

A *MASS EFFECT* CASE STUDY OF MORPHED HUMANITY, FROM INDIVIDUALS TO POPULATIONS IN A
BIOTECHNOLOGICAL FUTURIST SOCIETY

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Contents

Acknowledgements	2
Contents.....	4
Glossary	7
Thesis Statement:	10
Abstract	11
Chapter One: Introduction.....	13
Section 1.1 Introduction: foregrounding Mass Effect, the iconic role-playing video game and basis for the thesis	13
Section 1.2 The continued fascination of science fiction and relations to real-world developments and a morphed humanity.	17
Section 1.3 The contemporary context of biopunk and stories like Mass Effect	20
Section 1.4 The influence of Gothic science fiction and body-play on contemporary body horror narratives.....	27
Chapter Two: Literature Review	32
Section 2.1: Discourses of surveillance, or how we examine and engage with studying power operations of biotechnology	32
Section 2.2 Engaging with enabling and constraining discourses to examine the role of player and researcher agency.....	34
Section 2.3 The usefulness of Foucault continued: the utilisation of concepts of biopolitical subjectivity.....	37
Section 2.4 Examining the historical context of monster theory: From monsters to mutants, a twenty-first century theory emerging from the Gothic past	46
Section 2.5 Where is the monster now? The mutant as a posthuman agent; the intersection of the Gothic and posthumanism	53
Section 2.6 The origins of the term mutant, and how this links with a posthuman teratology	55
Chapter Three: Methodology	58
Section 3.1 Games studies and hermeneutical approaches.	58
Section 3.2 Mass Effect and Meaning.	65
Section 3.3 A taxonomy of mutants.....	74
Section 3.4 Methodology of/ for a new monster theory.	79
Section 3.5 Examining the broader literature of social and gaming monsters.	86
Chapter Four: The Player as Mutant	92
Section 4.1 Player connections to the avatar of a biopunk role-playing narrative.....	92
Section 4.2 The playable mutant: examining the different mutant paths of Shepard and the player	94
Section 4.3 The resurrection of a hero, and reconfiguring an identity.....	104

Section 4.4 Mutants and sexual hierarchies: Desiring the mutant avatar.	113
Section 4.5 Examining the cloned avatar, and the role of the player vs the non-playable character	115
Chapter Five: Means to the End – How the Player Picks Their Biofuturist Utopia.....	126
Section 5.1 Examining the biological choices and consequences of the series ending, and the start (of a new biopolitical era).	126
Section 5.2 Investigating the concept of a bodily ideal/utopia.	128
Section 5.3 The social meanings of play; how our RPGs can shape perspectives on identities and philosophies.	141
Chapter Six: Genetically engineered ideas of perfection.....	145
Section 6.1 Putting the desire for a designed mutant under the microscope.	145
Section 6.2 The desire for a mutant child and the relationship to the parent/creator.....	147
Section 6.3 Examining ideas of perfection. How BioWare designed a perfect mutant woman for video games.	152
Section 6.4 Taking ownership of a manufactured life: Miranda’s liberation through life and death	163
Section 6.5 Designing a mutant woman in an era of scepticism of biotechnology and scientific progress, and contested concepts of womanhood	167
Section 6.6 Examining desire for the female monster-mutant	176
Chapter Seven: The Disabled Mutant.....	187
Section 7.1 The social location of the disabled body and the usefulness of crip theory to analysis disabled characters.	187
Section 7.2 The spectacle of the disabled mutant in the laboratory (and the museum).	192
Section 7.3 Jack, a contrasting case study to Kaidan, and the tensions between mutated characters and institutions of care.....	201
Section 7.4 The operations of disability in a society of designed and morphed beings.	209
Chapter Eight: A Mass Mutant Population.....	218
Section 8.1 The political context of Mass Effect’s studio, and its influence across the series	218
Section 8.2 Canada’s eugenics past, its twenty-first century relevance and concepts of bioethical memory.....	219
Section 8.3 Interrogating the consequences of deliberate mass sterilisation.	225
Section 8.4 Accountability and the question of justice: what to do with the complicit companion.	231
Section 8.5 Analysing the ways in which the player can manage the krogan population.	235
Section 8.6 Designed mutations as a solution to bodily oppression.	238
Chapter Nine: Genetic Harvesting and Changing Populations.....	246
Section 9.1 The rise of fictional mutants in a biopolitically uncertain era.	246

Section 9.2 Genetic harvesting and the subjectivity of the body consumed into the neoliberal reaper machine.	250
Section 9.3 The zombie as a mutant.	259
Section 9.4 The zombie as an internal, not external, threat.	263
Section 9.5 Expanding genetic possibilities: the future of biotechnology, autonomy and democracy.	275
Conclusion.....	279
Bibliography.....	284

Glossary

Alliance – the military organisation in *Mass Effect* that represents the military (and colonist) interests of humanity. Commander Shepard serves in the Alliance as a Naval Commander.

Batarians – in *Mass Effect* the batarians are an alien species whose government believes in slavery. Their territory is outside of the Galactic Council's control and they are not represented on the Council.

Biotics – Beings who can manipulate dark energy to make objects move and to attack people with waves of energy or to use as energy shields.

Cerberus – a terrorist group in *Mass Effect* who fight for human supremacy.

Codex – The 'lore' of *Mass Effect* is entitled as a 'codex' and is accessible through each game menu, the *Mass Effect* wiki, and an official audio app.

Collectors – These aliens were once known as protheans, but they fell under the control of the reapers who altered their genetic make-up to such an extent they became a new race of enslaved organic beings serving the reapers.

Element zero – a substance in *Mass Effect*, that if a character is exposed to they may develop the ability to manipulate dark energy otherwise termed 'biotics'.

FemShep – the female iteration of Commander Shepard

Geth – in *Mass Effect*, a synthetic species of aliens (or robots) created by the quarians as indentured servants until they rebelled and liberated themselves.

Husks – sleeper agents created by the reapers by implanting organics beings with reaper technology to indoctrinate the subject to make them serve the will of the reapers.

Krogan – in *Mass Effect*, a species of aliens that are seen as a warrior race despite being a diverse population

ManShep – the male iteration of Commander Shepard (also the ‘default’)

Organics – the term in *Mass Effect* for beings that are not made of technology but flesh and bone.

Prothean – a species wiped out thousands of years before the start of the series. In the first game, it is revealed that it was the reapers who ended their galactic empire.

Quarians – in *Mass Effect*, a species of aliens that have had to flee their homeworld since losing conflict with a race of machines and now spend much of their life in protective suits as they are extremely vulnerable to infection. They are thought of as the nomads of the galaxy.

Reapers – in *Mass Effect*, a race of hybrid organic-synthetic machines that emerge from dark space every 50,000 years to harvest all intelligent life in the Milky Way galaxy

Salarians - in *Mass Effect*, a species of aliens that have short lives and therefore prize achievements (intellectual and militarily) for the short time they have in life. They are represented by the galactic council.

Synthetics – beings in *Mass Effect* who are made of technology (typically artificial intelligences).

The genophage – a sterility plague that severely impacts the krogans’ ability to have children. It was created by a team of salarians and was unleashed upon the krogan with the support of turians.

The Normandy SR1/2 - the spaceship that the player (as Commander Shepard) commands throughout the original *Mass Effect* trilogy.

The Tempest – the spaceship that the player (as Pathfinder Ryder) commands throughout *Mass Effect Andromeda*.

Tuchanka – krogan home-world destroyed by nuclear bombs.

Turians – in *Mass Effect*, a species of aliens that have a strict military organisation and one of the largest military forces in the Milky Way galaxy. They are represented by the galactic council.

Pyjak – a creature in *Mass Effect* often referred to as a “space monkey” that is found on multiple planets across the Milky Way. They are commonly treated as vermin.

Thesis Statement:

To investigate science fiction's marginalised figure of the mutant framed by the cultural context of a morphed humanity, using a case study of the *Mass Effect* franchise to interrogate the archetype as a metaphor for morphed humanity, biopower and bodily relations.

Abstract

The monster is an icon of literary discussion and criticism, cemented by Cohen's 'monster theory' (1996), with his conceptualisations vital for "understanding [the] cultural creation of monsters" (Gloyn, 2020). Gothic scholar Halberstam argued that "...the emergence of the monster within Gothic fiction marks a peculiarly modern emphasis upon the horror of particular kinds of bodies" (1995, p.3). It is the postmodern monster that will become the subject of this thesis.

This thesis re-engages with the monster, arguing that the rise of biotechnology and audience relations to this technology, provides a new lens for examining monsters that are created, reflected in the growth of the subgenre Lars Schmeink terms 'biopunk' (2016).

Brodwin asserts that the uncertainties emerging from biotechnological developments change how the body is conceptualised and categorised as the body is an arbiter of political relations (2000, p.7).

The thesis proposes that biotechnology has morphed humanity but, despite this, there are instances of biotechnological interventions (or disruptions) that are treated with suspicion, and their recipients, the icons known as mutants, face othering. This thesis therefore proposes a subspecies of the monster: the mutant, a literary icon representing the monsterisation of those altered by new forms of intervention and this is utilised through a case study of the popular game franchise *Mass Effect*. This will include a taxonomy of mutant types and definitions – from werewolves to cyborgs – to reflect the biotechnological age.

Monsters act as literary metaphors for marginalisation but there remains a long history of disabled people being labelled monsters as a pejorative term. This thesis contends with the

depiction of mutant *characters*, taking a neutral term to those representations with the hope that one day this term may be reclaimed, in a similar way to how the meaning of queer has been reshaped. Usage of a “morphed humanity” delineates how humanity’s normative relations to biotechnology and the body is ever-changing, and therefore undermines the idea that mutants of text should be marginalized due to highly contested and unstable perceptions of the body. This thesis seeks to provide analysis of a science fiction icon and term, the mutant, that has permeated a plethora of texts for decades but thus far has avoided engagement.

Chapter One: Introduction

Section 1.1 Introduction: foregrounding *Mass Effect*, the iconic role-playing video game and basis for the thesis

This thesis interrogates the way contemporary anxieties surrounding biotechnological developments have been reflected in science fiction media utilizing the video game series *Mass Effect* (2007, 2010, 2012, 2017), a series where humanity has been morphed by technological progression but where certain characters are treated as others, as mutants, and set apart from humanity (or their species) for what is perceived to be extreme alterations to their makeup. This chapter first explores the justification for using this series as its case study and how humanity has been morphed in this far-future setting.

Mass Effect is a role-playing video game depicting biological conflicts. The player, as Commander Shepard, spends the first two *Mass Effect* games warning the galaxy of the imminent reaper¹ threat, only for political leaders to declare the Commander a conspiracy theorist. The player cannot avoid the impending destruction, a sequence the antithesis of a role-playing video game where player input is usually paramount. The reapers will arrive in the Milky Way, and they will harvest advanced organic life to their own ends and kill whoever they don't need. This is a cycle that has been repeated countless times - and was what wiped out the previous advanced civilisation, the protoheans². The reapers do not want domination but to take as much *genetic* material from advanced organic life as they can harvest.

The philosophical system of the science fiction series is based upon utilitarianism: if the player completes the correct actions and help the many, the more resources you will gather

¹ See glossary

² See glossary

to fight the reapers and the more likely you are to unlock an ending that avoids the entire galaxy dying. Webber and Griliopoulos (2017) argue *Mass Effect's* utilitarianism by pointing to a specific point in the game where the player must choose “whether to sacrifice one Admiral Koris to save several non-combatants, but the real question is whether to sacrifice several non-combatants to save an undisclosed number of civilian crew and however many they might otherwise protect from the Reapers” (p.3). In *Mass Effect*, utilitarianism can be boiled down to the management of bodies for the ultimate good of the collective, as the player needs to manage ‘war assets’ whether they be acquiring soldiers, pilots, or even medical supplies which are then used not just to save people, but to heal soldiers who can rejoin the fight against the reapers. The reapers themselves take a body management position by the literal transformation of people into ‘husks’ ³ which are enslaved via technology to do the reapers’ bidding.

Stories of biological conflicts appear frequently throughout all four games. In *Mass Effect Andromeda* (2017), the main protagonist Ryder navigates conflict with the genetically modified kett, an enemy similar to the reapers in their quest for ‘ascension.’ The alien quarians⁴ are immunocompromised after losing their homeworld, several main characters are genetically modified (against their wishes), characters are drugged to enhance their abilities, several lab-created viruses are used to target specific populations, and the krogan⁵ are subjected to the genophage⁶ – a genetic modification limiting reproduction and bio-weapon inflicted upon the krogan by the turians⁷ and salarians.⁸ The tales of this fictional

³ See glossary

⁴ See glossary

⁵ See glossary

⁶ See glossary

⁷ See glossary

⁸ See glossary

universe force readers to confront notions of identities, such as how the mono-gender asari reproduce. *Mass Effect* lays bare the ethical, political, cultural conflicts relating to technological possibilities, identities, corporeal integrity and biomedical discourses by encouraging the player to consider these discourses and the decision-making conflicts they create. Through the fundamental elements of interactive role-playing, the player explores ethical reasonings and practical consequences to the actions the main character takes in relation to different bioethical plotlines.

Games – video and analogue – may attract a polemic discourse but “these games inform questions of meaning, identity, and morality” (Laycock, 2012, p.22). The confrontations of bodily norms and biopolitical exclusions within *Mass Effect* are indicative of the biotechnological age in which we are now situated as the mass media has focused on images of the body and technology as having a permeable boundary, changing our perceptions of the body (Brodwin, 2000, p.7). Additionally, Bradotti notes: “nowadays, as ever, women, LGBTQ+ people, undocumented migrants, asylum seekers, people of colour, the pauperized and the unemployed constitute the bulk of these sacrificial bodies that are now the proletariat of the digital and bio-capital era” (2022, p.57).

Mass Effect focuses on shifting identities more than any contemporary science fiction videogame series, and it is more expansive than many science fiction book series. Because of this, *Mass Effect* may be considered part of science fiction video game canon (Winter, 2022, p.3). Science fiction media often plays with themes of biology; *Farscape* (1999), *Star Wars: The Clone Wars* (2008) and *Marvel’s* franchise (dating from 1939) being just some examples for their wealth of content on clones and mutated super soldiers. But never have such a wide range of societies and characters that toy with bio-identities been brought so thoroughly into any single ‘universe’ before (and arguably since) *Mass Effect*. Biofuturism

has long featured in literature, the concept meaning to speculate on the potential and future of humanity, and Paul cites the popularity as booming in the 1920s with particular attention to J. B. S. Haldane's 1923 novel *Daedalus* which gained prominent critical attention for its prophecies of human genetic engineering (Paul, 2004, p.125).

Despite being a video game, *Mass Effect* adheres to Sontag's rules of science fiction films: first is the arrival of the thing (the reapers) that is witnessed by one person (the hero, Shepard), the second stage depicts witnesses corroborating the hero's story (Ashley and Kaidan), thirdly the suspending of international tensions in lieu of this great threat (eventually, this is the case in *Mass Effect 3* where centuries long tensions are resolved in mere hours), with the fourth stage showing unending destruction (worlds are destroyed) and finally the testing of a never-before-created weapon that targets the enemy's greatest vulnerability (the Catalyst) (Sontag, 1964, p.209). Its structure reflects the way in which video games studies have depended upon other media disciplines for analysis, with a range of academic approaches helping to interrogate the position of science fiction. Literary theory, video game studies and approaches to cultural theory can take narrative positions and apply them toward cultural knowledge –applying cultural understandings to these mutated and morphed characters.

As this thesis demonstrates, parallels are often drawn from fictional characters to the real people consuming these stories, and gamers have unique opportunities to probe representations due to the features of interactive storytelling. Section 2.4 of the literature review shows how monsters of classical tales have been linked with the real-world treatment and ostracizing of disabled people. Mutant characters have a long history in popular media. A recent example, *Teenage Mutant Ninja Turtles*, deserves specific attention in relation to this thesis and therefore will be discussed within the literature review. Stories

of the turtles, and marginalised bodies, resonate for audiences beyond notions of heroism to include understandings or experience of biomedicine and/or biotechnology; issues currently labeled as non-normative. However, notions of what can be labeled 'non-normative' are ever-changing; for instance, this thesis discusses the battle for reproductive justice and birth control pills which were once seen as unnaturally warping a woman's body away from their destiny to have children but today the practice of taking birth control is commonplace across much of the Western hemisphere. Daily medications may not be considered a way to make one a mutant now, but before antibiotics this would have been so. Thus, humanity is consistently changing its ideas of what constitutes normative interventions and normative bodies. Biotechnological interventions may have the ability to morph humanity, as it moves closer to a posthuman era.

The questions this thesis seeks to answer are thus: What is a mutant? What may lead us, or non-mutant humans, to become mutants? What does an emphasis on biology imply for humanity's relationship to mutants? How can this fictional mutant framework be adapted and applied within cultural theory? And, finally, how can this analysis add to understandings and theories relating to the positioning of non-normative bodies within society and culture? These questions have been crafted through the lens of a science fictional landscape that continues to speculate on (bio)technological developments and their relations to populations and the body.

Section 1.2 The continued fascination of science fiction and relations to real-world developments and a morphed humanity.

Science fiction and the possibilities of technology have long compelled audiences particularly with each scientific advancement. There is an urgent need to shift to renewable energy due to the climate crisis, SpaceX has helped reinvigorate space exploration, and we

have become better at looking at the galaxy around us, which has led to key discoveries, such as the potential of water on Mars and identifying a potential safe zone on Venus. There have been key breakthroughs relating to biomedicine and genetic engineering in recent years, too. The COVID-19 pandemic saw a race to develop effective vaccines on a scale never achieved previously, giving hope to scientists that global cooperation could be the future strategy to fighting other diseases at a time when previously progress had stalled due to a lack of interest from wealthy Western countries. There have been advances in DNA editing thanks to CRISPR that have led to debates about whether people should be allowed to 'biohack' their own bodies. Fukuyama speculates that capitalism can allow designer babies to be options at first for the wealthy and then for the wider public (2003, p.80). Additionally, Rajan uses the angry response in 1999 toward the possibility DNA sequences could be patented as a sign of the rapid corporatization of biotechnology and life sciences and the unease in public consciousness with this turn (2006, p.4). According to Thweatt-Bates literal cyborgs are among us due to the inventions of prosthetics, and the use of machines for life such as ECMO and pacemakers (2013, p.17) Vint states that the repaid gains in technology have made the concept of natural bodies irrelevant, and that we are thoroughly in the era of the posthuman (2007, p.8). And meat produced in a laboratory is no longer a fantasy from Margaret Atwood's *Oryx and Crake* (2003) - in 2020 Singapore was the first country to approve its sale to consumers. Additionally, the biotechnological revolution will be queer, with Braidotti pointing out that "biogenetic technologies invented by advanced capitalism can be appropriated to construct radically different bodies" (2022, p.59) and adding that "queer and trans subjects are actually joining forces to re-design biological structures and defy determinism. They are bio-hacking the future" (Braidotti, 2022, p.59). In 1997, The United Nations created the Universal Declaration of the Human

Genome opening with “the human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity. This recognises the increasing prominence of research such as The Human Genome Project (1990- 2003) and underpinning the preoccupation with genetics within the spheres of politics and human rights.

On a personal level, body modification has become common place; “...any stable separation between the monstrous and the normal is breaking down” (Jenkins, 2007, p.50) Jenkins points to mainstream bodily tampering and piercings as more common when they were once shocking and transgressive. Even architecture and design have started to incorporate ideas of living; with buildings treated like living organisms with ‘self-healing’ construction tools. Organic design is growing rapidly, causing a closer relationship between the natural world and manufacturing (Antonelli, 2021, p.7). Even science fiction discourse of body transformation filtered into everyday language during the late 2000s, with the economic crash known as ‘the credit crunch’.

“We live in an age of monsters and of the body-panics they excite. The global economic crisis that broke over the world in 2008-9 certainly gave an exclamation-mark to this claim, with Time magazine declaring the zombie ‘the official monster of the recession’, while *Pride and Prejudice and Zombies* rocketed up bestseller-lists, and seemingly endless numbers of vampire- and zombie-films and novels flooded the market. As banks collapsed and global corporations wobbled, and millions were thrown out of work, pundits talked of ‘zombie banks’, ‘zombie economics’, ‘zombie capitalism’, and even a new ‘zombie politics’ in which the rich devoured the poor” (McNally, 2011, p.1).

But while stories about the potential for technological progress capture our imagination, they can also be trappings that hide why science-fiction is so popular. Science-fiction is not only about what we can do, but an examination of who we really are. The moral value of technology is dependent upon how we use the capabilities of technological enhancement - and the boundaries between progress and harm are not always clear (Schalk, 2018, p.106). Science fiction becomes the medium through which the layman can make sense of rising bioethical conundrums and concerns.

Even as it is clear through these examples that biotechnology is now embedded within society, and consistently morphing humanity, there remains a fascination with, and marginalization of, those perceived to be altered by biotechnology to a non-normative degree. For instance, there remains modern folktales of persons extremely altered by biotechnology; for example, the Maryland Goat Man, the alleged mutant-monster the result of genetic experiments (Godfrey, 2019, p.2), signifying the tensions between the sometimes-opaque world of biotechnology with the lives of civilians, surrounded by the wildest fantasies of science fiction media. This next section interrogates the ways in which science fiction increasingly reflects anxieties relating to biotechnology, and explores the booming popularity of a specific subgenre of science fiction – biopunk.

Section 1.3 The contemporary context of biopunk and stories like Mass Effect

Science fiction is “a critical perspective from which to critique the mutation of capitalism” (McQueen, 2016, p.1), with capitalism mutating and changing due to market demands and changing market relations shaping its operations. Historically, science fiction has often been divided into soft and hard categories: ‘soft science fiction’ has been a label applied to works that deal with politics, sociology and anthropology – something historically mocked for lacking in hard data and not being ‘true’ science (Le Guin, 2006). Margaret Atwood initially

resisted the label of a science fiction writer (Atwood, 2011, p.2) after doubting the legitimacy of claiming the title. Her most famous work examines the reactionary events following fertility and climate crises but decades ago, these themes were not considered as showcasing scientific knowledge. Hugo Gernsback, a publisher and editor often dubbed 'the father of science fiction,' expressed surprise that women could write on such themes (Larbalestier, 2002, p.158) - apparently forgetting the outstanding contribution in the previous century by Mary Shelley. Perhaps it is apt that Hugo Gernsback does make an appearance in *Mass Effect 2* – with a spaceship in his name that has crash-landed on a hostile planet where the male survivors exploit and subjugate the surviving women. *Mass Effect's* focus on biopolitics might be too soft to be considered for publication by Gernsback during the dominating hard science fiction period (prominent up until the 1960s). Science fiction has had to fight for acknowledgement, with space operas dismissed as "mindless escapism", however, it has since been reclaimed by fans, writers, and critics (Winter, 2022, p.5). Science fiction underwent many evolutions with current events having a substantial influence on the topics authors chose to make the subjects of their work. For example, named after the short story by Bruce Bethke, cyberpunk (popular in the 1980s) looked at how futuristic technology could be used by corporations and the super-rich to oppress workers. William Gibson's *Neuromancer* (1995) made this subgenre famous, as the novel explored concepts of cyberspace. In part, its success is because cyberspace felt accessible – at least more so than space travel – as millions engage in cyberlives across the world, creating a new idea of (trans)national boundaries (Nakamura, 2002, p.44). Haraway argues the "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"

(2006, p.152), concluding that machines are lively in comparison to an inert humanity (Haraway, 2006, p.152). The liveliness of machines in art and through science fiction has reawakened interest in notions of the physical body in literature, depicting new invigorations and manipulations of the body. As a result, this thesis argues that these developments influence how we understand and configure concepts of humanity and associated questions around non-normativity.

In this vein, soft science fiction has emerged with its own subgenres emerge as stories of bodily tampering and genetic engineering became known as biopunk. The name biopunk emerged after the rise of cyberpunk, but the roots were plain to see in Mary Shelley's *Frankenstein*. Not only did she give rise to a new genre in the West; she created a distinctive subgenre that explored the power of biopolitical stories, with biofiction sitting at the intersection of literary texts and biotechnology (Kucukalic, 2022, p.1). Just as there has been a "transition from late capitalism to biocapitalism", there's been a movement from cyberpunk to biopunk (McQueen, 2016, p.1).

There has been controversy over this name – cyberpunk scholar Brian McHale (1992), for instance, argues that the distinction between cyberpunk and biopunk is artificial. This reflects the queries over the distinctions between trans and posthumanism, which both deal with the way technology has transformed life but in radically different ways, with transhumanists such as Bostrom (2006) supporting technological interventions as necessary for humanity, and posthumanists such as Braidotti examining philosophy through the lens of humanity's technological advancements. As such, biopunk and cyberpunk both examine power structures of late capitalism, however, biopunk in this thesis is defined as the specific examination and exploration of biopolitical exclusions under power structures, and *Mass Effect* is thoroughly a work of biopunk. Cavallaro posits that: "Cyberculture pivots on a

contradiction: a growing fascination with the body, testified by all sorts of media, coexists with an increasing infiltration of the body by technologies that seem to take its materiality away” (2000, p.75). Biopunk, I contend, is not concerned foremost with technologies that take its materiality away, but in emphasising the potential for supremacist power through materiality without consistent dependencies upon technology (after conception).

Cyberpunk needs some form of cyber-content (hard technology or even cyberspace) to examine the control of data and how it relates to autonomy under stories set in an era of late capitalism. The DIY philosophies of cyberpunk and biopunk have been competing since the 1970s, trying to steer technology away from the military industrial complex (Michaud, 2017, p.42), and this mania of retaking bodily control seeped into the literature landscape. Cyberpunk was at its most prominent during the 1980s, but in recent decades, a focus on biopolitical stories have returned to the forefront, as the late 1980s saw the growth of the genetic rights movement whose presence gradually filtered into the media, including fictions depicting biohacking (Kucukalic, 2022, p.24).

Body horror is a common theme of science fiction narratives. There is a proliferation of virus stories (zombies or otherwise), and creatures created in laboratories by isolated men framed as intellectually brilliant. Research by the Geena Davis Institute on Gender in Media found that 62.9% of STEM characters in media are men, and 71.2% of STEM characters are white (2018). *Jurassic Park* (1993), a story of mostly men in laboratories trying to bring back dinosaurs, helped reinvigorate the biopunk subgenre onscreen. The popular film, adapted from the novel by Michael Crichton (1991), brought the impossible into cinemas: dinosaurs recreated from DNA collected and trapped inside sap. This was followed by another *Godzilla* (1998) revival, and the Marvel Cinematic Universe becoming a cultural force that could take on the irrepressible force of the reapers. Marvel’s *X-Men* franchise focused upon mutations

as being the “key to our evolution”, and this created a specific posthumanist context through which to evaluate human prejudice, changing social norms and human variation in an era of evolving beyond humanity (Murray, 2022, p.58). Superhero stories, through the medium of comics, have long had a place in culture, but in recent years their stories have become so popular that they now have a stranglehold on the film industry, too. Schmeink notes that “...the cultural shift towards biopunk themes should provide superhero narratives with an option to portray the ‘unlocked hidden potential within us’ as resultant from or contiguous with genetic engineering, thus exploring aspects of the posthuman condition” (2016, p.180). Schmeink is one of the founding theorists of biopunk in literary tradition. Schmeink reinforces the distinctions between biopunk and cyberpunk, but he is also the first theorist to compose a long form examination of biopunk themes in stories in *Biopunk Dystopias: Genetic Engineering, Society and Science Fiction* (2016). Previously, biopunk interpretations of stories were taken from posthumanist theorists (such as N Katherine Hayles) or theorists focusing upon cyberpunk as there are many interwoven threads between the subgenres. There are notable sociologists who in recent decades have captured the shifting mood of the field by focusing upon the sociology of the body (Bordo, 1993, Shildrick, 1997, Shilling, 2005).

Games have also seen an explosion of biopunk stories. In recent years there has been the release of the *Bioshock* (2007, 2010, 2013) games, the remaster of the classic *Dead Space* in which the player investigates the mutations of colleague's bodies into monstrous creatures. There has been a plethora of zombie virus games such as *The Walking Dead* (2012), *The Last of Us* (2013) and *The Last of Us Part 2* (2020). *Final Fantasy VII* (2020) was remade after cult-like popularity over the decades, a game where at one point, the player wanders through a lab of mutant experiments and can even team up with one of the creations, and its sequel

Final Fantasy VII: Rebirth released in 2024. Pokémon games (2019) have experimented more with mutations, aside from the original stone evolutions, including the gigantamax power that allows your pocket monsters to increase radically in size and strength for a temporary time. *Overwatch* (2016) and *Overwatch 2* (2022), a popular esports series, has a range of characters who have endured body augmentation. One of the most played games on Steam (Fillery, 2022), *Cyberpunk 2077* (2020), has a world and narrative fixated on bodily upgrades and transformations. The historical game *Ghost of Tsushima* (2020) now includes a plot inspired by Japanese folklore, involving the power of gathering hearts. Body horror and biopunk should now be considered prominent themes of game stories.

‘Body-horror,’ greatly overlaps with the science fiction genre, the latter of course being much broader. In body-horror, some sort of anomaly – whether brought on by nature, scientific experimentation, divine punishment, or the environmental impacts of war – threatens the safety of (normal) humanity” (Morelock, 2021 p.2). *Mass Effect* often straddles the line between cyberpunk and biopunk, as it “presents a dark, cyberpunk-inflected future dominated by predatory flows of corporate inequality” while the biopunk aspects are shown by the fact “military violence, force, and coercion seem to be bound up with scientific extraction of mineral resources, the industrial exploitation of people, and the accumulation of capital by the techno-elite, in a vast socio-economic condition and analogous to what the Reapers label cycles of ‘harvest’” (Winter, 2022, p.30).

The posthuman condition in fiction is often met with fear: there have long been doubts about Bucky’s *true* posthuman nature in the Marvel Universe (2016), and the ‘perfect’ form of Cell in *Dragon Ball Z* (1989) was bent upon destroying everything in the universe simply to show off how much *better* he was. There are countless stories about whether we can trust androids, particularly those that appear and ‘are made’ human, such as those in *Ex Machina*

(2015). And in our nonfictional lives, genetic engineering has been a topic that has caused great debate over the decades (Kass, 1997). This fear of the posthuman being excellent in some way that 'organic' humans cannot achieve, is explored extensively in the *Mass Effect* universe. *Mass Effect* falls within the realm of 'biofictions', or stories entailing the "creation of novel biological entities in both literary/fictional and scientific labs" (Kucukalic, 2022, p.1). One character is created by a eugenicist who specifically chooses each trait of his daughter to ensure that she has a 'perfect' design (and is the subject of chapter six). Her presence in the *Mass Effect* series, fascinates and terrifies other characters. It is often these reactions that reveal the fears around identity that continue to control and drive stories. It is our relationship to biopolitical exclusions that is the focus of thesis, as "the poetics of biopunk focuses not only on experimentation and hybridity, but also on resistance against discrimination" (Kucukalic, 2022, p.24). These biopolitical exclusions are explored in chapter three, leading to a taxonomy of mutants that forms the basis of this thesis.

Discussing, *Crip Times: Disability, Globalization, and Resistance* (2018), Robert McRuer states: "I was compelled by the ways in which bodies and bodily imagery emphasizing precarity were being used to send messages of outrage and resistance. Unruly bodies occupying public spaces, bodies – as it were - out of bounds, were challenging the guardians of capital and short-circuiting the official consensus that those guardians urgently needed to forge about the 'necessity' or inevitability of drastic austerity measures" (p.8). In a similar vein, this thesis is inspired by the ways in which bodies and bodily imagery become sites of contention and struggle under late-stage capitalism's fascination with biotechnology; challenging ideas of bodily norms and aspirations within a techno-centric landscape – a fascination reflected through narratives, whether games or literature. This thesis is organised to interrogate the image of the body, and anxieties of a morphing humanity. The

second chapter examines relevant literature influencing the thesis, while the third chapter sets out the methodological justifications for the thesis. Following the methodology, there are three groups of two chapters. Chapters Four and Five focus upon the agency of the player, and the player's embodiment of mutated characters. The following two groups, look at the idea of morphed humanity from individuals to populations. Chapters Six and Seven examine individual case studies of mutations, with the former examining ideas of what makes a perfectly designed human, while the latter chapter explores the tensions and challenges for disabled characters in a setting dominated by biotechnological interventions designed to upgrade humans. Chapters Eight and Nine shift attention to populations that have been changed. Chapter Eight looks at the population of krogan, who have been deliberately altered to have low birth rates while Chapter Nine examines the fear of body insecurity through the reaper's genetic harvests. The conclusion to this thesis summarises the findings of each chapter and offers insight into how this close textual analysis can become a framework for examining the power paradigms biotechnology creates, and insight into how to support those subjugated by biotechnological interventions.

Section 1.4 The influence of Gothic science fiction and body-play on contemporary body horror narratives

In the West, the science fiction movement was brought to life by Mary Shelley with the publication of *Frankenstein* in 1818, and this section establishes how many modern science fiction stories still reckon with the themes of that classic novel in which an aspiring scientist creates a life by constructing many parts from dead bodies, creating a new form of man. It was the first widely popular story of a *designed* person and has remained in the public conscious, often taught in secondary schools in England and adapted for stage. *Mass Effect* encapsulates that fervor for creation: it has two main characters and the entire species of

kett, collectors ⁹and keepers created by genetic engineering. *Mass Effect* includes a multitude of genetically engineered characters and resurrected bodies within *Mass Effect*, such is still the fascination with body-play over two hundred years later. *Frankenstein* thus became the urtext of science fiction, and a foundational text for BioWare and its legacy and themes can be traced throughout the thesis.

Frankenstein was inspired by the era of the Gothic, and the science lectures which Shelley attended (including performances of shocking dead frogs and watching their limbs twitch which is a similar process depicted in *Frankenstein* and all its adaptations). It has been claimed that the horror genre is a body genre (Williams, 1986, p.143) while the Gothic “endlessly reinvents itself” (McEvoy, 2007, p.7) keeping its relevance in an era of biotechnology, and to the fore is the era of the mutant. The Gothic, according to Halberstam is “loosely defined as the rhetorical style and narrative structure designed to produce fear and desire within the reader” (1995, p.2). Halberstam adds that Gothic fiction was preoccupied with the idea of deviant subjectivities, in conflict with established societal norms, at oppositional odds to the healthy and “pure” (1995, p.2). The “Gothic infiltrates the Victorian novel as a symptomatic moment in which boundaries between good and evil, health and perversity, crime and punishment, truth and deception, inside and outside dissolve and threaten the integrity of the narrative itself” (1995, p.2). The reason for the Gothic’s fixation with monstrous bodies and body-play was due to the scientific advancements in the preceding and proceeding decades (Harkup, 2019). Shelley’s life coincided with rapid advancements in science, with alchemical terminology morphing into structured chemistry, with the identification of 33 chemical elements by Lavoisier in 1789

⁹ See glossary

and, upon Mary's death, an additional 27 had been add to the list that would become the periodic table (Harkup, 2019, p.27).

The scientific context of literature is significant; it is why H. G. Wells (2006) focused upon Martians once humans could conceive of the concept of Mars due to breakthroughs in telescopic devices. The progress within science created a fervour of belief that anything was possible and in reach, whereas previous centuries had insisted that life was fixed and controlled only by God. Harkup comments that *Frankenstein* is the "spectacle of a creature brought to life from a collection of dead flesh, scavenged from dissection rooms and graveyards, was all the more terrifying because it felt all too possible" (2019, p.89). In short, the era of monsters was shifting into an era of morphed humanity (and, on the outskirts, mutants), and it is an era continuing to resonate today with significant advancements in biotechnologies.

Ursula K Le Guin, a pioneer of modern science fiction, notes how Shelley had changed stories forever with her creation. Each new form created in stories ushers in a new era of science fiction, whether it be robots/AI, monsters or mutants. Shelley was the first science fiction writer to "find archetypal images and release them into consciousness" (1989, p.75). Le Guin compares this to Capek's (2004) work of naming robots – the naming process, she argues, as essential to the process of archetypising – and robots have been an icon of science fiction ever since (1989, p.77).

Capek created robots and Shelley created mutants. *Frankenstein* inspired audiences due to the power Frankenstein unleashed, his own attempt to displace God. It scared audiences who recognised that while the creature was not human, he did have humanity and that was ultimately denied by his own creator. The creature's struggle to fit into a society, that both

views him as superior by his creation and inferior due to his lack of conformity, is why the story has been replicated so many times.

In one such iteration of the designed child, two main characters of *Mass Effect* are created as experiments: Miranda Lawson, a human woman, and Grunt, a male krogan. Both characters and their ramifications for science fiction will be examined and this will contribute toward the composition of a new vein of future research.

This thesis documents and organises fictional mutant types, as well as identifying the social location of the mutant. It acts as cultural theory about/for non-normative bodies in an age of biopolitics and population management. For instance, it is a framework for examining the accidental mutants who are created with no specific purpose in mind, as well as those intentionally created. This project evokes biofuturism, timely with the breakthroughs in biotechnology outlined throughout this chapter, and it does so through the interpretations of biopolitical stories set in the near and far future, to be able to extrapolate our hopes and fears around concepts of identities. A golden era for the subgenre was marked in 1923 with *Daedalus* (Paul, 2004, p.125) and coming to a climax in 1932 with Huxley's *A Brave New World*, yet there have been rapid developments in biotechnology since then and so there is a new era of contemporary biofuturism grappling with more realistic plots; such as corporate control over subtle genetic enhancements, the use of bioengineering within the military-industrial complex, and bioethical concerns over organ donation. *Mass Effect* aligns with these modern anxieties and contemporary bioethical considerations. Shildrick argued that "the 21st century is a fertile time for the monstrous, crossing and reworking material in digital, political, philosophical and bioscientific imaginaries alike" (2018).

The central goal of this thesis is to establish a new body of theory, centred on a fictional morphing of humanity icons, to make sense of contemporary developments within popular

science fiction that address the core concerns of bodily modifications. This includes identifying and defining mutants, identifying connections between mutants and bio-anxiety and contemporaneous attitudes toward biotechnology and the morphing of humanity. As “language is the fundamental mode of operation of our being-in-the-world and the all-embracing form of the constitution of the world” (Gadamer, 1976, p.3), identification of mutant types and recognition of the biopolitical context which leads to their creation is the foundation of this thesis. This thesis is a necessary endeavour at an opportune time; since the turn of the millennium there has been a shift to a biotechnological era where developments offer greater opportunities for body autonomy and modification, but these are heavily monitored and limited by states and individual pressure groups due to bio-anxiety - a term I define as the specific anxiety of loss of control over our identities. As Brodwin states, biotechnology disrupts our body’s materiality; “by altering this body, its limits, its capacities, and boundaries, biotechnologies make the social world seem that much less self-evident and indisputable” (Brodwin, 2000, p.9).

Mutant characters signify marginalisation in a biotechnological driven late capitalist society, as depicted by scholars such as Braidotti, Brodwin and Schmeink whose work contributes toward the foregrounding of this project. But this thesis argues that contemporary social justice theory often fails to account for bio-anxiety that is driving attempts to stifle body liberation, as bio-anxiety is a driving force of oppression. Instead, the focus is geared toward specific instances of hatred, rather than connecting marginalised together as non-normative due to their (perceived) bodily transgressions. This thesis helps to bridge the gap between social justice theories and will identify overarching biopolitical concerns that underpin marginalisation in the twenty-first century.

Chapter Two: Literature Review

Section 2.1: Discourses of surveillance, or how we examine and engage with studying power operations of biotechnology

This literature review functions as an identifier of established texts addressing relevant theory related to monsters and identifying areas of potential expansion and critical reflections on a morphed humanity. It also engages with relevant video game studies theory that address depictions and interactions with marginalised bodies. This chapter acts as a brief overview of the most relevant disciplines to the thesis; each chapter forms a case study which then engages with related aspects of monster theory and bioethics and so this literature review aims to avoid repetition and, instead, act as a bridge to each case study.

This chapter highlights spaces within these disciplines upon which this thesis develops.

The first part of this chapter will therefore establish the useful discourses of surveillance and population management. This section first interrogates Foucault's concept of panopticism and how this creates a discourse of bodily management, before then turning to the ways in which discourses manifest and how the researcher can contribute to this area.

Foucault's concepts of surveillance and panopticism are helpful to this thesis, which is concerned with the surveillance and spectacle of the body. The literature review will then turn to Foucault's notions of discourse and then biopower and biopolitics, the key elements for a thesis interrogating the management of populations and individuals.

Foucault takes Jeremy Bentham's architectural concept of the Panopticon – a ring-shaped building where there is usually a tower in the middle and became especially popular for prison surveillance – and argues the concept of power through examination reigns throughout modern society (Foucault, 1994, p.58). Foucault argues that “with panopticism...there would no longer be inquiry, but supervision [*surveillance*] and

examination” (1994, p.58-9), which manifests over a population or individual by “a constant supervision of individuals by someone who exercised power over them” (1994, p.59) which could include a PhD supervisor, manager, school-teacher, prison warden, doctor, someone who when exercising power “had the possibility of both supervising and constituting a knowledge concerning those he supervised” (Foucault, 1994, p.59). This knowledge was then “organized around the norm, in terms of what was normal or not, correct or not, in terms of what one must do or not do” (Foucault, 1994, p.59).

This thesis interrogates relations of normality when in application to the body, from acceptable/normative levels of morphing through biotechnology to those character subjects which are considered at the non-normative end of the scale of biotechnological interventions. The 1800s saw the rise of surveillance as a modus of control “which made it possible to keep that body and sexuality, finally conceded to them, under surveillance” (1978, p.126) through “schooling, the politics of housing, public hygiene, institutions of relief and insurance, the general medicalization of the population” (1978, p.126). This thesis engages with the concept that surveillance is still a fundamental operation of, and within, society, and each chapter examines the spectacle of an individual or population as a subject to normative ideas of the body.

The 1800s also saw the medicalisation of the body (as exemplified by *Frankenstein*) and, by extension, of sexuality; “since sexuality was a medical and medicalizable object, one had to try and detect it-as a lesion, a dysfunction, or a symptom-in the depths of the organism, or on the surface of the skin, or among all the signs of behavior” (Foucault, 1978, p.44), and the medicalisation of sex can be linked to “the control of the birthrate” (Foucault, 1978, p.100), a subject that is the foundation of chapter eight. The eighth chapter also examines the control of women’s bodies and of the concept of motherhood, as the seventeenth and

eighteenth centuries saw women's sexuality as a potential threat/menace to the health of the human species as "the hysterization of women, which involved a thorough medicalization of their bodies and their sex, was carried out in the name of the responsibility they owed to the health of their children, the solidity" (Foucault, 1978, p.146-147). The responsibility of motherhood and literature pertaining to this cultural phenomenon is addressed in greater detail in chapter eight which further analyses the historic and contemporary links between motherhood and morality. Furthermore, Foucault argues that the family is an agency of control as it was "the 'bourgeois' or 'aristocratic' family that the sexuality of children and adolescents was first problematized, and feminine sexuality medicalized; it was the first to be alerted to the potential pathology of sex, the urgent need to keep it under close watch and to devise a rational technology of correction" (Foucault, 1978, p.120). And so, chapter six takes Miranda as a case study to examine her class relations to biotechnology and her subjugation to her father in her design (and the limits he may have imposed on her fertility). As "sex would derive its meaning and its necessity from medical interventions: it would be required by the doctor, necessary for diagnosis, and effective by nature in the cure" (Foucault, 1978, p.67), Foucault's concepts on medicalisation and surveillance become a useful framework for a thesis concerned with understanding and documenting the various relations and paradigms experienced by those characters seen as non-normative.

Section 2.2 Engaging with enabling and constraining discourses to examine the role of player and researcher agency

However, to be able to engage in examinations of non-normative characters there must be understanding of the ways in which discourses work and can be enacted on the researcher. My role as a researcher is enabled and constrained by my subjectivity and experience of

Mass Effect as the series acts as a locus of competing discursive frames – which are not always cohesive or coherent. For Storey, “discourses work in three ways: they enable, they constrain, and they constitute” (2024, p.130), using Foucault's explanation that discourses are “practices that systematically form the objects of which they speak” (1989, cited in Storey, 2024, p.130). Language is a discourse as it can enable communication, but it can be constraining (limited vocabulary, different concepts of words and meanings compared to other languages, only being able to speak a set amount of languages) but it constitutes a speaking subject (the subject may think in language and know themselves through language) (Storey, 2024, p.130-1). Storey further argues that academic disciplines are also discourses and uses the example of the academic discipline of film studies: “Each discipline speaks about film in a particular way and in so doing it enables and constrains what can be said about film. But they do not just speak about film; by constructing film as a particular object of study, they constitute film as a specific reality (‘the real meaning of film’)” (Storey, 2024, p.130-1). Storey concludes that “discourses, therefore, are social practices in which we engage” (2024, p.131) and “what we think of as ‘experience’ is always experience in or of a particular discourse” (Storey, 2024, p.131), with the role of critical games studies to function discursively through critiques, reframing knowledge and understanding, enabling new ways of seeing games as historically produced cultural objects.

Mass Effect constitutes its own discourse through its narrative branches; the player is enabled by its choice-based mechanics to assume agency through the game but is simultaneously constrained by the choices which have been crafted by the developers which shape the narrative due to the financial and practical impossibility of having limitless choices in a single-player offline role-playing game. With hundreds of different interactions, various endings, and multiple potential romances and platonic friendships to be built, the game is

complicated and non-linear, and often a personal experience for players because of the decision-making mechanics. But it does not remain limitless, with developers needing to constrain choices to weave together narrative endings in a practical way. This tension between choice and scripted constitutes the lived reality of a player of *Mass Effect*. Through logging each choice and interaction within the four-game series, I tracked the discourse of morphed humanity through the domains of the narrative branches, characterisations, customisation features and the socio-historical context of the developer. For Foucault, the 19th century discourses on sexuality constituted the “reality of sexuality” (Storey, 2024, p.132) and not the repression, and within the universe of *Mass Effect*, the anxiety and controls enacted through biomedicine constitute the reality of a morphed humanity. This thesis puts forward the notion that *Mass Effect*’s futuristic aesthetic dressing acts as a discursive mask and that, through its relations to the body and identity (whether these relations are anxious or empowered), the series is reflective of contemporary society. My role as a researcher is to log each possible branch to make sense of how broadly the bodily relations – and bodily anxiety – is explored. I played the game as thoroughly as possible to see each different permeation. By focusing on the anxieties, and empowerment – the broader bodily relations becomes vital for interrogating the discourse of a morphed humanity (and those mutant literary icons so often at the very margins of biopunk narratives) for “we must not imagine a world of discourse divided between accepted discourse and excluded discourse, or between the dominant discourse and the dominated one; but as a multiplicity of discursive elements that can come into play in various strategies” (Foucault, 1978 p.100). Discourses are elements “operating in the field of force relations” and contradictory discourses within the same sphere may exist (Foucault, 1978, p.101-2).

However, Derrida focuses on a more binary opposition to the relations of power even though “the dominance of one over the other (a matter of, say, priority or privilege) is not something that arises ‘naturally’ out of the relationship, but something that is produced in the way the relationship is constructed” (Storey, 2024, p.129), but “as Derrida would also point out, they are not pure opposites – each is motivated by the other, ultimately dependent on the other for its own meaning” (Storey, 2024, p.130). This thesis agrees that within a morphed humanity there are character tropes that rely upon one another to be in contrast, i.e. the perceived normative body (morphed by biomedicine but in a normative way according to the game-world society) to the mutant trope (a non-normative body morphed in a less accepted way) creates tension within the narratives and leaves a clear societal paradigm to navigate. However, this is not *always* binary and the thesis aligns with Foucault’s interpretations of the conflicting and contrasting orders as the differing biomedical interventions and argues that the broad spectrum of bodily tempering consistently sees the paradigms of unacceptability in motion according to the philosophies of non-normativity of the day which are influenced by different *Mass Effect* societies and populations (i.e. the different philosophies to changing and designing bodies for the rich, versus the state sanctioned bodily upgrades allowed for the poor, an issue discussed in chapter six).

Section 2.3 The usefulness of Foucault continued: the utilisation of concepts of biopolitical subjectivity

This thesis is a nebulous multi-discursive text about the biopolitical narratives and operations of choice in *Mass Effect* and, as a result, Foucault’s work on governance, surveillance and management of people continues to be relevant as his work centres upon biopolitics. Through *Mass Effect*, BioWare explores concepts of a morphed humanity and

structural tensions between biopower and biopolitics. Foucault defines biopower as the political power to objectify human biology (Kocurek, 2022, p.23) and biopolitics as "to ensure, sustain, and multiply life, to put this life in order" (Foucault, 1976, p.138). This vague definition became a framework for analysing society and signalled a shift from eras defined by sovereigns to an order led by communities and started a movement of examining life through social and democratic structures. This vagueness offers opportunities to contribute to discourses on disabilities, monster theory and the way in which populations are managed via ideas of the body.

Foucault's concepts of biopolitics and biopower are much debated due to how broad the terms are (Kristensen, 2013, p.11). However, biopolitics has come to portray the struggle of societies and democracy in an economy of auctoritas (Cox-Palmer-White, 2011, p.33), and the organisation and fragmentation of biological identities (Marks, 2008, p.89), generally meaning that governments have greater concern over life rather than death, and this leads to policies regarding health, illness, reproduction, diets and housing (Foucault, 1981, p.25).

This can be most aptly demonstrated by the modern prison, as discussed in section 2.1 utilising ideas of the panoptic; the prison is a place of careful body management and concerned with productive forms of living, removed from the monarchical days of capital punishment and annihilation of the body (Shilling, 2012, p.80).

As Foucault explores, there has been a shift to productivity (1973, p.35), and the management of lives (eliminating public death) (1973, p.60) to exploit resource from the workforce to maximise output and productivity. The welfare state also signifies the shift to linking debt to the body (and its labour); the state will redistribute wealth to ensure that no citizen is left behind but only if they meet certain obligations and dedicate their lives in service to the state (Cooper, 2008, p.8), for example, in The United Kingdom disabled people

must pass a Personal Independence Payment (PIP) assessment – a tool which numerically ranks severity of conditions to see if the person may be granted financial support. As of February 2022, 80,000 people had their initial PIP ruling overturned (Disability Rights UK, 2022). The UK governmental system filters people according to those who can work and who cannot, with strict parameters on who may be granted social security in an attempt to compel people into employment for those unable to hold down secure jobs (Lindsay and Houston, 2013, p.1, Beatty and Fothergill, 2013, p.15), but deemed not disabled enough, allowed to fall through the societal cracks with limited support.

McRuer argues that “the absolute centrality of disability to a new-global politics of austerity has rarely been theorized explicitly or comprehensively,” despite the volume of disabled activists trying to draw attention to the impacts of austerity (2018, p.4), leaving space for the study of the management of marginalised bodies under neoliberalism. Lars Schmeink argues that biopolitics has a specific implementation and “is thus the practise of excising unhealthy, bad, or wrong specimens from the governed social body, by deciding which life is worth living and which is expendable” (Schmeink, 2016, p.225). Schmeink elaborates that biopolitics extends to those that struggle to be granted legal and economic protections - not dissimilar to billions of characters in the *Mass Effect* universe.

Mass Effect captures how centralised bureaucratic institutions have failed to protect marginalised people. Millions of refugees are created by the arrival of the reapers, billions are murdered, and potentially millions more are turned into husks and lose all sense of their own identity (detailed throughout chapter nine). *Mass Effect* draws parallels with real world stories of refugees, and those populations whose identities are either subjugated and managed, or persecuted to extinction. This aligns with Foucault’s predictions for the next era of biopolitics; that conflict and persistent political struggle would emerge from the

discourse that sees “...a race that is portrayed as the one true race, the race that holds power and is entitled to define the norm, and against those who deviate from that norm, against those who pose a threat to the biological heritage” (Foucault, 2003, cited in Kristensen, 2013 p.33), a reflection of chapter six which examines concepts of genetically engineered perfection.

Foucault’s warnings have come to fruition. While there have been celebrations of progressive gains - more countries legalising same sex marriage, for example - there has been the rising threat of the far right since the global financial crisis of 2008, and that has seen populist leaders installed in countries such as the United Kingdom (while writing this thesis this has included Boris Johnson, Liz Truss and Rishi Sunak), Poland (current president Andrzej Duda), Hungary (most notably Viktor Orbán who has been Prime Minister since 2010) and the United States (which saw Donald Trump’s presidency from 2016-2022 and his recent re-election), India has been ruled by Modi since 2014, and Bolsonaro took power in Brazil from 2019-2022. These countries have overseen punitive policies towards migrants, indigenous communities, travellers and/other marginalised communities, from threats to build border walls to walking back queer rights (Spike, 2021). Black Lives Matter is a movement that highlights the brutality that Black people are subjected to, but there has been minimal progress from politicians in this area. There are still murders of Black men by the police in the United States, despite widespread media coverage since the deaths of George Floyd and Eric Garner. And while the UK government has declared that the territory has no institutional racism, experts, including those within the United Nations, have widely criticised the 2021 report by the Commission on Race and Ethnic Disparities that came to this conclusion (United Nations, 2019).

The science fiction story of *Mass Effect* was created and released between 2007 and 2017, during the West's economic downturn after a boom decade, and it continues against this backdrop of societies contending with biopolitical exclusions. In Canada, where BioWare was founded, there have been an estimated 4,000 indigenous girls and women who have been murdered or have otherwise disappeared since the 1970s. A leaked government report had labelled the situation a genocide (Cecco, 2019). *Mass Effect's* central conflict shows the reapers taking and disposing of lives as part of a process to 'perfect' life. It is a biopunk series exploring the fear and doubts about our own sense of security, as we wrestle with the threats - perceived and legitimate - to identities, and continue to battle with how we define ourselves, and how that shapes our experiences. Similar to Bertolt Brecht's arguments that art is not without consequence (Silberman, Kuhn and Giles, 2015), *Mass Effect* offers a discursive commentary upon the material conditions which informed its narrative and its political world view (particularly as it relates to the management of bodily discourses).

There is a long history of bodily subjugation, which, interestingly, became an increased focus of government policy in the 1800s in part due to a goldrush of medical knowledge, and helped create the environment in which *Frankenstein* was created. It is important to examine this history of the treatment of the body as contemporary politics still reckons with bodily autonomy as there are increasing uses of biotechnology. Foucault identifies the shift from sovereign power – the (divine) right to kill to emphasise total power over life, into a shift towards biopower; a philosophy considering systems utilised for moderating the life of the living. This includes the transition from capital punishment to the proliferation of prisons – with greater attention paid to the wealth that can be created for corporations by housing people in prisons – and a greater concern over controlling population growth of specific

demographics. Even in cases where the death penalty remained, there was a greater emphasis than ever on the subjugation of the body, as seen by the 1752 Murder Act passed by the British Parliament which allowed for the dissection and investigation of bodies of all murderers as punishment after execution. The bodies were filtered into the medical profession becoming part of a wider system that bluntly ensured the management of bodies.

Foucault (1973) documents how “with the coming of the Enlightenment, death, too, was entitled to the clear light of reason, and became for the philosophical mind an object and source of knowledge...” as “medicine could gain access to that which founded it scientifically only by circumventing, slowly and prudently, one major obstacle, the opposition of religion, morality, and stubborn prejudice to the opening up of corpses.” The dissection of convicted people marked another step in the subjugation of bodies – one which had started several decades earlier with the collection of bodies of the poor. English law throughout the seventeenth and eighteenth century began to criminalise or otherwise punish poverty, believing that to be poor was a moral failing by those who were too lazy or resistant to the idea of adapting to a market economy. One punitive measure was the dissection of the bodies of poor people; “in 1694, the London town-council for the first time decreed that abandoned bodies of the poor – found dead in the street, or unclaimed after violent deaths – could be provided to the anatomists” (McNally, 2011, p.52).

This left some families feeling that desecrating the body would stop the deceased from entry into Heaven. It was, however, a victory for those within the medical industry who were desperate for bodies to dissect to gain greater understanding of the human body.

Foucault (1973) identifies how “historians linked the new medical spirit with the discovery of pathological anatomy, which seemed to define it in its essentials, to bear it and overlap it,

to form both its most vital expression and its deepest reason; the methods of analysis, the clinical examination, even the reorganization of the schools and hospitals seemed to derive their significance from pathological anatomy”, and this impacted not only the reorganization of institutions but the way in which the legal system upheld and supported this medical endeavour.

The Murder Act of 1752 was a response to decades of fighting over the bodies of the condemned at the gallows. While awaiting execution in 1737, Henry Bosworway implored a workmate to “save my body from the surgeons” which became a ubiquitous phrase of the era as surgeons would turn up at hangings to fight the families of the condemned for the body so that they could be used for dissection (Lock, 2002, p.66). McNally asserts how the revolts against the whims of the surgeons became a focal point for working class solidarity as “the labouring poor created two unique ‘forms of working-class cooperation in the face of death’: the Friendly Societies to which workers contributed pennies to fund a proper burial, and the riot against Surgeons” (2011, p.20).

Furthermore, while the United Kingdom may have ended slavery in 1807 with the Slave Trade Act, the bodies of Black people were used and experimented upon long after freedom had supposedly been granted. Bodies of those still trapped in slavery were routinely stolen or sold so that medical dissections could be performed. Additionally, “Daina Ramey Berry, a professor of history at the University of Texas at Austin, has documented the economic value of slavery in the United States. She notes that there was a brisk trade in black corpses in the nineteenth century, some exhumed by their owners for a quick profit” (Saini, 2019, p.51). Saini acknowledges the cruel irony that so much of modern understanding and knowledge of human biology stems from “the bodies of those who were considered at the time less than human” (2019, p.51).

The theft and subjugation of Black bodies was rooted in the discourse (see section 1.1) of freakery; a “process of construction, defining (and sometimes thwarting) the precarious boundaries between the ‘normal’ and ‘abnormal’” (Davies, 2015, p.24). Davies cites the case of Sarah Baartman, whose body was stolen and displayed at the Muséum d’Histoire until she was finally returned to South Africa in 2002 after decades of campaigning. Baartman’s body was stolen by military surgeon Dunlop who saw the profit to be made from displaying her both in life and death, and the case came to epitomise both how the medical establishment could reproduce inequalities and how the white supremacist gaze denied the humanity of people of colour, with the white gaze seeing only spectacle and constructed the notion of the ‘monstrous other’.

Medical establishments and professionals would plunder the bodies of the marginalised for well over a century – including the 1536 case of Vesalius stealing the body of a sex worker to dissect and mutilating her face so she could not be identified, and she was far from the only sex worker who he dissected to learn more of anatomy (Cleghorn, 2021, p.61). The Murder Act acknowledged the shift from the sovereign power and the right of the appointed monarch to take life and to ensure crimes were judged according to whether they offended the crown, to the complete subjugation of the body, even beyond death. This is an element which *Mass Effect* depicts throughout the original trilogy as the dead, dying and living are transformed into techno-zombie tools for the reapers (known as husks), an icon that forms the basis of chapter nine.

Mass Effect invokes plots of biopolitics and biocapital, which is described as a new phase of capitalism, within which biotechnology is an inextricable form of enterprise (Rajan, 2006, p.3). The reapers, and even the galactic council, do not simply destroy life as initially feared, but they wish to carefully manage life. This is a feature of biopolitics, which is the

“aggregate of governmental, political, institutional and economic techniques that supervise and permeate the population, setting in motion its hygiene, birth rate and life expectancy” (McQueen, 2016, p.9). Within the series, a race of aliens are sterilized due to being racialised, perceived as predisposed to violence. Even the capital of the galaxy is deeply segregated as the wealthy are allowed to occupy space in the luxurious Presidium, while the working class are pushed to the fringes of society and forced to live in the lower wards, a place where children in poverty often die, getting stuck in the Citadel’s pipes as they live invisible lives and search for any scraps they can find.

Taylor (2011) asserts that Foucault’s idea of biopolitics was about managing life to the point of hiding death.

“We may thus choose to cease managing an individual's life by letting her die, or to not foster certain lives to begin with, but this is not the same thing as the sovereign right to kill. While a person might be allowed to die or her life may be disallowed to the point of death, and while the state monitors the morbidity rate, you can be fairly sure that your death will not be claimed by the state, and that your life will be managed but not seized” (2011, p.49).

Taylor goes on to state that Foucault believes that there would be “more genocides under biopower than under sovereign power, because biopower wants to manage the health of populations. When combined with racism, this management becomes cast as a concern for the racial purity of a people” (2011, p.50). In *Mass Effect*, not only are undesirable populations sterilised but there is a pursuit among the rich for genetically perfect creations, deepening inequality. The central tension of the series is a struggle of reckoning with biopolitical imaginaries, and this is caused by deepening of biopolitical exclusions.

Perceptions of biology are tied to our position in society; “our biology is enacted in society...Society emerges from our biology, and from the interactions between those evolved bodies that we inhabit” (Rutherford, 2022, p.8). Rutherford emphasises that nature and nurture are often set apart; genetics are part of DNA which everything else is seen as part of the wider universe and it is implied that never the twain shall meet. Rutherford counters this false idea with the ways in which biology and society do overlap (and perhaps no field shows this more bluntly than the area of disability studies). As Rutherford states: “Nature was never versus nurture; it is and always was *via*” (Rutherford, 2022, p.8). This lends itself to Birke’s call that we must urgently find new ways of thinking about biopolitics – outside of reductionist terms - which “allow us to theorize bodies lived *in* culture” (1999, p.48).

Mass Effect is the product of a genre that has increasingly focused upon biopolitical imaginaries alongside the transformation of capitalism; “biocapitalism is the frontline of capitalism today, promising to enrich and prolong our lives whilst threatening to extend capitalism’s capacity to command our hearts and minds” (McQueen, 2016, p1-2). For “capitalism is mutable and multiple; it is always *capitalisms*.” (Rajan, 2006, p.7), with the bioeconomy a key site of investment and competition between post-industrial and emerging economies (Cooper and Waldby, 2014, p.6).

Section 2.4 Examining the historical context of monster theory: From monsters to mutants, a twenty-first century theory emerging from the Gothic past

This thesis expands on the original ‘Monster Theory’ (capitalised to credit its original contribution to the field), created by Jeffrey Jerome Cohen (1996), and this section discusses the concept of monster theory. The monster “is difference made flesh, come to dwell among us” (Cohen, 1996, p.7). Helen Davies declared the monster as ‘man-made’ by the

process of constructing freakery (2015, p.24). In monster theory, Cohen proposes in Thesis VII that the monster stands at the threshold of becoming (1996, p.20). This alludes to the posthuman transformation that some figures go to and thereby become mutants. This was the last of Cohen's proposals, and there has since been a subsequent rise in the role of biotechnology in science fiction.

This thesis posits that genetically engineered or otherwise altered characters deserve greater expansion and analysis and while they may be a sub-type of monster, they are significantly different from most monsters, and they reflect anxiety around bodily insecurity in a time of late-stage capitalism. Shildrik states: "At the very simplest level, the monster is something beyond the normative, that stands against the values associated with what we choose to call normality and that is a focus of normative anxiety" (2002, p.29).

Monsters are linked to eighteenth and nineteenth century scientific views that "...found a place for monstrosity in nature by seeing it as an excess or defect in the ordinary" (Mangham, 2023, p.29). As biotechnology becomes embedded in our society it is fitting then that "the original word *monstrum* means 'that which reveals' or 'that which warns' (Švelch, 2023, p.10). Posthumanist Braidotti asserts that "advanced capitalism and its bio-genetic technologies engender a perverse form of the posthuman" (2013, p.7). It is this perversity that is the focus of this thesis.

Monstrosity is a social category, "reflecting culturally specific anxieties and desires, and often deployed – wittingly or not – to achieve particular socio-political objectives" (Weinstock, 2020). Monsters are defined as creatures that were viewed as unnatural, stemming from the 1820s when Étienne Geoffroy St Hilaire proposed that there should be a field of teratology (or, the formal science of monsters). The French anatomy professor argued that "Monsters were mistakes of normal processes, but they were always explicable

and identifiable; there was a law of deformation as well as formation, and the 'normal' could now be studied through these rare instances of the pathological" (Luckhurst, 2021, p.236).

The popularity of horror (including body horror) is that it "derives from its transgressive nature – from the fact it can deal in matters often left out of other genres or considered too extreme, maybe even harmful" (Reyes, 2016, p.12). As Sharpe states, "...[the] law has, from the clay of humanity, constructed the monster to represent the greatest degree of difference to humanness" (2010, p.23). With Halberstam writing that the monster must be "multidimensional" in its horror to embody not conformity to male bourgeois humanity" (1995, p.110). Disability scholar Matthew Parry notes how facial and physical congenital disfigurements/malformations were viewed as monstrous, a belief pushed by Charles Darwin in his work on evolution (2013, p.7). Braidotti documents that queer feminists felt excluded, deviant, abnormal and *monstrous* compared to the dominant idea of humanity as they were "socially coded as 'unnatural' in their rejection of compulsory heterosexuality and reproductive normativity, queer and trans theorists deploy an extreme form of dis-identification from the Vitruvian humanist image of 'Man'" (2022, p.38). Braidotti adds that queer theorists join with disability theorists to critique aspects of human normality (2022, p.38). Gloyd compares feminist theory to the body of monstrosity; seeing both in constant flux in navigating and renegotiating the self; as thoroughly modern subjects (2020, p.24). Montaigne claims deformity led to the "monstrous representations that the imagination is capable of engendering through the power of unbridled speculation" (Kritzman, 1996, p.170).

In myths and legends, there has long been a curiosity about how monsters came to be, and if they are the product of 'unnatural' means. This includes such legendary creatures as the

minotaur; a beast that was part-man and part-bull that was created after Pasiphaë, the queen of Crete, mated with a sacred bull. The tradition of monsters in stories then, dates back thousands of years. On monsters, Carroll states:

“Boreads, griffins, chimeras, basilisks, dragons, satyrs, and such are bothersome and fearsome creatures in the world of myths, but they are not unnatural; they can be accommodated by the metaphysics of the cosmology that produced them. The monsters of horror, however, breach the norms of ontological propriety presumed by the positive human characters in the story. That is, in examples of horror, it would appear that the monster is an extraordinary character in our ordinary world, whereas in fairy tales and the like the monster is an ordinary creature in an extraordinary world” (2018 p.28).

Carroll argues that monsters come to be defined and shaped by audience reaction to them. Halberstam argued that fascination with the monster was a modern (not ancient) concept and added that “the monster itself is an economic form in that it condenses various racial and sexual threats to nation, capitalism, and the bourgeoisie in one body” (1995, p.3). The monster has come to represent the transgressions of norms within society, particularly relating to identities and the body (Perry Long, 1996, p.196), and the subsequent anxieties they unleash (Cohen, 1996, p.xii). Cohen and the thirteen other scholars who contributed to *Monster Theory: Reading Culture* (1996) created theory about these classical monsters, and how they operated (rather than how they were created, one of the main occupations of this project).

Monstrous characters evoke fear and desire in audiences. Anybody who has been exposed to *Dungeons & Dragons* (Arneson, Gygax, 1974) knows that players face the eternal question of whether *to kill* the monster *or romance* the monster: “By challenging the

boundaries of the human and the coherence of what seemed to be the natural world, monstrous bodies appeared as sublime, merging the terrible with the wonderful, equalizing repulsion with attraction” (Garland Thomson, 1996, p.3). As Gevaert and Laes write, “Indeed, from the beginnings of time people have considered monsters to be *tremendum et fascinans*, fascinating mankind but also frightening it” (2013, p.211).

There has been work on mutants; *X-Men and Philosophy: Astonishing Insight and Uncanny Argument in the Mutant X-Verse* (Housel, Wisnewski, 2009,) but this text is limited to the specific way Marvel designates the title of superheroes. This thesis differentiates by establishing definitions of each type of mutant and identifying them through *Mass Effect*. This project will thus supply a definition of mutant beings, which can then be applied to other media.

For the purposes of this thesis, it is important to establish a solid definition of what classifies as a mutation, as the water has been muddied over the years by the medical pathologising of the monstrous: “Formally articulated in 1832 by the French zoologist Isidore Geoffroy-Hilaire, teratology recasts the freak from an astonish corporal extravagance into the pathological specimen of the terata” (Garland Thomson, 1996, p.4). Mutants can be defined as creatures that have had their creation altered in some way to disrupt social, economic and environmental systems outside of normative practices and understandings, however this mutant point is ever moving due to the morphing of humanity’s desires and associated abilities in the areas of, that is consistently developing its notions of biotechnology and biomedicine. While monsters are viewed as aberrations, mutants are viewed as the next step toward progress.

Mutants only sprung into the English language in the twentieth century due to studies of mutations (Online Etymology Dictionary, 2023). Mangham uses the research of Darwin and

surgeons such as William Hunter to explore the meaning behind mutants. The dominating idea was that nature will endeavour to correct abnormalities such as an extra digit, and that the mutant could blend back to the “ordinary type”, despite monstrosity often being eliminated through the laws of nature and stopping propagation. Mangham adds that “...One of the interesting factors in this argument is the perception of mutation and deviation as belonging to the same laws of development as ‘normal’ or ‘healthy’ propagation” (2023, p.55). This is true to a certain extent: the experimented mutant is often designed to be better, but the consequences of tinkering with life can result in unwieldy results by those who put ambition before ethics – a typical trope of science fiction.

As Hughes states, “there is no great invention, from fire to flying, which has not been hailed as an insult to some god” (2004, p.75) and this latent anxiety transfers to the invention and experimentation of mutations. Michaud expresses similar ideas, stating that the fear of technological innovations should be linked “back to Prometheus’s theft of fire and Adam’s fall from heaven after disobeying God” (Michaud, 2017, p.143). This is emphasized in Foucault’s *Power: Essential Works 1954-64*, that details the opposition to centralized medicalisation by Protestants in English speaking countries in the nineteenth century who asserted “the right to life, the right to get sick, to care for oneself and to die in the manner one wished” (1994, p.155)

A morphed humanity represents the technological progress of society but also question the ethical progress of the world around it, with subjects of questionable or new techniques often marginalized (as in mutating outside of normative expectations). There are two distinct groups of mutants: accidental mutants and designed mutants.

Accidental mutants are those created unintentionally by a contaminated society, a result of dystopian times, but not deliberately designed by any one creator. The 1950s science fiction

era in the US had many mutations at the centre of their narratives, and this was also found in postwar Japanese cinema, comic books and later mainstream US TV. Examples of this would include: Godzilla, the original Teenage Mutant Ninja Turtles origin story, Captain Atom, or Spider-Man. These beings are the result of societies that have pursued nuclear power as a national status symbol. The *Teenage Mutant Ninja Turtles* is specifically described by Falkof (2013) as the inevitable imaginative depiction of the Cold War due to the lack of mass media images from such an event, and yet still held a grip of terror over the American public, and this was reflected by “constant” depictions of mad scientists and of out-of-control technology and nuclear apocalypses.

Their creation, and existence, is a destabilizing force to these borders. The contamination of nuclear power that has given them super strength and skills, and not condemned them to a painful death, means that their existence supplants humanity, regardless of whether they are fighting specific criminals or causing destruction against the excessive and reckless society that created them. They are the vengeance of uncontrolled capitalism by the state, as capitalism is now a model that cannot be envisioned beyond in the West and is the only conceivable path for governments (Hassler-Forest, 2012). But they were never intended to be so. This contrasts with those who have been deliberately designed to be better than humanity, not homo sapiens but “homo superiors” (Southworth, 2009, p.18). Those mutants are often created in laboratories by the infamously rich and eccentric lone scientist desperate to ensure his legacy.

This thesis will consider how these characters operate within the universe, how they are treated, and what threats to society they are believed to pose. This will be in part developed from and inspired by monster theory, popularized by Cohen.

For guidance, Cohen’s monster theory (1996) theses are:

Thesis I: The monster's body is a cultural body.

Thesis II: The monster always escapes.

Thesis III: The monster is a harbinger of a category crisis.

Thesis IV: The monster dwells at the gates of difference.

Thesis V: The monster polices the borders of the possible.

Thesis VI: Fear of the monster is really a kind of desire.

Thesis VII: the monster stands at the threshold of becoming.

Cohen's tenets of monster theory are engaged in each of the subsequent chapters, as the character case studies build upon the tradition of monster theory.

Section 2.5 Where is the monster now? The mutant as a posthuman agent; the intersection of the Gothic and posthumanism

The shift into a biotechnological age has been a long time coming. In 1720, the horticulturalist Thomas Fairchild presented a designed hybrid flower to the Royal Society – a new form of dianthus – the positive reaction surprised Fairchild who had been anxious that designing a new plant would have been perceived as blasphemous and a tinkering with God's creation and His order (Luckhurst, 2021, p.234). This was the first moment of acceptance for the idea that life could be played and tinkered with, that there could be more than God's design. Working to change genetics is now an energetic field of science, promising the eradication of diseases but also inspiring those with means that they can design their own bodies and (one day) their children.

In *A Cyborg Manifesto*, Donna Haraway (2006) proposes new feminist theory based on the idea that all humans would eventually have their existence and bodies entangled with technology, changing the very concept of our perceptions of humanity. Many concepts and ideas that appear in science fiction – including the potential for new technology – are most

often borne from desires and anxieties that exist in the real world. Science fiction tropes of cloning and visual imaginaries of robotic support for child rearing and birthing (*Star Wars*, 2005, *I Am Mother*, 2019) have facilitated speculation on the trajectory of real-world technological developments. The moral panic over “test tube babies” since the 1960s, saw James Watson decry that “all hell will break loose, politically and morally, all over the world” in 1974 (Garber, 2012, *The Atlantic*) if advances into invitro fertilisation continued. Recently, debates have raged about the right to ‘biohack’ our own bodies and take ‘full control’ over our own lives and away from corporations and especially, as proponents see it, away from Big Pharma. As Braidotti says, “bio-hacking means self-designing one’s embodiment” (2022, p.167).

As technology advances, the nature of life will be altered further. Genetic screening exists, we can have bone marrow transplants to alter our immune system, the rich have access to better health care and greater control over genetics. Through examining science fiction, we can examine our relationship to identity and our bodies, as science fiction opens a world of possibilities and challenges. Science fiction predicts where the current trajectory of technological advances will lead, and how society will reconcile with what may happen. Stories of jobs being under pressure from automation, are plots that tap into a real anxiety reflected in the audience with self-service tools and the development of artificial intelligence replacing workers. This is an anxiety that dates to the birth of the industrial age and destruction of the first textile machines to be implemented in factories in Nottingham in 1812. Hughes argues that the Luddites impact on the politics of progression can still be felt today: “... [They] represent one recurring historical response to the rapid, dislocating changes brought by technological progress: to smash the machine instead of the political and economic system that produces it” (2004, p.108-109). To an extent, it is why mutant

characters are a point of spectacle as their design is tied to capitalism, the commodification of the body and advanced uses of biotechnology while healthcare inequality often remains in these fictions.

Feminist theory since the 'cyberpunk years' has tried to re-engage with the figure of the cyborg, the blending of biology and technology, using it as a focal point to evaluate the digital and technological ages we are in (and, occasionally, through a utopian lens). There are claims that "feminist cultural studies have embraced the cyborg as a social and technological *construct* but have ignored, for the most part, the *matter* of the cyborg, a materiality which is as biological as it is technological, both fleshy and weird" (Alaimo, 2010, p.7). Alaimo added that "the critical reception of the cyborg as technological but not biological insinuates a transcendent cyberhumanism that shakes off worldly entanglements" (2010, p.7). Haraway argues for pleasure to be taken "in the confusion of boundaries and for responsibility in their construction" (Haraway, 2006, p.150), and this thesis agrees with that sentiment: the confusion of body-boundaries and possibilities is not a blanket-ill even though, as this literature review shows, the confusion of body-boundaries is so often treated as a reason for anxiety. Because of this, social justice theory will be harnessed to help examine specific changed characters, and their relationship to society.

Section 2.6 The origins of the term mutant, and how this links with a posthuman teratology

In *Foucault Monsters and the Challenge of Law*, Sharpe explores the legal history of the monster under English law (2010). Various laws in England and across the world have drawn associations with monstrosity. One of the first possible documentations of the word 'mutant' being employed in a legal framework was in 1991 in New Zealand (*M v M*) in reference to a transgender woman who was referred to as a "hermaphroditic mutant" (Sharpe, 2010 p.102). In defining monsters, Sharpe claims "monsters serve to mark the

boundary between human and non-human while simultaneously calling into question the stability and coherence of that very boundary” (2010, p.30). Sharpe continues “for what is mutant in the eyes of the court is a body with no clear gender home” (2010, p.102), emphasizing the blurred boundaries between monsters and mutants. In an era of greater biotechnological advancements, of queer identities winning greater recognition and of a boom of science fiction in TV, films and games, there is room to question the social location of fictional mutants, whether this location is dependent upon creation or other marginalisations and if there are relevant offline/real-world reflections.

The digitised age therefore offers new possibilities in examining the monster. Patricia MacCormack proposed a posthuman teratology that calls into question the boundaries and conceptualisations of monsters *and* of humans (2012, p.295), due to the notion that the viewer/player is entangled with the monster and the monster’s world, responsible and tethered to their being. Švelch states that “posthuman teratology beckons us to look beyond the boundaries of the individual hero or monster and consider instead an unbounded, supra-individual monstrosity that expands in space and time” (2023, p.126).

There is then precedence for re-engaging with the monster, particularly when the new bioethical age “involves wrestling with new moral questions posed by biomedical discoveries, realising our ethical standards appear differently as biology fills in our picture of humanity and its place in the world” (Burnett, 2009, p.55). This thesis interrogates the moral questions that the design of mutant characters poses in chapter six, as well examines the bioethical interventions to mutant characters in chapters seven and eight.

In scientific terms, it is stated that “while rare and sometimes harmful, mutations are also essential, as they result in the inherited genetic variation that forms the basis of evolutionary change” (Weitzman, and Weitzman, 2017, p.60). In literary theory, mutants

demonstrate a disruption to normative populations, and the ushering of a posthuman age and representing a clash of powers between those who are subjects and those who have the power to control populations. I define mutant characters as: “characters experiencing/who have experienced biological transition away from normative expectations due to some intervention, characters in conflict with their creators whether systems of capitalism specific individuals and characters struggling with their creation and seeking full autonomy and body liberation” (Farnsworth, 2022).

Chapter Three: Methodology

Section 3.1 Games studies and hermeneutical approaches.

This chapter establishes the rationale for the thesis, as well as how the approach was selected, thereby constituting a methodology. This is designed to avoid Aarseth's criticisms (2003) that research topics involving video game studies have methodologies falling into vagueness.). *Mass Effect* acts as a 'cybertext' (Aarseth, 1997, p.1), a media format which prioritizes and centres the user of a text, with games allowing for player navigation and role-playing games allowing for specific choices through interaction, avoiding the typically linear narrative of books and other media. *Mass Effect* fulfils Aarseth's ergodic criteria; leaning into the branching narrative experience through an epic story, but its ludic experience – its game making – is what provides an opportunity for a unique form of analysis, as the cybertext user "performs in an extranoematic sense" (1997, p.1). Aarseth notes that "theories of literature have a powerful ability to co-opt new fields and fill theoretical vacuums..." (1997, p.18), and therefore literary theory helps to navigate the relationship between media and biotechnological themes.

This thesis is concerned with the ontological interrogations of monstrous identities and depictions in a biotechnological age, through a case study of *Mass Effect*. Social historical studies link video games to their social context, "where technologies are perceived as socially shaped or constructed" (Mäyrä, 2008, p.32). Gee affirms this, stating "...good video games are extensions of life in a quite strict sense, since they recruit and externalize some of the most fundamental features of how human beings orientate themselves in and to the real world," (2005, p.211). Bogost observes that "since the industrial revolution, much literary criticism about technology has focused on the uncanny ligatures between humanity and machinery" (2006, p.51). The premise of this thesis is to shift the focus (somewhat)

toward the depiction of biotechnology and monstrosity; two fields which have not yet been woven together strongly. This follows the tradition of literary studies but informed by the key developments in theories of game studies since the beginning of the twenty-first century. As Hall asserted, “representation connects meaning and language to culture (1997, p.15),” with the representation of mutants and morphed humanity connected to a culture of biotechnology. Mutants are a cultural phenomenon as they carry meaning through language and representation (Du Gay, 1997, p.5), and to establish the ontological properties of mutants in media, there must be epistemological assessment of interpretations of representations of monsters of which mutants are a subset. Hermeneutics are a traditional and epistemological approach to social sciences as linguisticity is “deeply woven into the sociality of human existence” (Gadamer, 1976, p.20). For hermeneutical interrogation “It seems advisable then, if not imperative, to take up the question of the interdependence of rhetoric, hermeneutics, and sociology as regards to the universalities that run through all three” (Gadamer, 1976, p.20) and so this thesis begins with examinations of the word mutant (section 3.2), current literature and the shifting meanings within science fiction(s) including the subgenre of biopunk, and then extends to engaging with bioethical research within each chapter’s case studies. The latter process is particularly important because “just as in rhetoric and hermeneutics so also in *sociological reflection* an emancipatory interest is at work that undertakes to free us of outer and inner social forces and compulsions simply by making us aware of them” (Gadamer, 1976, p.30). But, before we proceed, this chapter now turns to the justification of using a video game as a cultural artefact (via its representations) to further establish the context for this thesis’ parameters of study. According to Gadamer, “the difference between a literary work of art and any other text is not so fundamental...All written works have a profound community in that language is what

makes the contents meaningful. In this light, when texts are understood by, say, a historian, that is not so very different from their being experienced as art” (1975, p.155-156). And yet, there have been debates about how best to interrogate games, since their emergence as a (relatively) new media. Games differ somewhat to other narrative media as “players *inhabit* the goals of a virtual character in a virtual world. The virtual world is designed to be *attuned* to these goals... [and] In a video game, a virtual character *instantiates* the goals of a real-world player. The virtual world is designed to *invite* the real-world player to form certain sorts of goals and not others” (Gee, 2005, p.212). The goal-orientation of video games means they do not align with media such as film or TV, raising questions about if they possess narratives in the same way as earlier media forms, and, if they do, how they might be scrutinised.

Ryan states that “...games may not be stories, but they can be machines for generating stories” (2006, p.189) and compared the idea of a film focused on a plane flight, which will present one image of it in motion while a simulation “will model multiple instantiations of the same process: in a flight simulator, the airplane can perform many different takeoffs” (2006, p.188). Games have multiplicity – of endings and in-game events – and “only by studying the multiple nature of video games is it possible to gain a fuller understanding of the growing influence of video games and to envisage their role in the future” (Mukherjee, 2015, p.10). Jenkins considers video games as ‘lively art’, challenging middle class assumptions and cultural norms through modes of play (Jenkins, 2007, p.11), reaffirming the idea of the potential for a video game to allow for examinations and depictions of bodies. While the player is bound by the objectives of the game, this means that “to play a video game is therefore to interact with real rules while imagining a fictional world, and a video game is a set of rules as well as a fictional world” (Juul, 2005). If “rules themselves create

fictions” (Caillois, 2001, p.8), games are fiction crafted from rules. Juul went further, by designing six principles of game design, stating that a game is:

1. A rule based formal system;
2. With variable quantifiable outcomes;
3. Where different outcomes are assigned different values;
4. Where the player exerts effort in order to influence the outcome;
5. The player feels emotionally attached to the outcome;
6. And the consequences of the activity are optional and negotiable.

(Juul, 2005).

Games are systems which allow players to “engage in artificial conflict, defined by rules, that results in a quantifiable outcome” (Salen and Zimmerman, 2004, p.96). While games may vary from other media as players are tethered to interaction by gameplay rules, the fiction of the world has not been forgotten in recent games scholarship. There has tended to be a middle ground (typically between ludology and narratology) where the unique properties of games are accepted, but there are still efforts to engage with their fiction(s), meaning that “just as we can choose to discuss games or players, we can also choose between studying a specific game for its role in the general media ecology or focusing on the game itself and the playing of the game” (Juul, 2005). *Mass Effect* will be used as a case study to interrogate wider cultural studies theory regarding biotechnological speculation, with this thesis taking a holistic pathway through ludology and narratology.

Narratology refers to narratives as a “universe of representations” (Todorov, 1969, cited in Pelurson, 2017, p.26). For Cassirer language, art and religion are forms of representation (cited in Gadamer, 1976, p.76). This became a basis of the treatment of games in academic study; to view games as vessels for narratives. A narrative is a story about things happening

to “people, animals, aliens from outer space, insects– whatever” (Berger, 1997, p.4). Video games can act as narratives if they have a “conflict of intentions”, and video games may contain story, or “the sequence of events which happen in the fictive world” (Wibroe, Nygaard, Andersen, 2001, p.166). Gee refers to “projective beings” to show how game characters are beings the gamer has been given from the developers, and an avatar to project desires, intentions and goals by the player (2005, p.213), thus games can operate as a vehicle for fictional worlds, to explore and test fictional laws and societies – making close textual analysis and appropriate and *conventional* methodology. *Mass Effect* operates as a branching narrative, providing ample fictional worlds and plots to evaluate and multiple choices for the player-avatar to engage with.

Close textual analysis has previously been employed within video game studies, a recent example would be Kirkland’s *Video Games and The Gothic* (2022). This thesis is also a close textual analysis embedded within the cultural context of biotechnological speculation and development. Games are part of a media ecology, and scholars can choose to study a game for its role within this media ecology or focus on the game itself and/or the act of playing (Juul, 2005). Additionally, “...the formal study of games focuses on the nature of game and play and aims to provide concepts, models and theories that accurately describe the essential and unique features in game form and its functions” (Mäyrä, 2008, p.33). A formal analysis within video game studies broadly consists of playing a game and “forming an understanding of how the game system works” (Lankoski and Björk, 2015, p.23). Such analysis within game studies has precedent, some examples being Bódi’s *Videogames and Agency* (2023) and Ruberg’s dissections of queerness within video game representation (2019).

Bogost has called for a “a greater balance of attention to players and social phenomena as well as to the construction and operation of hardware and software platforms” (cited in Heineman, 2015, p.213). *Mass Effect’s* fully realised environments, realistic animation, high-quality voice acting and the development’s commitment to building fan communities around the games have been the main drivers behind the success of the series (Heineman, 2015, p.194). This thesis therefore considers the game narrative, the impact of the narrative on the players – including the role played by player agency in shaping the narrative - the construction of characters within the narrative, its legacy (as a popular video game series) and the cultural context of the creation of both BioWare and *Mass Effect*, ensuring a holistic approach akin to what Bogost has advocated for.

Hermeneutics is the classical discipline of understanding texts and “understanding must be conceived as a part of the event in which meaning occurs, the event in which the meaning of all statements – those of art and all other kinds of tradition – is formed and actualized” (Gadamer, 1975, p.157). Gadamer explains philosophical hermeneutics as taking “as its task the opening up on the hermeneutical significance for our entire understanding of the world and thus for all the various forms in which this understanding manifests itself: from interhuman communication to manipulation of society; from personal experience by the individual in society to the way in which he encounters society; and from the tradition as it is built of religion and law, art and philosophy, to the revolutionary consciousness that unhinges the tradition through emancipatory reflection” (1976, p.18). The true power of hermeneutical analysis lies in the ability to see what is questionable, considering – beyond artistic and historical tradition *and* principles of modern science – the whole of our experience (Gadamer, 1976, p.13). This emphasis on considering the whole of a text is fundamental to this thesis, as:

“Philosophical hermeneutics takes as its task the opening up of the hermeneutical dimension in its full scope, showing its fundamental significance for our entire understanding of the world and thus for all the various forms in which this understanding manifests itself: from interhuman communication to manipulation by society; from personal experience by the individual in society to the way in which he encounters society; and from the tradition as it is built of religion, law, art and philosophy, to the revolutionary consciousness that unhinges the tradition through emancipatory reflection.” (Gadamer, 1976, p.18)

If “we recall the hermeneutical rule that we must understand the whole in terms of the detail and the detail in terms of the whole” (Gadamer, 1975, p.291), then this thesis must consider the cultural context of *Mass Effect* and *Mass Effect’s* relations to culture.

Additionally, through the process of hermeneutical inquiry, the study of those considered mutants looks from the marginalisation of individuals to wider population management and the gradual morphing of humanity. This includes examining a key plot regarding krogan sterilization within the wider politics of Canada’s own sterilisation policies (Chapter Eight).

According to Mäyrä, the hermeneutic circle of research process involves theory and understanding, the collection of more data/further observation, analysis, interpretation and then back to engaging with theory and understanding, and repeat (2008, p.153). This research process is a fundamental part of this thesis. Du Gay proposed a ‘circuit of culture’ whereby production, consumption, regulation, representation and identity are all connected, feeding into one another, backwards and forwards (1997), and this is why there will be a focus on the way in which the player can consume the game and enact choices, the contextual history of BioWare and the way that narrative operates within these constraints and factors.

The next section will address why *Mass Effect* was chosen for the project's case study, and how it functions as a narrative.

Section 3.2 Mass Effect and Meaning.

Video games are embedded within everyday life; just as the 1950s and beyond saw computers become cheaper and more reliable, video games have followed the same trend (Pagulayan et al, 2012, p.796). Within the first 24 hours of the release of *Halo 3* US sales generated approximately \$170 million dollars, rivalling the movie release of *Spiderman 3* and the record book release of *Harry Potter and the Deathly Hallows* (Chalk, 2007).

Furthermore, for this revenue to be generated, video games have had to move beyond the stereotypical idea of a gamer as an adolescent male and grow a diverse audience (Pagulayan et al, 2012, p.797). Even in 2009, 25% of gamers in the US were over the age of 50 (Entertainment Software Association, 2009).

Additionally, the video games industry has helped to drive technological advancements, just a selection of which include virtual reality headsets, Microsoft's development of accessible controllers for a range of physical disabilities, greater accessibility options within game menus, and stretching microprocessor technology to "its limits" (Shippy and Phipps, 2009). All of which lays the groundwork for future console development.

Some games have been recognised as cultural artefacts (Kirkland, 2022, p.10), demonstrated by the 2019 exhibition at the Victoria and Albert Museum (Foulston and Volsing, 2018). Games are multiple, diverse and their gameplay can be shaped by those around us (Wilde, 2023, p.1). Wilde uses video games as case study for posthuman subjectivity, arguing that "we live in an era where the fundamental principles of what it means to be human are being reconsidered and reconceptualised, and we are moving towards a more entangled and relational understanding of the human's ontology" (Wilde,

2023, p.1). Wilde continues that we are moving into an “era of more and more advanced technological and digital innovation” (2023, p.2). This offers new opportunities for exploring the digital and its influence over our non-digital lives as video games offer constantly evolving depictions of the boundaries between bodies and biotechnology.

Video games allow for the utilisation of thought experiments and interpretation more so than other mediums due to their specific requirements for interactivity and the ability to roam within branching narratives: “You don’t just absorb the story, you participate. You don’t just learn about the events, you carry them out yourself” (Webber and Griliopoulos, 2017, p.14). Agency is understood by the limitations and potential of player interaction and the capacity to meaningfully intervene with design structures (Bódi, 2023, p.59). *Mass Effect* is a game space that demonstrates unusual player agency: “The *Mass Effect* trilogy placed considerable emphasis on affording narrative agency with an intricate structure of predetermined story permutations that carried over each instalment” (Bódi, 2023, p.125). If video games allow for interaction and meaning through interaction, then *Mass Effect* may offer an ideal case study. Player choices being fundamental to the game text acts as modern metaphor for the complex biopolitical choices which people must navigated in daily life, with every player being part of a constrained discursive narrative coming to terms with conflicting and competing ideas. The player must navigate complex choices without always clear and easily understood consequences (and live with those consequences), a fictional comparison to the ways in which people must navigate complex and opaque institutions through forms of self-governance (examined in further detail in chapter nine). Because of this, it was important to play the games repeatedly with a sensitivity toward the biopolitical as the player as a subject. Much of my data collection was therefore spent playing and charting the different biopolitical interactions and varying consequences.

Video games have formed the basis of my 'play' time since childhood, and are a fixed point of my leisure time, as well as my working life in academia. Video games operate as a form of culture, through creating their own systems of meaning via text, narrative, player actions and images and, so, meaning is made through playful action (ludosis) (Mäyrä, 2008, p.14, p.19). It is participants – or, in this case, players – who bring meaning to objects and events, and it is our use of games that equip narratives with meaning (Hall, 1997, p.3). The player-avatar bond is a fluid association, and one that allows for the building of further connections with non-playable characters (Taylor, Kampe, and Bell, 2015), and *Mass Effect's* central tenet is to provide opportunities for the player to establish close connections with non-playable characters (NPCs) to an extent that was previously absent in action role-playing games. My own playthroughs have involved playing as both genders, romancing every character, and letting NPC and best buddy Garrus win the shooting competition every single time.

The player is the subject of the game; "The attraction of a game, the fascination it exerts, consists precisely in the fact that the game masters the players... Whoever 'tries' is in fact the one who is tried...What holds the player in its spell, draws him into play, and keeps him there is the game itself" (Gadamer, 1975, p.106). Each playthrough comes with the risk of failing, whether it is choosing a wrong role-playing interaction or failing to meet a previous high score. For this reason: *I am the subject of Mass Effect*, with the hours of gameplay, with the proximity to the game and as a member of its audience, there are moments of intimate interpretations and readings which can contribute to research, linking with Mäyrä's hermeneutical circle.

Games are an active part of my routine, and I have always viewed them as (cyber)texts through which to explore sociological constructs and identities. Most of my significant

gameplay experience – and those which have provided the most pleasure – are choice-based games that trigger new and varied interactions. Tuan (1997) observes how unknown locations are merely space, and we must wander and explore and familiarise ourselves with an area to give it meaning thus transforming it into place. The Normandy¹⁰ – the central hub for the player – thus developed meaning over time as I returned to its location and interacted with the main non-playable characters and learned of their stories and usually fraught identity-related journeys. The Normandy was the place where Grunt was born from a tank, where Miranda divulged the information that she had been created by eugenicist, and where Shepard can engage in romantic liaisons. Heidegger asserts that “to build, is really to dwell” (1971) with the role-playing nature of *Mass Effect* challenges the player to build meaningful connections to non-playable characters and, if they do so, they are rewarded with a full and skillful team in the fight against the reapers.

Within hermeneutic investigations our understanding of a text “is already interpretation because it creates the hermeneutical horizon within which the meaning of a text comes into force” (Gadamer, 1975, p.397), Gadamer continues that to be able to express the meaning of a text we “must translate it into our own language” (Gadamer, 1975, p.397). The repetitive playing of *Mass Effect*, the understanding of its interactions, its culture, even its terms such as pyjaks¹¹ and batarians¹² reinforce the idea of the expertise of the player, and to reinforce the validity of the expertise of the player as a researcher. This gamer’s interpretation, understanding and language is then translated into the language and context of cultural studies.

¹⁰ See glossary

¹¹ See glossary

¹² See glossary

Role-playing games provide pleasure by giving the gamer multiple lives they could never live in reality, creating multiple life histories that hold meaning (Gee, 2005, p.105), allowing players to cross the boundary from societal reality and norms to “adopt artificial behaviours and rituals of a game” (Salen and Zimmerman, 2004, p.333), and games can create emotional arousal from character identification (Apter, 1991, p.18). *Mass Effect* met the key criteria of pleasurable games by its ability to create meaning through observation of engaging cutscenes and through kinaesthetic engagement and play (Newman, 2002). As a result, I have played each of Shepard’s games (the first trilogy) at least fifteen times, totalling an approximate minimum play-time of 1500 hours (and an additional 400 hours spent on the multiplayer modes within *Mass Effect 3* and *Mass effect Andromeda*). I played the third instalment significantly more times than the others as I experimented with the different plotlines and different outcomes for the entire galaxy. *Mass Effect Andromeda* is a game I have experienced in various ways on five occasions: never fully completing (or, ‘100%ing’) the game on any specific playthrough due to the nature of its narrative and time cost, but each time selecting new and different side quests to complete during that exploration. *Mass Effect* thus becomes a cybertext as it “...centers attention on the consumer, or user, of the text...” (Aarseth, 1997, p.1).

Occasionally, YouTube videos were sought, to save and watch the dialogue wheel and branching interactions and to watch player reactions to these choices. *Mass Effect*’s own codex ¹³app was utilised listened to while at the gym (further demonstrating that video games can permeate life even when the console is turned off and allowing for increased accessibility of content rather than depending on a hard-drive). The codex offers entries on

¹³ See glossary

characters, missions, places, series, and politics. Further information can be found on planets and cultures in-game by going to each planet in the series which was also an important process of data gathering. Ultimately, my data collection depended upon my own playthroughs, to link myself with the avatar and to share the same goals (according to Gee), thus giving myself time to experience the live material and embody the research as Shepard. This does pose its own ethical and accuracy questions; can I as a researcher investigate something I am a fan of? Autoethnographies within video games studies have been utilised in recent years, most notably Poppy Wilde's *Posthuman Gaming: Avatars, Gamers, and Entangled Subjectivities* (2023), allowing justification as a methodological approach. The hundreds of hours spent playing the series and capturing field notes allowed for a more dispassionate position allowing for analysis of the broader narrative and themes at play. The data collection for my thesis depended upon me embodying *many Shepards* – not just the Shepard storyline I favoured – to begin to interrogate Shepard's moral actions within the wider ecosystem of a society rooted in biotechnology, as shown by one chapter reflecting on the player relationship to an increasingly-augmented Shepard.



Figure 1 An example of the codex menu from in-game

Culture involves practices that “carry meaning and value for us, which need to be *meaningfully interpreted by others*” and, to some extent, “we give things meaning by how we use them” (Hall, 1997, p.3). And so, as part of a formal analysis it is important to play a game multiple times and try new options (Lankoski and Björk, 2015, p.26). Aarseth warns that “if we have not experienced the game personally, we are liable to commit severe misunderstandings...unlike studies of film and literature merely observing the action will not put us in the role of the audience” (2003). Gadamer argues that when the advancement of inquiry takes place, this still happens from a teleological perspective of progressive research yet hermeneutical research adds a “a spirit of self-reflection” (Gadamer, 1975, p.286), allowing the position of the gamer as researcher to offer the chance for self-reflection which can contribute to a hermeneutical thesis. The games particularly *Mass Effect 2*, inspired me to read about genetic engineering in literary traditions which led me to monster theory and what I viewed as a gap in literature – but the spirit of self- reflection extended to the ethics of my research and using a video game as a case study of changing identities in an unstable

landscape. In this thesis I am examining significant moments of biotechnological development and experimentation of this technology on wider populations, as well as reflecting on my own position as a gamer within an expansive community. While my study could have remained as an individual autoethnographic approach, it is concerned with writing about topics fraught with ethical quandaries as well as writing about subject matters that still relate to living people, so autoethnography alone is not the appropriate framework. This thesis focuses on science fiction gaming and offers reflections on accessibility and disability, the representations of living humans and the complicated consequences and influences this may have on consumers. It interrogates the socio-historical context within which the games were created and how this shaped the direction, meaning and interpretations of the series.

At the start of this thesis, during the initial reading stage, I played each of the four games and created detailed notes on each biopunk plot, as well as a spreadsheet documenting each incident of mutation or biopunk related plotlines – of which there were 86. The spreadsheet was organised according to which game it appeared and whether it was a main mission or side quest. Plots were then recorded against character ‘traits’ (such as the background of designed beings). New ‘lore’ that the player may overhear that will then trigger a biotechnological related mission was also recorded. There was also a tally of instances of discussion of genetic/bodily manipulation that was relevant to the world but did not relate to any specific character or trigger any missions (such as news reports that Shepard can hear in the elevator). The biopunk plots were also marked as either individual instances or part of a wider plot – the genophage (krogan sterilization) was an overarching theme throughout all four games, for instance, but had three four directly related main missions in the original trilogy, and more than half a dozen secondary plots or missions.

Screenshots of biopunk plots were collected, and videos were captured to be able to revisit for later analysis, which was a task made far easier by the possession of a PlayStation 5 and its hardware and software which support capturing digital play with ease. I also played through the original trilogy on PC (as well as Xbox and PlayStations 3, 4 and 5) although the only notable change was to the icons used in a minigame to unlock safes in the second game. Most of my recorded footage focused upon the mutant characters and interactions with them. At several points, I would reload and execute the same conversations with different dialogue options to ensure that I captured the different character reactions. This is referred to as interaction mapping by Consalvo and Dutton, with their advice to conduct multiple playthroughs “so that the researcher can consider the game as a whole and can determine if earlier (unremarkable) dialogue/options/choices were actually important enough to include” (2006), a method utilised by Johansen Østby in their thesis *From Embracing Eternity to Riding the Bull: Representations of Homosexuality and Gender in the Video Game Series Mass Effect and Dragon Age* (2016, p.88).

The *Mass Effect* series falls within Aarseth’s definition of ergodic literature as a “nontrivial effort is required to traverse the text” (1997, p.1). Each game can take between 20-60 hours depending upon how many side quests are completed. The first trilogy is roughly 120 hours long. In contrast, someone who wants to play *Mass Effect Andromeda* can expect to play for around 90 hours if they wish to finish every single quest – but that does not consider the potential for replays to experience different morality paths. These estimates are broad guidelines as players can focus on the main missions, and BioWare have released downloadable comics which players can complete before the second and third games. These comics allow players to spend several minutes going through the details of the previous game(s) and making key choices which will then influence the game the player is

about to start. However, players are encouraged to complete as many missions and optional side quests as possible. The final endings in the original trilogy depend on the player gathering 'war assets' throughout each of the three games that are then tallied; this final score will impact the ending that the player experiences, with the possibility of all life dying. This means completing the comics alone before the third game will make it impossible for the player to unlock the ending which would see as many characters as possible survive, thus enhancing the story-based pleasure derived from the world and series.

There is a narrative potential within this text due to the dynamism of player choices making it essential to witness the game in as many facets as possible. Video game worlds and narratives can be a testing ground for the logic of the new societies" (Švelch, 2013, p.194). The wide variety of endings, and the expansive options for dialogue interaction provides a wealth of material to analyse and decipher. Each playthrough, conducted for pleasure, developed knowledge and expertise of the games which was then carried into this thesis. It is necessary for researchers conducting close textual analysis to have an intimate knowledge of the narrative and my study provides ample evidence of that.

Section 3.3 A taxonomy of mutants.

As part of the data collection, it was necessary to differentiate between the different types of mutant characters, for there was variation with story background, origins of powers/non-conformity and narrative operations. To identify, distinguish and ultimately analyse the mutants of *Mass Effect* it is first important to define exactly what a mutant is, and their various subtypes. Creating a taxonomy helps specify differentiate from monsters and specify how technological interventions create a dimorphism between the two categories. Mutants are a subspecies of monsters, defined by an interruption in their makeup due to societies

technological advancements. Not all mutants are the same or and so have their own sub-categories. The spectrum of mutants follows:

Mutants in motion (werewolves, for example)	Mutants in motion are beings/bodies that transition into another temporary state due to a specific influence/intervention. This would include werewolves who transition from human to wolf due to the influence of the full moon. However, what makes werewolves mutants is the specific bite that one must receive to become infected and then take on the form of a werewolf. Mutants in motion require an intervention that causes their beings to be in limbo <i>between</i> states.	Chapter Four
Augmented mutants	Tech-mutants are mutants that have had specific technological or cyber intervention to aid their mutant transformations. An example of this would constitute the husks in <i>Mass Effect</i>. Their bodies were once human but have been degraded due to biotechnological interventions that have changed their beings at a genetic level, but they also have cyber implants to direct and control their limbs. They are at the intersection of biopunk and cyberpunk.	Chapter Nine

Designed mutants:	Designed mutants have been created to a specific genetic profile to fulfil a specific purpose in their life. This enforces supremacist ideas that are determined by the creator.	Chapter Six
Subtype 1:		
Perfected	The perfected mutant is made entirely to supremacist ideals. They are the beacon of a posthuman era.	
Subtype 2:		
Experimental	Experimental mutants have their genetic makeup tampered with but only to a limited degree, and with the idea of testing a component/trait and not necessarily with the aim of achieving perfection.	Chapter Seven
By-product mutants	By-product, or accidental, mutants are mutant beings that have been inadvertently created, often by contamination, and as an unintended consequence in the relentless pursuit of nationalist capitalism.	Chapter Seven
Cloned	The cloned mutant is a genetic copy of an original character, usually a non-mutant.	Chapter Four, Six, Eight
Doubled	The doubled mutant is created as a shadow or contrast to a non-mutant character. They do not need to be genetic copies and therefore are	Chapter Four, Six

	different to clones. This would include the figure of Hyde, created by Jekyll as a way to explore his latent desires and repressed nature.	
Zombie	The zombie may be accidentally or deliberately created but its defining features are: the desire for genetic/bodily material and the lack of free will, conscious decision making and bodily autonomy.	Chapter Nine
Hybrid mutants	Hybrid mutants are those who are created through deliberate genetic alteration and blending of creatures from different species. The early form of this were creatures such as the Minotaur and chimeras.	Chapter Five

This taxonomy was created from the initial data collection tracking biopunk related plots and references in *Mass Effect*. From this, characters are compared to see if there were any similar connotations in their design, or if they are ‘standalones’ thereby creating a new type of mutant. By connecting the characters and themes of their creations, it helps to see how the basis of this futuristic society is entrenched in biotechnology.

These mutant types are rooted in the biotechnological capabilities (and sometimes oppression or domination) of the fictional society and therefore, much like monster theory, it is appropriate to examine the connotations to lived experiences of marginalised identities. Biotechnology and biomedicine are directed toward the elimination of disease – which will be explored in relation to concepts of Foucault’s medical gaze – and so the abled-disabled spectrum must be considered within the treatment of mutations. Price’s concept of

'bodymind' is a useful framework at this juncture as "bodies encounter each other often in violent collision such that captivity and mutilation are no longer metaphors" (Erevelles, 2011, p.28). Bodymind is a "a sociopolitically constituted and material entity that emerges through both structural (power- and violence-laden) contexts and also individual (specific) experience" (Price, 2015, p.271). In this spirit, this thesis interrogates the role of biotechnology for individuals and wider populations. Furthermore, it is vital to examine the potentially differing experiences of biotechnology and how it may shape or disrupt character sexuality, as well as whether speculations of biotechnology challenge whiteness or uphold both racism and the (inextricably linked) classism. Only by examining each case study through its social location can the role of biotechnology within the narrative be determined.

Each subtype will be explored throughout the chapters of the thesis, from its identity to the different examples of its type. For example, Chapter Four examines augmented mutants, cloned mutants, mutants in motion and designed mutants, Chapter Five addresses hybrid mutants, Chapter Six tackles designed perfected mutants, which contrasts with the experimental mutants and byproduct characters that form the case study of Chapter Seven, Chapter Eight examines the experimental sterilization plague the krogans suffer as well as the doubles and clones which are made to attempt to overcome this suppression, and Chapter Nine focusses extensively on zombie mutants. The mutant taxonomy is the foundation of the analysis.

Section 3.4 Methodology of/ for a new monster theory.

There is precedent for the crossover between posthuman theory and monster theory; as “the posthuman shares with the monster a confusion of boundaries that challenges what it means to be human” (Toffoletti, 2007, p.84). Yet, monster theory applies specifically to classical monsters: monsters which are seen to be *less than* human. This leaves a notable gap in monster theory as it is unable to offer discussion on characters that are *better than* humans. It does not offer anything about characters who have had their body upgraded, or had genetic advances amplified by design. It does not provide a framework to discuss the primary focus of this thesis; the topic of mutants.

This thesis proposes that mutants deviate from monsters in that they have the potential to be viewed as surpassing humanity. Cohen’s Monster Theory provides a framework for building the theory due to its precedent of formulating the rules of monsters and identifying their actions. Mutants are a subgroup of monsters. Just as “monstrous births could...be interpreted as signs of God’s displeasure outside of specifically sexual immortality” (Weinstock, 2020), few biopunk plots have dominated popular culture more than stories that toy with the creation of life - and when the ‘natural’ norms of creation are broken or replaced, popular in an age of biotechnology or the anthropocene (Braidotti, 2013, p.5). The age of biotechnology tinkering with the creation of life is increasingly common, leading to a new era of monstrosity yet to be specifically examined, and finally bringing into the fold the hybridity theory (Weinstock, 2020).

Through interpretations of *Mass Effect*’s mutants, it is necessary to utilise the older, established language of monster theory, borrowing from its framework and applying new cultural meaning (Hall, 1997, p.32-33) to an evolved branch of monsters. This is a standard methodological approach within cultural studies as there is a necessarily “interpretative

nature of culture” which spawns new interpretations from existing interpretations, with the result that interpretative cultural studies are often caught up in this ‘circle of meaning’ (Hall, 1997, p.42).

Monster theory examines the social location of marginalisation through the metaphor and embodiment of monster characters. This thesis extends monster theory to critique the relationships between subjects and creators, the context within which characters are designed and the ways in which mutated characters are marginalised.

Monster theory remains popular in academic discussion and there is a plethora of recent publications (Švelch, 2023, Mangham, 2023) to highlight its enduring relevance, but it is also a theoretical framework that has been pushed to its boundaries in recent decades; this reflects the very nature of monster theory wherein what becomes normative must always be tested.

This thesis creates a system of representation (Hall, 1997, p.17) as it contains ways of organising and classifying the concepts of the mutant and establishing the relationships between each being making the development of a taxonomy a necessity.

Utilising close textual analysis, this thesis primarily works as encyclopedic discourse, a term created by Foster, in analysis of the *Pokémon* taxonomic process. Foster notes how *Pokémon* stems from the Japanese tradition dating from the Edo period (1600-1868), of classifying and categorising monsters; a tradition specific to Japan due to Foster’s insistence that its monsters are characterised by abundance and variance (2013, p.134). This thesis will thus be a work of teratology under the monsterology field. Within Western monster studies, it has been far less common to categorise monsters as part of the ontological approach. It offers an organisation of specific monsters, to differentiate their meaning and reactions.

Cohen argued monster theory sat at the circular edge of hermeneutics, inviting the exploration of new spirals and new methods of “perceiving the world” (1996, p.7). This circle refers to the nature of philosophical questioning; such as “how does language shape the life it seeks to describe and how does life shape language?” (Brown, 2005, p.293). Hermeneutics allows for a range of interpretations (Brown, 2005, p.293), which is why it is an appropriate framework for devising this thesis.

Video games therefore allow not just the examination of the figure of the mutant archetype, but the examination of the potential for the player interaction with the mutant. There is relatively scant academic work on the intersections of video games and monsters; Švelch being the main prolific voice, with some input from other scholars (Strang, 2018, Kocurek, 2015). There is room then to develop monster theory into the realm of video game studies, with the thesis extending the framework of established theory for a medium that offers potential for new analysis, because “whatever else a monster is in this world, it’s also a person, and every foe you encounter has its own fears, anxieties, and dreams” (Hudson, 2016, p.98).

Švelch states that video games have historically relied upon transgressive aesthetics monstrosity in monster boss fights designed to instil awe in the player: “Video games have often relied on ‘edgy,’ transgressive aesthetics and monstrous imagery to shock and disgust the player. Battles with boss monsters especially attempt to fill the player with fear and awe” (2023, p.19). He further asserts that the player is provided with motivations to slay the monster – from trophies to experience points (2013, p.198).

This thesis examines how stories of biopolitical imaginaries (and exclusions) are explored in the video game series *Mass Effect*. Švelch argues that video games, by their nature, changed the way monsters have been conceptualised due to the fact the player must face the

monster (and the monster must be defeated). Švelch states that “the logic of informatic control has now colonized even the things we fear: our monsters, previously deemed to be inscrutable and abject” (2013, p.195). Švelch emphasises how video games centre action making monsters targets of the player’s/players’ actions (2013, p.195), and that “to convey its message, a monster must grip our attention and then emotionally and cognitively affect us” (Švelch, 2023, p.11). Video games therefore become an ideal medium for evaluating the current role of monsters and arguing for the distinct categorization of mutants. Through hermeneutic analysis of *Mass Effect* new analysis of characters changed or supported by biotechnology will take place. Types of mutants will be identified, as will their roles in stories and specifically in the video game series of *Mass Effect* Bradley states that: “Studying characterization builds empathy and gives students a broader sense of the human experience that can be difficult to obtain through other means...” (2016, p.122), validating the selection of focussing on monstrous characters and the taxonomic borders and experiences of mutants.

Mutants can be examined for how they disrupt the binary between natural and synthetic, challenge ideas about natural existence in a biotechnological age and can bring forward new conceptualisations of liberated bodies. This can lead to real world comparisons, and analysis as the twenty-first century depends more on developments in the biotechnology field, as we stand on the brink of all becoming mutants, we can explore how to support the liberation of bodies and analyse how biotechnologies are being used to either disrupt norms or reinforce order and structural oppression. Science fiction is grounded in postulating what our world may look like with certain technological advancements. This philosophy will follow that trend by looking thoroughly at stories with the evidence of real-world enforcement of bodily norms.

It must be noted that there have long been discussions in disability studies and feminism regarding appropriate language usage, especially when examining metaphorical concepts such as mutants, cyborgs, and monsters. This thesis endeavours to treat all analysis with respect and consideration for language usage. Language such as misfits has become useful as a materialist feminist concept focusing on “the co-constituting relationship between flesh and environment” (Garland-Thomson 2011, 594). Furthermore, there are ongoing tensions regarding the usage of the word ‘freak’ and its potential to be reappropriated (Davies, 2015, p.11) which Tromp dates to 1847 when the word became associated with human anomalies (2008, p.1). Some disability scholars reject the use or employment of the word “freak” believing that its legacy is too harmful to overcome (Clare, 1999, p.70), but there are other critics and scholars who think of ‘freakery’ as a performative identity which might “subvert normative understanding of visually different bodies even as it invokes them” (Davies, 2015, p.12). While the terminology of freakery reflects the harmful attitudes that have historically been associated with reactions and oppressions of the disabled, it is a language and terminology that reflects othering in the similar ways to how disabled people were once referred to as monsters. Modern usage is not appropriate, but the analysis of historic attitudes is necessary when wrestling with the topics of biopolitical exclusions and how they came to be, and how they were historically categorised. With that understanding, it is appropriate to consider the word mutant in this project. Mutant will refer to the fictional characters, just as monster theory refers to monsters, with metaphors and allegories considered for their wider implications for all people, but particularly those often associated with such characters, such as disabled people as humanity continues to be morphed through greater reliance and interventions from biotechnology.

Furthermore, this thesis discusses theories of 'cripping' when examining the creation of disabled mutant characters and this is another term that carries resistance with arguments that as a term, for those outside of academia, it is alienating to those without physical impairments (Sherry, 2015). However, the framework is of use when discussing examples of a morphed humanity, the blurred boundaries between disabled and abled, and so its implementation will be executed in the spirit that in this project it is a useful apparatus.

Mass Effect is a microcosm of the fears and fantasies around biotechnological advancements. No series goes so far to show so many different applications of the potential for biotechnology. *Mass Effect* explores the manifestations of 'bio-anxiety' - or the fear of a loss of control under biopolitical dystopias. This makes the series unique, and it provides a wealth of material for analysis. Foucault focuses on the nature of discourse, not just the operations of language, to understand how acquisition, interpretation and distribution of knowledge comes to be, and how this knowledge "comes to be produced in different periods" (Hall, 1997, p.43). The game therefore offers some breadth of commentary for how biotechnology may assimilate into our lives and society, and how people will reckon with 'super' beings. Social justice theory, such as *The Cyborg Manifesto* (Haraway, 2006) or *The Biopolitics of Disability* (Mitchell and Snyder, 2015), and history already provide a model for how advancements in technology have often been treated with suspicion, including by the very humans who may have benefited from certain advancements. As Donna Haraway was inspired to create new feminist theory through analysing cyborgs in science fiction, a new post-feminism liberationist theory is proposed from the popular science fiction figure of the mutant. It is a theory needed at a time when it is possible to alter and modify bodies with greater ease, morphing humanity.

Badmington (2000) examines the ways in which the previous boundaries between fiction and philosophy have now been breached, citing Haraway's *Cyborg Manifesto*. Badmington calls this 'fictive theory' (which was developed from the work of Maurice Blanchot's analysis of 'The Disaster'); where the examination of fiction resulted in the composition of new philosophical arguments. This thesis parallels the goals of fictive theory, taking a science fiction icon to apply readings and analysis of body sociology. To agree with Michaud; "The imagination must be studied and taken seriously since it often reveals feeble signals that allow us to understand the present and the future" (2017, p.82). Furthermore, the "cyborg is "a creature of social reality as well as a creature of fiction" (Haraway, 2006, p.149), with Haraway claiming social reality is lived social relations and a "a world-changing fiction" (Haraway, 2006, p.149). Fictional mutants act as a fleshier cyborg, a creature whose social reality is lived in social relations *shaped by* relations to the body and biotechnology's potential interventions. The *Cyborg Manifesto* therefore acts as a frame through which we can analyse the characters of *Mass Effect*.

As *A Cyborg Manifesto* makes "an argument for the cyborg as a fiction mapping our social and bodily reality..." (Haraway, 2006, p.150) so too will this thesis, linking mutants and morphed people of fiction to an era of biotechnology and biocapitalisms. Fiction is populated with cyborgs – creatures both animal and machine – and so too is modern medicine with "couplings between organism and machine, each conceived as coded devices, in an intimacy and with a power that was not generated in the history of sexuality" (Haraway, 2006, p.150). Haraway states that one perspective is where "people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints" (2006, p.154) and argues for an acknowledge of a range of perspectives, concluding that "cyborg unities are monstrous and illegitimate; in our

present political circumstances, we could hardly hope for more potent myths for resistance and recoupling” (2006, p.154). The mutated and morphed bodies are both oppressed under neoliberal capitalism, for fitting into a non-normative categorisation, and can be a source of resistance. Their iconography through media texts (and literature) is an activating point for discussions of the treatment and spectacle of these non-normative bodies in fiction and within social realities.

Zombie theorist McNally states “...we are thinking of imaginative spaces for the production of meanings. And, as we have seen, however much they mobilise local languages and idioms, regional imaginaries in the world of modern capitalism also aspire to a regional cartography of global processes in the spheres of culture, economy and politics” (2011, p.183). This thesis is the result of mutants that are scattered across our media landscape, to such an extent that *Mass Effect* alone may be considered a worthy source of inspiration for a thorough taxonomy/compendium of mutants.

MacCormack questions “can we even ask what a monster is?” (2013, p.293), arguing that the monster is used to contrast with humanity, which is viewed as the default normative body (similar to how under liberal humanism, the white abled cisgender man becomes the central body to be compared against). This project seeks to interrogate the mutant, defining it on its own terms in a society of monsters *and* humans.

Section 3.5 Examining the broader literature of social and gaming monsters.

This section addresses peripheral literature areas the thesis touches upon and overlaps with, bringing together areas of games studies theory, monster engagement and transhumanist approaches.

The player is positioned as normative, fighting those who are othered as “in video games...killing monsters may be more acceptable than killing people, but those monsters

can stand in for marginalised or pathologised people” (Kocurek, 2015, p.86), as “monsters are frequently coded as social undesirables – as racial or ethnic minorities, as sexual deviants, as those living on the margins of society” (Kocurek, 2015, p.86). Monstering is a byproduct of othering (Matthew, 2021, p173) with the recent Gothic focusing upon identity, subjectivity and therefore ‘othering’ (du Coudray, 2006, p.44), and because of this, the project must voyage beyond monsters and myths so that queer, feminist, race and disability theory may all be brought into the thesis to examine bodies as they delineate from established borders and national identities. Monster theory and criticisms of Gothic literature helps form this thesis’ foundations due to their focus upon the body as a disruptive force to a capitalist patriarchal nationalistic society. Gothic literature has helped propel monsters into literary discussions. Stories such as *Frankenstein*, and *Jekyll and Hyde* have sparked debates about the adaptability of humanity. Theories and discussions around these stories will then be useful to exploring mutants as a plot device, and on a wider scale. Analysis focuses on specific plots and characters, thus building a portfolio of evidence to examine how *Mass Effect* incorporates the biopunk themes of genetic tampering and mutation into its games. Transhumanist theorist Robert Geraci argues *Mass Effect* shows the normalisation and dependency on artificial intelligence by the characters and eventually the player, thus making *Mass Effect* an ideal case study for futuristic technologies and their relationship to the body; “The *Mass Effect* sequence mirrors the adoption of biotechnologies during the twentieth century, and perhaps beyond” (2012, p.743). Geraci points out that in the game, most governments oppose genetic tampering and yet the heroic figure of Shepard is resurrected due to biotechnological interventions. He further argues for the need to consider *Mass Effect* for its parallel depictions to real life; those technological aids in the game are at first hated and then normalised, and this is the path

that most biotechnological advancements go through – as we argue over the ethics but continue to take one step further into a biologized era. Geraci asserts that *Mass Effect* has normalised the transhuman, and this thesis develops this argument one step further to explore the transhuman and posthuman in the series, and our relationship to those themes. Each chapter takes a specific type of mutant demonstrated within *Mass Effect*, set forth the definitions and taxonomy for their categorisation and then analyse their interactions within their world as a specific mutant type, with chapters focusing on the player as a mutant (chapter four) the chase for perfection (chapter six), and disabled mutants (chapter seven). These chapters explore the creation of the mutants, why and how they were made into the characters they were, the choices behind their designs, their relationships with their creators, and how the stories of their lives reckon with their mutant identities. This is then used to support the notion of body liberationist theory, as a challenge to the increasingly outdated and exclusionary nature of feminism, that centres around one gender at a time when the binary has been destroyed, fluidity is more embraced by individuals, and body transformation should be accessible to those who desire it. The legacies of 2nd wave feminism have been blamed for replicating the hierarchies it was meant to challenge “in its own ranks” by allowing and promoting transmisia (or, the hatred of transgender people), a follow up of anti-porn and anti-sex work feminism that was so common in the 1970s and 1980s and for being led – predominantly – by white Western women (Srinivasan, 2021, p.149). For Schalk (2018) “Black feminist theory is an academic field and mode of literary criticism that emerged out of black feminist movements and groups who found their presence, experiences, and concerns being excluded or ignored within white mainstream feminism and black power and civil rights movements”. Feminism is still lacking in analysis of asexual and aromantic identities and has traditionally held little room for the inclusion of

disability (Murray, 2020, p.81), and there have been long-standing criticisms of its focus on white women. However, “alignments with feminism, queer studies and critical race studies have created new possibilities for understanding how disability is lived and deployed” (Murray, 2020, p.46) exemplifying that contemporary multidisciplinary approaches lead to greater understandings (and agitations for) body liberation. Fraser argues that one goal of cultural studies is to ascertain “which conceptions of equality and difference are likely to be most fruitful for future engagements?” and “which modes of feminist theorizing should be incorporated into the new political imaginaries...” (2020, p.2). As Rosi Braidotti states, arguing for a more inclusive posthumanist feminism, rather than a feminism rooted in humanism, humanism and its approaches have failed to fully create a reflective central human figure, despite leading the push for more human rights in the twentieth century, in particular. Braidotti states that “From the posthuman perspective, humanism needs to be reviewed, historicized and assessed critically. Because it is so built into our system, we need to dis-identify with it” (2022, p.41).

In chapters eight and nine, posthuman theory is employed, as “Advanced capitalism and its bio-genetic technologies engender a perverse form of the posthuman. At its core there is a radical disruption of the human-animal interaction, but all living species are caught in the spinning machine of the global economy” (Braidotti, 2013, p.7). It is this perversity that is the focus of this thesis, examining the fascination with biotechnology in science fiction, the fears and anxieties it engenders for marginalised and non-normative populations.

The series is inhabited by mutants, and bio-engineering generally are topics the player interacts with during the majority of missions. The series has a race of aliens that have been engineered to ensure lower reproductive rates, there is also a race of aliens who are severely immuno-compromised after losing their homeworld. In both galaxies, tampering

and playing with DNA are commonplace, but the rich have more control over the end products. These stories have an impact on the identities of those who inhabit the worlds and influences their relationships to people and places. Therefore, theories of body sociology are essential in examining these biopunk themes and ideas in the videogame series. Chapter nine therefore examines biopolitical security and the reason the mutant resonates at this moment in history.

The thesis avoids taking a purely narratologist approach. While the stories of *Mass Effect* will be used to look at a literary subgenre, it is not just the writing content that will be evaluated. How the mechanics impact the story will also be looked at, mixing game studies theory, literary theory and cultural theory.

As Braidotti states:

“...the posthuman condition introduces a qualitative shift in our thinking about what exactly is the basic unit of common reference for our species, our polity and our relationship to the other inhabitants of this planet. This issue raises serious questions as to the very structures of our shared identity – as humans – amidst the complexity of contemporary science, politics and international relations. Discourses and representations of the non-human, the inhuman, the anti-human, the inhumane and the posthuman proliferate and overlap in our globalized, technologically mediated societies” (2013, p.1-2).

The use and application of body sociology and biopunk literary theory demonstrates *Mass Effect's* role in helping to explore the themes of the body and bring them to the forefront of one of the biggest science fiction franchises of the modern era. *Mass Effect* is ultimately a tale of bodily management as much as the possibility of ruling the laws of physics, but what implications does that have for the rising literary subgenre of biopunk? The aim of this

thesis will be to interrogate the depictions of non-normative populations and the way in which those interpretations and values can be shaped, from the perspectives of game studies and literary theory.

Chapter Four: The Player as Mutant

Section 4.1 Player connections to the avatar of a biopunk role-playing narrative.

To use *Mass Effect* as a case study there must be an interrogation of the properties a role-playing game series offers. At the centre of this genre of game is the player, and the choices which the player can make with conversations relating to biotechnology and humanity's place in the galaxy. The player occupies an avatar that has been altered by biotechnology and is given a position of control when interacting with plotlines relating to biotechnology and biopolitics. This chapter therefore deals with each of Shepard's mutant identities in turn, demonstrating how these facets of mutanthood pertain to the relationship with the player. The primary focus is on the central connection the player can make to the wider morality and philosophy of the universe through embodying a mutant, and the actions of Shepard.

Critiquing Foucault's proclamation of the 'death of Man', Gabilondo states "he did not realize capitalism does not get rid of its old technologies and apparatuses; instead it exports them to the Third World" (1995, p.424) and so, globally, man has been transformed into a cyborgian vision of consumer culture, one represented in the proliferation of the avatar. Avatars allow us to enter cyber-realms masked, and this chapter considers the player's experience as an avatar-mutant. We are responsible for the character and the digital icon; we are connected to them, but we are not them in our day-to-day lives. As theorist Rehak explores: "Through gaming, then, the concepts of *avatar* and *interface* became interlinked; part of what users seek from computers is continual response to their own actions – a *reflection* of personal agency made available onscreen for reclamation as surplus pleasure"

(2003, p.111). Video games are ubiquitous and morph our reactions and experiences as players are transformed through the technology (becoming cyborgs).

Player agency is diluted as our power is transferred, stored in and directed by a mechanical other (Rehak, 2003, p.113). The balance of power in *Mass Effect* is in constant tandem as a role-playing series that allows players to make choices, choices which can save a galaxy or even destroy a galaxy. As Perron states, “the story-driven game is at the junction of an ergodic player-character's body and of the exposition of the inner life of the protagonist” (2018, p.88). Shepard’s appearance and actions all mutate throughout the course of the games, as the player can apply different philosophies and values to the avatar.

The player’s first task is to design their Shepard: choosing between male and female options, designing their face, assigning a combat class and giving the Commander a background history, from spacer, colony kid or earthborn. After selection, the introduction of the game provides a monologue from Captain Anderson describing why Shepard is special and should be considered for elite ranks of the spectres, special agents chosen by the Council to protect their interests and Council space, a role with little oversight. Anderson may even state Shepard is “the only kind of person who can protect the galaxy” but exactly what kind of person Shepard is, remains open for interpretation due to the array of customisation choices that the player is first faced with.

Comprehending the player connection to the avatar (Shepard) is crucial to formulating an understanding of the various ways in which they can embody the mutant subject.

Additionally, examining Shepard as a clone (a type of mutant listed in the taxonomy in chapter three), is of importance as the role of clones in science fiction and the audience's uncomfortable relationship to them, as the clone and Shepard battle for centrality in *Mass Effect*.

Section 4.2 The playable mutant: examining the different mutant paths of Shepard and the player

Shepard can align with several biotic classes which are profiles where the character has received genetic enhancement, namely: adept, vanguard and sentinel. These three classes make use of biotics, but how Shepard came to have these biotic abilities is left a mystery.

BioWare's codex entry states that "Biotics are the result of in-utero exposure to element zero. This usually causes fatal cancers in the victim, but in rare cases it coalesces into nodules within the foetus's developing nervous system." Biotics can "manipulate dark energy and create mass effect fields through the use of electrical impulses from the brain." But biotics can only exist through exposure to element zero – or a *disruption* to the expected 'natural' creation process, thereby making all biotics mutants.

Shepard's biotic abilities give the Commander a significant advantage in society. Human biotics are rare, and while often shunned by humanity, biotics would give a soldier a skillset that many opponents in battle would not be able to call upon. This marks Shepard as different from most humans who are rarely exposed to element zero. It is this marginalization that sees Shepard as a mutant of humanity, as humanity itself has not been morphed and views biotics with suspicion and as a dangerous threat to social order. While the player does command the most significant time of Shepard's life, the lack of details informing the player about the decisions they can make to customise Shepard puts Shepard at odds with the rest of the galaxy, if they are an accepted and unexplained mutant. This is also an issue players face when customising the playable character of Ryder in *Mass Effect Andromeda*. The sequel to the original series allows Ryder to become a mutant without the use of biotics. This is because BioWare added a customisation option for Ryder on the

Tempest spaceship¹⁴. Players can change Ryder's facial appearance on The Tempest without any comment from the crew or Ryder's closest living relative despite potentially drastic changes. The move to include this mechanic made sense from the player's perspective as it allows customization of an undesired feature without restarting the game. However, the convenience for the players exposes a hole in the narrative - exploring a new galaxy means that biotechnology will be more limited than in the established Milky Way, and yet Ryder can adjust their genetic makeup and facial structure with ease and without comment. It is an anomaly that reveals little about the biotechnology that is available in the Andromeda galaxy and more about the tricky task of balancing plot with mechanics.

It is arguable that gamers occupy a space of morphed humanity themselves by their actions, able to transition between states of embodiment. As Martin J. Barker notes in a study of *The Lord of The Rings* fan culture, the word "identification" is often used in cultural studies while little definition is provided or no strong relationship between the word and the audience is established (2005, p.375). In the context of gaming, there is a difference from consuming films to how the player can direct the body and sometimes choices of the main character, allowing them to occupy specific space. This links the player with the main character, and a certain responsibility and connection is present, even if it cannot necessarily be defined as identification. Therefore, the mutant character and the morphed player in control share close experiences throughout the *Mass Effect* games.

Games can transform player identities. Kennedy argues that games based on Lara Croft forced men to assume the role of a woman, and this constituted queering the gamer in some form, as the queer embodiment materialises through the fusion of the player and

¹⁴ See glossary

game character (2002). Through the queering of Lara Croft and her players this “subverts stable distinctions between identification and desire and also by extension the secure and heavily defended polarities of masculine and feminine subjectivity” (Kennedy, 2002). But while Kennedy’s work gives a critique of the feminist and gendered aspects of playing *Lara Croft*, this discourse can also be flipped: how many women gamers have found themselves ‘queered’ throughout their time gaming by playing the character of a cisgender man? But because of the persistent ideas that women are less interested in games - despite evidence to the contrary that women make up 41% of the gaming community in the United States and between 40-45% of the Asian gaming community (Yokoi, 2021) - there is a risk of erasing this queer experience for women who game.

Furthermore, gaming culture often mirrors wider issues in society; for instance, how the gamergate movement that targeted women in the games industry encapsulated how white men were blaming their frustrations about society progress and the threats to their privilege on marginalised identities. This included sending death and rape threats to women prominent in gaming. As Christopher A Paul surmises, the movement of gamergate sought to reframe the entire games industry, and while members of this movement could not agree on one underlying message or purpose, the end result was a widespread attack on women (2018, p.84).

Queerness has also specifically been attacked and targeted by gamers as the presence and existence of marginalised gamers continues to draw debate, and the focus on men playing as women mirrors the ongoing debates about trans rights: that is exactly what anti trans activists claim that trans women are doing i.e. ‘playing’ as women. In this instance, playing as the gender a person identifies and wishes to be assumed as, may be the only outlet for expressing their queerness when waiting times for trans healthcare can take years. In 2020,

BBC research found that it can take three years for a trans person's first appointment regarding transitioning, with the UK national average wait time being 18 months (2020).

Video games may be a form of play, but they are also one of the few realms where transgender people can have the opportunity to imagine themselves as they want to be seen. Healthcare for trans people may not get priority, but the transformation of the person through a game is another form of mutation thereby making gamers morphed when playing as different genders.

It must be highlighted that gender goes beyond narrow biological sex characteristic assignments. Gender is linked to identity formation (Ruberg and Shaw, 2017; Shaw, 2015; Kivijärvi and Katila, 2021), and games do pose a unique scenario for players to inhabit bodies not their own, and experience perspectives not their own. Playing as a different gender gives an ample opportunity to navigate the world through a different gendered perspective. However, the ability to play as a woman in the *Mass Effect* series may have been missed by gamers if they did not try the game before 2012. Prior to this, BioWare never suggested that there could be a woman as commander in any of their box art. It was only with the release of *Mass Effect 3* that this changed, when BioWare held a public vote for fans to decide how FemShep would look on the box art for *Mass Effect 3*.



Figure 2 The original box art for the trilogy

The decision to hold a vote over the artwork for ‘FemShep’ risks mirroring the work of Dr Solomon, who surveyed people to find the most desirable beauty traits (as discussed in chapter six). The decision to hold a vote, and the democratisation of Shepard, puts the power of creation onto the player. The gamer, though, is not a static entity. The gamer must navigate the Milky Way as Shepard, and it must be their choice to play as queer, to play as themselves (in this story) or someone else, and to also dictate the model of Shepard that all other players will see before creating their ‘own’ version. The player assumes the role of Victor Frankenstein *and* the creature. But even this role of mutant creator is limited by biases and BioWare’s own construction models. Players did not get a blank slate but were faced with certain features to vote on. As highlighted by Jamie Woodcock, certain character types get far more prominence than others in the games industry; with more customisation options for Caucasian characters, while characters of colour have fewer options for voice acting, skin tone and hair types (2019, p.126). Woodcock reiterates that “these are not the kinds of game-based constraints that are fun to experiment with through play; instead,

these are imbued with biases that naturalize some elements within the gameplay, even before the game begins” (2019, p.126).

Of the six options that BioWare gave fans to vote on, only two were women of colour.

Colourism also played a factor as only one option had a dark skin tone and this was met with some derision by fans, with one BioWare forum poster, Zombaholic, commenting “The 4th one is a bit more exotic then the rest...” and user amomjc stating “4th one to add some Ethnicity to the game, and the 5th one is my favorite.”

The vote facilitated public discussions about who FemShep could be and risked further marginalisation of gamers of colour who had to read through racialised and racist comments. There was little chance for players of colour to be able to loudly or publicly identify with a version of Shepard which was not white; “...Players who elect to describe themselves in racially ‘othered’ terms, as Asian, African American, or Latino, are often seen as engaging in a form of hostile performance, since they introduce what many consider a real-life ‘divisive issue’ into the phantasmatic world of cybernetic textual interaction” (Nakamura, 2002, p.37). Not only must fans endure these fetishised and racist comments, to publicly identify as a non-white Shepard could create a barrier to engaging with the fandom and even be seen as hostile, skewing any public debate or reflection that BioWare may have wished for (beyond using the poll as a marketing tool). It is worth noting, that in 2013, BioWare released an infographic on *Mass Effect*’s Twitter page that stated that only 18% of players who finished *Mass Effect 3* played as ‘FemShep’.

The video game dichotomy replicates a hierarchy: casual gamers feminised and constructed as “mindless consumers,” while hard core gamers possess true knowledge of games, culture and the wider gaming industry (Gray, 2020). This dichotomy protects the identity of the gamer as white and male; “this constructed technological (in)competence, a signifier and

performance of white cis-heterosexual masculinity, is a part of the authentication process of the cultural script of gaming culture, keeping masculinity as the only viable option” (Gray, 2020). The cultural script makes it difficult for marginalised voices to be heard and accepted, skewing any attempt at democratising games and a shared avatar.

There was little variation with the appearance of FemShep: all had the same body type, and several were nearly identical except for hair colour and eyebrow hair thickness, defined by feminine features, makeup and pointed chins. This feeds into du Cille’s analysis of the production of multicultural Barbies: identical in shape and tone, except for minor differences. The multiple lines of manufactured Barbie which are to represent difference and yet are all nearly mirror images, represent a pluralism of ‘sameness’ that does not displace the hierarchy of whiteness but reinforces it (1995, p.556). I must agree with Toffoletti’s conclusion that “Barbie is troubling because her marketability relies on both the consumption and negation of cultural difference” (2007, p.61). Furthermore, Barbie has come to represent the plasticity of women’s bodies in the technological age, and how they have become objects to be controlled and manipulated (Rogers, 1999, p.125) – aligning with the sameness of the Shepard’s to be edited, controlled and molded by the player, but only with a very narrow selection of options to choose from.



Figure 3 (Mass Effect Wiki)

Dominant ideologies of beauty can be apparent in the design of FemShep. And, far from being incidental preferences, they shape the avatar of the series. The creators – a hybrid of BioWare’s corporatism and of consumers’ individual preferences – therefore risk wading into the realm of eugenics, the practice of perfecting humans often by erasing disability and other marginalised traits due to supremacist ideas. This is a pertinent point when

considering that this version of FemShep is what is used to promote the avatar of the galaxy by BioWare; the avatar that can take or save the lives of trillions of beings. It is not simply envisioning their own Shepard, but the form of Shepard that the rest of the gaming audience will see before they can create their own Commander.

The creation and representation of FemShep was criticised by games scholar Amanda Phillips (2020), who claims that she should not exist and could not exist materially. This is because, as Phillips put forward, FemShep is never allowed to occupy her own space but is ManShep's game code copied and altered on a minor level to create a more feminine idea of Shepard. The central idea of Shepard is normative: to fit a stereotypical idea of a (white, abled, cisgender and, crucially, male) can-do hero that American audiences would love.

Rather than being a feminist icon, FemShep is a minor concession that was not acknowledged by her creators until an opportune marketing moment came along to allow other (co-)creators (the fans) a voice. And so, gamers chose from a very narrow set of options about who FemShep is. FemShep had already been filtered through a white supremacist, cisgender-focused and sexist system – feeding into ideas that the mutant is designed to uphold supremacist ideals.

The default version of Shepard as a man has implications for the idea of leadership in a society where Shepard becomes akin to a religious leader preaching warnings about the doom of the galaxy and trying to lead civilians to safety and security. Religion and science fiction often combine to explore the possibility of technology against the concepts of philosophy, religion and spirituality. Much of science fiction scholarship is directed toward exegesis. Mutant stories are, for example, about what happens when the process of 'natural reproduction' is broken or interfered with, and the original mutant story of the minotaur

was seen as a punishment for usurping the gods. In Jewish folklore, the creature Golem, who occasionally can become a force of mischief, was created from a mix of materials. There are many specific references to religion within *Mass Effect*. Mordin compares the salarian faith to Hinduism for the salarians belief in reincarnation – the only character to reference a religion outside of the Abrahamic tradition. There are numerous references and allegories to Christianity throughout the series. Ashley Williams and Dr. Suvi Anwar are vocal and devout Christians. Dr. Amanda Kenson refers to the reapers’ “blessings” when she expresses her desire to finally see them arrive. Shepard is returned to life by Project Lazarus – a project that shares its name with a man that Jesus brought back to life four days after his death. Shepard has devoted followers, akin to disciples, as the Commander spreads word of the reapers across the galaxy when many dismiss the claims. Shepard therefore takes a leadership role while mirroring many of the cornerstones of Christian stories. Posthuman and transhuman explorations have been widely discussed in relation to Christianity due to the overlapping themes, namely, concerned with mortality and the ‘soul’.

Thweatt-Bates argues that Jesus was a true hybrid –and an early cyborg. However, Jesus was made as a mutant (his conception avoiding natural reproduction), he was brought back to life briefly and during his lifetime he embraced numerous cultures and identities. But Thweatt-Bates also interrogates the question of his gender, and how his gender is often viewed as inextricable to the point that questions of his gender have not be taken seriously in scholastic debates. Furthermore, Thweatt-Bates cites Mary Daly and Daphne Hampson as post-Christian feminists who argue “that the categories of male and divine share in a profane *communicatio idiomatum*, and that the divinity of the male is written so strongly into the Christian tradition” (2012, p.186) that it is impossible to envision a Christianity where a woman is the central figure.

While there may be two gender options for Shepard – and not enough gender choices for a futuristic biotechnological universe – the story and marketing envision Commander Shepard as a man. There is tension then between the different versions of Shepard, a struggle between genders and between players of different Shepards, fighting against different narratives that their own fandoms and developers put forward.

Section 4.3 The resurrection of a hero, and reconfiguring an identity

In *Mass Effect 2* Shepard acquires another creator; in the opening minutes of the game: the Normandy SR-1 is attacked, and Shepard dies after rescuing a crewmate who had refused to abandon his post. Shepard is left to float alone in space as their suit leaks oxygen. It is a lonely death for the saviour of the Citadel. But leader of the human-supremacist terrorist group, The Illusive Man, pays billions of credits (the galaxy's main currency) to resurrect Shepard.



Figure 4 Shepard's death

Shepard's resurrection remakes the Commander into a mutant; - as marginalized and exiled due to disbelief he/she could possibly be alive – and one viewed by the lens of the body as an organic machine, a philosophy dating back to the 17th century, inspired “by the seventeenth-century physician William Harvey’s description of the heart as a pump” (Harkup, 2019, p.24). This stems from Descartes and Hobbes, who view the universe as akin to the machinations of a clock with the human body described as an ‘earthen machine’ of organic pumps and levers, which Harkup describes as a monumental shift in scientific attitudes (2019. p.155). In *Mass Effect 2*, Shepard states that Cerberus spent “two years rebuilding me,” drawing implicit connotations with a mechanical process.

There is one unintended mark of the Lazarus Project: Shepard is left with visible facial scars, and Doctor Chakwas later informs the Commander that these can be healed if Shepard maintains a “positive outlook” and is kind and generous with their actions. There are two morality paths in *Mass Effect*: paragon and renegade. Paragon is the path focused upon getting people to work with Shepard peacefully. Renegade is focused on getting the job done at any cost. Shepard’s facial scarring reduces if Shepard/the player takes a paragon path when confronted with conflict. Disfigurement, a term created by disability activist Mikaela Moody, refers to the inherent hatred of disfigurements and malformations.

Disability becomes tied with a literal punishment for Shepard’s perceived bad actions – actions that allow or even support murder and genocide. *Mass Effect* is not alone in binding non-normative appearances with malevolent perceptions. Outside of fiction, there have been wild and baseless claims that John Merrick – known for his deformities - was in fact Jack The Ripper, looking ‘monstrous’ was enough for people to assume deviance (Davies,

2015, p.161).



Figure 5 The email discussing Shepard's scarring

Recent space opera has been defined by “its pitting of questionable protagonists, unsympathetic characters, and rebarbative moral ambiguities against the uncritical depiction of diabolic villainy and saintly heroism in classic space opera that was, to be fair, more boundary-pushing, in other ways, in its own time” (Winter, 2022, p.15). The facial scarring of Shepard is a reminder of the freedom of the player to choose not simply to create a heroic central figure, but the choice to create a hero that may be deeply unsympathetic.

The facial scarring at the beginning of *Mass Effect 2* is stark as Shepard’s face holds multiple long scars. The game offers opportunities for the scarring to heal or become more visible depending on each interaction Shepard has. Because of this, Shepard fits the criteria within the taxonomy (chapter three) as a mutant in motion. Shepard’s specific mutated aesthetics – and the status of his/her scarring – is one element of Shepard’s overall identity that is

never permanently connected or rooted to one state. Shepard can transition from a visible mutant to one that fits the posthuman supremacist mold of being a paragon of humanity. Unlike the werewolf, whose states are determined by the moon and therefore by time, Shepard's mutant (aesthetic) states are determined entirely by characterisation. Just as Miranda resurrected and remade Shepard as a mutant, the player can continually control Shepard's mutant appearance. As Hurley states, "The abhuman subject is a not-quite-human subject, characterized by its morphic variability, continually in danger of becoming not-itself, becoming other" (1996, p.3). However, beyond the temporal boundaries of difference for transformation, the mutant in motion causes considerable curiosity and fear over their status – particularly as the status is in flux. Carroll set forward the formalist theory of horror to categorise monsters, arguing over the binaries of fusion and fission. Fusion relies upon combining and conflating elements in a monster, while fission separately distributes these related elements into beings (Carroll, 1990, p.45). For instance, "an undead zombie is fusion, as it is at once an animate being and a human corpse, while a werewolf is a fission, as it is sometimes human, sometimes animal" (Švelch, 2023, p.12).

The werewolf is often symbolic as a "transgression of norms" whether sexual, racial or bestial (Luckhurst, 2021, p.232), and as Luckhurst asks, "what line has been crossed to bring down this curse?" (2021, p.232). For Shepard, the specific line crossed to bring down the "curse" of bodily transformation (through scarring) is the transgression of the moral normative expectations; by treading the renegade life, Shepard becomes more visibly a mutant.

The fascination with scarring and with adapting the appearance of the face is a staple of body horror and specifically originated in Gothic horror. In the 19th century there were continual experiments with skin grafts by British and French surgeons, with patches of skin

held together with bandages or crude stitching “the modern images of Frankenstein’s monster with heavy stitching and deep scarring may not have been so far from the reality of piecing together such a creature” (Harkup, 2019, p.201).

If Shepard takes more renegade actions, Shepard’s eyes change to red. The association of red eyes hinting at evil is clear in literature and gaming: Dracula and various vampires had red eyes which warned of their supernatural misdeeds, Lord Voldemort (*Harry Potter and the Goblet of Fire*, Rowling, 2000) has red eyes and causes two genocides, even Big Daddy units (*Bioshock*, 2010) have red eyes when they are confronted with an enemy, and while they may be machines, Shepard is compared to a machine due to their cybernetic implants. The prominence of red eyes raises questions over Shepard’s humanity, or whether they are more machine, and leaves ableist assumptions by leaving physical marks of amorality while a virtuous life is rewarded by being allowed to look more human, and more compliant to normative standards of beauty. But Shepard is made to look more of a mutant, and less human, for choices that the original creator BioWare indicate are amoral. This leaves the question over the success of the resurrected mutant Shepard: is Shepard more or less of a successful mutant design by how well they comply to expected moral codes?

The player faces few consequences in the first game of the series for taking a renegade choice. During the majority of the first game the different choices result in simple dialogue differences but end in the same results for Shepard. But during the second game, Shepard receives visible marks reflecting their morality. The hero can suddenly look like a mutant, and have attributes traditionally associated with evil. This is a failure for the Lazarus Project. If Shepard wants to remain the same, they must make paragon choices. Additionally, there is the chance for a discrepancy in the ‘lore’ as with each game the player can choose to make wildly different choices and create an inconsistent personality for Shepard. This

suggests that the endeavour to bring back someone from the dead is weighted towards ending in failure. For the Lazarus Project to be a clear success: Shepard must be paragon throughout the games, but player agency can disrupt that ‘goal.’



Figure 6 FemShep renegade appearance in Mass Effect 3

Transitioning through death is a staple of biopunk and cyberpunk stories, whether the body is reinvented or the soul trapped in cyberspace, examples of this include: *Cyberpunk 2077* (2020) where dead terrorist Johnny Silverhand has their personality uploaded into an engram so that he exists posthumously, *Black Mirror's* episode ‘Be Right Back’ (2013) follows a woman who uploads her deceased partner’s personality into an android, and in *Mass Effect 3* a hospital visitor and staff member argue over whether President Huerta who clinically died of a stroke two years previously is in fact alive as a virtual intelligence drives his body. O’Connell acknowledges the relentless quest to evade mortality and defeat what are seen as our fragile bodies:

“We have always had higher notions of ourselves. The whole setup-garden, serpent, fruit, banishment- was a fatal error, a system crash. We came to be what we are by way of a Fall, a retribution” (O’Connell, 2017, p.1).

The fear of our bodies breaking drives medical advancements, but it also leads to speculation in fiction about exactly how we may one day elude our own mortality.

Protagonists in science fiction come to the forefront of this issue; they are tasked with defeating great threats and protecting the lives of others. The Lazarus Project is an extension of this path; show the Commander broken and alone in space and then rising again to protect the galaxy. What hero could be more unique, more glorious, more admirable than one who has conquered death?

Biopunk works explore bodily management either by an authoritative state or by an overarching biopower. Cerberus fits the latter category, stealing Shepard’s body away from the public sphere so that they may experiment on it and bring the Commander back to life. It is a process carried out by an organisation that must always hide, due to facing charges relating to terrorism and the punishment of execution if they are ever caught. There is no general oversight on their work, no ethical debates and no scrutiny. There is no consent from Shepard or their loved ones on an invasive medical process that will change the biotechnological landscape of the Milky Way. Flanagan highlights those protagonists who “...have experienced body modifications as a result of surgical intervention after a serious accident, [and] are similarly uninvolved with the decision-making process” (Flanagan, 2014, p.17).

Shepard has no say in the decision to be resurrected, and in *Mass Effect 2*, Liara offers an apology to the Commander for giving their body to Cerberus so that they may attempt to bring the Commander back to life. In one of the Commander’s backstories Shepard can have

a living parent that they are in contact with prior to their death. Shepard's mother though, is not informed by Cerberus that Shepard has returned, instead their mother sends a confused email upon learning they are alive.

After the resurrection, Miranda requests Shepard be implanted with a control chip – a request denied, allowing the player agency. Miranda's desire for a control chip stems from a level of control she has exerted over her by her own creator since birth. The corpse represents the relinquishment of control, and Miranda is all too ready to use biotechnology to assert her control over the physical form of Commander Shepard. As emerging technology has been explored in literature, posthuman theorists and critics reckon with issues of agency and warned against the struggle for domination over bodies. The creator must always be wary for "ironically, expanded too far across the bodies of disciplines, the science of control might rob its progenitor of the very control that was no doubt for him one of its most attractive features" (Hayles, 1999, p.111).

In *How We Became Posthuman*, N. Katherine Hayles examines the power dynamics at work once humans are augmented with cybernetic implants, the same process Shepard is subjected to with the Lazarus Project. Hayles looks at the potential for cybernetics as criticism of Wiener, a posthuman propagator, who argues that cybernetics should and would be contained within a liberal humanist framework. Hayles queries this assumption, stating:

"But no person, even the father of a discipline, can single-handedly control what cybernetics signifies when it propagates through the culture by all manner of promiscuous couplings. Even as cybernetics lost the momentum of its drive to be a universal science, its enabling premises were mutating and reproducing at other sites. The voices that speak the cyborg do not speak as one, and the

stories they tell are very different from the narratives that Wiener struggled to authorize” (1999, p. 112).

Not the father of a discipline, the father of a perfect mutant, or the project leader of a resurrection can control the impact of cybernetics on the individual according to Hayles. However, doubts linger and in *Mass Effect 3*, Shepard can watch footage from the initial stages of the Lazarus Project and while watching, Shepard can question whether they are really who they were before their death, or whether they are a high-tech copy. Prior to this scene, Shepard had always insisted that they had control over their identity, and they knew who they were. It is a moment of raw vulnerability from the Commander, who even after building a close relationship with Miranda Lawson, can still question whether they really have control over their identity.

Hayles queries the depth of infiltration of cybernetics and questions what, exactly, makes us more than cells reacting and going through specific processes. What creates an identity, and when is that identity altered by augmentation? With the control chip, Shepard’s personality would have been limited but even without, how can Shepard really trust they are the same person, and not a Shepard version 2.0 copy?

There is, of course, ironic tension that Shepard’s actions are entirely determined by outside forces – the player and the limited narrative paths chosen by the developers. The player is the one who decides Shepard’s relationship to Miranda, Cerberus and the ideas of Shepard’s own identity. The player must determine Shepard’s comfort and acceptance with their mutant status, an identity that both empowers Shepard but also creates a barrier of loneliness and isolation to the rest of the galaxy.

Section 4.4 Mutants and sexual hierarchies: Desiring the mutant avatar.

Hayles identifies what she terms erotic anxiety at the heart of many posthumanism critiques. After the Lazarus Project has rebuilt Shepard and the Commander has transformed into a mutant, Shepard has several more love interests, including new interest from squad mates that were previously unavailable to the Commander: Kaidan and Tali for ManShep and Garrus for FemShep. All three of these characters question the role that Cerberus has played in rebuilding Shepard, and whether the organisation can really be trusted. If they lack trust in the work that Cerberus carries out, there is implied suspicion of Shepard as the organisation's main project.

Mutants are often treated as spectacle and othered for their not-yet-normative modifications. Many of Shepard's love interests express surprise that Shepard would reciprocate feelings for them, despite romance being a common feature within alien societies except for the salarians'. Shepard's experience is comparable to that of the mutant Miranda (discussed in chapter six). Her designed perfection elicits mixed reactions from men: there are staffers who make overtly sexual remarks about her body, and other employees who label her as a "bitch". During the romantic scenes between Miranda and ManShep, there is competition over the better mutant. Miranda admits her own insecurities at her own design, her worth and her father's endeavours, while comparing herself to Shepard who she describes as a "perfect human specimen." ManShep can ask if Miranda is jealous, and the moment of tension can lead the two to share a kiss. They are bound by commonality; created because of the whims of rich men, and they struggle for their own autonomy and so commit themselves to a collective cause to protect societies even at the expense of their lives which their creators deem as worth more than entire communities.

It might be assumed that two perfected mutants might be the first beings of a new posthuman 'super' class. As identified previously, there are many Christian links in *Mass Effect* and both Miranda and Shepard also hark back to Adam and Eve; as mutants that stand in contrast the world around them and eventually leave their spheres (although under their own volition). But they cannot be the founders of a new posthuman class. Miranda cannot maintain a pregnancy to full term, and Jacob comments that ManShep will never start a family as he is tied to the Normandy and a sense of service. Miranda and Shepard's partnership rejects those who want a new posthuman class to emerge. Miranda and Shepard shrug off the expectations of those mutant imperialists in favour of autonomy and solidarity. This is reflected in their relationship when, after Miranda defeats her father at Sanctuary, she refuses to join the Normandy with her potential love interest, Shepard, and instead steals fighter jets and bombs Cerberus bases. The two are independent from one another, knowing they have different purposes which they have decided for themselves without the influence of their creators, and yet they remain tied through solidarity and a shared understanding of what it means to be marginalised in a universe fearful of the posthuman.

The duo Miranda and Shepard becomes particularly iconic, even if no romance is pursued. They set the standard of a mutant team, but a benchmark that is sought to be surpassed. During shore leave, Commander Shepard is dogged by a private security force that eventually captures them in a stasis field. It is revealed that this private force is led by none other than Shepard's clone, a clone that was taken from Cerberus by Maya Brooks. "You had Miranda, I have her", the clone states triumphant, while the original Commander is thrown into a container and left to wonder how to defeat the clone without Miranda by their side.

Section 4.5 Examining the cloned avatar, and the role of the player vs the non-playable character

Shepard is presented as the ultimate soldier, fulfilling a player-power fantasy as the player is responsible for rescuing the entire galaxy - but in *Mass Effect 3* it is revealed that Shepard is not unique at all. During the 'Citadel', a downloadable content pack, Shepard and the Normandy's crew take shore leave to recover from the intensity of the ongoing war with the reapers. However, a private army plagues Shepard and the crew. It is eventually revealed the leading force behind the army is an identical Commander Shepard, built during the Lazarus Project in case Shepard needed organs donated. Bitter at being deemed disposable, the clone of Shepard wants to take back what they see as rightfully theirs: Shepard's life. Perron compares the experience of the player as to one of victimhood, when there is no way to escape the monster and the success (and frustrations) of the player are tied to the life of the avatar (2018, p.89); in this case the avatar must fight against its own image, the player confronted with an artificial intelligence mirror the player, but potentially better, the clone reproduced on multiple levels.

The clone steals the Normandy, using Shepard's fingerprints – which are an identical match – to steal the ship and gain access to spectre codes and security. The rivalry between the clone and original culminates in a fight on the Normandy's cargo bay, that ends with the clone hanging onto the open cargo door. Shepard can choose to try to save the clone or to let the clone fall to their death. If the Commander does try to help, the clone will still choose to throw themselves from the Normandy and into the Citadel below. After seeing their accomplice (Maya Brooks) turn away from them after their defeat, the clone feels they have nothing left to live for as the Commander takes control once more.

The figure of the clone has been described as “technoscientific narcissism and capitalist simulation” (McQueen, 2016, p.11). Cloning has even become a contentious issue within the games industry as Games that are copies of others – either by theft or creative coincidence are referred to as “clones” (Alexander, 2016, p.123). Nevertheless, the figure of the clone has long fascinated audiences, as has the concept of the ‘double’, which the clone plays into. The clone, or doppelgänger, represents early desires for immortality, repressed and transformed into the discomfort of the uncanny for resurfacing old feelings of familiarity and new feelings of terror (Asma, 2009, p.190). As Grosz states in an analysis of all things freakery, images of ourselves can draw ambivalent reactions which destroys the self for us to view ourselves reflected as we seek control over, and pleasure from, the image itself (1996, p.65). Additionally, “the freak confirms the viewer as bounded, belonging to a proper social category. The viewer’s horror lies in the recognition that this monstrous being is at the heart of his or her own identity, for it is all that must be ejected or abjected from self-image to make the bounded, category-obeying self possible” (Grosz, 1996, p.65). Instead of intrinsic unity, the clone or mirrored double instead enacts a fraught relationship as a battle of control over our identities and perceptions rages. More recently, as biotechnology progresses, the potential for the creation of the clone has elicited further horror at the unnaturalness of its design, even if that design identically mirrors us.

Tally Jr. (2024) argues that “the rise of dystopia remains crucial to understanding the system that has become so pervasive and powerful that even the thought of its destruction or evanescence seems nearly inconceivable today” (p.2) while “...utopian theory represents less the effort to produce visions of ideal societies and more an attempt to map the present world system in its dynamic complexity” (2024, p.2-3). Science fiction imaginaries therefore have offered frameworks within which to develop praxis: Even Marx utilises the language of

monsters in his critiques of capitalist economies (Tally, Jr, 2024, p.3). Additionally, science fiction tropes such as nuclear apocalypse stories of a desolate earth can urge us to “choose not to build the last bomb and choose not to push the button that will launch it” (Canavan, 2014, p.4). Stories of a changing humanity can offer us insights into the discomfort of audiences yet still urge us to consider systems which divide classes of people – including those seen as entirely new beings.

While focusing on the art of Patricia Piccinni that depicts cloning, including the infamous work *Game Boys Advanced*, curator Juliana Engberg states that “cloning has the potential for great medical advances, but this medical frontier looks uncanny and unsettling and still unresolved from the point of view of these new replicants” (Enberg, in Toffoletti, p.156).

The artwork depicts two child clones in front of a screen, the clones which are identical look haggard, ageing and unwell with sallow skin. The clone of Shepard is created precisely for the benefit of medicine – or specifically, to increase the medical options for bringing the original Commander Shepard back to life. The situation certainly is unsettling for the clone, with no fixed identity, community or purpose. As Toffoletti follows up: “One of the reasons why the clone is horrifying is because it threatens the uniqueness of each individual. If you can make a clone of yourself, then who is the ‘real’ you? Will your clone look like you? Act like you? Or possibly come to replace you?” (2007, p. 149)

In *Mass Effect*, there is a clear split due to the game mechanics: the clone is always lesser because it is not the being controlled by the player. The player becomes an augmented enhancement for Shepard, as the identity between player and character merges.

Yet, to the crew of the Normandy, there is little to tell Shepard and the clone apart.

Kazuo Ishiguro’s classic biopunk novel, *Never Let Me Go* explores the insecurities that the concept of cloning revealed. The narrative follows a thirty-one-year-old clone, Kath, who

reflects on her time at boarding school that prepared her for the future ahead, one where she, and her peers, would be prepared to give organs until they died (the euphemism “completed” becomes the term to describe the passing of clones). While working as a caregiver for other clones who have begun the donation process, Kathy explores the possibility of deferring her own donations, seeking out the workers at her former school to put the request in motion. When she finally meets with Miss Emily after many years, she learns there is no way to delay donations and that all clones must donate their organs as soon as possible. What’s more, Kathy learns the real reason why she and her friends were forced to attend a school away from society: because the civilians of England cannot stand to look upon clones, or afford them any semblance of equality, particularly after one scientist created scandal by seeking to ‘perfect’ humanity.

“It’s one thing to create students, such as yourselves, for the donation programme. But a generation of created children who’d take their place in society? Children demonstrably *superior* to the rest of us? On no. That frightened people. They recoiled from that” (Ishiguro, 2005, p.259).

Clones are deliberately designed. They represent the disruption between mortality and immortality; clones (and their genetic material) provide the key to immortality through harvesting, and yet that comes at the expense of the clone’s life. Often hand in hand with the fears regarding our lives and identities, is the fear of our demise. Toffoletti argues that the clone does not simply raise questions about our identities and worth, but about the value of our existence as death becomes circumvented. Through clones, death is destroyed as the self can be repeatedly remade without end, with life being prolonged indefinitely by the provision of spare parts from the clone (Toffoletti, 2007, p. 154).

Throughout *Mass Effect* creations of bioengineering such as Miranda Lawson and the tank-born krogan Grunt, reflect on their purpose and try to find meaning in their creation. The is true for the clone of Shepard, who looks for meaning but can only find it in the life of the original Shepard. The clone's purpose of design was to die or be harvested so that Shepard could live (if required). The clone is a way to defeat mortality, and yet the cloned Shepard chooses to reject the immortal prospect of the 'Shepard' identity, instead choosing to support individualism and reject the goals of their creator.

Shepard's clone fails to steal the Normandy and fails at stealing the Commander's life, not because they are less capable, but because they have no history. They have fewer allies, just hired mercenaries who have no loyalty and who the clone treats with disdain. The clone has no connections, and no real understanding and that is what leads them to inevitable defeat until their one accomplice, Maya Brooks, turns her back on the clone.

The topic of cloning has been met with public debate in recent decades. In the early 2000s, many states in America passed legislation limiting cloning research, and it is estimated that 46 countries have banned human reproductive cloning. Anxiety around cloning peaked with the creation of Dolly, the first animal that was cloned through an adult cell by nuclear transfer. Dolly was born in 1996 and had three 'mothers', or ancestors that donated DNA, the egg and one that acted as the surrogate for Dolly. The cloned sheep however died at the early age of six years old, and suspicions persisted that her premature death and other health conditions were linked to cloning. One study debunks this theory, with co-author Professor Sandra Corr, a co-author of the study stating that "we conclude that the original concerns that cloning had caused early-onset [osteoarthritis] in Dolly were unfounded" (Corr in Dvorsky, 2017). But the suspicions of cloning had persisted resulting in the study of Dolly's health, despite the fact there were identical clones to Dolly who were in good health.

But Dolly's creation prompted debates on the nature of cloning as a concept, and not just the specific process that was utilised to bring to life the cloned sheep. Jasanoff highlights the specific media culture hinged on the term clone:

“The scientific term *clone* carried uncomfortable baggage outside the laboratory.

Dystopic fantasy films such as *Boys from Brazil* (1978), about the Nazi doctor Josef Mengele's plot to rule the world with an army of Hitler clones, and *Clonus*, in which human clones were bred to supply spare organs for the wealthy, had circulated in popular culture since the 1970s, veneering scientific potential with moral dread” (2011, p.8).

The media culture that depicted the creation of “identical copies of nonhuman mammals morphed easily into nightmare visions of industrially manufactured, intellectually subjugated, enslaved human beings, like the subhuman populations rolling off the assembly lines in Aldous Huxley's 1932 novel *Brave New World*” (Jasanoff, 2011, p.8).

Dolly is an example of commercial enterprise and biology mixing in a way that had not previously been noted (Braidotti, 2022, p.58). Dolly's creation points to the “queering” of possibility between genealogy and kinship; “Dolly is a trans-entity, of mixed sex and deviant biological origins, with genetic material from unrelated organisms, mixed, sampled and re-sequenced....Dolly is the cyborg embryo of the transbiology era, inaugurating a queer lineage” (Braidotti, 2022, p.159). Dolly was a trigger point for humanity being able to question how far we could go in the pursuit of controlling what was believed to be uncontrollable and ungovernable: nature (Jasanoff, 2011, p.8).

In the same year Dolly's creation was announced, cloning critic Leon R. Kass warned of the dangers of cloning stating that the clone “will be saddled with a genotype that has already lived” ensuring the clone is always compared to the ‘alter-ego’ (1997, p.22). The clone of

Shepard caters to the very worst warnings that those against cloning put forward. This is because Shepard's clone was never allowed to exist in his own right, was never granted autonomy and was used and manipulated either by Cerberus or by Maya Brooks. The clone was justifiable in pointing out that there exists a "cult of Shepard." Commander Shepard is given the power to negotiate contracts and peace between societies, to choose who lives and who dies and has unbridled power that the reapers seek to emulate. Shepard does this with a crew behind them and is the avatar of the original series.

Kass argues for the "wisdom of repugnance" meaning that the negative reaction of cloning specifically is not the result of ignorance, but legitimate evidence that cloning is bad. But the clone of Shepard only becomes an enemy to the Commander due to trying to steal Shepard's life. It is the mistaken idea that there can only be one entity of Shepard, and the reasons for the clone's creation that lead to a path of destruction and death.

The UK's 2008 Human Fertilisation and Embryology Act makes the concept of saviour siblinghood protected by law - i.e. the right to conceive a child for the express purpose of that new child donating tissue/organs to an older sibling in need. As Gothic theorist Wasson acknowledges: "The growing mind of the child conceived in order to donate tissue to another would be shaped towards such sacrifice from birth." Wasson's critiques of the posthuman thematic prevalent in science fiction led to specific analysis around the issue of cloning. The Gothic, an era that birthed the West's science fiction movement and embraced ideas of the grotesque, allows for the exploration of cloning in fiction. Wasson asserts how such fictions depicted some members of society as being created to "be raided as living organ banks" (2011, p.83). This is the process that led to the creation of Shepard's clone. Their personhood denied and seen as little more than a source to extract materials from in the ultimate bio-capitalist exchange. But Wasson's analysis provides some hope in the claim

that “...these fictions also give a platform for imagining resistance, for the fact that the clone is a double emphasizes the kinship between harvester and harvested, and thus demonstrates visibly that the harvester is implicated in the tissue economy” (2011, p.83). It is from ideas of resistance and hope through which we must operate.

In *Mass Effect 2* Shepard questions why The Illusive Man brought them back from the dead as he could have used the money to train a private army. The Illusive Man responds that Shepard is the best at what they do, and that they are a symbol of hope in the fight against the reapers. Shepard then is unwittingly complicit in the creation of the clone, and its intended disposal. Both are mutants, but one is destined to be the harvester and empowered, and one is destined for destruction and harvesting (not dissimilar to what the reapers intend for humanity and the rest of the galaxy).

Wasson acknowledges the practice of organ donation is tied up with geopolitics and the ways in which we assign value of life. It is cited how many are uncomfortable at the risk our loved ones may go through donating organs, and it is more comfortable to let faceless strangers go through the procedure. However, this is wrapped up in Western wealthy privilege as Wasson asserts that in the legal and consensual organ donation trade “the binaries remain disturbingly constant, tissue moving from poor to wealthy, marginalized to powerful” (2011, p.80). She further argues that fiction forces us to acknowledge the “raiding” of real people who are made as doubles, and that such fictions mean that audiences cannot look away from the suffering.

The clone is another reminder of the gruesome experiments of Cerberus. In the first game, the player is introduced to Cerberus as a fringe terrorist organisation with Shepard regularly encountering the results of their experiments: often rachni soldiers, and rarely thorian creepers. Shepard’s association with Cerberus in the second game is largely out of necessity:

the galaxy is facing destruction by the reapers, but no other organisation or governmental body will listen to Shepard. There are points in *Mass Effect 2* when Shepard can question Cerberus workers over the group's past actions. Miranda will explain that had they known either the rachni or creepers had or were capable of feeling pain then they wouldn't have tried to use them as soldiers. But then, as Shepard points out earlier in the game, the mutant Miranda talks about herself as a tool to be used by Cerberus. The moments of reflection on the actions of Cerberus in *Mass Effect 2* are few and far between because of the pressing nature of the impending reaper invasion. Their previous victims, rachni (that are akin to insects) and creepers that are not identifiably human, shelter the audience from the horror of the experiments. However, there are rare moments of living humans responding to the terror that Cerberus has caused, and Shepard must confront their history.

"From: Toombs

"What the hell kind of game are you playing, Shepard? You did the buddy act when I had the gun on that Cerberus scientist, telling me you understood. Now I find out you're working for Cerberus?

"Tests were done on me that you can't even imagine. For years. Cerberus did them. They tortured me. They used me as a damn lab rat. And now you're teaming up with them like they're any other merc band?

"I've got my own merc team now, Shepard. And I kill any Cerberus team I can find. If I run into you, don't expect any different."

Toombs is a minor character that neither Shepard nor the player ever encounter again. However, the clone remains a clear reminder of the damage that Cerberus has caused. That they share the same face, also speaks to Shepard's debt to Cerberus and is a visual reminder of why the clone was needed (for Shepard's own benefit).

The organ industry has been highlighted as an area of bio-exploitation. Wasson's warnings about inequality are based on very real stories of organs harvested from poorer people to go to those who are wealthy, *Time Magazine* highlights one village in Nepal where there have been significant organ donations – specifically kidneys – from villagers. In one ward of 75 houses, almost every household had a member that has donated a kidney (Wade, 2014). This highlights the damage of bio-exploitation of poor people, who are incentivized to give away their organs but for money that is quickly spent, and while not being fully informed of the risks to their health. The clone of Shepard has nothing until they steal Shepard's access to the Normandy. They have no history, friends, community or wealth. Stealing Shepard's identity is a natural strategy when the clone's existence was the result of the risk that they might have their genetic material stolen by Shepard and Cerberus.

Wasson recognises the power of the work of posthuman theorists such as Haraway, whose work on cyborgs supported a blended bio-tech future, but also maintains that a utopian ideal is unlikely to be met when there are external threats to the body and criticised the idea of "idealized visions of the body as self-contained and discrete" (2011, p.84). This thesis demonstrates how power is concentrated in favour of dominant forces (organised according to a white supremacist and eugenics doctrine). The thesis supports the liberation of bodies from oppression, bio-anxiety and imposed limitations so that people may be able to determine their own identities, but it also recognises the way state and private interests may guide or determine bodily health and modifications for their own vested interests. The cyborg future that Haraway proposes is an ideal, showing how technology can help liberate people as technological advancements become more prolific and ubiquitous. However, as biotechnological developments continue to move forward, our own bodily relations change.

This thesis supports total body liberation but warns of the dangers of how identities may be used and organised, in new and specific ways according to biotechnological advancements. Krampe's essay on queering masculinity in *Mass Effect* points to the utopian vision that Haraway has of a cyborg future, arguing that the cyborg "promises, among other things, the utopia of imagining a world without gender" (2018) free from dichotomies. Krampe argues that queer identity "can be understood" as a cyborg identity, and within this landscape "as social and bodily reality are reconceptualised as relational, partial and contradictory" (2018). This thesis does not dismiss gender but acknowledges that it is not tied to the body, but that there are forces that dictate and control the flow of lives, people and categories according to narrow ideals about gender and its relationship to biology. This project strives for a post-gender world where gender liberation has taken place, but recognises the resistance required against capitalist forces prescribing narrow gender notions, and while biotechnology offers numerous possibilities for altering bodies but only if corporations and states grant permission.

The avatars of the *Mass Effect* universe become a symbol for the biotechnological promise that the far-future represents and offer players a multitude of opportunities to embody mutant characters and navigate the narrative complexities of body-based narratives. The most complex of those choices feature prominently in the ending to the original trilogy and, for that reason, are the focus of the next chapter.

Chapter Five: Means to the End – How the Player Picks Their Biofuturist Utopia

Section 5.1 Examining the biological choices and consequences of the series ending, and the start (of a new biopolitical era).

This chapter is concerned with the original ending of the *Mass Effect* trilogy, which was derided upon launch. One BioWare forum poll showed 88% of respondents were dissatisfied with the ending (Winter, 2022, p.3), as a result, the developers felt they had to adjust the ending. The new ending gave the player an extra decision leading to an alternate ending. Each potential ending posed varied but significant bodily consequences for every character in the series, and for the figure of Shepard.

The ending of the original trilogy gives the player a choice of different endings, each of which demonstrates the limited power of the player to manage the futures of multiple populations. Habermas considers the ability to objectify through discourse, while praxis is a way of utilising discursive management as “members behave toward formally organized action systems, steered via processes of exchange and power, as toward a block of quasinatural reality...” which leads to objectifying “normative contexts into something in the objective world” (Habermas, 1981, cited in Outhwaite, 2009, p.86). The game is an example of biopower (discussed in section 2.3) (Kocurek, 2022, p.23); objectifying humanoids while the game encourages the enabling and enacting of power through its ludic-play mechanics and narrative design which combine to empower the player to manage and order humanoids (and life more broadly) in specific ways. The ending’s far-reaching consequences for the bodies, identities and populations of humans and aliens alike can thus be considered a biopolitical imaginary on a scale rarely seen in video games due to the specific ways in which the player’s decisions across three games culminate in varied endings.

In the final act of *Mass Effect 3*, Shepard must face off with the reapers on Earth, and above the London sky shines the former galactic capital the Citadel which has been transported into 'Sol territory' as a base of operations for the reapers. Shepard and their squad must battle through London to reach the beam that can send Shepard to the Citadel. There, Shepard must make a final choice about how to end the war – or even whether to end the war at all.

The player meets the creator of the reapers – an ephemeral projection of the child that Shepard couldn't save in the opening scenes of the game. The voice – dubbed 'star child' by fans – tells Shepard that the catalyst weapon (of which the Citadel is now a part of) can end the war in several different ways. Option one: Shepard can use the power of the catalyst to unleash an energy wave that *destroys* all synthetic life, this includes Shepard's robotic allies the geth ¹⁵but the reapers would also die. Option two: Shepard can choose to take *control* of the reapers, but Shepard will lose their connection to their humanity and will become a part of the reapers. Option three (which was added after the initial release): Shepard can give up their body into the catalyst and choose to merge synthetic and organic life (known as *synthesis*). There is a hidden option, where Shepard can destroy star child and allow the war to continue with the reapers exterminating all advanced organic life, leaving the Milky Way to start the cycle again in thousands of years. The trilogy ends with this final choice that has deep ramifications for the galaxy, which the player is left to speculate on.

It is the different options for biopolitical imaginaries that form the finale of the series and is the focus of this chapter, speculating on their ramifications and interrogating what is conceptualised as the bodily *ideal* that the players must grapple with. This chapter examines

¹⁵ See glossary

ideas and attitudes toward bio-determinism – the belief that people should be rooted through concepts (often inaccurate) of the body, and that these should determine our social location and subjugation(s)/liberation(s).

Section 5.2 Investigating the concept of a bodily ideal/utopia.

Perhaps the most surprising part of the controversy around the ending is that synthesis was not in the original finale but was part of the expanded ending. BioWare's own history aligned with the choice to merge synthetics ¹⁶and organics. As BioWare's own 'Secrets' book states about its original logo conception: "The idea of human-machine interface was also part of the rationale behind the name, leading to the company's first official logo, which depicted one robotic and one humanoid hand, reaching out to the user" (2020, p.14).

A games development studio founded by (medical) doctors may well take an optimistic approach to the relationship between people and biotechnological tools. Synthesis as the ideal path (stated as such in the game) matches the company's vision for biofuturism. But the problem with RPGs is summed up best with the issues of Shepard choosing synthesis: what right does one person have to fundamentally disrupt and alter every individual's body without consent? The option of synthesis is seemingly ideal as it avoids the mass deaths of synthetics. However, 'star child' is clear that everything destroyed can be rebuilt, and the geth and the artificial intelligence of EDI consented to ending the war once and for all (although they likely never considered the stipulation that they themselves would die, particularly only some weeks since making peace with organics), while nobody in the galaxy consented to have their very identities changed – what is seen as an upgrade for all beings might not be received as such.

¹⁶ See glossary

The hybridised and augmented human is not a new concept. The cyborg formed the basis of Donna Haraway's futuristic visions of feminism, putting forward the case of the organic-synthetic human as disrupting borders, inequality and firmly shattering all those old boundaries human white supremacist hierarchies have clung to in recent centuries. Haraway argues that "modern biologies are constructed by a common move - the translation of the world into a problem of coding, a search for a common language in which all resistance to instrumental control disappears and all heterogeneity can be submitted to disassembly, reassembly, investment, and exchange" (2006, p.164). For synthesis, the problem is conflicting 'codes' which may be disassembled and reassembled into a homogeneous code as liberty and diversity is exchange for a utopian order and conformity which will eliminate conflict.

There is conflict between synthetics and organics dating centuries before when the quarians decided to create synthetic robots as servants, and then chose to try (and fail) to exterminate them for asserting their own autonomy after asking "does this unit have a soul?" The consequence of which saw the quarians in exile from their homeworld, immunocompromised due to an exiled life on spaceships, and ostracized for the galaxy for both starting and losing the conflict with a race of synthetics perceived as a threat to the wider galaxy. It is a fear that audiences can connect to when the fear of the AI and whether they can be considered human dominates news stories in the technology sector, with one Google employee fired for claiming the corporation's artificial intelligence was, in fact, alive (Kan, 2022). The synthesis mutant that Shepard – or the player – can create is a blended version of synthetics and organics, and can end the conflict(s), and competition for resource that repeatedly happens between the two species. This struggle for reconciliation comes at the cost of altering identities permanently and without consent, as well as risking the

stagnation of progress. If bodies are technologised, they could bypass mortality, dependent on the life of the technology rather than the beating heart. But death itself promises progress: “the passing of each generation facilitates social change, allowing the next to assume positions of power” (Shilling, 2012, p.187).

The conclusion of the trilogy provides a glimpse into what this alternate future could be. The game ends within minutes of whichever decision the player takes, with only hints of what life could be for any remaining survivors. In the ending for synthesis, organic life has glowing green eyes, reminiscent of the iconography of robots and the idea of the ‘life of data’, designs used throughout the series to show the ‘veins’ of data in geth hubs. To begin this transformation for the rest of the galaxy the player must sacrifice Shepard by throwing them into a beam of glowing green light. Aesthetically, every living creature now shares the same eyes. Within the final monologue of the game, the artificial intelligence known as EDI offers insight into the experience claiming that she is no longer alone and that everyone is liberated from bodily constraints and technological fear, creating harmony. It is a utopian vision of the alteration of life to take ‘the best bits’ of technology and biology.



Figure 7 Krogan after the 'synthesis' ending in *Mass Effect 3*

However, the mutant is a product of late-stage neoliberal capitalism and the systems within *Mass Effect* do not offer an alternative system, and so the utopian vision falls under scrutiny when one considers the prospect that this transformation can alone defeat a long history of cultural tensions and repression. There may be attempts to achieve harmony through ideas of upgrading the body with technology, but cultural traditions and history risk being destroyed for an egalitarian dream, erasing the trauma of subjugated people (such as the krogan) in favour of creating a more docile monolith population.

The audience is left to speculate about the order of this new society. But this thesis must interrogate the nature of this order and of the nature of the body within any order. As Balsamo asserts, “when the human body is fractured into organs, fluids and genetic codes, what happens to gender identity? When the body is fractured into functional parts and molecular codes, where is gender located?” Let us trust women, gays, lesbians and other alternative forces, with their historically ‘leaky bodies’ (Balsamo, cited in Braidotti, 2013 p.96). Braidotti’s *The Posthuman* references multiple theorists including Hayles’s argument

that gendered bodies do not lead to the erasure of embodiment through the merging of machine and human intelligence (Hayles, 1999, cited in Braidotti, 2013, p.96), and gender codes have often themselves been thrust upon AI (such as Siri and Alexa), even for the benefit of the consumer if not to fundamentally change the embodied experience of the machine.

Haraway's iteration of the cyborg is particularly utopian, aligning with the idea presented by BioWare: the idea that the merging of technology and biology will disrupt the normative orders and structures which are forced upon us. Alaimo criticises Haraway's utopian vision and the disregard for the role of nature, at the expense of focusing upon the code of biology (2010, p.106).



Figure 8 Mass Effect 2, bodily changes discussed as code

Biology remains a contentious issue when reflecting upon gender. Intersex people have, for example, been forced to conform to narrow normative binaries that only adhere to a misguided understanding of the body, that fails to hold up to rigorous inquisition.

Historically intersex bodies were considered legally monstrous, and while this has shifted “legal concern over the mixing of sex/gender in one body remains a considerable source of anxiety and accounts for the other of transsexual people in law today” (Sharpe, 2010, p.6). It must be noted that intersex and transgender identities are separate but often conflated for the ways they transgress enforced gender norms and strict gender categories (even if there is not always solidarity between those communities). Sharpe iterates that: “Accordingly, because medical science no longer refuses the reality of mixed sex, contemporary intersex bodies can be viewed as falling within Foucault’s monster framework. That is, they represent a form of morphological irregularity that challenges a binary understanding of sex/gender, if only fleetingly before they are surgically ‘corrected’” (2010, p.7). The shadow of biology continues to persist over identities and over bodies, leaving people with very real and lasting legacies – and sometimes trauma – due simply to the unshakeable and yet false beliefs that certain components must make a man, and certain components can only make a woman.

As Balsamo states: “After acknowledging the impossibility of biological essentialism as a foundation for the identity of “woman,” feminist thinking proceeds to an analysis of the cultural construction of the body, and is immediately confronted with a discourse that gleefully joins it in deconstructing biological essentialism” (1997, p.31). Alaimo motions towards a holistic approach to biology to try to weave a nuanced line between the preoccupation with defining gender, a situation that Balsamo notes, has caught many feminist activists and philosophers out. When arguments of biology and socialisation fall flat, it may reflect an opportunity to scrutinise the concept of gender at all. Wajcman adds that Haraway’s vision of the cyborg does not always disrupt gender boundaries or the boundaries between human and machine as visual representations (particularly from

Hollywood) “rarely challenge traditional, Western stereotypes of gendered or racial bodily difference” (2004, p.95). As Balsamo argues that feminism must be rooted in postmodernism, it may, in fact, be time for a new philosophy in the age of biotechnology. This thesis offers a chance to move away from the dichotomy of male and female, and instead acknowledge the marginalisation of populations under the wider neoliberal system, and the ordering of bodies. It is a holistic approach examining how populations may be ordered, moved, socially engineered and manufactured and fed into the neoliberal late-capitalist machine. Rather than definitions of others’ bodies and identities, this thesis examines the ways in which bodies can transition and the forces that may influence or deny this. This can become praxis and a practical framework for evaluating the trends of marginalisation through evaluating population management and wider systematic forces, bucking recent trends of specific identity representational politics. Through this thesis, wider political systems can be identified in this bodily-insecure age.

The post-digital age would indicate a need for a new approach given the disruption to bodies, conceptualisation of identities and the changing relationship to technologies generally - the natural body has been replaced by a “technology produced simulacrum” (Kroker, 1984, cited in Balsamo, 1997, p.28) as “being human means being part of a civilization that seeks to extend its boundaries” (Kurzweil, 2005, p.250) is an ideal that aligns with Haraway’s vision. Kurzweil argues that the “transbiological era will ultimately give way to the postbiological era, but it is to be hoped that our values will remain influential” (2005, p.284). However, the values of posthumanism are still under debate, with the issue of gender highlighting that there is little consensus about what biotechnological progress should mean for feminisms. Kroker sees that under post modernity gender becomes an artefact – a dated one – trying to apply meaning to generic bodily units (Balsamo, 1997,

p.29). This thesis reworks an old problem of how to define gender, instead asking what the changing relationship with technology does – specifically biotechnology – mean for bodies, and for marginalised populations and their organisation. It is not that concepts such as techno feminism (Wajcman, 2004), xenofeminism (Hester, 2018) or decolonial feminism (Vergès, 2019) do not have a place within this thesis, indeed they do, but it is that this project takes a broad approach to the way in which populations are ordered, and the way in which marginalisations are perpetuated and made systemic. Alaimo argues that Western feminism is so rooted in ideas of nature that feminism has been “haunted” by essentialism (Alaimo, 2010 p,5) while Birke warns of feminism’s “ghost of biology” (1999, p.44). The notion of which gender a person occupies fades in importance when we consider how conceptualisations and *perceptions* of gender – or any perceived non-desirable and further still any non-normative expression or identity – are punished and ordered. It is a modern discourse for conceptualisations of gender to essentially be labelled different rather than similar, “dating from the eighteenth century” (Wajcman, 2004, p.50). For where in feminism, do non-binary people exist? The plight of Black men and women, which surely are at odds with the experiences of white women? And what, too, of disabled bodies treated each as grotesque, as violating the norms of the religion of neoliberal capitalism? As Butler posited: “when the relevant ‘culture’ that ‘constructs’ gender is understood in terms of such a law or set of laws, then it seems that gender is as determined and fixed as it was under the biology-is-destiny formulation. In such a case, not biology, but culture, becomes destiny” (1999, p.12).

In a biotechnological age, there will be attempts to erect concrete borders to control a changing landscape and this will manifest in the form of biological determinism - through false techniques such as x-raying migrants to ascertain their age (Syal, 2021)- a fixed centre

that can be gatekept by corporations and private interests. But this attempt to make identities static fails through the embodiment of agency; new identity cultures may be formed, and new frameworks established to interrogate formerly fixed definitions and visions of the body. Additionally, taking a broader view of topics often associated with biology (only), such as gender, allows for nuanced discussion about a myriad of oppressed identities and includes more women (ironically) than the mainstream feminism of nations such as the United Kingdom who are currently working towards excluding transgender women from services as debates over gender and the body become linear. Like Foucault's examinations of biopolitics and the biopower paradigm, the mutants mark a transitioning era of politics as bodies are managed in new ways, and revolts are a perpetual threat to order.

What would a hybridised body look like? *Mass Effect* puts forth its own ideas, ones of glowing eyes suggesting the proximity of data to skin, but perhaps more relevant is the personal identification of gender/race/sexuality within this new identity, and where this synthesized identity fits in the new political order. Ultimately, those characters had no say over their changing bodies, identities or relationship with themselves and technology, but will still be ruled over by a galactic council (even if that council would be – potentially once more – replaced due to loss of life in the war), that does not have representatives from all species and whose power and wealth is concentrated only around certain planets.

As Bolasmo speculates, cyborgs are “neither purely human nor purely machine” (1997, p.33) and this pattern of disrupting dualisms continues as the organic-technological body disrupt the binaries of male and female and blur the boundaries of culture and nature. Challenging binaries goes beyond bodies: frustrations with the categories of sex and gender, human or machine extend across the far reaches of the universe. One scholar, Greenham, uses the

concept of neocosmicism in science fiction to move beyond the traditional framing of conflict as good versus bad. One of the frustrations Greenham expresses in the examination of cosmicism is the perpetual idea that everything forms binaries: good versus evil, “an obsessive drive to evaluate everything in terms of binary opposites with one of the poles being the right, best, and favourable at the significant expense of the other” (2022, p.55). Neocosmicism is Greenham’s answer to the revolution against the binaries: “This shift is primarily about recasting the meaning of the dark from being negative, and therefore evil, to simply being” (p.197) as “the human creature fears the dark it does not understand...” (2022, p.91). The hybrid being is an attempt to merge two alien identities and seen as a solution to conflict, and it is Shepard’s quick solution to the problem of synthetics and organics lacking understanding of one another.

In some ways, this is an entirely new hybrid species, much like Braidotti’s conceptualisations of Dolly the sheep (2013, p.74). However, synthetic code is treated as homogenous under *Mass Effect’s* lore, despite the varied and complex history between the geth, virtual intelligences, reapers and the AI-character EDI, and organics are incredibly varied and continuously in conflict with one another throughout the centuries. Synthesis offers a hint at how bodies have changed but the audience is left to speculate on the wider political tensions left behind. How do the krogan, for instance, begin to heal after centuries of sterilisation? Their ‘upgraded’ hardware bodies may offer new possibilities but are unlikely to erase or quickly heal the generational trauma endured by such a large and influential population in galactic politics.

The utopian vision of synthesis does not align with the likely expectations of the species within *Mass Effect*, furthermore, accepting disruptions to identities and conceptualisations

of our own bodies (without consent, or forewarning) would evoke trauma that would be comparable to the krogan losing their reproductive rights.

Hybrid mutants as set out by the taxonomy and listed as “those who are created through deliberate genetic alteration and blending of creatures from different species. The early form of this were creatures such as the Minotaur and chimeras.” In 20th century science fiction, hybrid mutants in stories have concentrated upon the image of the cyborg – or the blending of technology and the body. Ewan Kirkland set forth the idea of the cyber-Gothic possessing qualities that “express a fascination with the biology of human body” while blending images of cybernetics (2022, p.59). Cyber-Gothic is a technologised update of the Gothic (Botting, 2007, p.209), merging the advances of technology with the body in ways that evoke tension and suspense. Hybrid mutants often play into this realm.

Yet, the end point of the series is not the end point for speculation for fans, with the implication that our biology *requires* an upgrade. This is not unique within the series: while *Mass Effect* has suggested at the worrisome consequences of undemocratic genetic tinkering (the krogans with the genophage), the lore in *Mass Effect* carries the contradictions of normalising genetic enhancements for greater achievements but only to a point. For instance, heavy genetic alternations such as the ones Miranda Lawson were put through are banned, and yet Alliance soldiers routinely receive regulated genetic enhancements to carry out their duties. *Mass Effect* puts stock in regulating the bodily transformations: with the player given ultimate power to decide the fate of the Milky Way galaxy. Bodily transformations are supported but only in equal relation to one another, and erases the democratic process in favour of empowering the player, while erasing the different cultures and knowledge bases of communities in favour of creating a homogenous

race. The galactic council placed strict controls on the bodies of the population, including regulating reproduction.

This thesis focuses on the way in which bodies are created, depicted, managed and located.

But this is not to disregard that “that an environmental inheritance of sorts is passed along to one’s progeny, along with one’s genes” (Alaimo, 2010, p.106). There is room for further interpretations of where environmental factors collide with bodies (and to some extent, this thesis acknowledges the way in which ecological factors may influence bodies, i.e. the deliberate experimentation of bodies in uncertain and unstable environments), but the scope of this project is to situate the *perception* of mutating and morphed bodies.

Just as Butler asks: “Does sex have history? Does each sex have a different history, or histories?” (1999, p.10) - as well as the famous “what is sex?” - the position of mutants through time and lineage must be examined. Mutants (and a morphed humanity) have the genetic code shared with those that came before, often those who are decidedly un-posthuman even if their genetic material was altered with. Mutants may have eight donors, or one, but their body and genetics tether them to the world as too, more importantly, does their social experience. Mutants are social products, marginalised as too extreme within a society that is geared toward supremacy and advancements.

Wajcman further criticises Haraway and the reception to *A Cyborg Manifesto* for showing “too much enthusiasm for the cyborg” (2004, p.96) and questions whether any substance can be gained from this avenue of discussion or theorisation. Wajcman points to the fact (so far) that all hybrid offspring of cross-species animal are infertile, therefore suggesting that a fundamental alteration in humanity would not result in a new species. Wajcman’s belief that “real women do live in physical difference in flesh” (2004, p.96) risks taking for granted just how we define real women – those already dependent upon technological assists are as

equally as human as those who occupy natural bodies. There is already biotechnological tinkering and technology assisted devices that allow people to navigate the world.

Undoubtedly, the cyborg is a fetishised being, as the mutant risks being, through the utopian reaction that technology can emancipate us from the very forces that have the most control over who gets to access said technology in the first place.

Wark claims that “Haraway sees genetic code and computer code as a new kind of fetishism that are partly, but not entirely, legible to the old Marxist and Freudian versions” and goes so far to label this “a new kind of code causality” (2015). Trying to inscribe genetic code is not a new phenomenon: the obsession with purity in blood lines can be shown throughout the litany of history of each monarchy, relevant still today as Charles III of the United Kingdom was coronated in May 2023. What has become new is the ability for corporations to be able to operate in such a way that there is now greater bodily and genetic control, particularly for the wealthy. The twentieth-century saw horrific experiments in the field of eugenics to render populations pure – most notably through Nazism, but as chapter eight explores, other states of the 1940s era also experimented on people through bodily torture. The lessons of the past can be the production of socially-informed ethical frameworks when using biotechnology to transform bodies. Cavallaro credits Paul Rabinow for crafting the term biosociality which Cavallaro defines as a way of “producing bodies through biologically based technologies” (2000, p.72) signalling the shift into a biotechnological era. Cavallaro suggests that the boundary between living and non-living is constantly shifting due to biotechnological advances and body transformations, with technosociality referencing “the merging of nature and technology in a shared environment” (2000, p.72). This inspired a rise in science fiction literature focused upon the manipulation of the body – or, biopunk – from *The Boys from Brazil* (1978), a film which envisions the clone of Hitler, to the *Jurassic*

Park/World (1993, 2015) franchise terrifying children for generations about the prospect of cloned dinosaurs walking among us. Biopunk has taken over; from the persistent popularity of *The Teenage Mutant Ninja Turtles* from 1990s arcade games to the reimagined IDW comics. As Alopex, the mutant and liberated arctic fox states to a mutant soldier created by ruthless capitalists: “I’ve been where you are now: a mutant to serve and fight for others...You can be more than a weapon. You can be your own person (‘Service Animals’, 2022, p.34). The status of mutants has repeatedly occurred as a plot point in science fiction, with the cyborg or hybrid mutant as the central figure of curiosity: the utopian ideal to an idea that both fascinates and horrifies audience, one that suggests progress but an idea of progress that is beyond our autonomous control. The figure of Shepard in *Mass Effect* presents a juxtaposition; the player is given control over the biotechnological future – the chance to shape and define what exactly is our posthuman ideal – but at the expense that no other non-playable character is able to provide guidance or even consent to their bodily changes, in a series where the canon is personal to the fan, and their own story, and no other player can inform that decision. A million Shepards, a million different interpretations, but with no consent, input or discussion.

Section 5.3 The social meanings of play; how our RPGs can shape perspectives on identities and philosophies.

To create social meaning, play is a useful tool for gamers and observers to interact with new systems, rules and societies.

“...role-playing resembles not only religious ritual but broader models of how human beings produce meaning. It is collective; it is autotelic; it is ‘set apart and forbidden’ in that it must be performed in a certain way and will be spoiled if it is not ‘taken seriously’; it provides a ‘liminoid’ state in which ordinary social

norms are suspended; and it produces a unique experience of flow or engrossment. It is through this mode of 'serious play' that humans are able to temporarily suspend the ordinary world in order to imagine alternative worlds together" (Laycock, 2012, p.233).

Laycock links the idea of creating new norms out of broken structures as a method of play through *Dungeons & Dragons*, as the game allows for a fluid narrative that allows players to conjure new meanings through interactions with the world around them (Laycock, 2012, p.231). Biolegal specialist Jasonoff who comments "for rights to have social meaning, they must become embedded in people's imaginations and understandings and worked out in their practical dealings with one another..." (2011, p.15). This must include science fiction, where audience understanding is translated through participation in interactive narratives, where gamers can shape their own views and experiment with the outcomes presented by developers. Jasonoff states that as questions are raised by new biotechnological practices and techniques "that embody genetic understandings of life, but whose legal and social meanings are far from clear at the moment" (2011, p.3) there will be continued discussion and focus upon the role of biomedicine and biotechnology within our constitution – which are therefore inevitable components of our science fiction. Jasonoff argues that the period of rapid biotechnological focus, change, innovations and bioethical debates characterised the start of bioconstitutionalism: "Revolutions in our understanding of what life is burrow so deep into the foundations of our social and political structures that they necessitate, in effect, a rethinking of law at a constitutional level" (2011, p.3). *Reframing Rights* was released two years before the end of the *Mass Effect Trilogy*, signifying the shift into an era of bio-curiosity. The ending of synthesis epitomises the culture of bodily idealisation, as the

hybrid mutant presented an idea of hope for the posthuman in which everyone could partake.

But the work of *BioWare* risks missing the warnings of *Frankenstein*; as Asma (2009) reminded readers of *On Monsters*, the fatal flaw of Frankenstein's work was to focus too much on sciences and less so on humanities, on thinking of progress and not of meaning. Asma asserts that too much materialism in science leads to reductionism, where people are reduced to body their parts: "Their creators demonstrate their own cleverness and Promethean pride, but though human knowledge might be able to compose life itself, it cannot, it seems, compose it well. Something essential is always missing (2009, p.153). *BioWare* allows the creations through synthesis to be unleashed into the imaginations of players to speculate upon, but the overwhelming focus on the ending is on the science and technology that can be utilised to stop the reapers, with little overt in-game dialogue about the potential sociological repercussions. Mutant characters are a modern concept within the Promethean tradition; mutant characters provide warnings through their construction when holistic (and ethical) considerations are ignored. This thesis's central focus is on the characters created outside of natural - 'normative' - reproduction, or life that has been altered by some intervention in some way. These characters present the tension embodied through defying non-normative systems with the ending of synthesis, the merging of synthetics and organics, the ultimate ideal within the *Mass Effect* series after centuries of conflict between synthetics and organics, and between organics and organics. Hybrid mutants offer insight into the disruption of boundaries and normative assumptions. Not fully new – as they are not birthed as such but are altered after already being born – they possess some understanding of a prior normative existence until (at least) the point of transformation into the mutant state. Hybrid mutants are one of the few forms of mutants

that enter a posthuman state during their lifetimes (the difference between mutants in motion, such as werewolves, is that they occupy the posthuman state permanently upon their entry). They cannot also be classified as augmented mutants as they are figures where their state has altered, but there is still some semblance of what once was. The basic bodily state remains intact but they enter a new stage of being.

The ending of *Mass Effect* therefore offers a transitional state for humanity, if Shepard aligns with the utopian ideals of post and transhumanists such as Haraway and Kurzweil.

The player can undertake a new era of posthumanity, where everyone must undertake the transformation, regardless of their consent. Instead of multiple heterogeneous cultures, identities and communities, this version of *Mass Effect* presents one homogenous body, bound together by the experiences of artificial intelligent life rather than social or even biosocial experiences. It is a case study for the hybrid mutant, but a shallow narrative that risks sweeping generalisations about the power of technology to unify, and the confusion of order with peace, where only one group can thrive together and differences are seen as a threat to stability, rather than an essential part of the posthuman future.

Chapter Six: Genetically engineered ideas of perfection

Section 6.1 Putting the desire for a designed mutant under the microscope.

This chapter explores the designed/perfected mutant, listed within the taxonomy (chapter two), from the construction of the concept of perfection to the implications of deliberate production outside of the human-normative spectrum. Miranda Lawson, as the main ‘perfected’ (as the game describes her) character of the series, is the centre-point for analysis. The design of the perfected woman demands engagement with feminist and social justice theory, for what makes a perfect woman and according to who? The starting point for this chapter then, is the concept of agency for characters *designed* for a specific purpose. This chapter focuses upon Miranda’s design and how that philosophy guides her birth, life, and death, asking did (and how) the design of her body influence the course of her narrative? This chapter is a study of the life of a perfected human and the persistent tension they experience with normative society.

Miranda is designed to be perfect; every trait chosen by her father, Henry Lawson. She will live 1.5 times longer than average; recovers quickly from wounds and has considerable biotic strength. She had no mother. Various genetic data was taken from multiple women to contribute to her design (there is no mention whether this was taken with consent).

Miranda was given the best education and the best training “that money could buy” (2010), and she becomes the centre-point of the story in *Mass Effect 2* as she leads the resurrection of Shepard, is a potential romance option for Shepard, and in the final game (if she is alive), provides Shepard with the knowledge to defeat reaper-allies Cerberus¹⁷.

¹⁷ See glossary



Figure 9 Mianda at the start of Mass Effect 2

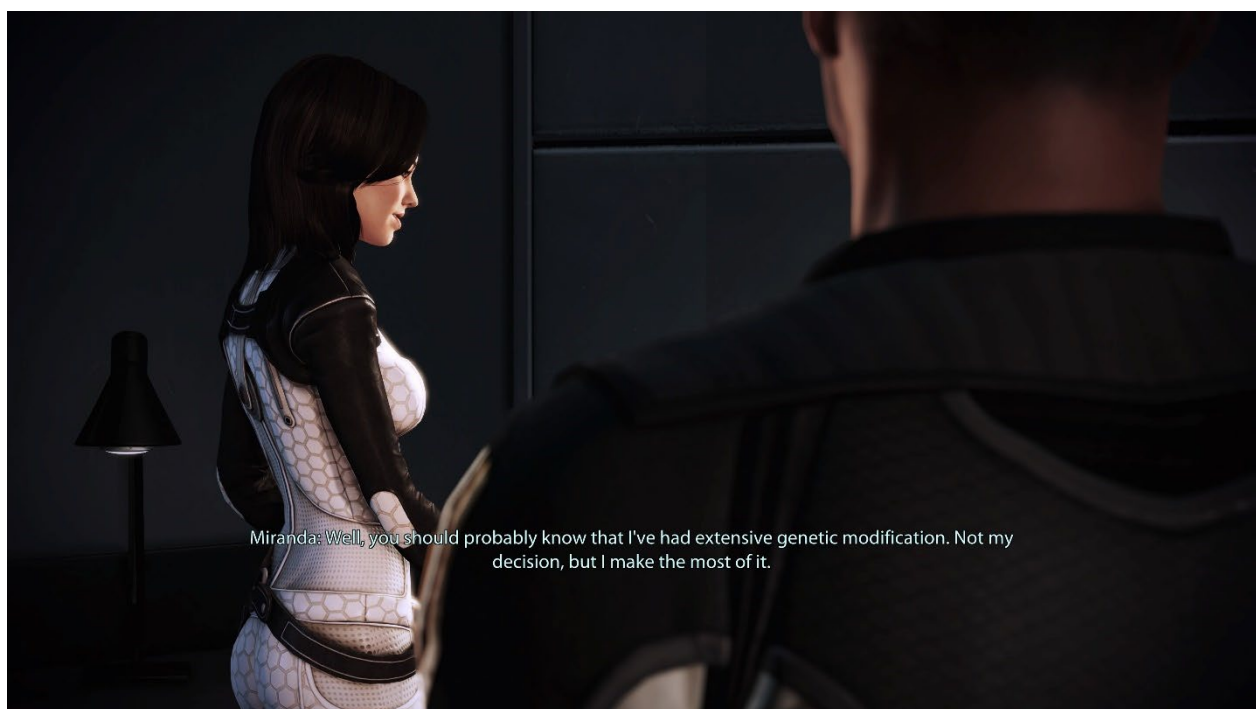


Figure 10 Miranda discussing her creation

Miranda's perfect design calls into question what is considered the apex of humanity.

Classical humanism's centre point is male and "moreover, he is white, European, handsome and able-bodied; of his sexuality nothing much can be guessed, though plenty of speculation

surrounds that of his painter, Leonardo da Vinci” (Irigaray cited in Braidotti, 2013, p.24).

Miranda mirrors these characteristics, differing only in her gender. Miranda could have been designed to be anything and yet, despite presenting as a posthuman being, she conforms to classical ideas of humanism, enforcing, as Halberstam argues, a normative category of identity.

“...what is unique to each human is not the normal but the mutation; either you value mutation and uniqueness or you invest in the normal and the lack of difference. To stretch the analogy even further, either you want uniqueness and therefore you deliberately deviate from the norm or you want conformity and you settle for being just like everyone else. And it is no accident that those brave souls who do choose mutation and deviance over stasis and obedience are often represented as a plague on society (Halberstam, 2012, p.142).”

Henry Lawson’s (and BioWare’s) aesthetic and identity choices for Miranda are investigated throughout this chapter, as well as Miranda’s reckoning with her design and her own battle for autonomy in a society where she is the poster child for supremacist values. Chapter six is ultimately focuses upon the life, death and design of the perfect human - and of her creator(s).

Section 6.2 The desire for a mutant child and the relationship to the parent/creator.

Under neoliberal capitalist structures, children become the vanguard of the system: the symbol of the promise of progress as a soon to be labour force:

“The fundamental demands of capital for a renewable supply of labor power exert strong pressures for certain (privatized) forms, (disciplining) practices and (alienated) states of being to emerge. At the same time, they generate forces that obstruct the

likelihood that other (communal, open-ended, integrated) childhoods will develop”

(Ferguson, 2017, p.113).

Yet, Ferguson acknowledges that children do represent a challenge to capitalist social reproduction and capitalist value production (2017, p.113) by emerging as new identities, ready to carve their own paths, prone to rebellion and not yet fully transformed into workers. She adds “children - the future laborers on whom capitalism depends- thus pose a problem for capitalism: they are not as prepared, as adults are, to abandon the play end of the work/play continuum and all that comes with it” (2017, p.12). Furthermore, the role of children within neoliberal capitalism constitutes an extension of social reproduction theory, which Ferguson claims refers to “the biological reproduction of people (e.g., breastfeeding, commercial surrogacy, pregnancy), the reproduction of the labour force (e.g., unpaid cooking, caring and cleaning tasks) and individuals and institutions that perform paid caring labor (e.g. personal home care assistants, maids, paid domestic workers)” (2017, p.131).

Social reproduction theory moves beyond Marxism’s analysis of goods and services – outside of the formal economy – to the kin-based location of family (Bhattacharya , 2017, p.3). Social reproduction theory allows space for analysis of such characters, through the examination of the reproduction of children – and the role of biotechnologies in their conception – and the ideas of the reproduction of the labour force. This thesis analyses the fears produced through science fiction narratives where genetically engineered characters are created to replace or succeed the current labour force/humanity.

Mass Effect 2 was released in 2010, the year Craig Venter led a team which tested inserting synthetic DNA into a bacterial cell. This process is a foundation to manipulating human traits. This is the starting point on a path that has the potential (and is already being toyed with) to lead to a plausible scenario of people being able to choose their children’s aesthetic

traits. Miranda is the endpoint of the possibilities of the technology that was being developed at the time of the game's creation. She may be classified as a 'bioborg', an identity constructed through her genetic alterations and interactions with biotechnology (Kucukalic, 2022, p.101).

Silver dismisses concerns that the development of genetic engineering would result in deepening inequality, risking the futures of disabled children and being a tool accessible only to wealthy families that will treat children as commodities "to be purchased and used" (1999, p.233). Those concerns are addressed throughout this chapter, as Shepard can challenge Miranda's view that she is a tool to be used.

There has long been a fascination by filmmakers and artists to depict tales of men using technology to craft the 'perfect woman' (Wosk, 2015 p.137), but Miranda, like the women of *The Perfect Woman* and *L'Eve future* (the focus for Wosk's analysis), Miranda lacked key traits that would be seen to make her a perfect woman: a devotion to domesticity and motherhood (as she was unable to maintain a pregnancy) and perpetual and ready availability for sex (2015, p.140).

Miranda states in *Mass Effect 2* that her father "wanted total control over me. Right down to my bloody DNA." Miranda's body is a capsule of supremacist ideals: Miranda is white, she is designed to be straight, she is able-bodied, and her body operates better than the able-bodied humans. That she is created as an ideal to be desired lends weight to the idea of a 'perfect' human based on hierarchical and prejudiced ideas. Scientist Stephen Hsu created a predictor by studying genetics to accurately guess a person's height. This has led scientists to believe that we are getting increasingly close to a time when parents will be able to make specific choices about their children's traits and that it will become part of the IVF process. However, there are worrying questions over the accessibility of eugenics. Hsu's research

built its data from the genetic information of Northern Europeans. The systems built to be able to guide the worrying future of eugenics already catered to a white centred outlook (Regalado, 2017). It was the Marvel Cinematic Universe's Baron Zemo (2021) who summed up the conundrum of literary posthuman mutants, saying "the desire to become a superhuman cannot be separated from supremacist ideals."

There has been a long history of the tension contained within the bodies of those who threaten understanding of humanity, or even seek to supplant humans. Beal (2002) states that "the monster is often *both* demonized and deified, revealing a deep sense of ambivalence about the relation between the monstrous and the divine, and intensifying the sense of paradox". In contrast, the design of Miranda is posited to be the divinity of humanity.

That divinity is assigned by a eugenicist obsessed with his legacy. Weinstock explores the relationship monsters have to motherhood: "Montaigne, for example, expressed this belief in his essay 'On the Power of Imagination' (1850), writing, 'we know by experience that women transmit marks of their fancies to the bodies of the children they carry in their wombs'" (2020, p.17). Hains claims that an integral process to creating women and girls – such as the cartoon show *Powerpuff Girls* (1998) – is to remove women from the process: "myths that rob women of their power to create life are not new; the *Powerpuff Girls*' creation echoes other creation myths in which a male figure bypasses women's role in the reproductive process" (2005 p.16). Much like the *Powerpuff Girls*, Athena or even Eve, Miranda's traits are bestowed by one man. But Miranda was created to be both an icon and a weapon, to secure Henry Lawson's legacy by creating the new posthuman being. It was Frankenstein who declared "No father could claim the gratitude of his child so completely as I should deserve theirs" (Shelley, 1993, p.43).

The ambition to design a child can lead to “evaporating human bonds, technologically assisted childbirth, the separation of sex from procreation, an incompatibility between parenthood and individualistic life choices, and the commodification of children are aspects of the posthuman becoming-monster” (Schmeink, 2016, p.145). Miranda and Oriana are examples of commodified children. Henry Lawson severed any connection that a maternal figure might bring to Miranda’s life. During the 1990s, the possibility of ‘virgin births’ due to increasing reproductive choices being offered created a moral panic regarding the natural family and natural body (Shilling, 2012, p.5). In *Frankenstein*, Victor states, “I pursued nature to her hiding places” and Henry Lawson carried on in this same image: not simply disrupting the way life is created but severing connections from baby to community. This emphasises that “Victor Frankenstein has become the prototype for pretty much all subsequent depictions of mad or evil scientists” (Harkup, 2019, p.101). From her creation, Miranda had every aspect of her life controlled. She reveals that she was not allowed friends as she was pushed to impossible odds by her demanding father.

“In the context of body modification, child/adolescent characters are routinely depicted as disempowered or subordinated subjects. Decisions regarding these modifications are made by either parents, legal guardians or the state – and the role of the young protagonist is to come to terms with their body and the scientific engineering that has affected or produced it” (Flanagan, 2012, p.17).

This extends to the community that was crafted around Miranda and not merely her genetic traits that she was given. Flanagan argues that children are “victims of circumstance, rather than empowered advocates of technological progress” (2012, p.17), in direct response to suggestions from posthumanist theorist Nick Bostrom (2006, p.16) that people should have the freedom to choose how to enhance their own bodies. The idea of bodily autonomy is an

obvious way to circumvent control from the state and counteract those long held fears as more options for genetic/body modification become available. However, as Flanagan suggests, the rights of children fall back to parents or guardians, and rather than being an empowered agent of the posthuman, Miranda spends a significant portion of her life controlled by her father. There is a fight for liberation for Miranda: but this concerns not the state, but private 'investors' who want to see the human they deem perfect become a mascot for their agenda.

Section 6.3 Examining ideas of perfection. How BioWare designed a perfect mutant woman for video games.

In *Mass Effect* biotechnical progress is not reserved simply for treating and curing suffering or terminal conditions. Technology is used to probe how humanity could be *better*. In *Unnatural Selection* (2019), Professor Juan Izpisua Belmonte states that "It is natural to ask 'can we make a better human being?'" No character embodies this curiosity more than Miranda.

Silver aligns criticism of unfettered biotechnological pursuits as being spiritual in nature; "although all other intrusions into the body may work around the edges, genetic engineering, it seems, impinges on the essence of life itself – the soul. And the soul is clearly in God's domain" (1999, p.235). Yet *Mass Effect* has moved beyond this binary; as Miranda's soul remains whole, and the game explicitly states that it is her spirit and personality which make her "great". Yet, her body was designed (by both Henry and BioWare to conform to strict ideas about perfection; these ideas taken from a specific and narrow doctrine.

Ironically, for beings presented as *posthuman*, this represents the struggle to shift away from humanism which centres white European men as Enlightened; it is defined by sameness. It is presented as above difference, above squabbles over diversity, and it

“...functions by transposing a specific mode of being human into a generalized standard, which acquires transcendent values as *the* human: from male to masculine and onto human as the universalized format of humanity” (Braidotti, 2013, p.26).

The process of eugenics is embedded in the idea of erasing disabled people. But there are other prejudices at play: the quest for perfection also caters into white supremacist ideals, including chasing the aesthetic beauty standards that dominate Europe, as Europe continues to rule over global capitalist spaces.

“Becoming posthuman means exceeding the limitations that define the less desirable aspects of the ‘human condition.’ Posthuman beings would no longer suffer from disease, ageing, and inevitable death (but they are likely to face other challenges” (More, 2013, p.4).

Miranda may be posthuman in this sense, due to her creation, but her design was not about simply protecting quality of life. Her creation was about having one human encapsulate all the best traits deemed desirable according to a specific doctrine, to ensure that she had advantages that would place her ‘above’ humans.

In an episode of the *Imaginary Worlds* podcast, science fiction essayist Damien Walters (2020) comments that “It’s [scifi] being used for this slightly fascistic view of the body which is then linked to quite controlling advertising and marketing paradigms to sell stuff to people” in an episode discussion the bodies of superheroes. In the same episode, author Jason Dittmer states, “when you see Superman and characters of his timeframe coming out in 1938, 1939 and 1940, they kind of embody a lot of the attractive elements of fascism.” Dittmer uses the example of Captain America as a blonde-haired, blue-eyed icon “with his perfect physique, a product of science and government collaboration.” He concludes that “I don’t think you have to look too hard to see where this kind of cult of the body, the

importance of masculinity and physical violence as a way of overcoming problems. There's a lot in there that is fascist, I think."

The image of perfection meant Miranda's creation was limited to certain features: white, Western, visibly able-bodied to emulate ideals about what a woman should be. This, however, is something that games developers have tampered with for decades. While games have always been played by women, they have rarely been marketed for women; *The 2024 Games Developers Conference* found that men make up more than two thirds of game developers, while only 23% surveyed were women (Women in Games, 2024). As such, male fantasies of what women should look like have dominated video game content, partly as the result of men making up the bulk of gaming programmers, and partly the result of catering to a hyper-sexualised society. Kucukalic states that "the body is seen as an extreme assemblage, consistent of the imagined, subjective, biotechnological, and mediated aspects" with established analysis of women characters pointing to the empowered woman as still needing to be attractive, sexually active and "gazed at" (2022, p.104). While phenomenological approaches to feminism and the body can dismantle homogenous ideas of gender (such as Haraway's cyborg); in science fiction literature cyborg women, as this section demonstrates, still often adhere to narrow views of gender normativity (Kucukalic, 2022, p.104).

Designing a woman to be perfect is nothing new to games developers, for women have traditionally been held to unrealistic standards of beauty. The first major example of this being Lara Croft, whose video games came to prominence during the 1990s and 2000s. She is notable as the first woman given her own action-adventure series - what would traditionally have been the role of a man. Lara Croft contrasts with the women before her who had often been relegated to damsels in distress (notably, Princess Peach). Lara Croft

became a model for women characters, by creating a caricature that catered to gamers who were white men. Yet, she had to cater to a specific audience to circumvent opposition from a potentially hostile consumer base. Adrienne Shaw (2015) examines how Lara Croft came to be, and what legacy has been left for women.

“Her class, race, sexuality, and gender presentation were made normative, and thus, the only challenge she posed to mainstream game representation was in her performance of gendered labor. At her inception Lara could have been a kick-- ass, intelligent, woman of color, feminist superstar. Market logics, imagined audiences, and an assumption that men could not identify as Lara led, however, as Sheri Graner Ray describes, to ‘a hypersexualized female caricature that is, essentially, ‘eye candy’ for male players’” (Shaw, 2015, p.19).

Questions linger about Miranda’s feminist legacy due to the way her character was directed and framed throughout the series. With Miranda’s characterisation BioWare catered to the expectations of their audience, and perhaps, reflected the desires of the creators in an industry dominated by men. While Miranda shows her vulnerability when her sister is kidnapped and when, in *Mass Effect 3* assassins are hunting her, BioWare shows not a shot of Miranda’s emotive expressions, but of her bottom. The camera lingers on her posterior repeatedly throughout the two games in which she features. As a perfect human, so much of Miranda’s character was focused upon eliciting a specific reaction from a certain demographic of gamers: one of lust. This could be seen as inevitable when in 2015 - two years before the release of the final instalment of the original trilogy – the International Game Developers Association found that 75% of games developers are men. A human’s perfection, and most significantly, a woman’s perfection, was left to be defined almost exclusively by men.

This has been a contentious issue since the original trilogy was introduced, and shortly after the remaster of the original trilogy was announced, Project Director, Mac Walters stated that those shots of Miranda would be removed for the *Mass Effect: Legendary Edition*, acknowledging that “I do think a lot of things have evolved since” (Metro, 2021). Yet, immediately gamers took to social media to decry the changes and to assert that BioWare was supporting censorship and giving into what is pejoratively called “woke culture.” There were claims that BioWare were being anti-sex, even though the games will still have just as many sex scenes and include characters who are sex workers (whose services can be utilised by Shepard) and strippers.

Referring to the work of Stephen Kline, Nick Dyer-Witheford, and Greig de Peuter, Adrienne Shaw asserted that Lara Croft’s design “represents a revised approach to game design that more prominently incorporates women into the game world but in a way that intensifies appeal to the male market,” and to some extent, this process can be witnessed within Miranda's design.

Miranda does have protective clothing, and yet she is made to wear precariously high boots that would be detrimental to working on the battlefield. The process for designing Miranda was undertaken to ensure that she appealed to the sexuality of (certain kinds of) gamers.

The Art of Mass Effect, a book that detailed the ideas behind the different designs that appeared in the original trilogy; stated “concepts of Miranda’s body and clothing tried to balance sex appeal with a uniform befitting a Cerberus officer” (Hudson, Watts, Hepler, 2012, p.64).

Miranda’s uniform conforming to attitudes of what is sexually appealing shows that it’s not just Miranda’s genetics wrapped up in ideas of perfection, and to be perfect, Miranda conforms to ideals of beauty. However, the trajectory started since Lara Croft has been to

make women less overtly cater to the male gaze, rather than to create a radically empowered woman. Miranda's mutant status complies less to ideas about the posthuman, but more to current ideas about how women should look and behave; the role that the female body plays in the production of feminine identity is significant in the context of patriarchal discourses of femininity that seek to prescribe only certain body shapes, physical features and behaviours as desirable" (Flanagan, 2014, p. 101).

This extends to which genitals women are assigned in stories, their body shape, their skin colour (or, more aptly, their *whiteness*) and even whether their hair is visible or hidden. It is a burden all women in fiction carry: the axiomatic belief of what makes a woman. They are not their own characters but defined by their audiences and creators' perceptions of what a woman should be. Miranda encapsulates this history that they all carry, and she is the example of the pinnacle of these forces. The legacy of Lara Croft is still felt in the games industry. But if women are held to high standards, how then to make Miranda represent the posthuman image of perfection? As Compton points out in *RPG: Role-Playing Gender, and How the Game Industry Has Sustained and Defied Sexism*: "... the male gaze does not give pleasure to the male viewer alone: hypersexualised women also give female viewers a 'misrecognition as [a] superior' body, seeing an ideal in female bodies that is not attainable...These are part of everyday life in the West, accumulating sexist capital regarding suitable looks, dress, and posture for women, while consumers are simultaneously discouraged from questioning these images through their very normalisation" (Compton, 2019).

Miranda must be an image of perfection in a culture that creates women and girls according to strict ideas of what is acceptable. Miranda must have an implicit sexual desirability, and yet she must not be seen as promiscuous. She must be capable, but she needs to be

vulnerable enough so that the playable protagonist is never inferior to her. Miranda's mutant status is something that causes desire: to command the affections of a 'perfect' woman is a symbol of status, but if the male Commander Shepard fails in this endeavour, then it is no slight on his own prowess, because Miranda is unlike all other humans. In an argument with Commander Shepard over his potential romantic and sexual relationship with Miranda Lawson, Ashley Williams states in *Mass Effect 3*, "I'm a real person, Shepard. Flaws and all" - an interesting comment from a woman designed to cater increasingly to outdated ideas of femininity as the series went on, but she is not, unlike Miranda, a *mutant* woman. By the final game of the trilogy, there is little to tell Miranda and Ashley apart. Ashley started *Mass Effect* as a soldier that was labelled a 'tomboy' but her redesign for the final game, saw Ashley let her hair loose quite literally and adorn conventionally feminine makeup styles. Even in the posthuman era she occupies, Miranda is held to the same standard as all non-mutant women in games and tethered to the same ideals. Miranda is a later iteration of Lara Croft, and so is Ashley Williams – designed or not.

"Lara Croft exhibits an interesting duality. Physically, she is the embodiment of objectification as she is young and possess an impossibly large (yet gravity defying) chest, an inhumanly small waist, and well-rounded hips. On the other hand, she is strong, smart, independent, and, in many ways, the ultimate feminist hero" (Wright et al, 2010, p.104).

Miranda's DNA stems from Lara Croft. Miranda's body proportions are similar to Lara Croft's. Miranda is a leader; indeed, her leadership can save the lives of multiple members of Shepard's team in the 'suicide mission' of *Mass Effect 2*. She is intelligent; making new scientific breakthroughs that have eluded humans for centuries. She possesses a large chest, large bottom, yet is thin with well-rounded hips. She can run perfectly, while carrying heavy

weapons, in six-inch heeled boots. It is difficult to imagine a world where a 'perfect' woman would be selected as having a small chest, and a well-rounded stomach instead of well-rounded hips. It is also difficult to imagine the idea of a 'perfect' human woman being made to be Black, or else simply not white, or that woman not being condemned by audiences. The two main characters in *The Last of Us 2* (2020) were declared "ugly" by gamers for daring to have muscles in a post-apocalyptic zombie world. They were white, brunette, and conventionally attractive by the standards enforced by European ideals, but both also had muscles and wore clothes not considered feminine. This was enough to elicit anger from gamers.

Even posthuman mutants are still designed to these doctrines of similarity.

Miranda's father embodied white nationalism in the creation of his daughter. In the roots of monster-mutant stories, racism is inescapable. As an example, Weiner, Stevens and Rogers note (2018, p.13), Frankenstein's monster (or, more appropriately *mutant*) is noted as having common associations with how Asian people were described at the time. As Frankenstein's mutant is made to be shown as an experiment gone wrong, perverse in nature, and ultimately a failure, the associations with Asian people, based on stereotypes, suggest that this was deliberate coding designed to highlight further the 'monstrous.' In contrast to *Frankenstein*, *Mass Effect* explores perfected technology, in a galaxy endlessly in pursuit of 'progress'. Miranda, from the outset, is intended to be perfect and it is therefore compulsory when discussing her character, to analyse the decision to make Miranda white, and the implication of associating whiteness with perfection.

Modernisation – or the rise of twentieth century capitalism – saw a new ordered management of bodies as wage labour separated workers from owners, and urbanisation saw mass movement into cities and as the need for employment, advertising and a focus on

the aesthetics and productivity took over; the dislocations “created anonymity, forcing people to rely upon bodily appearance rather than kinship or local memberships as indices of identity and social position” (Garland Thomson, 1996, p.12). But how best to create a desirable trophy daughter whose body represents the end of humanity, and the beginning of a ‘posthumanity’? The beauty industry gives clear directions as the “...focus on the female body is prevalent in all areas of cosmetic surgery – from the determination of ideal proportions to the marketing of specific cosmetic procedures” (Bolsamo, 1997, p.60). This is an industry that is accused of upholding white supremacy and erasing the identities of people of colour; Dr Chris Solomon, whose expertise lies in the contentious arena of visual profiling, used facial recognition software to conduct a survey to discover which traits and features the public found the most desirable. One hundred people took part in this survey. The results suggested that ideas associated with Western beauty dominated, and one key area that was rated as attractive was having a fair complexion. But as journalist Summer Noblé points out: the data is questionable when presented as understanding the ideas of beauty if it does not consider the implicit biases that people answering the questions may bring with them in their answers.

“Experiments like Dr. Solomon’s aim to create a visual representation of what beauty means, but instead it just reinforces Eurocentric beauty standards that have long been valued over other traits. As a result, emulation of whiteness is something many people of non-white descent undergo to obtain more acceptance or success, including skin-lightening and double-eyelid surgery” (2015).

The concept of the ideal body is fluid between cultures, with the concept of aesthetic perfection rooted across a multitude of cultures and traditions, and “the physical capital

obtained from possessing an 'aesthetically pleasing' body has been enough to encourage both men and women to turn to the surgeon's knife" (Ogden, 2012, p81). Ogden adds that this focus on the aesthetics has come at the expense of ignoring the functionality of the body, and that this – and the surveillance of non-normative bodies - "suggests a need for change to contemporary society's hegemonic ideals of civility and normality, so that difference of any nature can be accepted" (2012, p.81).

Could a Black, fat and disfigured woman be seen as perfect? Not to gamers who already mock Miranda's supposedly wonky teeth, and certainly not to a eugenicist character like Henry Lawson who is associated with human supremacist organisations. In 2015, Jef Rouner (Houston Press) found that there had only been 14 playable Black women characters in games history, and only five of those women could be classed as main protagonists. In May 2024, there was online backlash to the upcoming *Assassin's Creed* for including a black samurai character – based on Yasuke, a black samurai documented in history (Murray, 2024). Miranda's skin colour is designed to appeal to the dominant ideas of beauty for the loudest gamers. Ironically, Bolsamo points to Napoleon N Vaughn's reports that cosmetic surgeons routinely reject prospective Black patients due to the fear of hyperpigmentation and scarring (1997, p.60). Miranda's 'perfect' status reveals the state of hierarchies, oppression and suppression. But making a character that conforms to these ideals, while it does go some way to making us question *why they should be considered perfect*, ultimately also serves the same people who share those ideals in the first place.

The questions over Miranda's skin colour linger in the wider context of the series. *Mass Effect 2* was a departure from the first game with its darker tone. The opening montage was created from photographs of circuit boards and screws intermeshed with meat bought from supermarkets (Winter, 2022, p.6). Shepard leaves the polished Citadel Council, for space-

stations like Omega that are defined by their poverty, with images of aliens collapsed drunk on the floor outside of nightclubs blaring dance music. Even when Shepard does return to Citadel space, the lavishness of the financial district and the beautiful gardens of the Council chambers have gone. Shepard only briefly gets to glance at the light of the middle-class areas, during one conversation with the Council. The rest of the time, Shepard is back in the working-class wards that are visually darker, rely on neon lights, and are occupied by street vendors who, predictably, shout Japanese for no apparent reason given that everyone else, including the aliens, speak English (or have it presented as translated as such, for the player). *Mass Effect 2*'s 'high tech, low life' thematic was taken from the genre of cyberpunk, a literary movement stemming from the 1980s that heavily appropriates, and rarely respectfully appreciates, Japanese culture. Sarah Emerson (2017) explores this phenomenon and how Asian cultures (particularly Japanese cultures) are often referred to in these stories through subtext and yet rarely do Asian characters ever feature in their tales. As Hall (cited in Kates, 2017 p.4) asserts "...by casting white people in Asian roles... Representation is dictated and maintained by those in power and those who have power are constantly trying to fix meaning in a way that supports its agenda". As the perfect representative of posthumanity, Miranda's creation as a white woman has severe implications in a game that has only one main character of colour, particularly when it was non-Western cultures that also contributed to the creation of the environment of *Mass Effect 2*.

The Gothic novel explored nationalist identities through monsters (not yet designated as mutants) (Halberstam, 2020). While monsters often show the oppressive hierarchies at play in a capitalist society for humans (by contrasting their 'monstrous form' with the human). The mutant solidifies these ideas by showcasing certain features – white, middle class and

heterosexual – as a cypher to reveal perfection. Where Miranda differs is that she is not a man. Yet, as shown, even this idea of progress can be questioned when she has the body of a woman designed for the male gaze, and is a woman designed to be the tool of men.

Miranda's story is ultimately situated in the Gothic; with a tyrannical father - a staple of the Gothic (according to Botting, 2002, p.283) - family doom, the motif of revenge (Moers, 1976, p.100) and an insidious amount of paternal control even over Miranda's sexuality.

Biofictions challenge the masculine/feminine binary and that "as a transitional figure between a human and posthuman stage, the female hero is an intermediary conduit of gender" (Kuckalic, 2022, p.104). As a character far surpassing the capabilities of others within the masculine military complex, Miranda challenges implicit gender normativity. However, there is persistent tension as her design is supposed to encapsulate dominant (and biased) views of what makes a perfect woman. Miranda's womanhood is not just important for the marketing of the game, but it is central to her story of self-liberation from oppressive figures and ideologies. Miranda Lawson has her story defined first by the control of her father, and then by the control of her employer, The Illusive Man. Refusing these patriarchal figures results in her own liberation. Miranda Lawson's story is more than skin-deep, but her body and design were the result of capitalist lust: from all her creators.

Section 6.4 Taking ownership of a manufactured life: Miranda's liberation through life and death

One of the final missions of the trilogy takes place at a concentration camp that was promoted as a safe space for refugees fleeing the reaper war. When refugees landed, however, they were taken by Cerberus soldiers and turned into husks in brutal experiments. Henry Lawson oversaw the project, and it was also where he held his second living daughter, Oriana, whom he had kidnapped from her adoptive family.

Miranda goes to this Cerberus-controlled facility alone, which is under attack by the reapers, to save her sister. The complexity of the branching narrative is demonstrated in this mission where several key decisions the player made in the second and third game influence the mission's outcome – an outcome that can see Miranda, her father, and/or her sister die. When Shepard arrives, Miranda stands injured before her father, who holds a gun to Oriana's head. If Shepard does not kill Henry Lawson, then Miranda will throw her father through a glass window, ending his life. Significantly, if Miranda is not present in the game, Oriana can murder her father and kill herself in the process. In the 'optimal' path, Shepard cuts a deal with Henry Lawson, agreeing to let the eugenicist go on the condition he spares Oriana. Upon freeing the younger Lawson sibling, Miranda murders her father. The cycle of abuse ends. The creator is dead.

The beginning and end points of life are symbolic in narratives. For Miranda's creation, her father chose every attribute of her physical profile and even tried to shape her personality and ideology as he saw fit. Henry Lawson's decision to create Miranda and Oriana without a mother is a deliberate choice to ensure that Henry's influence over his daughters is complete. Justine Larbalestier explored the tension between genders in science fiction noting how traditionally in the genre the rule of men has been seen as natural, and any disruptions of this order have often been treated as the trigger point for a societal breakdown (2002, p.229) and yet *Mass Effect* attempts to examine this paternalistic idea of men as leaders, women as subjects through the depiction of designed mutants.

Henry Lawson can be killed by either of his creations who choose to reject his ideals rather than be relegated to products to be used by him. Miranda discards her father's white supremacist, ableist and allo-cishetereopatriarchal agenda, that dictated so much of her design. Yet, this can also result in her death.

For Miranda to die at Sanctuary, the player must reject Miranda's attempts to meet Shepard and her request for support early in *Mass Effect 3*, Miranda must also not hold any loyalty to Shepard either by the player refusing to do her specific mission in the second game, or by Shepard breaking up with Miranda early in the third game. Miranda's death can be referenced by Shepard toward the end of the game, when the Commander finally murders villain Kai Leng and declares "that was for Miranda, you son of a bitch". Miranda's death can be another point of fuel for Shepard in the fight against Cerberus and the reapers, particularly if the Commander is a man and partner to Miranda. The fall of Miranda and Oriana is the destruction of the quest for perfection for humanity, with Henry Lawson's legacy is in tatters.

The decision to allow Miranda to die by players conforms to the idea of disempowering women to empower men in the narrative. In the 1990s, 'Women in Refrigerators' was a website set up by women in the comics industry (coined by leading writer Gail Simone) that documented the women characters in comics that were killed off, raped or otherwise disempowered to help further character development for men, often giving them a desire for 'revenge' to propel their stories forward. With 82% of players in 2013 playing as ManShep¹⁸ (BioWare), most of the time, Miranda's death was decided by a male Commander Shepard. Miranda can only romance the cisgender male form of Shepard, and so her death will add further fuel to his desire to see the end of the reapers. Miranda's death puts her firmly in the fridge - Miranda's perfected womanhood is not enough to break free of this sexist trope.

¹⁸ See glossary

Cohen's seven principles of Monster Theory stipulates that "fear of monster is a desire and our guilt is assuaged with their death" (Cohen, cited in Gloyn, 2020, p.11), and Cohen's principles are vital for "understanding [the] cultural creation of monsters" (Gloyn, 2020).

What has been created, must have an end and the choice presented in *Mass Effect* is significant: Miranda either is empowered to live her life on her terms, or she dies to end the disruption to nature her birth caused and to further Shepard's rage and development.

A mutant woman can defy the expectations of a paternalistic society by her post-human status and even if that mutant is the creation of a man ruled by internalised misogyny. Yet, at a laboratory filled with humans who have been transformed into husks, Miranda too has an engineered body and a talisman of the horror genre by her creation. ReBecca Elizabeth Compton explores how empowered women characters operate within the genre of horror, stating: "the perversion of innocence is a perversion of feminine motivations, as assumed or constructed by wider culture. It is this phenomenon that makes a female antagonist in horror games frightening – more frightening than a male or genderless monster" (2019, p.54).

Compton examines how women act as 'agents of horror' in horror games, focusing on how the subversion of traditional roles can be crafted into further disempowerment of women who are written for an industry still dominated by men. Miranda falls into this category; as she exceeds the limits of most humans with the assumption that she represents a new era not bound by anything other than the ideology of biological superiority – and yet, she is still crafted to misogynistic ideals.

"It may be tempting to see a 'Woman as Agent of Horror' as an empowered feminist icon for her regained agency through her assertion of power over the player. However, her empowerment is subversive to existing gender roles,

which configure her as powerless or as a victim and rely on many sexist beliefs – among them benevolent sexism. This type of sexism is at odds with this kind of monster: girls are supposed to be protected, not protected against” (Compton, 2019, p.54).

Miranda is both victim and pursuer. She can be the victim of her father’s plans, and die by Shepard’s negligence as a Commander, lover and/or friend. But she is also an individual who can liberate herself and her sister and help end the war. Players are left to reconcile with their own feelings of Miranda the mutant. The stark options result in Miranda being killed to serve the men around her in different ways, or with Miranda being a fully empowered individual, free from the dogmatic ideology of her father, able to facilitate the end of the war, all while rejecting the expected path of joining Shepard back on the Normandy. If Miranda does survive, she decides to rejoin the fight in her own way, stealing fighters and bombing former Cerberus bases, rather than rejoining the Normandy as Commander Shepard’s second-in-command. Miranda once again steps outside of the player’s control on the path to her own liberation.

Section 6.5 Designing a mutant woman in an era of scepticism of biotechnology and scientific progress, and contested concepts of womanhood

What directs Miranda’s character for much of the games is her own reconciliation with the fact that she has been designed to be better than much of humanity, and so even her own choice to fight the reapers, and leave her father’s control, feels unworthy. Yet, genetic engineering is not an uncommon phenomenon in the *Mass Effect* universe. One codex entry describes the situation as thus:

“In the 22nd century, manipulation of the human genome became commonplace. Techniques of genetic engineering advanced to the point where

the rich could custom-build fetuses that grew into stronger, smarter, and more attractive adults.”

Miranda is a custom-built human; the technology used by her father ensured that Miranda was better than even the very best humans, signalling the transition into a posthuman era. Miranda continually experienced isolation and extreme pressures because of her design. There are debates about whether such technology and processes would have such a lasting psychological impact. James Hughes pours scorn on the ‘Bioluddite’ idea that designing the perfect baby would cause long term damage to familial bonds: “A society with designer babies will supposedly be obsessed with genetics and forget about the importance of parenting. In fact, just like birth control, abortion and family planning, germinal choice is likely to increase the fit between kids and the desires of their parents, making both happier in the long run” (Hughes, 2004, p.134).

Mass Effect could be accused of approaching this plot from the Bioluddite perspective by the emphasis of the pressures placed upon the products (as Henry Lawson sees them). The Luddite movement was founded by textile workers in the 1800s, growing to prominence when workers took direct action in Nottingham over fears their jobs would be lost due to the advancements in automation. Workers argued that their skills would be lost due to the increasing appeal of machines, that could carry out complicated tasks quickly, whereas workers needed long periods of training. Workers destroyed machines, at a time of rising unemployment. The term Luddites since has been associated with a reluctance to embrace the future possibilities that developments in technology may bring.

In the 2000 NSF survey it was found that men were more likely to believe that any risks posed by genetic engineering would be outweighed by the benefits at 45%, compared with 34% of women. Those who had graduated from college were 11% more likely to believe this

compared with people whose highest educational qualifications were achieved from school.

Hughes concludes that “given these predilections, it is natural that the first transhumanist organisations have been more attractive to affluent, well-educated men, many with libertarian leanings...” (Hughes, 2004, p.72).

Bioluddite anxiety has been captured in a range of media, shows like *Humans* (2015) and *Better Than Us* (2019) engrossed audiences worldwide for their exploration of whether robots could be human. The video game *Detroit Become Human* (2018), follows three androids in a human-dominated society that was hostile to the attempts by androids to agitate for better rights. In one of the opening scenes, the player can witness homeless and unemployed people protesting the employment of androids. But, perhaps, a broader discussion is why employment is the only way for humans to escape poverty, rather than the fixation on whether machines will get to a point where they can be considered human. This ‘Luddite’ fear of progress has spilled into advancements with biotechnology. And what Hughes refers to is the concentrated debates about moral rightness or wrongness. But what is more influential is the systems technologies are deployed in. There is a great deal of difference, for instance, between an equal society that uses biotechnology to eliminate pain, and a society that does this for a selected few. The latter society is the one in which Miranda Lawson is forced to navigate, set apart from humans and isolated because of her design and her legacy debated.

Through Miranda’s private emails, it is revealed that she cannot maintain a pregnancy. Doctors cannot confirm whether this is due to her genetic makeup and Miranda does not know if her father deliberately designed this feature of her body. There is precedent in science fiction of creators getting cold feet about their plans to start a new human race: realising that the posthuman mutants have the capacity to be better than humanity, Victor

Frankenstein saw the idea of creating a partner for his creature as a threat to mankind (Harkup, 2019, p.306). Halberstam points to the irony, asking “was it not Frankenstein himself who had hoped that his scientific breakthrough would make him the creator of a new species?” (Halberstam, 1995, p.45), and pointing to Frankenstein’s engagement with what Freud termed as projection, seeing his original ideas of creating a new species be distorted and stolen by his own creation.

In contrast, for Haraway, the cyborg is severed with spirituality, the cosmos and the idea of the heterosexual relations leading to the advancement/creation of its species (Haraway, 2006, p.151). Under this biotechnological era, the mutated and morphed person is forever linked to that system, as well as to individual creators. Often, heterosexual relations are bypassed – and not pivotal to any of the case studies’ – but there is a system of relations that shape the treatment of mutated identities and bodies.

The desire for ultimate control over the creation has been explored since *Frankenstein*, as the creator refused to design a wife for his frustrated and lonely creation. ‘The monster’ was brought into the world to stand apart from man, without any consent, and then was denied his one request by his creator. The desire of the male monster, and the denial of bodily autonomy of the (cisgender) female mutant reflect how both monster and mutant fail to conform to expected roles of humanity. Denying these potential desires of designed beings is another way that creators can keep their creations separate from assimilating into humanity. Yet, still, Miranda has a wealth of potential (human) suitors. Miranda has several hopeful suitors through a dating app, Jacob is a failed romantic partner who acknowledges that Miranda “requires a better man than I” which is something he will say to the augmented mutant ManShep, and several characters sexualise Miranda or make comments about her desirability.

The questions that linger over the cause of Miranda's inability to maintain a pregnancy become significant in the context of contemporary feminism. Since the early 2010s, Great Britain has seen the entrenchment of trans-exclusive radical feminists, commonly shortened to 'TERFs', who have tried to redefine womanhood. It should be noted that this group claims to be gender critical, but their failure to engage with scientific evidence or lived experiences of both transgender and intersex people suggests a lack of critical engagement that risks harm to certain marginalised individuals which is why the name 'gender critical' shall not be used henceforth. As feminist theorist Sophie Lewis documents, 'TERFism' started in Great Britain, and has tried to export its ideology to other Western nations, yet it has far more in common with those aligned on the far right, than it does to progressive feminist ideologies (2019). This new feminist ideology has seen feminists try to redefine what it means to be a woman. In previous decades, feminism sought to abolish the preoccupation with notions of the body and argued that women were entitled to the same rights as men, and sidestepping assumptions about bodily potentials allows space for intersex and transgender individuals to have their identities acknowledged. But feeling threatened by the expanding recognition of who faces oppression, trans exclusive radical feminists sought to limit who could be classed as a woman, and therefore who was deserving of feminist support, recognition and basic human rights. This argument has engulfed British feminism, with writer Graham Linehan banned from Twitter (before Musk's takeover) for breaking its conduct on hate speech after months of relentlessly abusing trans people online. The issue has even spread more widely across the West, as during a Presidential debate, Donald Trump claimed there were "transgender operations on illegal aliens" (Alfonseca, 2024) to link the fear of migrants to gender reassignment, a topic of discomfort for conservatives. *Harry Potter* author, J K Rowling has also lost a wealth of support after promoting prominent anti-trans feminists,

writing an inaccurate blog post on transgender people (2020), and including a crude and stereotypical depiction of trans women in her *Cormoran Strike* (2020) series, published under the name Robert Galbraith (coincidentally, the name of the psychiatrist who pioneered shock treatments as a form of conversion therapy for queer patients). Rowling was named in a lawsuit filed by Imane Khelif, claiming she experienced cyberbullying by the author and others for her perceived lack of feminine features which led to the Olympic-winning boxer having to deny being a man, engulfing the 2024 games in controversy (Keslassy and Ritman, 2024). There is increasing fear of the perceived instability of womanhood. This has led to some feminists arguing in favour of checking people's gender when they use restrooms or specific gym spaces. The anxiety of the age of biosecurity has seen increasingly desperate attempts to resurrect body borders to conceive of some stability; the most telling example is the increasing policing of which bodies are entering which designated public bathrooms, with those who do not present feminine enough facing threats of removal from women's restrooms (Halberstam, 1998, p.20) in humiliating and intimidating fashions. Some feminists now seek to define women according to bodily limits that not even scientists agree to - which was exactly what feminism sought to destroy mere decades ago linking Alaimo's claims of a "haunted" essentialism (Alaimo, 2010 p,5) with the "ghost of biology" (Birke, 1999, p.44) continuing to hound feminist philosophy. But as 'TERFs' try to define who is a woman by strict and arbitrary scientific rules it means that Miranda's own womanhood is under threat, not simply because she is posthuman but because she cannot maintain a pregnancy, a trait that right wing feminists describe as inherent to all 'true' women.

But as Simone de Beauvoir declares in 'The Second Sex' (1949) "one is not born, but rather becomes, a woman". It is not what a child is assigned at birth, but what a human declares

themselves to be upon realising their full autonomy and agency. De Beauvoir touches upon posthuman thinking with this statement, leaving space to imagine a world that embraces the possibilities that future scientific breakthroughs might mean for biopolitical imaginaries and the human body.

The debates within feminism have led to fragmentation, as who counts as 'us' has led to the concept of woman becoming elusive; one example of this is that, at times, the category of woman has excluded Black women while the category of 'black' negated all Black women (Haraway, 2006, p.156). The creation of taxonomies of women(hood) persists over time between different (but related) fractions of radical, liberal and socialist feminists, with every other feminism absorbed or marginalised with epistemologies produced to police any deviation from the current notion of women's experience (Ibid, p.156). Concepts of womanhood remain linked to contemporary issues of the day, i.e. socialist feminism advanced by aligning with Marxism with the unity of women resting "on an epistemology based on the ontological structure of 'labour'" (Ibid, p.158), but even wage relations became subordinate to a wider view of labour under patriarchal-capitalism (Ibid, p.158). The influence now over feminism has shifted (in part) to modern biologies (Ibid, p.164) illustrated by "molecular genetics, ecology, sociobiological evolutionary theory, and immunobiology" with biotechnology informing research broadly (Ibid, p.164). Haraway continues "these excursions into communications sciences and biology have been at a rarefied level; there is a mundane, largely economic reality to support my claim that these sciences and technologies indicate fundamental transformations in the structure of the world for us" (Ibid, p.165). The influence of biotechnology though has, for some perspectives such as radical feminists, resulted in a reaction of reducing womanhood to biology as an attempt to reclaim control in unstable biopolitical times.

But science fiction is pushing back on inaccurate bio-essentialist arguments about womanhood. After reviewing representations of women in science fiction, Jessica Toomer argues that the posthuman helps to reframe concepts of womanhood: “Post-human female heroines are often able to defy and subvert men’s restricted view of femininity” (2020). Men continue to dominate the games industry and therefore are the arbiters of women characters in games. But femininity in Britain has also come under pressure from some feminists. Toomer examines how posthuman mutants could overcome stifling and outdated views of biology and its projections onto bodies, by signalling a new era of humanity. Toomer explores how the mutant super soldier, Max Guevara, in *Dark Angel*, challenges these lingering ideals about the pinnacles of femininity.

“She confronts the stifling limitations of her sex, wrestling with the fact that she was created with feline DNA, that she is often the object of male fantasies, that men look to control and wield her body for their own purposes. And she rebels, weaponizing her autonomy, recoding herself, embracing the otherness that taints her womanhood” (Toomer, 2020).

Guevara’s story is similar to Miranda Lawson’s. Women created within male power fantasies, only to ascend to their own autonomy and throw off their oppressors. However, otherness does not taint womanhood but merely expands it. Neither Max nor Miranda are made lesser in their womanhood because of their creation. They have fought for their identities and defined their lives for themselves: a struggle every woman must go through in some form or another, in a cisheteropatriarchal world that is designed to contain ideas of femininity and womanhood. There is nothing which naturally binds (or contains) women, these containments constructed and enforced, as the concept of being female is “a highly

complex category constructed in contested sexual scientific discourses and other social practices” (Haraway, 2006, p.155).

The idea of women taking control of their autonomy is a concept that men have pontificated on for several decades. In 1929, Hugo Gernsback published Wallace G West’s story *The Last Man*, in his science fiction magazine *Amazing Stories*. *The Last Man* depicted a violent matriarchy, suppressing men, and the journey to overthrow this order and re-establish a patriarchy. While this story is not particularly significant of itself, the comments around the story reflected the long-standing fear that women would avenge sexism, overthrow men to assume their power and effectively evolve quicker and better than men. Larbalestier’s documentation of sexism in science fiction notes the context in which this short story was written; accompanying the story, Kipling asserts: “Perhaps in thousands of years, evolution will have progressed in such a manner that the world will be entirely peopled by females. This is not so impossible as it seems to be, because with many insects, the female of the species already dominates” (Kipling, cited in Larbalestier, 2002 p.56). While the comments revealed little about science and the technological advances that society would go on to make, they did reveal an engrained feeling that somehow women’s bodies could adapt (or would be adapted) to usurp men from their position of privilege in society. Early popular science fiction short stories hint to the specific terror that women would one day surpass men, and the increasing development of technology would destabilise the intrinsic order in an allo-cisheteropatriarchal society. Mutant stories therefore tap into real biases and are an expression of deep-rooted fears of the order of society being disrupted, opening the gate for an era of liberation for people of all genders. Miranda Lawson is the dreaded outcome of a sexist paranoia: A mutant woman made superior to men, and one who defeats the oppressors within this galaxy.

Section 6.6 Examining desire for the female monster-mutant

The intense focus on women and their relationship to nature is rooted in much of biopunk's history (dating as far back as the story of Medusa). Hawley explores the complicated dynamics women in biopunk must navigate, and just whether the original Frankenstein's monster could have been a woman:

“This potential to disturb the boundaries underpins and informs the female monster's depiction in Shelley's novel and is arguably the reason behind her silence. For Shelley, a female monster- a woman born of unnatural means, a creature both desirable and horrible- would have been too much of a boundary creature, even within this tale about monstrosity and otherness (2015, p.221).”

Hawley goes on to examine the other women in *Frankenstein*, asserting that they are “unproblematically beautiful” (2015, p.221). The women of *Frankenstein* exist as dressing to the wider plot, and their dainty beauty is often contrasted with the hideousness Frankenstein feels over his creation. As Hawley states, Shelley consistently pairs the women of her novel with lexical choices steeped in nature. The women are either coded as being naturally beautiful, or as spending time in nature and being at peace with the natural world around them.

“This contrasts with Victor and his scientific ventures, which are depicted by Shelley as barren and transgressive (a male attempt at reproduction) as well as penetrative (a rape of Nature)... In this sense, Shelley's depiction of male and female characters works to confirm the boundary between nature and technology. The greatest dichotomy in *Frankenstein* is therefore not that between Victor and his monster- who both stand representative of masculine endeavours in science and techno-production- but between Victor and

Elizabeth, the woman who represents Nature and natural corporeality (and, presumably, the possibility of natural reproduction). Had Shelley's female monster been allowed to live, she would have disrupted these boundary structures. Hence, perhaps, the speed with which she is relegated to the depths of textual impossibility" (Hawley, 2015, p.221).

The associations of monstrosity and femininity are deemed incompatible through this lens. Hawley examines *Frankenstein's Bride* and how the female monster is by design, by how visible her scars are so that she clearly symbolises a "put-together thing" (2015, p.224). Hawley adds that "it is this ability to disturb the boundaries that grants her such cultural power, and consequently, bestows upon her a life beyond the confines of Whale's narrative" (2015, p.224).

Make no mistake that *Frankenstein's Bride*, described as monstrous, crosses into the mutant boundary for all deliberately genetically engineered characters do. However, the relationship to femininity and biopunk has shifted into arguably a more comfortable era: now we can imagine the science used to so tightly control genetics and human potential, it is easier and more comfortable for creators to feel that they can design a perfect woman who fits with their ideas of femininity, particularly when marketing that woman for an audience where the loudest voices are those owned by men. But Miranda still elicits lust from players due to her perceived superiority and the fact she is seen as *beyond* human. Miranda conforms to extremely narrow ideals of beauty pushed by a white supremacist ableist society. *Frankenstein's Bride* breaks these expectations in one key area: her facial scarring, and the face is held as the ultimate expression of femininity. It is a permanent external reminder of her artificiality.

As Lars Schmeink notes: “The monster as enforcer of boundaries functions as a warning against the dystopian consequences that a science-fictional reality of posthuman genetic engineering will bring. Its origin story is a reminder that scientific hubris brings forth horror and destruction” (2016, p.144). Schmeink refers to the monster, but the mutant is an important subspecies of the monster in a new posthuman age. The genetically engineered mutant Miranda realigns and enforces boundaries through her existence as a posthuman woman. Her father’s attempts to assert control over her and assimilate Mirana into the upper echelons of human society, ultimately cause Miranda to wrestle with her identity. As questioned by Weiner, Stevens and Rogers when looking at Pandora, the first human woman created under instruction according to Greek mythology, “Is she a copy or original? Artificial or natural? – helps explain the disquiet and disgust Frankenstein’s Creature engenders” (2018, p.105). Miranda’s identity crisis extends further when she considers that she “wasn’t the first one he made, only the first one he kept”, and her genetic twin Oriana lives a very different and largely secure life away from their creator, only ever featuring in the *Mass Effect* games when she needs to be rescued by Miranda and Commander Shepard. Both siblings share the same advantages, yet one is living in service of a galaxy that maligns her. Weiner, Stevens and Roger add “but the Pandoric product is beautiful in an absolute sense: it has the force of revelation, as if the unseeable were made seeable” (2018, p.105); whether Miranda is an original, unique, a copy or a faded ideal does not matter in the context of her life: she works for liberation of the galaxy, and ultimately secures her own freedom and autonomy from the same forces that hold the galaxy entrapped by capitalism and self-destruction. As Frankenstein’s creation chased his creator alone through the Alps, Miranda fled her creator by voyaging through space. The first mutant wanted a wife to be able to birth a new society. The posthuman mutant of Miranda, had assimilated into

humanity and yet was committed to dying in a suicide mission to fulfil a purpose designated by men. It was a choice that she undertook, but one that was guided by The Illusive Man. Miranda assumes full autonomy during the mission however, when she commits to seeing the Collector base destroyed when The Illusive Man would prefer it salvaged and used, and she resigns her position at Cerberus and helps Shepard destroy the Collector base. Miranda transitions into full independence, waging war on the reapers on her terms and not at the behest of the whims of men. Until this moment, Miranda was prepared to sacrifice herself for a purpose that was not just specified by her.

Yet, at the start of the second game, as Shepard explores the Lazarus Station, the player can find logs from a staffer – Wilson – and he refers repeatedly to Miranda in derogatory and sexist terms, labelling her an “ice queen” and “bitch.” Players too have often referred to Miranda in such terms. There have even been forum discussions asking if “anyone liked Miranda” (JakBandit2208, 2010) and players remarking on why they deliberately kill her off in the games.

In early scenes Miranda tells Shepard that she is not looking to become friends with the Commander, and this has driven arguments in the Mass Effect fandom that Miranda is indeed cold. Yet, Wilson, her colleague and the person who leads the criticisms against Miranda, is revealed to have double-crossed Cerberus and caused the attack on the station, killing all of Miranda’s staff and jeopardising Shepard’s rise from death. His criticisms of her character and warmth undermined by his role as a double-agent. Miranda’s professional approach is greeted with insults laced in misogyny, but the language around her also paints a picture of a woman emotionless and practical, traits often associated with androids. Before the player knows yet of her genetic makeup, her humanity is put under suspicion.

Yet, repeatedly, Miranda usurps the dominant misogynistic tropes around her by her own actions. This (framed) cold agent gives up two years of her life to save Shepard and risks her own life protecting the Commander. She risks her life several times to protect her sister, Oriana, from an abuser. Miranda states that her privileged education, upbringing and genetic superior means she can do “just about anything” she wants to: Miranda then chooses to join the fight against the mighty force of the reapers; suggesting “to be human is more than the sum of its parts, namely human DNA. It includes decision-making, free will, agency...” (Ostry, 2004)

Miranda’s central identity is presented as underpinned by the makeup of our DNA, but consistently Miranda’s choices shape her destiny. Shepard can counter Miranda’s own questions about her worth in the second game of the series, as the Commander can say “it’s spirit and personality that makes you great, it’s what makes anyone great”, something that is reinforced by the very mechanics of a role-playing game, where a player must be judged by each dialogue choice they make. This is an idea that makes equal Shepard, Miranda and, crucially the player; the player can also be great if they make the correct decisions and are in the same situation as the designed creation whose purpose was to be perfect. The idea that Miranda’s perfection comes from her DNA, rather than her greatness being carved through her choices, is simply incompatible with the themes and mechanics of the *Mass Effect* games.

In 1978, Philip K Dick published the speech ‘How To Build A Universe That Doesn’t Fall Apart Two Days Later’. The author, known for examining themes of transhumanism and posthumanism, used the speech to address ideas around authentic humans and fake humans. This debate has been central to stories of transhumanism and posthumanism: what makes someone human? And of course, can humanity truly be ascended without

losing the very facets that many associate as being human-exclusive? But as transhumanist scholar Katherine Hayles asserts in relation to this speech: “Authenticity does not depend on whether the being in question has been manufactured or born, made of flesh and blood or of electronic circuits” (Hayles, 1999, p.163).

And yet, still disempowering tropes of androids and mutants dominate their history in literature. In Philip K Dick’s ‘We Can Build You’, one of the main characters declares “what a *thing* to fall in love with” about a human woman, that has been conflated with an android because of her lack of attachment to the leading man. Dick notes that the most fascinating part of this woman, Pris, was, what he termed, her “emptiness dead centre” (Dick, 1972, cited in Hayles, 1999, p.171). Attributing feminine characters lack of passion or general lack of emotion as being a code for their *lack of humanity* is the result of enforcing strict gender roles. Additionally, associating emptiness with being anything other than human veers dangerously into ableist territory, as many autistics and neurodivergent people have faced comments about being detached or cold - but it has been consistently contended that autistic people do have empathy, but simply that allistics do not understand how autistic people often process their emotions (DeThorne, 2020). Androids, believed to be cold and pragmatic, such as the cylons in *Battlestar Galactica* (2004) who are deemed as pretenders to humanity without feelings, are often coded in ableist terms. The fact that a woman is given these attributes only extends the desire to shock: for women are associated with warmth and living for others, due to how women have been given subordinate roles in society, and only in the last century have women started shifting from running households (a highly demanding job) to giving their labour into the wider workforce. The “emptiness” is what characters and fans alike react to during the early introductions of Miranda. Framed as an overly ambitious cold bitch – in comparison to Shepard, who in the first game kills

hundreds of mercenaries and cloned krogan— Miranda elicits fear, hatred, and desire among the characters around her, and yet her actions consistently contradict the mutant-stereotype of her.

Remarks about Miranda by other characters are regularly split between commenting on how terrifying she is or discussing her romantic life. Liara comments that “she was so cold when I first met her...you’ve no idea how much you changed her” if Shepard romances Miranda, and Kasumi remarks that it “it’s strange to see Miranda smile as she works...and it’s all because of you.” In *Frankenstein*, the creature demands that a lover be made for him, or else his misdeeds against his creator will continue. The ideology of amatanormativity espouses that a single romantic and sexual partner can save a person from the abject horror of their own inner turmoil. In *Mass Effect*, Miranda is transformed from a cold, android-like woman into the more palatable role of caring spouse, who has softened due to the male Commander Shepard’s influence on her life. Without Commander Shepard, Miranda would still be seen by the characters as cold and uncaring, despite her acts contrarian to this false belief. We live in a society comprised of a “violent enforcement” of heterosexuality (Srinivasan, 2021, p.97). Richardson also insists that “‘heteronormativity’ does not just refer to traditional norms in relation to sexuality and gender. It connects to heterosexuality as an organizing principle of life...heteronormativity not only upholds normative sexual and gender binaries, it also operates as a normalizing process” (2018, p.16).

Yet, Miranda maintains independence throughout any romantic relationship with Shepard. At several points, Miranda could join the Normandy but instead focuses her efforts where she thinks are best required, making Miranda one of the few characters to walk away from Shepard’s leadership. Miranda then steals fighters to bomb Cerberus bases, and she can help rebuild earth after the reaper invasion, showing that her work has not gained less

significance since no longer being a consistently visible or present character in the player's story. Miranda resists the romantic compulsion enforced upon society, as she continues to define her own story, refusing to bow to the expectations of others.

Women's sexuality became the focus of science fiction in the 1950s. Hayles examines this phenomenon and highlights how Bernard Wolfe's *Limbo* (1952) blends the themes of misogyny and posthumanism, while regrettably, inspiring other authors to do the same. The sex in *Limbo* puts forward the incorrect view that women can only experience vaginal orgasm and only if her partner, who must be a cisgender man, is physically on top of the woman. The book depicts Martine's rape of Neen, as he feels the need to prove that he has not been emasculated by her experience of clitoral orgasm, and Wolfe infers that during the rape, Neen enjoys the experience. Hayles criticisms of this work of sexism help detail a time of women's disempowerment in futurism, and that "sexual ideology is subverted and reconfigured by the cybernetic paradigm" (Hayles, 1999 p.123). Despite the futurist themes of *Limbo*, the dynamics between men and women are based upon the traditional oppression of women, and pigeon-holing of masculinity. Science fiction often reconciles with the potential for technological developments and what they may mean from a scientific standpoint, but not always what the relationship will be like between technology and marginalised people. Authors dabble with ideas that body transformation was possible, and that bodies outside of cisgender men and cisgender women could exist, but this meant that gender roles were enforced even more stridently as (male) authors struggled to accept the changing ideas posed by the possibilities of biotechnology. *Limbo* was from an era where women were shunned from science fiction, and soft science fiction stories were ridiculed and dismissed as unimportant.

Biopunk has changed alongside the changing times. In *Mass Effect* mutants are allowed to explore their sexuality fully and are not limited to gender roles. In the first sex scene between Miranda and Commander Shepard, it is Miranda who organises the rendezvous and she takes the lead once there, as the Commander is pushed to the floor and Miranda undresses on top of him before the scene fades to black. In *Mass Effect 3*, Miranda arranges (once more) to see Shepard in a private apartment. Miranda walks over to Shepard who is sitting on the bed and pushes him down before the scene fades to black. Miranda takes charge of each sexual encounter, and Shepard is made subordinate (and his masculinity remains intact). Miranda, the biocreation, and Shepard, the resurrected mutant makes for a posthuman pairing, and their romantic and sexual union refuses to wield to any normative assumptions about gender roles when it comes to their relationship. In interviews on the representation of queerness on games conducted by researcher Adrienne Shaw, one participant notes that trying to subvert the norms of sexual and romantic representation posed aesthetic challenges, and particularly to make representation feel balanced and relevant so that queerness is normalised (2012, p.80). In the second sexual encounter with Miranda, ManShep will remark that Miranda tries to “maintain control”; she expresses her agency and autonomy and Shepard consents to this balance in their relationship. It is an indicator of Miranda’s transition from controlled creation to someone who now actively controls her own actions and desires.

In the *Lair of the Shadow Broker*, a downloadable content package, it is discovered that Miranda has joined an online dating service and is using it to find sexual partners for single encounters. Worth noting is that this depiction of online dating services used for quick hookups was released on the 7th September 2010 – two years before the launch of Tinder on 12th September 2012. Miranda’s sexual desires and her comfort with commanding sexual

encounters are referenced throughout the two games in which she features. Miranda is a challenge the conventions of the latent sexual ideology in society by her posthuman status, as men both fear and desire her. However, she is also challenging the traditional suppression of women and their sexuality. Her mutant status allows her to escape the petty restriction placed upon women, and her actions signal what a posthuman future may look like for women, far more than her genetic makeup.

Miranda's existence ushers in the possibilities on offer in a posthuman world and it has little to do with ageing or immune systems, but everything about imagining a world free from gender norms and societal convention. She is a contradiction in terms however, as BioWare either could not envision, or did not want to envision, a posthuman woman breaking the aesthetic expectations that cater to white men. She was not allowed to exist as a Black woman, a disabled woman or a queer woman, the latter gaining attention from fans when there is a plethora of queer characters in the game. Her body and design from Henry Lawson and BioWare enforce a culture of similarity dictated by a narrow ideology of supremacist values, but her actions destroy this, culminating in the murder of her creator. The death of Henry Lawson signified the murder of BioWare's original marketing and cynical design. It was perhaps that the end of the creator was a chance for reflection and accountability for the direction of one of the leading women in the franchise. Miranda's identity is a consistent source of tension for her, other characters and ultimately, for the player who must navigate bioethical positions on genetic engineering to a subject of the extremes of this practice. Unlike the krogan mutants (chapter eight) or the disabled mutants (chapter seven), Miranda's design is an intentional act to further expressions of power through a supremacist lens, and the player must reckon with their own interpretations of

her design while confronted by the human both subjugated and given advantages from that method of creation.

Chapter Seven: The Disabled Mutant

Section 7.1 The social location of the disabled body and the usefulness of crip theory to analysis disabled characters.

This chapter addresses the depictions of disabled people within *Mass Effect's* futuristic setting as the wealth of biotechnological innovations leads to new disabilities in the game while conversely be framed to cure all disability. It would be impossible to conceive of an analysis and a philosophy of non-normative bodies, without addressing the depictions and perceptions of disability, with mutanthood closely linked to disability (Farnsworth, 2022).

This chapter thus considers the social location of the disabled mutant within the series.

While humanity has been morphed through now-commonplace genetic engineering, there are governments and private corporations consistently pushing to experiment and create cutting-edge soldiers through genetic tampering. Within *Mass Effect*, one major subplot is concerned with the experimentation on children to see what will enhance their biotic abilities or implants more effective. The first part of this chapter therefore addresses the idea of the experimental mutant – one whose body is fully subjugated to pain and experimentation in the pursuit of a supremacist ideal. The second part of this chapter turns to the assimilation of disability into biotechnofuturism. The attitudes towards disability within society's focused upon tinkering and editing the body and its genetic structure will be examined, as well as the room structurally and individually for accepting disability within a medicalised society. Two mutants in this chapter are addressed: the specific experimental mutant, and the human with the potential to be transformed into a mutant (with or without consent).

The treatment of disabled people as distinctly different from the wider population extends back to Ancient Roman times, as the practice of drowning disabled children was enshrined

in the Roman Laws of the Twelve Tables (Asma, 2009, p.40). It was Augustine, when describing various disabilities in repulsed terms, that stated “some even look monstrous to us, because of their extreme ugliness and the horrible strangeness of their limbs” (Laes, Goody and Rose, 2013, p.16). There has long been an association between the monstrous and disability. In the medieval Middle East, lepers were thought of as zombies, physically excluded from society and othered, an enduring legacy of how disabilities and disease are treated and classified (Morelock, 2021, p.17; Foucault, 2009). The Catholic Church labelled those with leprosy as the ‘undead’ while those who had porphyria (a form of anaemia) may have inspired vampire stories due to those with the condition needing to avoid sunlight and developing stained red teeth giving a blood-lust appearance (Valentine, 2017, p.36). Sharpe adds that the “...the abnormal individual represents a condensation of concerns over the physical body, criminality and sexual non-conformity” (Sharpe, 2010, p.40). Due to fear and prejudice, sexuality and disability have been heavily linked to what is perceived as morally transgressive, with Foucault noting that in the late stage of the eighteen-century masturbation was viewed as similarly monstrous and believed to cause physical ills. This chapter examines the roles of sexuality and romanticism for the disabled mutant. Even the fear of disabled children historically stemmed from a fear of bestiality and hybrid births (ibid, 2010, p.72).

Sharpe examines Foucault’s idea that disability changed as a notion – a monstrous notion – due to legal frameworks addressing the ways in which new technological and surgical interventions may also change perceptions of monstrous bodies. At the intersection of medical and legal discourse, Sharpe uses the example of conjoined twins stating that monstrousness may survive an encounter with science:

“For conjoined twins are understood to embody mixture at the level of human morphology and this continues to represent a challenge to a legal order that understands the subject as a single embodied mind. In this regard, the monster is best understood in terms of the effects it produces. For science slays monsters only when, in addition to understanding them, it neutralises the threat they pose to legal taxonomy” (2010, p.37).

To utilize medical intervention is to fundamentally transform the experience of operation in society – it is the point of creation of a morphed humanity. Given the history of experimentation on disabled bodies, and the perceptions of medical interventions needed to normalise the disabled, there is a close association between the disabled and literary mutants. The intersection of these identities is at the heart of *Mass Effect*, a series focused upon the possibilities of biopolitical imaginaries.

In the futuristic biotechnological society of *Mass Effect*, disability is addressed in a multitude of ways. At one point, the player loses control of Commander Shepard and guides another character – the only time this happens in the role-playing series – and this character is a disabled man, whose movement is influenced by his disability, Vrolik syndrome, a type of brittle bone disease. The player occupies the character of Joker in *Mass Effect 2* for several moments, as collector forces invade the Normandy SR-2, the central spaceship Shepard uses to navigate through the galaxy. The invading collector party kidnap every (organic) member of Shepard’s crew, and Joker is the only human left who can purge the ship of collector forces. Besides the character of Shepard then, Joker is allowed the chance to be the player’s hero, as he must be controlled to run through the ship and defeat enemy forces. This disabled man briefly becomes the protagonist of the series.

Joker is one of the first characters that Shepard meets in the series, and his disability can be raised in conversation prompts almost immediately with Joker insisting that it does not impact his performance as the Alliance's best pilot in the galaxy. Joker is not the only disabled character on Shepard's crew. Early in the first game it is revealed that the soldier Kaidan Alenko suffers migraines due to L2 (biotic) implants that allow Kaidan to manipulate dark energy to move objects and afflict enemies with damage (a form of telekinesis). In *Mass Effect 2*, the dying drell, Thane Krios, joins Shepard's team and in *Mass Effect 3*, communications specialist Samantha Traynor joins the team and gradually reveals a myriad of allergies, intolerances and stomach afflictions that she must manage each day. Just as in life, there are a litany of – visible and otherwise - disabled characters which surround the player.

Crip discourse can be useful for understanding the treatment of disabled characters within *Mass Effect*; it is a discourse that has increasingly been relied upon for dissecting the experience, subjugation and resistance of disability under late-stage capitalism as crip can help disentangle “the discourses...that contain and fix dis/abled bodies” (Chen, 2012, p.215) as it is a reworlding to challenge the order of things (Chen, 2012, p.237). McRuer states that crippling is still in motion with emerging meanings (2018, p.22) and that “crip and crippling can certainly be positioned alongside a range of terms that represent the need for new or multiple languages for thinking about disability” (2018, p.22). Describing culture as ‘crip’ “remakes the substance in question: ‘crip culture’ is not simply crip + culture” (McRuer, 2018, p.21). However, it must be acknowledged that much like the term ‘freakery’ (and mutant – although for this thesis it refers to literary characters) there is some resistance the term of ‘crip politics’, as Mark Sherry (2013) argues this is a discourse that could be alienating to disabled people who associate the term with physical impairments and “‘crip’”

politics may be a trendy terminology among privileged academics right now, but disabled people cannot afford the luxury of gambling on jargonistic fads to secure themselves social justice". But as Kafer (2013, p.15-16) and Price (2015, p.270) argue, crip politics can be a useful discourse to occupy and merge both activist and academic work to work toward a coalition across disability categories. There is an urgent need "for unity of people trying to resist world-wide intensification of domination has never been more acute" (Haraway, 2006, p.154). However, a shift of perspectives and ideas may "better enable us to contest for meanings, as well as for other forms of power and pleasure in technologically mediated societies" (Haraway, 2006, p.154), leaving space for the framework of crip theory as a way of resistance and demonstrating the need to recognise and analyse a morphed humanity. Central to the idea of crippling, Schalk states that the field of "disability studies is the interdisciplinary investigation of (dis)ability as a socially constructed phenomenon and systematic social discourse which determines how bodyminds and behaviors are labelled, valued, represented and treated" (2018, p.3). 'Bodymind' is materialist feminist disability concept by Price which refers to enmeshment of the body and the mind as these "are typically understood as interacting and connected, yet distinct entities due to the Cartesian dualism of Western philosophy" (Schalk, 2018, p.5); the concept of bodyminds contradicting this 'close but separate' philosophy and tying the body and mind together. Price states "I said bodymind every time I wanted to mark the fact that I believe mental disability matters, that it is an important category of analysis. But I hadn't really moved anywhere with the problem that body and mind tend to be treated as rhetorically distinct; my use of bodymind was simply a marker" (2015, p.269). The term bodyminds affords this thesis an opportunity to analyse the disabled characters through a holistic notion of the interconnectedness of disability, across the body and across culture. The next section examines the way in which

disability may relate to mutant status, acknowledging the framework of bodyminds through the case studies of disabled characters.

Section 7.2 The spectacle of the disabled mutant in the laboratory (and the museum).

There is a common trope within science fiction and fantasy of deliberately disabled mutants, who may be deliberately physically tested and maimed in an effort to release underlying hidden potential. This has been a common theme within fantasy and science fiction, such as in the 1990s anime *Dragon Ball Z* (1989) where every time a Saiyan is close to death and healed, their strength increases exponentially, known as zenkai power (which is used as a tactic by Vegeta as he battles Frieza), or within *Star Wars: Episode III - Revenge of the Sith* (2005) where Darth Vader's connection to the dark side increases as he acquires his cyborg body, signifying his distance from humanity and the light side of the Force. The disabled mutant has become a trope with science fiction, as audiences and authors alike fixate on the limitations of the body, and the question of whether the body ties us to our humanity.

The disabled body has often been forced to be a spectacle for the gaze of the non-disabled.

This gaze has operated in several ways: within the institutions of care and as subjects to spectacle from the non-medical populace. In *Birth of the Clinic*, Foucault (1973) states: "to look in order to know, to show in order to teach, is not this a tacit form of violence, all the more abusive for its silence, upon a sick body that demands to be comforted, not displayed?

Can pain be a spectacle? Not only can it be, but it must be, by virtue of a subtle right that resides in the fact that no one is alone, the poor man less so than others, since he can obtain assistance only through the mediation of the rich." Foucault adds that disease may only be cured from interventions, tying with notions of biopower to objectify human biology. This stems from the spectacle of pity, forming the basis for modern medicine and the way in which the institution makes subject the disabled and/or temporarily sick body.

The spectacle, and the pity, have not stopped at the doors of hospitals or clinics; outside of the medical community, the fervour of curiosity in different – and specifically, disabled – bodies came to a head in the twentieth century. Freak shows – where people of colour and disabled people were held as spectacles – were popular throughout the nineteenth century, only ending in the 1940s. Perhaps no case more demonstrates the subjugation to spectacle that disabled people have been subjected to than Charles Byrne – a story documented by Roger Luckhurst. Byrne lived with gigantism, which was likely caused by a pituitary tumour, causing him to grow to 2.3 metres in height. He first appeared at freakshows in 1782 in Edinburgh and then London. The tumour would likely have led to his premature death in 1783, and before his death, Byrne was terrified that his body would be preserved, and he would be a spectacle in death as in life. This is precisely what happened. While Byrne's corpse was on the way to burial the medic John Hunter stole the body (Luckhurst, 2012 p.217) and it was only in January 2023 when the Hunterian Museum in London acquiesced to long-term campaigns for its removal from display, however the museum continues to keep the skeleton under the guise of research. The sad case of Byrne's life and death illustrates the morbid curiosity of disabled people.

The monstrous or freakish body becoming the subject of the audience's gaze bestows the audience as 'normal' and positions the monstrous body as the 'other', or "... to make the physical particularity of the freak into a hypervisible text against which the viewer's indistinguishable body fades into a seemingly neutral, tractable, and invulnerable instrument of the autonomous will, suitable to the uniform abstract citizenry democracy institutes" (Garland Thomson, 1996, p.10). But "this demarcation of boundaries is also an illusion, for the 'monstrous' other also bears some resemblance to the 'normal' self in terms

of representing all of that prior fragmentation and amorphousness that has been repressed, 'ejected' or 'abjected'" (Davies, 2015, p.2).

Richardson argues that "...the body is not an essential attribute but shaped by our culture" (2010, p. 9), and that our ideas of "freakery" were not shaped by the actual capacity or appearance of the body, but of our culture that treated certain bodies – the disabled and queer as some examples – as spectacle. The literary monstrous, the depictions of disability and the mutant are linked through the subversion of bodily norms, norms enforced by oppressive and ableist governments and systems. This section tackles the intersection between disabled and the mutant, the spectacle and care of non-normative bodies and the different groups of disabled communities that are depicted within *Mass Effect*.

Two groups of experimental mutants will form a case study within this chapter. The first group are Alliance cadets who were implanted with technology to make their biotic abilities stronger, and the final group will focus on kidnapped children who were experimented upon by Cerberus. Kaidan Alenko is the main focus of this first section. When his mother was pregnant with Kaidan, there was an incident where she was exposed to element zero ¹⁹and this allowed Kaidan to be born with biotic abilities even though it led to the premature death of his mother. Kaidan therefore can fit both the paradigms for an experimental mutant and for a mutant that is a by-product of unintended tinkering due to nationalist capitalist pursuits. There is precedent, of course, for biological experimentation, with the United States creating the Committee of Medical Research which administered a toxic dysentery vaccine to teenagers at the Ohio Soldiers and Sailors Orphanage resulting in severe side effects, and the committee provided funding to the University of Pennsylvania

¹⁹ See glossary

Medical School to transmit influenza to thousands of patients in order to test an experimental vaccine (Cooper and Waldby, 2014, p.118). There was suspicion from Kaidan, and many of those exposed to element zero, that this was a deliberate incident by the Alliance Naval Service to experiment with children to develop their potential for biotic abilities, when humans are not naturally biotic and require intervention to become biotics²⁰, an intervention not widespread or accepted by the populace meaning Kaidan was treated as a mutant rather than a part of a morphed humanity.

The *Mass Effect* codex hints at the daily trouble that biotics face in human society. It states that biotics face routine suspicion and persecution as a result of the false belief that human biotics can read and control minds. It adds: “Biotics symbolize the dehumanization of mankind to people philosophically or religiously opposed to gene modification and cybernetics.” Additionally, *Mass Effect* (1) Gianna Parasini informed Shepard of the Binary Helix group and how “much of their research is in biotic modifications. That angers many Luddite, organic-baseline, and fundamentalist groups.” Not just Luddites who are in opposition to bodily transformations as the Citadel authorities punish anyone with unregistered gene modifications. The malignment of biotics is explored further in *Mass Effect Andromeda*. The human character Cora is a powerful biotic, yet she was trained by the asari, seeking refuge within their society as human’s were intolerant and suspicious of her powers and abilities.

Within *Mass Effect*, the military openly advertises for biotic humans and even incentivizes them to join their ranks. This aligns with the philosophy within the series that biotics can potentially be ‘super-soldiers’, with many in-universe think tanks trying to develop advanced

²⁰ See glossary

biotic soldiers. Jeffery notes how the United States had spent over \$400 billion on military defense from 2005-2016 and that substantial efforts had been taken to develop new super soldiers (2016, p.118). Thweatt-Bates highlights that within the rhetoric of transhumanism, advances in technology make a myriad of promises to improve health and life-longevity but can also “represent an invasion of bodily integrity, as well as economic and political exploitation and oppression” (2012, p.3). As a result of Kaidan’s exposure to element zero while his mother was pregnant, and the subsequent implants he received to be able to control his biotic abilities, Alenko had been left chronically ill from migraines. The L2 implants Alenko was given were discontinued due to the risk of profound neurological damage that their implementation could cause. Kaidan’s story of daily pain links to messy real-world biomedical interactions and “embodies a crip potentiality that enfolds pain into progress and incorporates rest with action” (Jerreat-Poole, 2020). Disabled/experimental mutants are developed through their pain, optimised as weapons or soldiers (or as other subjected beings to the state/corporate interests), denying the body liberation, and even rest as all moments are utilised to full efficiency. This ties with Shildrick’s (1997) idea of the leakiness of pain, and that through this, “we can begin to conceptualize bodies, desires, and experiences (painful, shared and otherwise) within a system of connectivity” (Patsavas, 2014, p.214-215). Patsavas goes on to state that “my experience of living with pain leaks onto those around me... Any borders that do exist are as much a product of active negotiation as they are flesh” (2014, p.215).

As Schalk (2018) points out “when reading fantastical representations of (dis)ability, the line and connections between ability and disability become, at times, quite blurred”, adding that “speculative fiction can challenge assumptions about the definitions of and

boundaries between disability and ability through defamiliarization” (p.118). Schalk uses the concept of ‘dis(ability)’ to reflect Schalk argues for use of (dis)ability to visually suggest “the shifting, contentious and contextual boundaries between disability and ability” (2018, p.6.). The legacy of experimentation for Kaidan lingers not only in his biotic abilities but through his *disability* that has left him with substantial pain; his leaking pain impacting his life and those around him, including the integrity of the Alliance, but the root of this disability also being bound with his value as a soldier.

The emotional and physical damage of developing biotic children is emphasised in one side mission where the player encounters biotic terrorists holding an elected representative hostage, demanding reparations as justice for being subjected to biotic implants. In the paragon route, the player can rescue the politician, who lets the terrorists go without facing charges and eventually recognises the plight of biotics and works toward trying to grant them reparations. The narrative enforces the idea that kindness and patience from the experimented upon will lead to justice, even though there had been no sense of imminent justice at all for biotics prior to their act of violence. Disability scholars Mitchell and Snyder argue that biopolitical exclusions (such as mutants in literature, and disabled people in life) operate within neoliberalism around “expectations of the ability to approximate able-bodied and heteronormative capacities” (2015, p.104) and they continue that this creates a “neoliberal simulacrum” (2015, p.104) whereby disability results in no meaningful inclusion but, instead, societies offer tolerance and integration into the workforce which creates the illusion of a disability inclusive society. It must at this point be noted that while Kaidan speaks of his disability, there is no time that the player encounters his disabling episodes of pain. Kaidan is medically supported through the Normandy’s doctor to be able to perform his duties, with Kaidan insisting to the commander that his disability should not affect his

work in any way – a notable remark for any chronically ill disabled person who has not yet discovered the ability to schedule pain episodes. Instead, the player only sees what the game presents as benefits to Kaidan’s experimented mutant status – the ability to help defeat enemies with Kaidan’s unique biotic power – while foregoing any experience of his limiting life-long disability. This is a theme that continues with *Mass Effect’s* second group of experimental mutants as they are objectified by their bodies (and ‘disease’), managed and maintained by medical interventions only, hidden and out of sight of the player and able to be selected by the player for missions.

Also, of importance to both Kaidan’s mutant status and disabled status is his queerness. This thesis looks to incorporate all marginalisations within its framework, taking inspiration from Crenshaw’s identification and theories on intersectionality (1989, p.140). However, the recent trend has been to envelope intersectionality within representational politics, and taking a narrow approach so that, for instance, feminism may have developed a better space for body positivity, but it is still conflicted over how to treat non-cisgender women with dignity, or how to address how patriarchy harms men (particularly those deemed not masculine enough under these norms, such as queer men like Kaidan). This thesis takes a broad scope approach, analysing how population management of marginalisation disenfranchises all and upholds normative supremacist ideals.

In *Mass Effect 3* Kaidan’s bisexuality is revealed, becoming a romance option available to both ManShep and Femshep²¹. Previously, Kaidan had only been a romance option available to FemShep. The content for Kaidan’s romance in *Mass Effect* has been contentious, with fans arguing less that Kaidan’s romance is a slow burn with ManShep and more that

²¹ See glossary

BioWare should have made Kaidan a romantic option for ManShep from the start of the series – even though this was always going to be a huge barrier given that the first game was released in 2007 and, at that time, had to suffer the faux-moral outrage of FOX News claiming that the game was already too overtly sexual from conservative and repressive corners.

Mutant characters offer a challenge to assumed heterosexuality culture in that their bodies transcend into the posthuman and pose new questions about the pursuit of relationships. Their bodies, experiences and desires disrupt normative expectations as they occupy a rare, treasured, feared and marginalised space in society. Their experience is somewhat comparable to queer theory as the word queer is “not the acts in which they engage but rather the coercive norms that place their desires into a position of conflict with the current order” (Halle, cited in Mitchell and Snyder 2015). Queerness is not a common shared experience, in the same way womanhood could not be, as each individual would experience oppression or marginalisation differently. The cisgender asexual experience may not share much in common to the gay transgender experience, and the gay transgender experience of a man may have little in common with that of a gay and transgender woman. The word queer is a marker for going against normative expectations surrounding bodies: whether the individual body or the desire (or lack thereof) for and interaction with other bodies.

There are still operations of engineering to ensure normative romantic entanglements; mortgages are often unaffordable to individuals, some states (including the United Kingdom) encourage marriage by giving tax breaks to married couples – and marriage itself remains exclusive to same gender couples in many countries - the United Kingdom only allowed same sex marriage from 2013. Dating from the sixteenth century, the then termed hermaphrodite (now an outdated and offensive term for gender non-confirming people)

was described as an identity that dismantled “all fundamental relations that drive society, but most of all they attack marriage and family” (Perry Long, 1996, p.196). The blurring of gender binaries, and the personal autonomy to choose and define identities means those outside of normative practices – such as mutants – destabilise institutions which seek to reproduce and protect concepts of normativity.

Biosociologists Mitchell and Snyder argue for the linkage between crip/queer bodies and experiences, stating:

“The designation ‘crip/queer’ recognizes that all bodies identified as excessively deviant are ‘queer’ in the sense that they represent discordant functionalities and outlaw sexualities. Thus, crip/queer forms of embodiment contest their consignment to illegitimacy because sexual prohibition has proven one of the most historically salient forms of exclusion within biopolitics since the late nineteenth century” (2015, p.3).

They argue for the incorporation of Randall Hale’s definition of queerness to align with the concept of desires in conflict with the current order (2015, p.3). According to McRuer, “‘to crip’ or ‘to queer’ gets at processes that unsettle, or processes that make strange of twisted” (2018, p.23). As a crip/queer mutant, Kaidan falls outside of the normative experiences of the compulsion for alloromantic heterosexual/romantic relationships that are desired through amatonormativity. As Halberstam points out, marriage connects couples against everyone else and offers that to increase intimacies and connections “we should consider replacing marriage with wider units of connection and relation” (Halberstam, 2012, p.110-111).

The repression of disabled male sexuality aligns and combines with the fear that the mutant will create an entirely new population thus displacing the order of humanity. The disabled

mutant, and the desire for the disabled mutant, creates an unstable tension for the potential for the disruption of traditional dominant familial structures due to the imposed aesthetic and ableist romantic standards enforced in day-to-day late-stage neoliberal capitalist society. The futures of those exposed to the violence of exclusion may be refigured as they are perpetually in the process overcoming (Butler, 1993, p.53). There is a future horizon beyond straight composition if “queer/crip perspectives can help to keep our attention on disruptive, inappropriate, composing bodies” (McRuer, 2006, p.155). Those deliberately exposed to element zero and implanted with chronic pain inducing technology, are an example of a deliberately disabled mutated population, created for the purpose of testing humanity’s capacities, but there is community and a future beyond subjugation for those marginalised in this way.

Section 7.3 Jack, a contrasting case study to Kaidan, and the tensions between mutated characters and institutions of care

The second group of experimental mutants originated from a (rogue) Cerberus cell that kidnapped children and kept them in confinement. The children were subjected to chemical experiments and made to fight to test their growing biotic abilities. The major character who came from this was Jack, who was referred to as ‘Subject Zero’ during her tortuous childhood at the hands of Cerberus. After escaping the cruelty of Cerberus, Jack pursues a violent criminal path. But the player needs Jack to join the main mission and so Shepard must break her out of prison. As Jeffery states in the analysis on Superman’s super/posthuman body, “evolution also implied obsolescence” (2016, p.75). Audiences feared the instability that post-humanity signified in stories; Jack can be a subjected hero if she gives into the war machine, but anything else posits Jack as a dangerous enemy to wider society. Shepard frees Jack on the condition that she must help in the fight against the

collectors - with Jack finding herself bargaining for the perception of freedom once more.

Jack joins the team and brings unique biotic abilities – namely shockwave, a technique that can blast enemies off their feet if they are in the direct line of sight of her. Interestingly, *Mass Effect 2* deploys the use of more biotic humans – Miranda and Jacob. While Miranda's biotic abilities are explained due to her genetic makeup and deliberate genetic tinkering in her creation and design, Jacob's are not, despite the lack of naturally occurring biotic humans. He is neither confirmed as an experimented mutant nor has that history denied, however it can safely be assumed that he is mutant due to the fact that he does possess biotic abilities and therefore must have been exposed to element zero at some point in his life.

While the two groups differ in the levels of torture they suffered and by who carried out their 'training' as children, the result was the institutionalisation of children to fully meet their potential within the neoliberal machine. Mitchell and Snyder identify disabled people, leaving behind care institutions, as ashamed of their solidarity from wider society and estranged from the sense of community they previously experienced, and that "widespread public disavowal of disability translates to elected forms of alienation from other disabled people" (2015, p.122).

The sense of isolation is perhaps captured in *Mass Effect 3*. Jack – if she has survived the suicide mission of *Mass Effect 2* – will go on to instruct young biotics at Grissom Academy, and act as a mentor for mutant humans who constitute biopolitical exclusions. Additionally, the downloadable *Mass Effect 2* content *Overlord*, sees the player explore a rogue Cerberus cell where it is soon revealed that an autistic teenager is being experimented upon by his older brother to see if he (David) can communicate with the synthetic geth. This teenager can be rescued, his care passing to Grissom Academy where Jack teaches. As Cheyne writes,

disability often combines with wonder for non-disabled people, eliciting the fetishising of disabled people as inspiration supercrip stories: “Both the enfreakment of the disabled person and the elevation of the disabled person in supercrip narratives are understood as generating distance, between disabled people and nondisabled observers/perceivers whose putative normality is shored up through the act of observing/perceiving” (2019, p.85).

The player can make two key decisions: allow Cerberus to keep custody of David so that the information gleaned from the experimentation can be utilised against the geth or give custody of David to Grissom Academy which has expertise and experience in caring for individuals at the margins of abilities in the *Mass Effect* universe. In the biopolitical age, schools have become places where children have their bodies managed; inoculated against disease, monitored for signs of abuse and even having their weight tracked. Schools are not singularly places of education but places to “shape the embodiment of young people in their totality” (Shilling, 2012, p.22). Grissom Academy acts as a care institution, sheltering children from abuse from their families and from society and the productivity expectation of the neoliberal system while simultaneously acting as an agent for the Alliance to train children (in a safe environment) for combat and to exposure children to Alliance sympathetic education and propaganda. For instance, in *Mass Effect 3* the player can choose to send the children from Grissom Academy into war either as frontline support or as reinforcements. One option will inevitably result in the deaths of the students, with one of the final images of the original trilogy being Jack standing over the graves of her students. There is not a scenario where the students do not serve in the war for the Alliance, there is not a scenario where any student can opt out even though some students express fear about the reaper invasion and the threat of war as Shepard walks the halls of the academy. The students – as biopolitical exclusions – become the subjects of the reaper war and of the

player, mirroring the forced assimilation into abled society which disabled people must experience. For example, Canada's assisted death laws have pushed one disabled woman to choose death as the medical and accessible support she needed (as a result of Medical Chemical Sensitivities, a chronic condition) for housing was not provided for by the government (Favaro, 2022). The system for disabled people is one of conformity and subjugation fully to the neoliberal system, with little other choice. This thesis warns of the dangers of the false promises of the biotechnological age if the fundamental rights of the body – housing, healthcare, full stomachs – are not addressed and advocates for the full liberation of marginalised populations to be able to control the destiny of their own bodies, without the constraints of late-stage corporate capitalism.

Recognition for disability can become difficult when it is queried “aren't we all a little disabled?” (Linton, 1998, p.12–13; Gill, 1994, p.46), an attempt at containment which “instead of a banal, humanistic universalization of queerness/disability, a crip theory of composition advocates for the temporary or contingent universalization of queerness/disability” (McRuer, 2006, p.157), and argues for the rights of crip/queerness to be acknowledged and taken seriously. To do this, we can and should dismantle our own neoliberal entrenchment by asking “How can we queer this? How can we crip it? What ideologies or norms that are at work in this text, discourse, program need to be crippled? How can this system be de-composed?” (McRuer, 2006, p.158).

But the subjugation of disabled people has long been a foundation of neoliberalism. Cohen argues that classifying those as monstrous justifies displacement or extermination “by rendering the act heroic” (1996, p.8). Grissom Academy and Shepard/the player replicate the uses that the Alliance and Cerberus put (disabled) mutant bodies to; they must fully be subjected to the reaper war effort, risking their lives, to make use of their super soldier

potential. For Jack joining Grissom Academy is the only solution to any desire to become part of normative society. To become a mentor figure, particularly as a woman, is to become a nurturer and to assume a normative expected role for society. Jack's life prior to this was one of biopolitical exclusion, experimented upon for the concept of the greater good. Jack's promise is in her capacities as a biotic that is subject to the state. Prior to taking a (undefined) position at Grissom Academy, Jack had broken out of prison after being arrested and charged with several violent crimes, theft, and crashing a spaceship into a moon. In *Mass Effect 2*, Jack demonstrates her love of violence by trying to tempt Shepard to steal the Normandy from Cerberus to live a life of piracy, and breaking into Miranda's office, threatening her and committing violence by throwing Miranda's furniture at her so that Shepard must intervene to resolve the situation. Jack's greatest faux pas in society however is that she was tortured by use of chemicals, given so many drugs to induce states of anger and euphoria to experiment the capabilities of her biotic powers and to try to 'prime' them during battles. The use of drugs for women is seen as a pollution of the body which leads to widespread and total social exclusion, creating a "soiled identity" (Ettorre, 2012, p.34), going against ideas of the natural purity of women to nurture, and to grow life (safely) within their own bodies. It is Hayles that states that "the junkie's body is a harbinger of the postmodern mutant" (Hayles, 1999, p.42-23). Writing on *Bioshock*, a video games series that depicts dependency on steroids for the posthuman body to focus within a dystopian capitalist (underwater) wasteland, Kirkland states, "The body the player inhabits is a modern amalgamation, characterised by cosmetic surgery, biomedical implants and anabolic steroids, a shell more posthuman than human" (2022, p.47). The disintegrating body has been the subject of an enlightened approach to understanding biology creating an "unruly mutant" (Kirkland, 2022, p.47). The player-character-body in *Bioshock* is therefore

comparable to Jack; a mutant changed by the forces of a capitalist society, dependent upon drugs to unlock the highest of the posthuman potential (as deemed by her creators), creating an unstable and violent self which is seen as an acceptable cost in the pursuit of greater bodily understanding and control over both Jack and other biotics subjected to experimentation. As Kirkland adds “In depicting a violent world of bodily augmentation, accelerated evolution and manufactured monstrosity, Bioshock echoes various Gothic sub-cycles exploring questions of humanity and its place in a modern, postmodern, post-human world” (2012, p.59). Kirkland links these themes with Punter’s idea of the decadent Gothic (from literature in the 1890s) which are preoccupied with the idea of the degradation of the human species – in particular, examining how much an individual can degrade/be put through before their identity with humanity begins to fade (2012, p.59). Such beings – cyborgs and mutants – are comprised of “an unstable fusion of competing elements which embraces the hybridity, partiality, uncertainty and abjection” (2012, p.53). Jack’s instability is shown throughout the acts of violence towards others (and ironically, toward the mutant Miranda) marking her as different from the crew who are working toward the same goal of trying to save humanity in *Mass Effect 2*. To become stable, and once more part of humanity and less of a visible mutant outsider, Jack must take on normative roles to be accepted once more: the roles of caregiver to children, and subjected mutant using her powers for the great imperialist war machine of the Alliance²², and not the terrorists who created her. Jack must still be subjugated, but to the right system: to the military industrial system and not a private corporation, to be part of neoliberalism and reject holistic individualism, showing

²² See glossary

once more how the mutant will struggle for liberation persistently throughout their lives if biotechnological based capitalism endures.



Figure 11 Jack's biotic abilities demonstrated in Mass Effect 2

In Jack's loyalty mission in *Mass Effect 2*, the player must visit the former Cerberus facility where Jack was held and tortured as a child. The player soon discovers the place has been abandoned, with only the odd archive link to explain what had happened: Jack was not the only child experimented on and the children were regularly made to fight, but Jack did not break out, rather Cerberus allowed her to escape once the experiments were finished. The facility is akin to a prison; with little sunlight, children crammed into small rooms and there was careful surveillance of the entire facility during Jack's time there. After World War II, in the United States, prisons became the main place of experimentation on human research subjects (Cooper and Waldbey, 2014, p.119). It was also discovered that the Cerberus cell had gone rogue, and that the threat of the Illusive Man discovering the experiments also led to

the decision to allow Jack to escape. Jack is adamant that for closure, she must be allowed to plant and detonate a bomb in the facility, but she and Shepard discover a survivor from the cell – a former child victim. Aresh has tried and failed to restart the facility with the idea that the experiments that they were all subjected to as children must have had a purpose. This is a common response in both trauma victims and those who live with chronic pain, with fixations on trauma, bitterness and anger common (Wraith, 1994, p.111), as well as the idea that the hard times must have value or be deserved and must lead to better times or truer, deeper understanding of the nature of life (Briere, Scott, Jones, 2015, p.34). It is also Aresh's attempt to continue the cycle of life by creating yet another generation of mutants. Once the potential to create a mutant has been demonstrated, it likely will be replicated. Even the mutants themselves may long for further creations like them, even if they have been left with trauma at their own design, as Frankenstein's creature asks "Cursed, cursed creator! Why did I live?" (Shelley, 1993, p.103). The creature implored his creator for another mutant – a woman – that he could then marry and have mutant children with, creating an entirely new population of mutants (but under the leadership of mutants and not man), going so far as to claim it as his right (Shelley, 1993. p.111).

For the creators it means a new population and a secure legacy for their ambition, for the mutant, a population of modified beings means kinship and a chance to seek validation for the trauma that they were put through; if a mutant race is deemed a worthy way to advance society then the personal trauma can be bargained with ideas of the greater good. The experimental mutant often suffers with the dual legacy of being a mutant and experiencing the long-term trauma that comes with the knowledge of being an experiment, even if they were unaware of the experimental process. The experiment itself may leave the mutant with physical and psychological disabilities, throwing the mutant into a strange

contradiction of being a posthuman being whose body was used to chase ideas of progress and failing to live up to ableist normative standards.

Section 7.4 The operations of disability in a society of designed and morphed beings.

Futuristic societies offer insights and interpretations of what the future could be, and where humanity may direct the future to go. Inventions in science fiction are usually at the forefront. Cheyne asserts that wonder is a central tenet of science fiction and why audiences read/watch the genre (2018, p.87). The idea of the flying car (which does feature in *Mass Effect*), the accessibility of space travel (a core feature of *Mass Effect*) and the ability for humans to transcend their current limitations are often staples of the futurism genre. As with most fictional products, the role of medical advancements are not always addressed in science fiction: it is common for disability as a whole to either be cured or not addressed in the story, or for depictions of crumbling healthcare systems under the cyberpunk genre while technology itself flourishes (Farnsworth, 2022).

“Futurity has often been framed in curative terms, a time frame that casts disabled people (as) out of time, or as obstacles to the arc of progress. In our disabled state, we are not part of the dominant narratives of progress, but once rehabilitated, normalized, and hopefully cured, we play a starring role: the sign of progress, the proof of development, the triumph of mind over body” (Kafer, 2013, p.28).

There has been criticism of the relationship to the cyborg and disability within futurism. As Kafer’s criticisms of the figure of the cyborg positions the disabled body as a barrier to time; “That disabled body, the logic continues, is then *transformed* as it becomes technologised, a process that only serves to stress that any person with a disability who is *not* somehow engaged with technology remains identified as being ‘disabled’” (Murray, 2022, p.88). There

is additionally the argument that the cyborg pictures a world where disability is left behind post-cyborgisation, treating disability as a monolith experience and one that is potentially temporary under cyborg politics (Kafer, 2013, p.105). Murray criticises posthumanism's exclusion of disability by paying particular attention to the words of Braidotti, who claims that biotechnological and technological advances on "...monstrous, the grotesque, the mutant and the downright freakish...have gained widespread currency in urban post-industrial cultures" (2002, p.177). Braidotti insists that feminism and cyber-feminism "play with the body boundaries" (2002, p.177) while Murray asserts that the use of terms such as "freak" and "mutant" could hint at the absence of disability from the theorisation of feminism and, in particular, of posthuman feminism. Murray claims that this may in part be due to the rise of feminist and cyberculture writings and theorisations predating the prominence of critical disability studies – the former taking place during the 1980s when disability studies was not particularly regarded within theory (2022, p.8).

There tends to be even less acknowledgement in science fiction over the issue of long-term care needs. Disability narratives themselves often fall in traps of disabled bodies on display: as inspiration or 'supercrip' narratives or with curiosity (Cheyne, 2019, p.84). *Mass Effect* does indeed contain 'supercrip' narratives to an extent – with the depiction of the tortured bodies of Jack and Kaidan who have developed biotic powers, unusual for a human. Yet, *Mass Effect* also contains the long-term realities of disability (again, to an extent) with Kaidan's lingering migraines and with the characterisation of Joker.

Within science fiction "disability is both subject and source of wonder, deployed to generate wondrous affects but reconstitutable through a productive wondering. Disability wonder can be both the result of and the catalyst for readerly reflection" (Cheyne, 2019, p.90). *Mass Effect* offers insight into the societal position of disabled people in a futuristic setting.

Disability wonder can lead to reflection, inclusion, a developing audience understanding (or, in bad cases, fear and discomfort of the disabled other), but it also offers interpretations of what writers, creators and people generally think of the future and the value of disabled lives, or whether there is any role at all for disabled people in a futurist society. In technobiofuturist societies it is imperative that disabled people must be given attention and included in all interpretations and speculations. Their experiences of disability and biopolitical exclusions are fundamental to the ideas of biofuturism. As Dan Goodley states, “why critical disability studies? Because there is an epidemic of signification around the disabled body and psyche which threatens the death of disability” (2012, p.72)... “... Because of this neoliberal capitalist world we live in that threatens to (re)affirm the idealised fully functioning, responsible, reasonable individual body and demonise the monstrous Other” (2012, p.73). Goodley further asserts that we are currently in an era where we must “tend obsessively to our bodies, “...tend obsessively to our bodies, to fight death and erase those aspects of life we deem vulnerable, incomplete and challenging” (2012, p.74).

How do disabled/non-normative bodies align with mutant bodies in speculative fiction and biofuturistic societies? While not a mutant as such, Joker deserves attention within the analysis of non-normative bodies, for his relationship to disability in a galaxy of mutants, where health centres around ideals of perfection and humans are made to supremacist ideals. How does a disabled person navigate a world for mutants? What does a posthuman/mutant world mean for the lives and realities of disabled people? How does Kaidan’s disability align with his mutant status and posthuman powers? This thesis now turns to Joker to probe these questions, a disabled character that challenges perceptions of disability in *Mass Effect* as he is not a combat-soldier, a super soldier or enhanced in any

way, but his disability is a point of contention for several characters who are seen as the paragons of their species.

Joker is the pilot of the Normandy spaceship which Shepard commands. Joker is Shepard's pilot for the entire trilogy and the only character to be a permanent member of Shepard's crew. He is the constant to Shepard's team, the best pilot in the galaxy, an admired and respected Naval officer, and a disabled man. He is also the person who saves the Citadel in *Mass Effect* (1) by leading the fleet to attack a reaper invasion, and the person who saves the Normandy from destruction after collectors board the ship in *Mass Effect 2*. He is the only other character which the player can control other than Shepard. While the player cannot make any specific role-playing choices as Joker, nevertheless the player occupies his disabled body during a critical time for the Normandy. Joker also is accompanied by Doctor Chakwas (if the player allows it) as she is the ship's doctor but specifically desires to work alongside Joker to monitor his disability (Vrolik Syndrome). Ogden sees the surveillance of biopower as relational to Foucault's concepts of biopower. Foucault identifies the outbreak of plague in Medieval Europe as the first instance of surveillance and control of the body, with medical records being kept as well as conducting monitoring of movement within towns (Foucault, 1995). In her study of inflammatory bowel disease and how people (particularly children) navigate this condition, Ogden states: "Biopower allows for the creation of the ultra-controlled, normalised (and fake) non-leaky body whilst ableism sustains and contains damaging ideas of normalcy" (2012, p.95). Ogden continues that the current regimes of surveillance of disabled bodies "suggests a need for change to contemporary society's hegemonic ideals of civility and normality, so that difference of any nature can be accepted" (2012, p.95). *Mass Effect* offers some remedy to this, with Joker and Kaidan allowed a certain amount of privacy for their disability, and with Joker becoming

a playable character, his role is never diminished or monitored due to his disability status – there is far more player interaction and freedom with Joker than there are for other characters.

Questions over the (precarious) position of disability in a biofuturist world are hinted at in the evidence of our everyday world, suggesting that greater medical information may not lead to the liberation of disabled bodies. One statistic of note is that in the United Kingdom, in cases of fetuses with Down's Syndrome, there is a 92% abortion rate which has led disability scholars and activists such as Tom Shakespeare to compare medical language, and targeted screening as operations of eugenic policies enacted by medical practitioners (Mangham, 2023, p.233). As Mangham states, "In a society that values all natural varieties of organic life, unconscious steers toward selective abortion and the loaded language of 'defective' or 'negative result' pregnancies would have no bearing" (2023, p.235).

Biotechnology is at the mercy of intrinsic and systemic prejudices, meaning that biofuturism does not by default offer a hopeful narrative for disabled people, but a complicated line to tread when needing support, particularly when disabled bodies become medicalised and at risk of devaluation. Surveillance of the disabled can lead to attempts to eliminate the disability. However, *Mass Effect* does speculate – to a limited extent – on the futures of disabled people, if they are granted support and the means to liberation.

In *Mass Effect* (1) Kaidan's disability is merely a dialogue point for the player never sees or experiences Kaidan have a chronic pain episode, even though the game features heavy combat which would wear and tear on any soldier.

However, early in the third game, Kaidan becomes badly injured and is rushed to hospital on the Citadel where he remains. This incident will also happen to Ashley Williams if she survived the events of Virmire in place of Kaidan Alenko. Kaidan (or Ashley) is forced to

recuperate in the hospital, away from Shepard's ability to revive squadmates with medigel – a mechanic that has featured prominently until this point. Jerreat-Poole (2020) compares this to Joker's experience of 'crip' time which places an emphasis on slowness, as Joker is physically slow at several critical points in the game and is often metaphorically out of sync with the internal gossip and politics of the Normandy. Kaidan is also a character that experiences a crippling of time. Jerreat-Poole points out the player is rewarded through paragon points (and eventually leading to the possibility for Kaidan to rejoin the Normandy crew) if the player visits Kaidan in hospital, and this, Jerreat-Poole states, forces the player to experience a time that is slowed in the hospital away from the main missions and rush of battle. Kaidan's experience is made separate to Ashley's - not through gameplay or the time in hospital which is the same – but through dialogue options with Kaidan and the doctors which reveal that his implants have been damaged and that this has impacted the levels of pain that he experiences during his recovery. Brodwin asserts that the uncertainties emerging from biotechnological developments change how the body is conceptualised and categorised. "As a collective symbol, the human body provides the most basic metaphors for order and disorder. ...The figure of the natural body, like the concept of nature, is a moral arbiter of acceptable behaviour and legitimate political relations..." (Brodwin, 2000, p.7). The nature of disability and the posthuman mutant transform the perceptions of order and disorder. The mutant often conforms to supremacist ordered ideals in a way that has transgressed the norms of society due to the ambition of a person or society. The disabled body however is seen as a disordered body, failing to fit into any normative categorisation. Kaidan's body encapsulates the hybrid ordered/disordered experience of the disabled mutant, and this is reflected in the disruption that Kaidan causes to the gameplay through the idea of crip-time.

“Unlike the super-cyborg/ super-crip of popular imagination, Kaidan’s injuries are not automatically healed or glossed over. His recovery process is his primary narrative in *ME3* and requires him to miss many of the action-adventure quests that, with his six-pack, bulging biceps, and superpowers, he was clearly designed for” (Jerreat-Poole, 2020).

Kaidan cannot fulfil his purpose as the biotic academy set out for him; he is forced to sit out and the squad and war effort cannot benefit from his biotic abilities. However, within the Normandy crew the absence of Kaidan is only alluded to when Shepard has post-traumatic stress related dreams and expresses regret at Kaidan’s injury and that he is missed for his camaraderie. The lack of his abilities is not the focus, suggesting a safe space for disabled people and for disabled mutants who can exist beyond their purpose. In some ways, this was the first hint that the Normandy could offer an insight into the refuge for mutants as while there are a plethora of mutant characters in *Mass Effect 2* (Miranda, Grunt, Jack and Jacob), the entire game is focused upon every person on the Normandy submitting to the idea of a suicide mission in order to save the galaxy. However, throughout this healing process Kaidan may be given the time to heal and offered emotional support from the player-character.

The player is also deliberately slowed as a disabled person when they occupy the character of Joker. In the only section of the trilogy where the player is someone other than Shepard, the player must assume the role of Joker as the Normandy-SR2 is boarded by collectors. Joker’s movement is impaired by his disability, and the player is deliberately slowed down unable to reach the speed of Shepard. Joker is vulnerable with no armour and no combat strength and so the player is forced to hide from the collectors as they make their way through the Normandy to the drive core. This contrasts greatly with the usual combat

scenes the player can experience where there are even biotic moves such as charge designed to increase the speed of characters. The vulnerability of Joker as a disabled non-mutant is highlighted in this section. While in the early stages of *Mass Effect 2*, Joker may wax lyrical about the comfort and design of the Normandy's new chair, the accessibility of the ship must be brought into question when Joker is left in such a vulnerable position, as a pilot of the ship where the main controls and safety features of the ship are located so far away from his station of operations and when he has a disability that limits his speed and mobility. While there may be bodily transcendence in a biofuturist setting, the same intrinsic attitudes and discriminatory systems will exist and be built up according to those flaws. The new era of posthumanism and of mutants will create new and varied discriminations from the same lingering systems that are currently in existence relating to the "...inner power structures of advanced capitalism and the sexualized, racialized and naturalized political economies of exploitable labour and dispensable bodies that support it" (Braidotti, 2022, p.57).

The worth of the disabled mutant character, to the capitalist society, is dependent upon its use toward productivity. Joker is reprimanded by Miranda for his efforts to save the Normandy despite the considerable danger he was in. While Kaidan is granted time to rest, he is also a mutant of huge importance to the Alliance and the galaxy as the Galactic Council even offer him the position of spectre – thereby serving their interests to allow Kaidan to recover so he can fully rejoin the fight and make the most of his powers.

The disabled mutant is a challenge to all normative bodily assumptions, and there is potential for resistance as the "disabled refusals to be degraded, pathologized, or made perverse and similar developments of alternative disabled ways of being-in-common together" (McRuer, 2018, p.38). The experience of disability in the series is frenetic; trauma

is explored through Jack, and Joker is allowed a literal slowness/cripping of time but for Kaidan, his experiences of long-disability, linked to bodily-tampering are often ignored or overlooked by the developers and gameplay, limiting his experience of disability to a few dialogue options within the dialogue wheel. The only disruptive gameplay experiences happens in the final game in which he features, stemming from a combat wound, exacerbating is disability, and finally giving a limited acknowledgement to the disruption of chronic pain. Disability is often a feature of mutant characters as the experiments of their creation mark the subject with consequences of that tampering – and not the creator – and disabled characters more broadly become figures of tension in science fiction narratives or a morphed humanity as within these utopias disability is cured, or left behind in the pursuit of ‘the perfect design’ (chapter six).

Chapter Eight: A Mass Mutant Population

Section 8.1 The political context of Mass Effect's studio, and its influence across the series

Within *Mass Effect's* diverse galaxy are the biopolitically excluded, encapsulated by the plight of the krogan – a species deliberately sterilised with a fertility plague. Under the *Mass Effect* codex, the genophage is listed as a bioweapon:

“The genophage virus replicated by 'eating' key genetic sequences, altering every cell of krogan physiology so the krogan could not use gene therapy to fix the affected tissues. Once a genophage strain could replicate no more, it would starve and die, limiting mutation and contamination. In addition, the 'created' genetic flaw is hereditary. The resulting mutation made only one in a thousand krogan pregnancies carry to term, reducing offspring viability rather than fertility. Krogan warlords fought battles over the females able to carry children to term.”

This chapter focuses on the location of the krogan within the biopolitical social hierarchy and the legacy of bodily repression as they form a case study of experimental mutants (listed within the taxonomy in chapter three).

This chapter focuses on the backdrop of Canadian biopolitics and bioethics, and how these were reflected within the game – with the krogan genophage arc being a key plotline depicting futuristic visions of eugenics.

With the popularity of *Baldur's Gate* (1998), *Star Wars: Knights of the Old Republic* (2003), *Mass Effect*, and *Dragon Age* games (2009, 2011, 2014), the studio BioWare has gained a significant international reputation. The investment from publisher Electronic Arts (EA) expanded their studios into the United States of America. But the studio was quintessentially a Canadian product. The three students who went on to establish the

company first met in Edmonton, Alberta. The three – Ray Muzyka, Greg Zeschuk, and Augustine Yip – are medical doctors and worked together to create patient simulators (2020, p.9). From tinkering with medical software, came the idea to produce video games. BioWare was born.

BioWare was set up in Edmonton, Alberta, one of the thirteen provinces of Canada in 1995 and it was not until 2006 that BioWare opened operations in Texas – two years after EA acquired BioWare. The first game in the series was released in 2007, and the influence of Canadian politics is apparent, particularly when it comes to bioethics and medical practices. Canada's contemporary politics struggle to reckon with the practices of eugenics that occurred across the state throughout the twentieth century, as this chapter examines. Games can be historical artefacts utilised by hermeneutical research as “the question of the truth of art forces us, too, to undertake a critique of both aesthetic and historical consciousness, inasmuch as we are inquiring into the *truth* that manifests itself in art and history” (Gadamer, 1975, p.161). Gadamer argues “literature is a function of being intellectually preserved and handed down, and therefore brings its hidden history into every age” (Gadamer, 1975, p.154). Games may function as literary cultural artefacts, produced in and of their time, but also connecting with the reader/player within their time, with Schleiermacher asserting the need to discover the creator's history and cultural context to fully understand and interrogate their creation (Gadamer, 1975, p.159).

Section 8.2 Canada's eugenics past, its twenty-first century relevance and concepts of bioethical memory.

In 1883 Francis Galton coined the term “eugenics”, a concept tied to selective reproduction, supporting reproduction between wealthy and intelligent individuals who were white and able bodied. However, intellect particularly in the late nineteenth century was largely

determined due to access to wealth and education, something that was unobtainable for low-income families and girls. Eugenics came to define much 20th century politics and is something that is still grappled with, shown through this thesis with its interrogation of biopower, and ideas of supremacy and perfection. While eugenics became a central point of the horrors of the Nazi regime, they were not the only government who sought to control populations according to supremacist ideals. The twentieth century, an age of biomedicine, marked female bodies as reproductive, a crucial step “in which biomedicine produces and normalises female bodies to serve prevailing gender relations” (Ettorre, 2012, p.36). In 1928, the Canadian province of Alberta (of which Edmonton is the capital) passed a law titled the Sexual Sterilization Act that legally compelled the forcible sterilisation of psychiatric patients, and targeted indigenous women and girls. The Act established a Eugenics Board that would select people (or candidates, as the legislation referred to) for sterilisation. The board consisted of two people with a medical background, and two who did not, and the legislation gave legal protection to doctors and surgeons who carried out these non-consensual procedures; under these conditions it was inevitable that justice for patients would always face significant legal hurdles. This Act was only repealed in 1972, but it is thought that sterilisations continued until 2017 (Virdi, 2018). Just five years after Alberta introduced sterilisation laws, its western neighbour, British Columbia, followed suit. To Alberta’s east, Saskatchewan also carried out forcible sterilisation procedures on indigenous women and girls. A lawsuit against the provincial government, led by Canada’s first law firm that is owned by indigenous people, represented at least sixty women who had faced sterilisation, some claiming that they had been badgered and harassed by healthcare professionals during labour, and that they had been told that they could not see their

newborns until they agreed to the procedure. Some of the women were even told that the procedure would be reversible when it was not (Virdi, 2018).

Policies of sterilisation also spread across parts of the United States since 1907. Many disabled young women in institutions found themselves forcibly sterilised, particularly those with mental illnesses or epilepsy. One such case was that of Carrie Buck; in 1924 she was raped by the nephew of her foster parents and became pregnant. Carrie gave birth, and she, her daughter and her mother (at separate times) were diagnosed with learning disabilities. In 1927 in *Buck v. Bell*, the Supreme Court ruled that Carrie could be forcibly sterilised, with the ruling stating that “three generations of imbeciles were enough” (Cleghorn, 2021, p.212). The fever of forcible sterilisations spread to the United Kingdom as the British Eugenics Society proposed a bill supporting compulsory sterilisation to Parliament in 1931, however, it failed to pass. Eugenics even poisoned the United Kingdom’s feminist movement as Sanger supported eugenics into the 1930s, and Stopes even supported Nazi Population Science and attended a Nazi Party Congress (Cleghorn, 2021, p.213). It is hard to disagree with Cleghorn when she states: “It is an anger-inducing reality that the beginnings of reproductive justice were entangled with ideologies about how women – especially Black women, other ethnically diverse women and vulnerable women – should be controlled and regulated. The birth-control movement in America and Britain arose from the impulses and achievements of women’s suffrage” (2021, p.213).

Morelock points to Foucault’s identification of the two dominating types of racism in the twentieth century: ethnocentric and eugenic, stating “it is this more biological form of racism that, for Foucault, really provided the ideological justification for genocide” (2021, p.18). Morelock theorises that it was through the biological form of racism that allowed medial and military rationality to combine (2021, p.18). Eugenics waned in the West after

the atrocities of the Nazis, but it did not vanish. Sterilisations across Canada continued into the twenty-first century. In 2019, Japan's Supreme Court protected a law that requires out transgender people to be sterilised before their legal gender change will be accepted.

Nonconsensual sterilisation remains an issue to be reckoned with and has been a much-explored topic in recent decades in bioethical debates. The Canadian governments that enforced such policies were certainly not unique, and it is a backdrop to where the BioWare studio was founded.

Canada's policies of sterilisation enforced supremacist ideals about population growth and who should be the dominant population. This was the background to the creation of *Mass Effect* - a series that explored the very issue of forced sterilisation. Canada's policies were an extension of the belief that certain marginalised groups were inferior to white Canadians, with sterilisation seen as an end solution to the problem of these different cultures. In his study examining compulsory boarding schools for indigenous children in the United States and Canada, Woolford states that to understand genocide we must consider "group life", and when those lives and cultures are purposefully placed into jeopardy, and this must be evaluated within the context of broader colonialism (2015, p.11). Boarding schools were established to assimilate indigenous children into white populations, springing up across Canada's different provinces in the 1800s at a time when indigenous people were fighting for their rights over loss of land (Woolford, 2015, p.69). Almost 60% of boarding schools were Catholic run (Woolford, 2015, p.69). This chapter considers the persecution and oppression of the Krogan, culminating in the act of the genophage – a deliberate tool of sterilisation designed to limit the reproduction of the species.

Much of this chapter is rooted in the theme of bioethical memory, which as Lynch sets out is the (often collective) memory linked to breaking news stories related to medical horrors -

Lynch specifically refers to Tuskegee Syphilis Study and the neglectful and dangerous conditions at Willowbrooke State School where disabled patients were subject to abuse, and experimentation for the development of a treatment to hepatitis; experiments which included deliberately infecting patients, and re-introducing their stool samples into food and chocolate milk (Lynch, 2019, p.17).

Lynch states that “public memory *engenders* common identities, in contrast to social memory that exists as a result of pre-existing relationships” (Lynch, 2019, p.17), and there were attempts to learn from the establishment of boarding schools for indigenous children in Canada, but this created some tension as “Aboriginal peoples may take non-Aboriginal Canadians’ reluctance to remember a problematic past as evidence of the refusal to move forward or to truly endorse the possibilities of new ways of relating: conversely, some non-Aboriginal Canadians may locate the idea of remembering, of focusing on the past, as evidence of a refusal of Aboriginal peoples to move forward” (Campbell, 2014, p.136-7). Ironically, “it was assumed by the government and churches that without this reinforcing context of home and family life, children would quickly forget their cultural pasts, and thus unable to carry them forward into the future” (Campbell, 2014, p.154). Yet, indigenous communities in Canada have been locked in an intergenerational battle with establishments for recognition of their ongoing suffering due to lingering supremacist attitudes. Within *Mass Effect*, the oppression of the krogan means that they are trapped in despair, and unable to see any future due to the dislocation of their homeworld, and the limits the genophage has placed on their families.

The genophage becomes a bioethical memory shared collectively by the krogan, and by the perpetrators of the sterilisation plague. There are “dynamics, embodied, reconstructive, and [a] social nature” to human recollection” (Campbell, 2014, p.73), with the krogan reiterating

and sharing their memories of the genophage (and its impact) throughout all four games. Campbell argues that there may not be a real distinction between personal and collective memory, and instead we must consider how memory is shared across different pasts and “the responsibilities of those with whom memory is shared, especially the memory of harm” (Campbell, 2014, p.141).

The presence of bioethical memory lingers throughout the player’s interactions with the krogan, as Shepard is confronted repeatedly with the oppression of the krogan, which leads to the desire for multiple characters to create mutants to bypass the sterility plague they have been subjected to. There is lingering tension between the game product, and the history of its making, given the context of the Canadian government’s attempts over decades to forcibly sterilise marginalised communities.

In an article supporting the global myth of Canada’s innate progressiveness, a travel guide, argues: “Canada is more progressive in its values than our neighbour to the south... for instance it would be quite rare for attitudes against a woman’s right to choose”, (Bickson, cited Galloway, 2018) - seemingly unaware of Canada’s program of sterilisation, as Canada conceives of itself as a “stable and progressive” democracy (Campbell, 2014, p.136).

However, Canadian politics is at a crossroads. As Western nations fight with the rise of far-right forces, Canada is reckoning with the same issue. The liberal Prime Minister, Justin Trudeau (who, at the time of writing, is planning to step down), has not helped in this age of polarization; his reforms ineffective, his government accused of corruption, and his own history of wearing ‘blackface’ makeup disenfranchising progressives while the right is emboldened. Against this backdrop of Canadian politics with a liberal leader not delivering progressive politics, is the resistance from Canadian authorities to recognise what has been a cultural genocide to indigenous women and girls, and the persecution of mentally ill

women. Far from a progressive country, Canada is as stagnant in its neoliberalism as its neighbour, and allies in the West.

Section 8.3 Interrogating the consequences of deliberate mass sterilisation.

In *Mass Effect 2* a salarian joins Commander Shepard's team after working in a small clinic on the poverty-stricken space station of Omega. The salarian reveals that he was once a celebrated scientist who helped modify the genophage – a sterilisation plague inflicted upon the krogan. Mordin ended up on Omega due to a combination of guilt and frustration at his own legacy, but when confronted with the brutality of the genophage, Mordin insists that sterilising the krogan was right as data from simulations suggested the krogan population would grow too large in number and pose a threat to the galaxy. It cannot be overlooked that Mordin shares similarities with the root word "Mort" which in Latin translates to "death."

The krogan were a species famed for their warrior culture but previously isolated in the galaxy due to civil war destroying their homeworld, after they were supplied advanced technology by the salarians to defeat the common enemy of the rachni. With the rachni eliminated, the krogan set upon expanding their territory, with the aid of the technology given to them, but the turians and salarians wanted to maintain the balance of power in the galaxy in favour of their own races (that made up two thirds of the Galactic Council representatives). The salarians developed the genophage, a way to ensure that krogan reproduction rates dropped significantly. Together, the turians and salarians deployed this bioweapon against the krogan and the effects of the plague were devastating for the population. Female krogans endured miscarriages, with few ever having even one healthy child. With the breakdown of familial structures, some krogan turned to work as mercenaries and bounty hunters to restore some sense of pride in the galaxy, but many

krogan turned to fighting one another. The krogan population was facing the threat of extinction by the time of *Mass Effect*.

Bio-repression is a common tool used to enforce nationalism and control the demographics of certain populations, making it a key foundation of the management of bodies. This is because, as sociologist Rutherford points out:

“People are not born equal. They are conceived already cuffed to forces beyond their control that will shape their lives, limit their opportunities and keep their ability to fulfil those unalienable rights beyond their grasp. Class, race, wealth, nationhood, biology and randomness are all cofounders to the principles of equality” (Rutherford, 2022, p.8).

Many of the forces which Rutherford identifies are controlled by corporate or governmental forces. Examples of this management can be found in the twenty-first policies of Western nations which are gripped by anti-migrant anxiety. For instance, in 2021, it was announced that the United Kingdom’s Nationality and Borders Bill would allow for the measurement of bones and the collection of DNA samples from asylum seekers (Syal, 2021). Measuring bones would be used as an (inaccurate) method to estimate an asylum seeker’s age as part of processing their application to remain without deportation. This is not the first time ‘quack’ science has been used to try to categorise people. Phrenology, associated with the eugenicist Franz Joseph Gall, was the belief that our shape and size of our skulls can reflect our personality – a theory thoroughly debunked (Dempsey-Jones, 2018).

As new biotechnologies are developed, there is a fascination with governments and the wealthy using this technology for their own ends. Bio-data attempts to make the body controllable through data, and to shift that control from people to systems. People do make

up managed populations, and this was the experience of the krogan throughout the *Mass Effect* series.

Schmeink states the monster is a warning against the hubris of posthuman genetic tampering which brings horror and destruction (2016, p.144). It is the scientific hubris of Mordin, the salarians and the complicit turians that led to the destruction of the krogan population, and the annihilation of their culture(s). Mordin claims that he wasn't responsible for a genocide as nobody directly was murdered, but cultural genocide should not be considered a lesser genocide "even if the blood of group members is not spilled in the process" (Woolford, 2015, p.34). Mordin repeatedly remarks on the krogan's brutality and thirst for bloodlust and mocks the idea that there could be krogan scientists – even after it is revealed that a krogan scientist created a genetically perfect krogan soldier. Mordin represents the salarian cultural framing of the krogan as a threat to be contained. Yet, the player meets krogan who love poetry, krogan who holiday to the galactic capital, krogan who are scientists, krogan who are mechanics, krogan who are religious leaders, and krogan willing to give up their bodies for medical experiments in an attempt for their people to find a cure to the genophage. The atavistic society of the krogan is emphasised further still when Grunt faces opposition to taking the Rite during puberty – a krogan tradition – simply because he is genetically engineered. The krogan are sceptical of the power of biotechnology for how it was used against them, but the plight of krogan females is such that many are willing to submit to further experimentation to stop the genophage. Some krogan even spent thousands of credits (the common currency in *Mass Effect*) on testicle transplants to try to subvert the genophage.

For much of the series, the genophage is the political backdrop to the game. It is mentioned during missions, or when talking to krogan, but the consequences for living victims are not

fully expressed until later in the trilogy. It takes the player several hours into the third game to speak directly to a female victim of the genophage – a female krogan known as Eve (whose true name is revealed to be Urdnot Bakara). The only other female krogan in the series until this point was one dead body in *Mass Effect 2* – a victim of a salarian’s (Maelon’s) experiments to cure the genophage.

That female krogan are barely heard in the series, reflecting the dominant political discourse of whose voices (and lives) matter. For example, Judith Butler found one of the most harmful legacies of 9/11 was the stereotyping and the dehumanising of Arab people and contends that:

“Forms of racism instituted and active at the level of perception tend to produce iconic versions of populations who are eminently grievable, and others whose loss is no loss, and who remain ungrievable. The differential distribution of grievability across populations has implications for why and when we feel politically consequential affective dispositions such as horror, guilt, righteous sadism, loss, and indifference” (2009, p.24).

Butler continues that “an ungrievable life is one that cannot be mourned because it has never lived, that is, it has never counted as life at all” (2009, p.38). The ungrievable are not seen as quite human and therefore if the victim does not share a common identity – determined by national status or religious affiliation – then there is less horror over their deaths (Ibid). In the *Mass Effect* universe, the krogan have become ungrievable; stereotyped and blamed for the violence they receive as the galaxy presents the notion that it is in the krogans’ own interests for their sterilisation. Even Maelon’s experiments to cure the genophage are acts of brutal violence so he may claim to be the saviour of the krogan.

Maelon's tactics are unsurprising when set against the backdrop of history. When the bubonic plague wiped out up to fifty percent of the European population between 1346-1353, there was a rash and oppressive response from the Church and wider society. Seeing all-time low birth rates at a time of high mortality, the Church believed that if life was to be replenished then the only tactic was to control the bodies of women, and specifically their reproduction. These controlling attitudes – from marriage to births to even when women should be permitted to have sex – continued throughout the centuries across Europe (Cleghorn, 2021, p.44). Maelon's response to the genophage – which he helped to unleash on the krogan – follows patterns of the history of humanity; to control, monitor and subjugate the bodies of women in the hopes of the promise of a fertile future.

The player can interact with Bakara, one of Maelon's subjects, in the Normandy's med bay, reinforcing the vulnerability of the female krogan. Bakara reveals the suffering that she and other females endure daily, with intergenerational trauma, "sharing the past can shape or disrupt our identifications" (Campbell, 2014, p.75). Under eugenics, the suitability of mothers is targeted by an ideology concerned with controlling and defining exactly who is fit to reproduce; "motherhood was not simply a personal choice; it was a political act that many believed required proof of merit" (Kline, 2001, p.101). Kline's comments came after research into the sterilisation laws across the United States (and their subsequent influence on the Nazi regime). From 1909 through to the 1950s, California sterilised over 20,000 patients in their facilities – most of the victims deemed mentally ill – and this was the largest sterilisation programme across all states in America (Wellerstein, 2011 p.29). California continued with sterilisation policies until the twenty-first century (Rutherford, 2022, p.153), and there have been further reports of forced sterilisation on up to twenty incarcerated

migrant women held in America's Immigration and Customs Enforcement ('ICE') detention centres (Rutherford, 2022, p. 154).

Bakara endured miscarriages, grief, and brutality due to the genophage. In *Mass Effect 3*, Wrex explains that female krogan who were not fertile were used as decoys to shield fertile females. Wrex clarifies that "the females suggested it. We've had to make a lot of tough choices to ensure we don't all die off." Braidotti suggests that nature and technology become interchangeable when the body is "subsumed into bioengineering", a manifestation of contemporary biopower, and this was a thoroughly twenty-first century ethos (2022, p.164), and Bakara's body becomes completely subjected to experimentation by her position as a krogan female desiring to be a mother and potentially assist her people in their survival.

Within cultures that depend on oral story-telling and oral traditions of disseminating shared histories "memory is dynamic, shared, and necessary for our sense of who we are and how we should go on in the world" (Campbell, 2014, p.146). Bakara reflects on all that she has endured and states "wisdom comes from pain and the genophage has made us very wise; rather than surrender to despair a few of us chose to preserve the ancient ways" in the hopes that krogan culture will one day flourish."

In Western society there is an "ideological burden" that associates women with danger and thus links them inextricably with the concept of monstrosity (Shildrick, 2002, p.30). Bakara's first still-born child left her with a profound sense of loss and desire for change for the krogan so she underwent trials to become a shaman; part of the test was to be buried underground with barely enough food to survive the week, and on the eighth day she starved. Bakara found a crystal on the floor that she used as a chisel to dig herself

out of the cave. This gave her a renewed sense of hope and self-belief, not just for her own personal identity but belief in her people.

Section 8.4 Accountability and the question of justice: what to do with the complicit companion.

Mordin had different recollections of his time working on the genophage adaptation compared to colleague Maelon, describing it as “best years of my life” with “laughter, ego, argument, passion.” Mordin is most comparable to the characters of Henry Lawson (discussed in chapter six) and Warlord Okeer who designed their creations; Mordin seeks to control and manage bodily forms, but rather than create one perfect avatar for a species, Mordin seeks out to perfect krogan (as he sees it) to adhere to a strict biopolitical order where power is concentrated among the council races. Maelon argues with Mordin, stating that the genophage modification was “cultural genocide” and “the experiments were monstrous because I was taught to be a monster,” insisting that “we tried to play God and we failed.” Maelon is horrified by the level of control that they demonstrated over the krogan – control handed to the player who must decide what to do with Maelon’s data; to use the data obtained unethically or to ignore the potential gains for the krogan. Even when Mordin begins to see the horror behind the genophage and commits to working on a cure, his response is entirely self-centred, commenting: “My work. My job to put it right. To prove I can.”

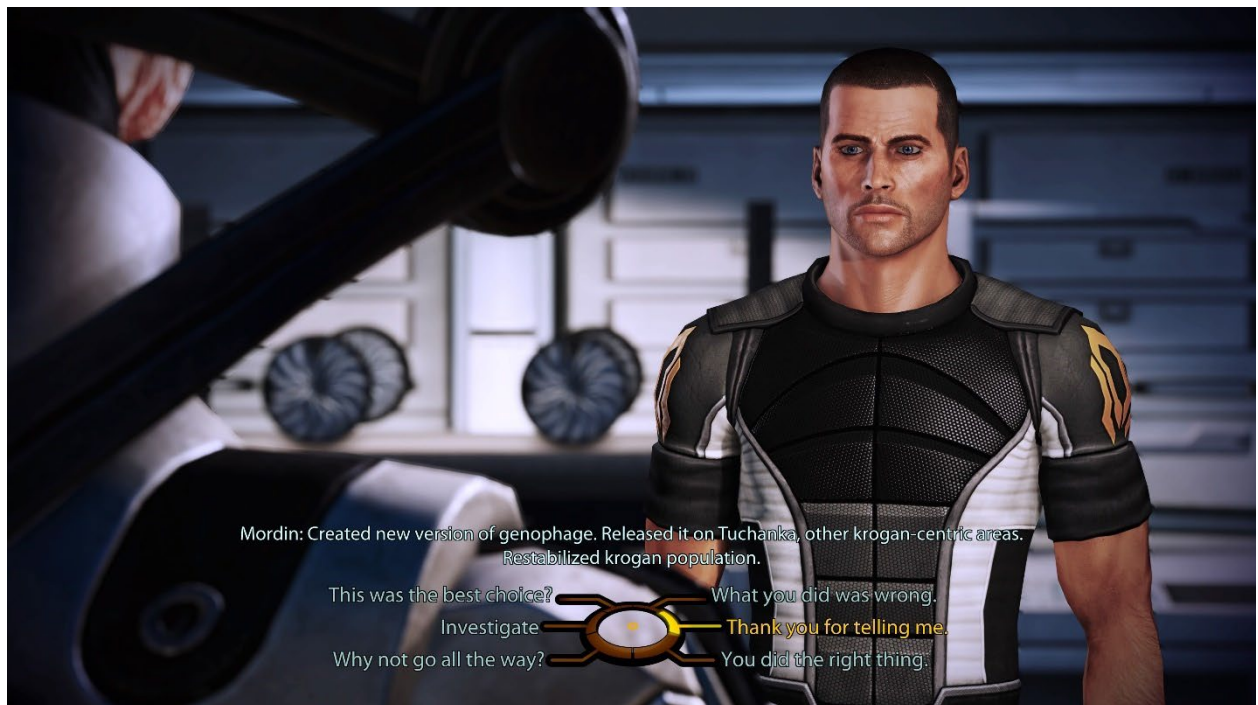


Figure 12 Discussing the genophage in Mass Effect 2

As the player works with Mordin, Youngblood notes how “Mordin’s continued discussion of the krogan takes on a decidedly racialized component” (2018). Youngblood links this with Mordin’s need to control bodies. Throughout the games, Mordin describes the krogan in loaded language insisting that he’s never met a krogan worthy of the name scientist, even though Mordin works alongside Grunt, a krogan genetically engineered by another krogan. Decolonial feminist Vergès theorises that Western patriarchy “turned women, Black people, Indigenous people, and people from Asia and Africa into inferior beings marked by the absence of reason, beauty, or a mind capable of technical and scientific discovery” (2021, p.13), with Mordin following this trend of establishing a hierarchy of worth to justify the idea of protecting the universe from the perceived violence of the krogan.

Dehumanization is a tool of oppression: eliciting different thought patterns which allow the justification of punitive conduct to those seen as deprived of humanness (Bandura,

Barbaranelli, Caprara, Pastorelli, 1996, p.366). Xenophobia is often present in Gothic science fiction “particularly when xenophobically depicting ‘others’ as threatening aliens...or depicting humanity as under threat from malign forces that justify forceful state intervention” (Wasson, Alder, 2011, p.16). It is up to the player whether to actively resist Mordin’s stereotyping and grant liberation to the krogan or to keep them subjugated.

Hodge identifies patterns of dehumanization and the influence this held within video games stating that “dehumanization, seeing humans activates empathy therefore stripping people of human qualities with group dynamics having the potential to amplify, (the out group being seen as less human) contributes to this factor of dehumanization” (2018, p.12).

Mordin claims that left “unchecked” the krogan population will multiply and this will lead to war and territorial disputes. The fear of becoming a ‘minority’, as Mordin expresses through this, is at the heart of racism; as Moore and Roberts identified when examining Islamophobia/misia: “hatred of Muslims spurred by the fear of terrorism, the association of Islam with sexual violence, and the fear of changing demographics, with Muslims imagined as a growing population who will come to ‘replace’ whites” (2021, p.16). White extinction theory comes from the idea that racial boundaries are distinct, with separate and unchangeable cultural and genetic traits and characteristics (Moore and Roberts 2021, p.72).

Racism and eugenics are tethered when ideology is concerned with gatekeeping the purity of certain races (and in *Mass Effect*, species). It is possible to examine the relationship the krogan have to eugenics with the relationship to living human societies. Furthermore, “the role of non-human characters within science fiction has traditionally been to provide an alternative ‘other’ through which human identity can be measured and compared” (Kempshall, 2023, p.179). Eugenics and reproductive control are areas of relevance today, as

Rutherford demonstrates through research on China's sterilisation programme, as one gynaecologist claims to have carried out eighty sterilisations each day (2022, p.155).

Rutherford located other reports claiming by 2019 the "Xinjiang region 'planned to subject at least 80% of women of childbearing age in the rural southern four minority prefectures to intrusive birth prevention surgeries (IUDs or sterilizations)" (2022, p.155). This project of sterilisation targets the bodies of the Uyghurs, a marginalised and persecuted ethnic group in China, who have been detained in re-educational camps and are face cultural genocide. Limiting the reproduction of the marginalised is one of the final steps to trying to wipe out an entire population, the step inevitably that comes before executions. This exhibits Foucault's assertion that the first task of a doctor is to be political and resist bad governments (1973, p.49) and that the intervention of doctors is an act of violence if not strictly determined by nosology (1973, p.25).

The player must decide which case they believe more: the salarian claims that the krogan are a threat, or the krogan plea for justice as in the final game, as the player chooses whether to cure the genophage or sabotage the cure. In a graphic released by *Mass Effect's* official Twitter account in 2021, BioWare revealed that 96% of *Mass Effect: Legendary Edition* players chose to cure the genophage, and 94% chose to keep the krogan leader Wrex alive on Virmire after he questions Shepard's decision to destroy a laboratory making clone krogans.

Research into the role of decision-based games suggests that games can be a space to explore and shape player values: "By stepping outside of themselves through role-playing gamers are able to reflect on their own attitudes toward the world and potentially reassess them" (Laycock, 2012, p.245). In interviews with players of the popular table-top role-playing game, *Dungeons and Dragons (D&D)*, participants felt that engaging in the game had

changed their lives for the better by encouraging reflection of the world around them as well as personal introspection of their values, ideological positions and conduct with other characters and non-playable characters (Laycock, 2012). Players overwhelmingly choosing to end the horrors of the genophage are suggestive of a community that supports reproductive justice for a marginalised community, particularly given that this comes with a cost for gamers: support curing the krogan and fan-favourite character Mordin will die, despite this, it is still the popular choice.

Section 8.5 Analysing the ways in which the player can manage the krogan population.

BioWare heavily based their worlds on the *D&D* alignment system, allowing players to “make concrete sense of the people we were and the people we wanted to become” (Cogburn, cited in Laycock, 2015). However, the system is complex with numerous formulas, and so the game carries out the calculations for players so that all they just had to choose an action or dialogue option to perform, and the game would take care of the character levelling and the relationship progression with non-playable characters (NPCs). Studies on the *D&D* system have relevance to the model of role-playing video games that BioWare became known as game-industry leaders for. Rehak identifies the key role avatars play in navigating agency: “On the most basic level, avatars enable players to think through questions of agency and existence, exploring in fantasy form aspects of their own materiality” (2003, p. 123).

In *Mass Effect* the alignment system has overwhelmingly seen justice for the krogan supported by the player-base. Yet, the player’s commitment to the krogan cause is called into question if Wrex dies in the first game. In the krogan cloning facility on Virmire, Wrex can challenge the player’s need to destroy the facility. Cloning is one solution to the genophage – yet the clones are under reaper control. If the player’s paragon or renegade

scores are high enough, they may calm Wrex down. However, if the player's morality scores are low then the only option is for Shepard to signal to Ashley Williams to shoot and kill Wrex. The reliance on scores and the casual way in which Shepard can order the death of a squad member can create an "ironic distance the game opens up between a player and a character disturbs easy identification" (Winter, 2022, p.21).

Wrex's death allows Wreav to lead the krogan. However, Wreav wants revenge for the genophage, pursuing reparations and territory. For Wreav, there can be no peace if the memory of the genophage lingers – but this asks the question of how committed to the krogan players are. Do the aims of the krogan change the commitment to justice for this marginalised and subjugated community?

Role-playing games mechanics for "character generation and conflict resolution serves as vehicles for imaginary adventures ending in rewards without limit" (Bryant, 2016, p.86-7), and this can mean that "fame, fortune, and victory over one's foes are the general ends adventurers seek in RPGs and game books" (Bryant, 2016, p.87). Player motivation then can be muddy, less so about commitment to justice and more about a desire to achieve a certain outcome according to the war asserts score.

The values at play in *Mass Effect 2* must also be scrutinised; for why is it that Shepard is the only person to decide what to do with Maelon's data? Why do the krogan not get a voice? Why is there no ethical oversight, press scrutiny or even involvement from the Council? The fate of an entire race is left to the whims of the player. However, the role of the player as responsible for negotiating diplomatic issues such as this, fits within recent trends of RPGs which have departed from "from wargaming in the individual player's focus, not on controlling an entire nation's military forces on a table-top battlefield, but on filling the role of a single imaginary Player Character (PC), whose attributes may be based on literary

precedents or completely fabricated by the player's imagination" (Bryant, 2016, p.78). RPGs then become examples of the player-avatar overseeing biopolitical management. As such, Mordin is viewed through the lens of his game *assets* – how helpful he can be to the main character competing in the campaign – and not, for instance, the subject of any court of law which could scrutinise his history.

To cope with the measures of the genophage, some krogan returned to the ruined homeworld of Tuchanka²³. The backdrop of nuclear fallout in a mutant story inevitably draws the mind to the many iterations of *Godzilla*, a story created after the nuclear attacks on Nagasaki and Hiroshima. Godzilla, or Gojira, represented the persistent nuclear related anxiety that dominated Japan's culture over the subsequent decades (Brothers, 2011). The krogan live with constant reminders of the horror of their land, but also the external threats they face. There is fear among some krogan, when the prospect of the genophage cure arises, about what the future will hold and whether the krogan will wish to dominate the galactic system again, which may result in further retribution. There is also the constant, ever-present fear of the genophage being made worse; as one krogan scientist tinkers on experiments on Tuchanka he jokes that it's not as though the salarians could make the genophage worse, and then quickly retracts that claiming not to give the salarians ideas. The krogan live with the constant threat of further loss of bodily control, and the one way to reclaim that control is to create a posthuman being.

²³ See glossary

Section 8.6 Designed mutations as a solution to bodily oppression.

There was little hope in finding a direct solution to the genophage, the belief in the prowess of the science of the salarians was far too great, but some tried to find ways to work around the sterility plague. In the first game, a cloning facility could counteract the consequences of the genophage, in the second game, one supremacist scientist works on genetically engineering the perfect krogan warrior. The two solutions offered wildly different prospects: one was concerned with an army of numbers, the other disposed of imperfect creations and only wanted one super soldier. The cloning facility ends up being destroyed on Virmire, but Commander Shepard can choose to work with an untested and unknown creation (later named Grunt) who is designed to be the perfect warrior.

In the same way Miranda Lawson was designed (chapter six), Grunt had every aspect of his physical being chosen for him. While Miranda was educated privately and strictly controlled until she ran away as a teenager, Grunt was kept in a tank and his creator, Warlord Okeer, attempted to indoctrinate him through audio directives that were played into his tank chamber. Unlike Miranda however, there is little effort from Okeer to design a perfect aesthetic body. Krogan are almost completely sterile so have little incentive to start families

due to the genophage; their sole focus is war.



Figure 13 Grunt in the tank (Mass Effect 2)

Designed mutants as set out in the introduction's taxonomy, represent the chase for perfection. Grunt is an almost fully grown adult at the time of his release from the tank and quickly enters a form of puberty, meaning Grunt must go to Tuchanka to perform a ritual to be accepted into a clan. Those who are without clans (or krantt) in krogan society are shunned. Grunt is initially met with suspicion by krogan who see him as the result of a "syringe," but he proves his worth in completing the ritual by defeating native fauna. Grunt has a militarised body, designed to be the best warrior of the krogan – a race with nothing left but the pride in their strength. Grunt is seen as a solution to the catastrophic oppressive effects of the sterilisation plague.

Mutant characters inevitably stem from that first creation in science fiction: the creature of Frankenstein.

“...Victor’s revulsion upon first seeing his creation, the Creature’s antipathy toward his creator, and the Creature’s own self-loathing anticipate some current responses to novel technologies and the prospect of artificial creation of new life forms” (Weiner, Stevens, Rogers, 2018, p.12).

Grunt and Miranda’s creations are a response to these anxieties, and a depiction and interpretation of futurism. Grunt’s existence is met with disdain that so much effort was put into one specimen, rather than the krogan working to cure the genophage, which left the krogan with questions about resource distribution. Both Grunt and Miranda come to revile their creators’ desires. Their autonomy cannot be assumed until after they have severed ties with their creators, but until that moment their existence is defined only by their symbolism: of a production to perfect their species.

In *Rossum Universal Robots*, written by Karel Čapek, robots are made on an industrial scale and their intelligence is so advanced that they are often mistaken for humans. Robots are created as fully-formed humans so that they may begin production and work from the moment they are activated to life. Čapek asserts “from a technical standpoint the whole of childhood is pure nonsense. Simply wasted time. An untenable waste of time” (Čapek, cited in O’Connell, 2017, p.105). This tactic was repeated by Grunt’s creator Okeer. While Henry Lawson created his daughters as babies, Okeer made his krogan (including the ones discarded for being imperfect) the size of adults, and hormonally all on the verge of puberty. Puberty is a particularly significant time for krogan, as they become driven by anger and hatred upon entering the state, the krogan then are subjected to a rite to determine whether they are worthy warriors to join their clans. If they survive, the krogan can then join a respected clan and have their status raised as true krogan warriors. The hormonal changes also attune them to combat and make them rage-war machines. Birthing a krogan,

even through a tank, at this pivotal time would mean that a genetically engineered being would be ready to become an apex warrior.

Chris Hables Gray examines the depiction of cyborgs as super soldiers in media, and points to the use of visors in real-world combat that display information. *Mass Effect* speculates on the idea of biotechnological influences improving the capabilities of soldiers. Body-tampering already happens to some extent in many fields, particularly sport which seeks to perfect the human body's performance. In *Mass Effect* cyborg tools – visors, mods for weapons – are commonplace, and yet body modifications to become perfect are scorned. As Grunt steps forward to undergo the rite, Uvenk is hostile toward Grunt, stating “you recite warlords but you are the offspring of a syringe” and that “being designed is the problem.” Grunt retorts “I am pure krogan. You should be in awe.” In *Mass Effect 2* and *3* “I am krogan!” is the common battle-cry of Grunt if the player selects him for missions. Hables Gray declared that the cyborg is “a better soldier, a better lover, a superhero, but that does not necessarily mean that their masculinity is enhanced (2000, p.278)”.

Krogan society depicts a toxic idea of masculinity whereby male krogan fight over status, territory, and clans. However, seeing the krogan simply as brutes is a reductive image that the turian and salarians conspired to create, to justify the unleashing of a sterilisation plague upon the krogan. The krogans are designed to be the better soldier but their masculinity is not enhanced when their own identities, communities and interpersonal relationships have been limited by their oppression. The krogan argue over who is the better warrior as their society is limited to such an extent that the life of a bounty hunter or clan warrior is the only viable future for a krogan male.

Hables Gray lists several types of cyborgs: restorative or those who experience regeneration of limbs, normalising cyborgs that restore creatures to normality, and those who are

reconfigured or otherwise posthuman. Under Hables Gray's taxonomy, cyborg – trans and posthuman become blurred. Yet, as this thesis seeks to establish, there are many specifics that do combine to determine what is monster, cyborg or mutant. These boundaries may blur, or one being may occupy multiple statuses, but the distinctions between the singular identities are visible. For instance, regeneration of limbs can take place in a variety of ways and will have different outcomes to a characters' life: if Shepard was resurrected but was more machine than human, that would determine their reliance on technology and how the characters around Shepard respond to their identity, than a resurrected being who is made of flesh and appears human. Grunt was not a krogan built with implants to aid how well he could shoot a gun. This may have been an easier method for his creator Okeer. But after the humiliation of the genophage by a once proud and mighty race of aliens, Okeer was determined to show the limitations of the sterilisation of the krogan could be surpassed in other ways. It was therefore important not just to create the best warrior but to create the best warrior made of flesh, bone, and the many redundant organ systems krogans have (reinforcing the notion of the mutant character as a fleshier cyborg).

Grunt asks fundamental questions about the wider operation of krogan society. The fragmentation of krogan society due to those with shared memories of the genophage, and those without, versus those within family and krantt structures and those without are a symptom of the wider oppression and subjugation of the krogan as "Processes of colonization always disrupt intergenerational remembering through dispossession, dislocation, violence, and family rupture" (Campbell, 2014, p.154). Because of the wider impact of the genophage coupled with the ruins of Tuchanka, the culture of the krogan is based around short term conflict, and not on technological growth. Krogan scientists can create life and can create new attempts at solutions to the genophage, but there is no

chance of a concerted effort to overhaul the oppression and subjugation of the krogan as there simply isn't the coordinated, funded or resourced scientific capabilities to be able to deliver this.

Grunt, and to an extent Miranda, represent the neoliberal obsession with power through the military industrial complex. They are designed to be weapons. While Miranda represents a human supremacist agenda, Grunt is the revenge of the krogan for the horror of the genophage. Despite the sanitised language used about both – the idea of test-tube babies in particular – Miranda subscribes to fashion magazines and admires architecture when walking around planets, and Grunt seeks out knowledge of history online and scorns the ruins of the homeworld Tuchanka, believing the krogan need and deserve more than the rubble created by relentless capitalist ambition. They break free of the blueprints of their designs to become whole beings, who love culture and art – a difference that Mordin highlights, between organic creatures and the collectors who are now completely under the control of the reapers. Grunt and Miranda may have been designed, but their autonomy is undeniable. They show the empowered mutant in the mutant-creator paradigm.

The krogan cloning facility is seen by Wrex as a potential solution to the genophage – a facility that represents the only place where krogan are being created in numbers not seen since the sterility plague, even though the krogan are controlled by Saren. This results in a standoff with the playable character Commander Shepard. As Patterson states, “who must either be trained to submit his military labor power to the multicultural alliance or be killed for corrupting the multiculturalist imperium as a terrorist-monster” (cited in Youngblood, 2015). The cloned krogan are not spoken to, only shot on sight. There is more effort to attempt to sway the main antagonist Saren, who chose to align with the reapers, than the krogan clones who were brought to life to fight in a war they had no say over.

This, to an extent, is mirrored in the introduction of Grunt who the player meets as he is held in a tank, not yet conscious or aware of the galaxy around him. It is the player who must decide his fate – whether to open the tank or hand over Grunt to Cerberus for research. But the player has no choice in whether to release Grunt *and* let him leave. Grunt must remain on the ship and serve Shepard's cause in a mission that has been called suicidal. He is an essential asset that Shepard commands to fight. On the mission to 'recruit' Grunt, Shepard and their squad encounter discarded krogan, who were dismissed by Okeer for not meeting his criteria of perfection, and given to a mercenary to fight as soldiers in her private army. Shepard can converse with one of these rejected and genetically imperfect krogan. The player can offer to help the krogan who has been abandoned by his creator, but he refuses, stating "I am not perfect, but I have purpose" (BioWare, 2010). The krogan in full armour, his face shielded, looks as imposing as the rest of the krogan clones that Shepard/the player has killed to this point; "Monstrousness heightens the dehumanisation of in-game enemies and justifies their execution" (Kocurek, 2015, p.86).

As Shelley writes at the start of *Frankenstein*, "Everything must have a beginning...Invention...does not consist in creating out of void, but out of chaos; the materials must be in the first place afforded" (cited in Weiner, 2018, p.171). In *Frankenstein* the materials were recycled body parts, taken from the deceased. John Sutherland claims that Frankenstein was created by a process comparable to fertilisation and in vitro (1996, p.24). In *Mass Effect's* futurism, genetic advances have allowed a less visceral process in creating mutants and yet Grunt and the many krogan mutants across the two games are created out of desperation from the destruction of an entire people. His existence relates entirely to bioethical memory, a time where the krogan long to return to, before the catastrophic effects of the genophage. "For monsters serve to mark the boundary between

human and non-human while simultaneously calling into question the stability and coherence of that very boundary” (Sharpe, 2010, p.30). Grunt, and the other designed character Miranda, fit traditional body horror themes: they are monsters (specifically, mutants) created. Miranda destroys her creator while Grunt’s creator dies in the process of trying to bring him to life. Yet, both characters throw off these tropes and demonstrate autonomy despite being created into clouded legacies of different species battling for democratic rights in a deeply unequal galactic system.

Chapter Nine: Genetic Harvesting and Changing Populations

Section 9.1 The rise of fictional mutants in a biopolitically uncertain era.

The main antagonists, the reapers, throughout the *Mass Effect* series harvest genetic material from populations, making it the most consistent biopunk plot throughout the games. Because of this, this chapter interrogates perceptions of threats to the body against the backdrop of contemporary biopolitics. It draws upon biopolitical theory and zombie scholarship, the latter a spinoff from monster scholarship but predominantly preoccupied with the conceptual idea of a population losing autonomy, making it a useful resource for examining the ways in which the populations of *Mass Effect* are continually under threat. In the final game of the trilogy, the fleet of reapers enters the Milky Way to destroy all civilisations and harvest genetic material. In *Mass Effect 3*, the player can ultimately be responsible for the destruction of the galaxy if a series of poor decisions are made throughout the trilogy. This premise is emblematic of the tensions facing game developers wanting to tell increasingly complex stories within linear experiences defined by apocalyptic themes. It tackles the question of “how do you make your end villain threatening enough that the player is motivated to defeat him/her, while allowing the player constant victories against the forces of that same villain throughout the plot?” (Heussner, Finley, Brandes Hepler, Lemay, 2015, p.84).

For BioWare, the answer was a final showdown where everyone in the galaxy could die depending on the player’s decisions throughout the games. The collective nature of the ending evokes themes of biopolitics, relating to vaccine hesitancy within communities and general barriers to healthcare trust that impact wider communities.

The threat of the reapers was made clear; at the start of the third game, the player watches as the reapers arrive on Earth – the first time we have experienced the human homeworld in the series – and bring instant destruction as cities are blown to pieces and Shepard's colleagues fall to the reapers' waves of attacks. This opening section ends with Shepard watching as a child they couldn't help is destroyed in a reaper's blast. The villain had to be an all-powerful force to encompass the threats to biosecurity: from the personal level (fear of harvesting or being turned into husks) and/or the fear of the collective population being used to make a reaper.

Because of the multitude of threats the reapers pose, this chapter examines bodily security through fears of harvesting relating to real-world biopolitical responses, as well as positioning husks within zombie theory, morphing new theory in this established field to fit with current biotechnological concerns. Bodily security (and insecurity) has risen in a time where the body is seen as permeable constructable and desired, something that can be controlled for social status in a fitness orientated culture (Elshtain, 2004, p.155) - with the increased sense of potential is the twin phobia of the loss of control.

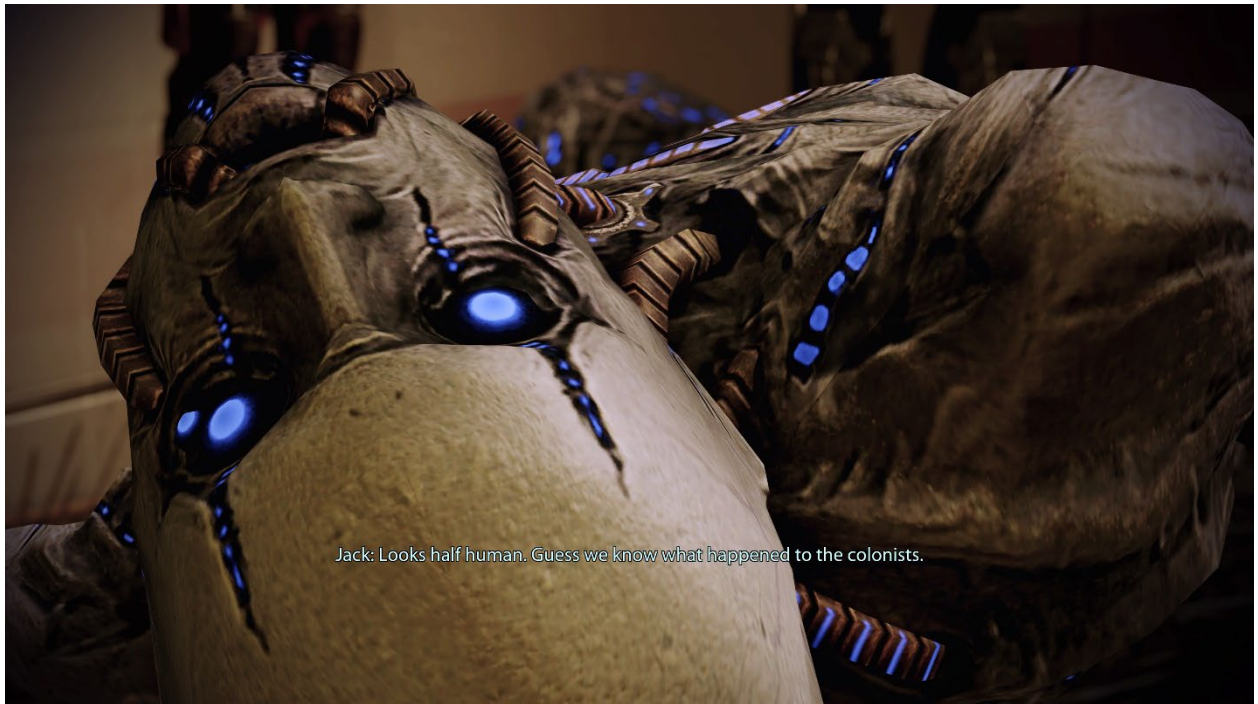


Figure 14 A Defeated husk in Mass Effect 2

In the first game the player learns what the reaper's purpose is when speaking to a surviving prothean virtual intelligence (VI) that had been left on Ilos for thousands of years. Vigil, the VI, informs Shepard/the player that the reapers destroyed its creators, the protheans. The reapers were not interested in surrender, but in the systematic destruction of all advanced organic life. The reapers did this in three ways: by turning people into sleeper agents to work for the reapers to undermine populations, by killing critical targets, and finally by harvesting as much genetic material as they need to be preserved into reapers to perfect their own organic-synthetic hybrid designs. The total power of the reapers fits into Carroll's theory that horrific monsters may also be threatening psychologically, morally, or socially (1990, p.43).

The struggle against the reapers is not just about survival, but about self-preservation of genetics as "the threat of Biological Others often takes the form of an invasion, colonization,

or genocide” (Morelock, 2021, p.2) and that “simplified, the Other will control us, kill us, or both” (Morelock 2021 p.2). In *Mass Effect 2* Shepard wakes from the dead to be informed that human colonists are vanishing. The player learns that a race of aliens - the collectors - are kidnapping humans to steal their genetic data. Further examinations reveal that the collectors were once protoheans, kidnapped by the reapers and then genetically tampered with to lose all autonomy – in the same way the reapers once did to the keepers on the Citadel, who now work silently to maintain the space station that serves as the capital of galactic politics. Upon finding out the truth about the collectors, squad mate Miranda declares that the collectors “are not doing to us” what happened to the protoheans. Laced throughout the games is the deep-rooted fear that people will lose control of their bodies. As bio-healthcare becomes more obscure, bio-security can feel less stable to general populations. During West Africa’s Ebola outbreak of 2014, there were conspiracy theories of healthcare workers deliberately spreading the virus (Morelock, 2021, p.19) and that healthcare workers were “cannibals or harvesters of body parts for the black market in human organs” (Snowden, 2020, p.498). For much of the series, Shepard is labelled a conspiracy theorist for warning about the reaper threat. Morelock argues that “the increasing volatility of science” in selected media coincides with “the declining public confidence in medicine and institutions in general” (2021, p.127) and Beck points to the idea that we are living in a risk society where “we become increasingly concerned with the dangers unleashed by our growing technological capacities and come to live under the permanent threat of catastrophe” (1992, p.5). This risk society has created a bio-instability, with perpetual tension and fears over our own biopolitical destinies.

There is a gene-fetishism to the conceptualisation of the reapers, particularly with the idea that they can ‘command + x’ (Wark, 2015) their way to creating reapers in the image of

humans by stealing genetic code. This chapter moves beyond the idea of gene fetishism (Alaimo, 2010, p.15) to instead examine bio-security and bio-anxiety – or else, the fear of being mutated without consent. The next section addresses the depictions of subjectivity to neoliberal technological governance.

Section 9.2 Genetic harvesting and the subjectivity of the body consumed into the neoliberal reaper machine.

The war creates refugees, a population on the margins of society and subjected to bio-insecurity through this marginalisation. As the player progresses through the game, the galactic capital, the Citadel, gradually fills with refugees fleeing the war. The player can argue to allow refugees access to the Citadel or turn them away. The player can listen to conversations between a refugee child and a turian worker, as she explains that she is waiting for her parents. As the game progresses, the worker offers to stay with the refugee, and it becomes clear her parents will not be joining her. On the Presidium Commons, Shepard can overhear two people talking in front of an advertisement for 'Sanctuary', a place for war refugees, and the two discuss whether to go to this haven. It is not until one of the final missions of the game that Shepard finally can visit Sanctuary – and discover that the haven is blocking all communications from the shelter.

Shepard is beaten to this shelter by Miranda (the focus of chapter six) who has been looking for her identical younger sister, kidnapped by their father who created them both through genetic engineering. While working through the mission level Shepard learns that Miranda's father, Henry, has been working for Cerberus, researching reaper indoctrination by turning refugees into husks – zombies, controlled via technology, practices of becoming-machines which Braidotti refers to as 'radical neo-materialism' (2013, p.95).

Examination of the mission at 'Sanctuary' forms a case study on the management of bodies, with particular attention to vulnerable communities – in this instance, refugees. Under a biopunk framework, Schmeink states: "Human lives, in the sense of biocapital, become commodities that need to be managed, their economic value determined through their biology, in the sense of a posthuman being-animal or being-machine" (2016, p.226).

The concept of biocapital is a keystone to the idea of the management of bodies, and to bio-exploitation generally. The management of bodies often pertains to the experimentation of bodies, and the transformation of those characters into mutants – in this case study, the transformation of refugees into zombie-husks which the player observes and then must annihilate. When bodies are so thoroughly subjugated, they often fall within the paradigm of what Foucault terms "the medical gaze" (1973, p.9). The medical gaze sees patients as biopolitical subjects: "the patient is the *subject* of his disease, that is, he is a *case*; in the clinic, where one is dealing with *examples*, the patient is the accident of his disease, the transitory object that it happens to have seized upon" (Foucault, 1973).

This gaze stems from changes in the latter half of the seventeenth century; natural history prioritised classifying natural beings by their characteristics (Foucault, 1973), and this saw a reorganisation of the medical gaze. This saw a shift in that the doctor was now "supported and justified by an institution, that of a doctor endowed with the power of decision and intervention" (Foucault, 1973) and "it was a gaze that was not content to observe what was self-evident; it must make it possible to outline chances and risks; it was calculating" (Foucault, 1973).

Balsamo links this medical gaze to developing technologies, with doctors using visual tools such as laparoscopes and sonograms which first objectifies the body and secondly subjects that body to the normative gaze (1999, p.281). This normative medical gaze, where doctors

only perceive the condition to the point that this dehumanises the patient and creates a power disparity open to abuse (Misselbrook, 2013). Foucault suggests the emergence of the 'population' as a site of governance theorised on the way that monitoring and maintaining life which related to the overall management of populations, yet at the same time there was a proliferation of complaints that within biomedical research clinical trials were only endorsed if the subjects were white heterosexual men, making this archetype the centre of humanity and excluding marginalised groups from being reflected in potentially essential data (Reardon, 2011, p.220). On the other side of the pendulum, genetics and biomedicine are used to deliberately brand specific marginalised groups as 'others' to target them for brutal policies, leading to debates about whether biological difference should be noted at all (Reardon, 2011, p.221).

Saini cites the example of the Holocaust of the extremes that bio-medical power disparities can lead to as medical knowledge was needed to setup concentration camps and gas chambers, and 'expertise' was needed to select who should die. And then there were all the gruesome human experiments known to have been carried out on people who were eventually killed, plundering them for biological data" (Saini, 2019, p.63). Saini documents that "... half the nation's doctors were Nazi party members. For a decade, German universities taught racial theory" (Saini, 2019, p.63). Ultimately, eugenics and the involvement of medical professionals and scientists can be described as "...an intellectual history, an account of the dangerous power of ideology-infected science" (Wellerstein, 2011, p.29).

Under this extreme power paradigm, people are dehumanised as a means for gathering key biological data often, subjugating humans and allowing untold suffering under the (false) justification of trying to ensure a better future for humanity. The management of bodies

sees people as subjects ordered according to their potential (whether that be by the labour or work that they can engage in, their genetic or biological material or their potential).

Perhaps, it was the zombie apocalypse show *The Walking Dead* (2010-2022) that said it best and most bluntly, when the main villain Negan screamed at his murderous gang not to needlessly slaughter the heroes of the show because “people are a resource” (2017). Negan sees the value of enemies who can be used for their labour again stripping people down to their bodily capabilities. Biocapital relies on dehumanisation and to see people only as the body we inhabit – which led to the refugees of *Mass Effect* being turned into husks via experimentation.

Addressing the medical gaze can be uncomfortable when it requires examining the power of medical professionals. One stain on the integrity of the medical industry is how bodies are still used as spectacle such as historical freak show performers who are displayed in medical museums, reflecting how the medical profession “perceives living people with unusual anatomies” (Davies, 2015, p.40). Such displays say “... that such people do not have an equal say in their fate, that they can be readily exhibited to the public as symbols of nature’s freakery or medicine’s miracles, whether or not they wish to be” (Dreger, 2004, p. 138). Yet, medical museums and the legacy of freakshows have been sidelined to the margins of culture and historical examinations, with a celebration of medical professionals more prominent in many (white) Western societies. Saini reminds us that it is possible for even the most prominent of scientists to commit abuse, to murder and to be racist and have other prejudices. Saini challenges the idea science is inherently noble, rational and unbiased by asking of those Nazi scientists who were associated with the Kaiser Wilhem Institute, “...if science is always so innocent, how is it that members of such a large and prestigious

scientific organisation could have sold themselves to a murderous political regime as recently as the middle of the twentieth century?” (Saini, 2019, p.66)

“The answer is simple: science is always shaped by the time and place in which it is carried out. It ultimately sits at the mercy of the personal and political beliefs of those carrying it out. In the case of some Nazi scientists, particular experiments may have been perfectly accurate and rigorous. They may even have produced good science, if goodness is measured in data and not human life. Other times, researchers didn’t care about the truth or other people’s lives, choosing instead to give the illusion of intellectual weight to a morally bankrupt ideology because it suited them” (Saini, 2019, p.66).

This justifies the need for greater analytical tools of power paradigms relating to the subjugation of the body, including works of analysis that allow for the examination of science fiction philosophies and representation. As Haraway points out, the “power of biomedicine and biotechnology is constantly reproduced, or it would cease” (1999, p.203).

These historical examples of bodily management help us to understand the gameplay of the series as well as the social context and histories informing the branching narrative.

‘Sanctuary’ becomes an iconic depiction of the environment of a biopunk story, as the player navigates through a hidden underground laboratory. There, Shepard sees the results of the experiments that have been conducted on war refugees as the player must fight through hordes of husks. They are described as “zombified soldiers” (Winter, 2022, p.32), subservient to the reapers with only one aim of killing all advanced organic life. The laboratory becomes a home of biopunk through its intrinsic relationship to experimentation. The laboratory, and specifically the pods where the refugees have been held and

transformed, evoke the horror of the eugenics movement and those instances of body experimentation in history.

At this juncture there must be consideration paid to the legacy of Unit 731. During World War II, Japan commissioned the Unit 731 to conduct biological warfare through experimentation. For those who entered the facility as test subjects, their life expectancy was merely one month (Gold, 1997, p.31). A former officer states that “we knew the prisoners would be used in experiments and not come back” (Gold, 1997, p.27). The reason that Unit 731 was allowed to exist was due to the fact that “...medicine was treated by the Japanese as being equal in importance to guns and shells in contributing to military performance” (Gold, 1997, p.20). Japan identified a key vulnerability during wartime: the threat of the disease. Perhaps this was no more keenly felt than in Europe with the outbreak of flu in 1918 that claimed the lives of roughly 50,000,000 people.

Soldiers were at greater risk from disease due to close quarters and a lack of sanitised conditions than they were of bullet wounds. Japan forged ahead with ethically dubious research that was designed to make medicine a helpful aid to its soldiers during wartime, but the establishment of Unit 731 saw a shift to the idea that medicine could also be a weapon against its enemies. The Unit focused pushed the human body to the limits – and broke those limits to learn more about death. This involved dissections on live subjects without anaesthesia, fatal experiments on babies by deliberately triggering frostbite, and taking so many blood samples from prisoners that “some of the victims became progressively debilitated and wasted” (Gold, 1997, p.31). The wasting of bodies is an important part of the subjugation of populations under biopolitics. The body is wasted through becoming beleaguered by the pressures of the neoliberal work state; “under neoliberalism the body is targeted as inherently lacking, and the pharmaceutical and

medical industries promise not to remove but mask social symptoms as individualized adjustments to states of universally beleaguered embodiment” (Mitchell and Snyder, 2015, p.40).

Under neoliberalism, the body enters a beleaguered state as it is worn down by constant work, creating pressures on our bodies that are propped up by over-the-counter medications to deal with symptoms such as headaches, back pain and digestive issues rather than addressing the underlying causes of those issues (long term bio-exploitation). Wastage then happens in the long term, under a relentless system where people are managed according to their ability to work, such as how the reapers indoctrinate people to become long-term sleeper agents, recruiting people into their war machine. In the case of Cerberus, we see shorter and more acute bio-exploitation as people are rapidly experimented on and turned into husks, almost as soon as they arrive at Sanctuary. As Thweatt-Bates states: “the notion that humanity might transcend or technologically transform its own nature collectively, rather than sporadically and individually, in these intellectual and historical precursors to transhumanism brings with it the specter of eugenics” (2012, p.44).

Thweatt-Bates explores the fears of the pursuit of betterment and its deeply uncomfortable ties to eugenics, considering the atrocities of the Nazis and of Unit 731. The politics and body experimentation conducted by the Nazis were the product of the fervor of eugenics that spread across Western Europe and settled in Germany due to a shift in Western politics and a unique opportunity presented by the extreme dissatisfaction of the post-WWI years. Eugenics culminated in the Holocaust, but is not an outlier when eugenics encouraged and directly led to multiple states in America performing sterilisations of vulnerable populations: “between 1909 and the early 1950s, the state of California sterilized over twenty thousand patients in government institutions for the mentally ill and mentally deficient” (Wellerstein,

2011, p.29). California was not alone in its sterilisation program – but it was the largest by a significant margin, with the total sterilised nearly the same as the total from the next four leading states combined (Wellerstein, 2011, p.29). As Kafer points out: “in many states, sterilization came to be seen as a necessary means of protecting the health of the race and the nation from further degeneration; as Oliver Wendell Holmes asserts in the infamous 1927 *Buck v. Bell* decision upholding Virginia’s compulsory sterilization policies, ‘Three generations of imbeciles are enough’” (2013, p.30). The law compelling the forcible sterilisation of women (the majority of whom were disabled, women of colour, and/or indigenous) was not repealed in the state of Virginia until 1974 (Kafer, 2013, p.30) - some 29 years after the liberation of the Nazi concentration camps in Germany.

The deep damage of eugenics is a shadow across transhumanism, specifically those strands which are focused on upgrading humanity to enter a new state beyond what we currently experience. The fascination with the monstrous, and limiting and controlling incidents of monstrosity in humanity, is linked to a reactionary need for control in an age of biopolitical insecurity. Eugenics has lingered for well over a century; “this 120-year-old term [eugenics] describes the systematic attempt by the state to improve the constitution of a population through enforced sterilization and selective breeding. In short, eugenics means state control of reproduction” (Young qtd in Thweatt-Bates, 2012, p.44). It must be emphasised that Young also counters that transhumanism is concentrated on voluntary choice and wide access to “Superbiology” (Young qtd in Thweatt-Bates, 2012, p44).

However, this true transhumanist utopia, as philosophers such as Young articulate it, must reckon with the entrenched power of the centralised state and its blurry relationship to the richest corporations. For instance, recent biotechnological developments are starting to influence how corporations treat their employees. Fraser points to the rising popularity of

egg-freezing, which is a procedure that can cost tens of thousands of dollars but IT firms and corporations, such as Apple and Facebook, offered to cover the cost for their employees to will delay having children as a way to dedicate their most high-energy years to productivity (2017, p.34). Fraser also highlights that expensive high technology breast feeding pumps have become immensely popular in the United States, a country “with a high rate of female labor-force participation, no mandated paid maternity or parental leave, and a love affair with technology” (2017, p.34). Breastfeeding is no longer thought of in natural terms and “hands-free pumps are considered the most desirable, as they permit one to express milk from both breasts at once while driving to work on the freeway” (Fraser, 2017, p.34). In *Mass Effect*, crumbling healthcare and competing interests for biopolitical control became the central theme as state systems failed to provide for vulnerable people and a private enterprise with vast resources was able to kidnap and experiment on populations that simply disappeared.

When The Illusive Man is confronted over the transformation of people into husks, he will simply answer that “they are being improved.” For The Illusive Man, what matters most is the capability of those joined into Cerberus ranks; to swell the corporation’s numbers and to improve those who fight for Cerberus. It is a marked shift in policy when in *Mass Effect 2*, the main Cerberus staffers are hired for their expertise. By *Mass Effect 3*, The Illusive Man wants more people fed into his war machine, to fight for his cause as he falls further under reaper indoctrination. The descent into indoctrination is rapid once The Illusive Man is implanted with reaper technology. The Illusive Man must be killed swiftly; a truly biopunk narrative where the zombie cannot be slowly foreseen, but submission is immediate, and so must be the response (Schmeink, 2016, p.219).

The Illusive Man's pursuit of a fully militarised body is close to the efforts of Henry Lawson and Warlord Okeer in creating their 'perfect' designs through Miranda and Grunt, respectively. However, The Illusive Man goes further by ensuring that the soldiers are turned into husks and therefore have no autonomy, and no chance to rebel. The vision of improvement that the reapers (and the indoctrinated Illusive Man) share is one of bodies upgraded with technology to thoroughly bring populations under control and working with one goal in mind: they become tech-zombies, a new form of mutant. As Oriana struggles with her father (and can subsequently kill herself and Henry Lawson), Shepard asks the scientist "What exactly do you think you've created here?" to which Henry Lawson responds "Hope. Few people have the stomach to do what it takes to survive. What we learned here will save countless lives. I will be seen as the saviour of the human race".

Section 9.3 The zombie as a mutant.

The player's first encounter with 'husks' takes place in the opening mission, on Eden Prime, where Shepard must investigate a beacon that the synthetic geth are trying to steal. As Shepard and the team make their way to the dig site, they encounter people from the local community impaled on spikes with implanted technology protruding from their bodies.

When the spikes lower, the people-turned-husks attack.

Husks form a specific type of mutant: classified under the taxonomy as tech mutants. Husks are, from the perspective of the posthumanist reaper position, upgraded humans who have had technology implanted so that they may better carry out the labour the reapers wish them to commit to. Unlike other mutants, the zombie implanted with technology has no chance in the fight for autonomy as the technology overwrites their consciousness (comparable to the process in *Cyberpunk 2077* (2020) where the main character V loses autonomy over their body after the implantation of a biochip). Boon states: "the bio zombie

is one that has been deprived of its essential self or its volition by some external substance, either temporarily...or permanently...The course of zombification can vary from chemicals to viruses, but some substance has caused the loss of self" (2011, p.58). The zombie stands out as a body-and-consciousness infiltrated rather than just the body manipulated by external forces. The technological and augmented zombie, however, loses their consciousness for a specific purpose – whether experimental or as a way to seek to upgrade the being. There has been a significant growth in zombie theory in recent years, and this section of the thesis will overlap with this key area.

The outbreak narrative reveals anxieties over the fear of authoritarian biopower and having one's body compromised (Schweitzer, 2018, p.2). Zombie stories originate from Haiti, the only country where slaves were able to overthrow white slave owners and subsequently took control over the island nation. Zombies in these stories differ greatly from the zombies of twenty-first century media. Zombies of Haiti were often the dead – killed through white supremacy – who rose from the dead due to magic and could perform magic against the white terrorists and colonists of the island.

"But, in Haiti, where, by 1789, half a million slaves toiled on French plantations in conditions approximating industrial labour, the idea of the dead moving among the living was transmuted into the notion of the living dead, people lacking all aspects of human personality, save the bodily capacity of mindless toil. In the Haitian context, the zombie became a figure of extreme reification – a living labourer capable of drudgery on behalf of others, but entirely lacking in memory, self-consciousness, identity and agency, the very qualities we associate with personhood" (McNally, 2011, p.211).

The zombie's roots have been consumed into the neoliberal capitalist and white supremacist machine. This has been the core focus of zombie theory since its coinage. Zombie theory is a specific branch of monster theory, and it is an area that has proliferated in recent years due to the boom of zombie fiction. As Schmeink identified, "by the mid-1990s fewer new zombie movies were being released than at any point since the late 1940s... But by the 2000s, the genre would prove to aptly address the American social and political landscape so drastically changed by 9/11" (2016, p.204).

While 9/11 changed the landscape of zombie media across Hollywood, there have also been popular zombie stories outside of the US, with the United Kingdom's *Shaun of the Dead* (2004) and recent Korean dramas such as *All of Us Are Dead* (2022). Zombie stories became popular in South Africa due to the perceived threats posed by the importation of foreign labour (Comaroff and Comaroff, 2013). There is a plurality to zombie theory; much of zombie theory has concentrated on the idea of the fear of the collapse of borders and therefore foreign migrants, particularly around the theft of jobs, but zombie theory can also be a wider critique of neoliberalism and the relentless chase for productivity. But this chapter argues that zombie theory can also be used to highlight the fear of the breakdown of healthcare, or of domestic infrastructure collapse. As McNally stated, zombie stories "are thus *fables of modernity*" (2011, p.184).

Schmeink postulates that the recent trend of zombie films – such as *28 Days Later* (2002) and the *Resident Evil* (2002, 2004, 2007, 2010, 2012, 2016) franchise – depict viral outbreaks "as the key metaphor for terror in liquid modern times and use it to fully break down the humanist subject position and all the safety it provides..." (2016, p.218). The reaper husks encapsulate the breakdown of the security which stable and funded healthcare provides, with those who are left without support or marginalised in society the first easy targets for

reaper indoctrination. Priscilla Wald documents the history of 'contagion' and how its initial usage actually pertained to the "rapid circulation of ideas" (cited in Vint, 2013, p.139). In *Mass Effect* the threat of the virus was via the corruption of the mind, and the implantation of corrupted technology which was used to spread the idea of the reapers as the rightful supremacist rulers. The husks are augmented mutants within the taxonomy, transformed into posthuman agents of the reapers to uphold their authoritative and bio-exploitative plans. The implementation of technology with bodies creating a 'cybergothic' quality reflecting the fascination of the human body (Kirkland, 2022, p.59) suspended between obsession and revulsion. Dryden further adds that the depiction of augmentation of this type "express[es] the excitement of scientific possibility intertwined with images of 'mutilation and mutation'" (2003, p.34-5).

Unlike most other zombie narratives, the husks, as told by the reapers, represent a new point for humanity and not the end of civilisation. In most apocalyptic stories, death is the end point of life, but for the reapers this is the start of a transformative process where the genetic material of the dead (and of the living) can be used and preserved through the creation of new reapers. Much like within capitalism, there is an endless recycling of bodies in the case for productivity, the games industry alone being an example of this as crunch culture takes over deadlines and many workers leave only to be replaced by interns, even in studios such as Naughty Dog (Schreier, 2020).

Wrestling over bodies and genetic material is a staple of body horror; the basis of the fear was rooted in historical acts of body theft – often by those with trained medical knowledge, claiming to protect communities. Prior to the 1831 Anatomy Act in the United Kingdom (but a foundational legal statute of The United States, too) which saw the sale of bodies prohibited (except for institutions such as workhouses and hospitals), public executions by

hanging often ended with surgeons who would physically fight loved ones of the executed - and not always deceased - for the body which they would dissect and examine (Lock, 2002, p.66). The claim to genetic material is a fraught topic, and one that *Mass Effect* reflects throughout the series, but more than our organs, the series depicts how the reapers *command* people's bodies *and* minds as one unrelenting army against friend, kin and krantt. Tech-zombies have already been identified as a specific zombie type by Kevin Boon, in a taxonomy of zombies (which includes the: zombie drone, zombie ghoul, bio zombie, zombie channel, psychological zombie, cultural zombie, zombie ghost and zombie ruse) which has become a foundation of zombie theory (2011, p.8). Boon specifies the tech zombie is "people who have lost their volition through the use of some technological device" (2011, p.8). The taxonomy does not dispute or erode the positioning of tech zombies within their zombie subcategories – however, there is claim that zombies are a type of *mutant*, as they are a twisting of the natural expectations of the (normative) body - and that husks are within the zombie and mutant families, as they are intertwined together.

Section 9.4 The zombie as an internal, not external, threat.

The zombie derived from Caribbean voodoo tales of the resurrection of the dead, and was reimagined in the 19th century in *Frankenstein*, a being made from the flesh of the dead, signifying "its liminal position between living and dead, its association with a horror produced by humans" (Wasson and Alder, 2011, p.5). Events in the early twenty-first century (particularly 9/11) made the zombie a product of mass consumption (Lauro, 2017 p.x). From *The Walking Dead* comics (Kirkman and Moore, 2003-19), TV show and games, to a plethora of zombie films such as *28 Days Later* (2002) and *World War Z* (2013), to multiple games such as the *Resident Evil* series (with fifteen titles from 2002), *Days Gone* (2019) and *The Last of Us* (2013, 2020) series, the zombie has dogged our journey into an age of cultural

anxiety and media monopolies, marking this as a time of restlessness, disorder and fear (Birch-Bayley, 2012, p.1148).

Zombie stories and scholarship reflected the fears of collapsing borders, and the response to exert an impulsive and nationalistic response of control. Across various countries in Africa and especially sub-Saharan Africa, there has been a rise in zombie stories, or any stories with 'blood suckers' such as vampires to reflect concerns over migrant workers.

"In Nigeria, newspapers carry reports of passengers on motorcycle-taxis, who, once helmets placed on their heads, transform into zombies and begin to spew money from their mouths, as if they had become human ATMs. In Cameroon, rumours abound of zombie-labourers toiling on invisible plantations in an obscure night-time economy. Similar stories of possessed workforces emanate from South Africa and Tanzania, including tales of part-time zombies, captured during their sleeping hours, only to wake up exhausted after their nocturnal exploitation" (McNally, 2011, p.175).

The zombie is a capsule for the fears of dissolving borders, and job insecurity (Comaroff and Comaroff, 2013) due to the belief that jobs were being stolen from the domestic workforce. Zombies represented the tension between what was portrayed in the media as an invading force putting nationals at risk, and the depiction of zombies as an all-consuming labour force that was single-minded in its task to take over every space (2013, p.141). The zombie acts an agent of capitalism: husks are set upon killing and destroying people who have not been indoctrinated into reaper control. The zombie is, through this lens, a recruitment tool to the rival labour force: indoctrinating/infecting all in their peers, as national borders crumble, and a new system is in place that 'consumes' native workers. This tension between identities and borders sees communities split into us vs them narratives.

The fear of the other is ironic in the case of South Africa - the pilferers and plunders consuming body parts are those who work for the state. Police morgues were locations where eyes, heart valves, skin and bone have been harvested, and at one mental health asylum, several missing patients went missing only to be found in a nearby swamp. Dr Giubileo, a doctor at the institution, was accused of selling blood, tissue and organs of patients and he died in a police cell the day before he was due to give testimony relating to the severe allegations (Scheper-Hughes, 2002, p.40).

Yet, fear of the other persists within zombie stories as communities look outward for the source of insecurity. In relation to plague stories, Wald states that films such as *Contagion* (2011) “dramatizes the dilemma that inspires the most basic of human narratives: the necessity and danger of human contact” (Wald, quoted in Vint, 2013, p.139). The fear of human contact, and of communities at large, has been reflected in zombie narratives, Vint uses the example of *The Walking Dead's* (2010) early seasons where protagonists Rick and Shane as the former tries to hold onto his moral values from the previous society, while the latter is willing to sacrifice anyone under the impression it will save the group he has chosen as his community. The surviving humans “able to adjust themselves to the new order, to draw a narrow circle of community and demonize all those outside it. This perspective reflects the logic of neoliberalism that fragments human subjects across geographic, ethnic, and class boundaries, and its refusal to allow one to recognize that survival is often at a cost for and of others” (Vint, 2013, p.141). *Mass Effect* offers a more hopeful view as EDI recites how many prisoners of the reapers simply refused to co-operate or refuse to turn against fellow prisoners even if it would extend their own lives. This thesis, however, argues that zombie scholarship in fact misses the key area of the collapse of domestic healthcare which zombie stories have reflected anxieties around. The threat is not from the external other,

but the internal collapse of the systems that control the management of populations according to the dominant order. This is linked to the concept of biogeographies which I define as the relationship between the body and place, and therefore the link between the management of bodies and social structures with strict borders, policing and yet collapsing from within.

The Walking Dead and spinoff *Fear The Walking Dead* (2015) have early scenes in hospitals to emphasise the collapse of the healthcare system due to a zombie pandemic – for where can people go to recover from bites if the hospitals are all gone? *Mass Effect* spends time examining the role of hospitals and healthcare when the system is facing collapse due to the reaper invasion. In *Mass Effect 3*, Huerta Memorial Hospital becomes a hub for the player, and one of the few fixed places in the capital that they can return to. The player must regularly visit injured or dying crew mates in the hospital and, as the war progresses, the hospital steadily fills with patients, some of whom lie dying in their stretchers. Shepard can intervene when doctors argue over whether to treat the patients they have now or ration the medicine. There is a sense, even in the early stages of the game, that healthcare systems are at risk of crumbling. By the end of the third game, the Citadel has been moved, taken under reaper control, the hospital now a place that Shepard/the player cannot access. As Shepard battles through London in the final mission, they can listen over the comms as a woman struggles (under the guidance of a medic standing next to Shepard) to help the injured person she is with. As they die, and she is left alone, the player hears the sound of one final shot as the woman ends her life.

In the context of the rising zombie stories in both the United States and United Kingdom, there have been debates about the state of healthcare. This is due to consistent lack of funds – particularly as the United Kingdom follows the United States model of privatising

healthcare. In May 2022, the nursing director for West Midlands Ambulance Service claimed that “patients were dying everyday” from ambulance delays to emergency scenes, and then further delays in patients being admitted into hospitals (Docherty, qtd in Mowat, 2022). In January 2021, Mencap received reports that people with learning disabilities had been informed by healthcare professionals that they were subject to ‘do not resuscitate’ orders if they contracted COVID-19 (Tapper, 2021). In December 2020 it had been found that a ‘blanket policy’ of do not resuscitate orders on care home patients had led to preventable deaths (Booth, 2020). The independent report conducted on behalf of the Care Quality Commission stated that individual doctors advised care homes to have blanket policies for DNACPR (‘Do Not Attempt Cardiopulmonary Resuscitation’) orders on COVID-19 patients, evidence of doctors refusing to visit care homes, evidence of wrongly applied DNACPR orders, and further concerns that there was still the potential for wrongly implemented orders (CQC, 2020). The pandemic arrived against a backdrop of ten years of austerity targeting the National Health Service and increasing privatisation.

The UK population is experiencing a crisis in confidence over the public health – perhaps no surprise when the then-Prime Minister (throughout the start of the pandemic) Boris Johnson told BBC North East News to “never mind about cancer outcomes; look at wage growth” (Johnson, 2021). It is worth noting in this context that the North East of England had the highest incidence of cancer rates in 2017 (Office for National Statistic, 2021). The progress in biotechnology seems at odds with the bio-insecurity that is now being experienced due to lack of access to even basic healthcare, as Shilling states: “We now have the means to exert an unprecedented degree of control over bodies, yet are living in an age that has the potential to throw into radical doubt our knowledge of what bodies are and how we should control them” (2012, p.5).

As capitalism rose in the eighteenth-century, this resulted in the entire subjugation of bodies of the poor as capitalism “involved an unrelenting commodification of the labouring body and its powers” (McNally, 2011, p.23). Husks represent the loss of bodily autonomy, and with that, they inevitably come to surmise the collapse of societal structures – structures which cannot treat them, cannot prevent indoctrination and cannot hope to begin to tackle the loss of control over the previously managed populations. The presence of the husks demands players to ask: What happens when healthcare cannot be accessed? What happens when people begin to become indoctrinated?

Healthcare systems are coming under increasing pressure, from rising costs, neoliberalism leading to marketisation and pandemics. Healthcare has been left with little to no support – summed up best by the Conservative Government in 2020 which promised new Nightingale hospitals to deal with the pandemic, building them, and then failing to adequately staff them and quietly abandoning their plans for use. For the public, under widening inequality, healthcare options become strained, and it becomes ever difficult to book an appointment with a general practitioner, while individuals (often white, born to the wealthy West and wealthier still among this population) become technologised. Virtual technology is touted as a cure for those who are disabled and cannot leave their homes despite the cost of headsets and the fact that virtual reality (VR) relies upon an entirely digitised economy. There are reports of wealthy New Yorkers paying for surgery on their bladders to make travel easier and to stop the embarrassment of needing to urinate on trips (Baio, 2022). During the pandemic, many wealthy corporations promised to invent new medical technology to help with supporting those who were unwell with COVID-19; Dyson was even awarded a contract to do so, but this was quietly cancelled under the Conservative government. The United Kingdom has been a case-in-point of the widening health care inequalities. As services have

consistently had less funding since the Conservative Government under David Cameron took power in 2010, there has been a rise in complaints, waiting lists, and missed targets – targets themselves introduced by the Conservatives – which has fuelled the Conservative argument that the only tactic to save the public health service is to sell it to private companies. In the 2016/17 financial year, Virgin Care won a third of the total contracts available and since the Health and Social Care Act became law, an estimated £25 billion contracts have been awarded (Silva, 2018). The sense of market competition in the NHS has increased bio-anxiety as people worry about lack of access to healthcare while simultaneously believing the state will intervene in their personal and private lives through medical interventions. One example of this includes, at a time when waiting lists are at record lengths due to the COVID-19 pandemic backlog and underfunding, trans exclusive radical feminists are fuelling fears that children are being medicalised, falsely identified as transgender and being given hormone treatments that they claim is irreversible (when they are not, and any treatment to postpone puberty for whatever medical reason is reversible). It is the repeated tactic of neoliberal capitalists: starve populations of funding, and then have marginalised people fight among themselves for the scraps. Throughout the third game, Doctor Chawkwis gives missions to Shepard to try to direct supplies as the galaxy medical community has increasing pressures placed upon it. The body no longer has the limitations imposed upon it that it once had due to advances in biomedicine and biotechnologies, but with this progress comes insecurity and what the body is and the ways in which it should be controlled (Shilling, 2012, p.5), inevitably giving rise to those who wish to restrict people's self-expression. As Brodwin claims, the idea of the "organic body" is not now seen as the epitome of humanity, and such a change in the way we position the 'natural' body creates a loss of past securities, philosophies and systems that were believed

to endure for eternity while for others there is excitement and freedom at what the future may hold. The response is split: “Some groups of people attempt to shore up the natural body as a blueprint for the social order, others celebrate disruption along with the verities it once supported, and most move uncertainly and ambivalently between these two poles” (Brodwin, 2000, p.8).

Crumbling healthcare access has been typified by the United States Supreme Court overturning *Roe V Wade* in 2022, a ruling that previously secured an individual's right to an abortion across every single state. Yet, the aftermath blamed trans-inclusivity around reproductive healthcare for the conservative push to overturn abortion protections (Butler, 2022). As Butler highlighted, this was false.

“So when some feminists now make claims like, “the patriarchal oppression of women is heavily rooted in our reproductive systems”, it can sound like those reproductive systems are the cause of the oppression. That is muddled thinking, wrong, and does not advance feminist aims. It is the social organisation of reproduction that leads to the conclusion that abortion should or should not happen. The state is claiming that it has interests in the womb, and it is figuring the womb as its province, rather than the province of those who actually have them. It is precisely the anti-feminist forces that figure the womb in that way that we must oppose. Otherwise, we attribute the existence of oppressive systems to biology, when we should be asking how those oppressive systems contort biological claims to their own ends” (Butler, qtd in Ferber, 2022).

Butler pinpoints the issue of discrimination and not the muddy emphasis on reproductive systems as the basis for inequality. This is where feminism has traditionally fallen short, as shown in chapters one and two; its unclear definitions, its attempt to gatekeep or erect

categories across gender means that it often falls short in identifying the political attempts to manipulate and coerce multiple marginalised populations – including those comprised of women. For example, the individual's right to abortion has been targeted by feminists in the United States – often with the slogan 'my body, my choice' - but what is missing largely from this tactic is analysis of the role of abortion over population (or body) management. Forcing people to carry babies to term, and thereby emotionally coercing a long-term family unit, removes (perceived, assigned, and categorized) women from the workplace. The *Roe V Wade* decision happened – without coincidence – after years of concern about the declining birth rate among America's white population. It is a move designed to control populations (like the krogan), as much as individuals, and the current strand of feminism's focus on individual liberty fails to acknowledge wider marginalisation, the ways in which it is enacted and why these moves are happening.

Feminisms embracing futurism, such as xenofeminism (XF), have begun to move away from the dominant strands of bio-essentialist based ideas of gender, moving to a "technomaterialist, anti-naturalist, gender abolitionist form of feminism" (Hester, 2018, p.32). While xenofeminism's advocacy for looking beyond the narrow categorisations of gender are necessary when examining the management of populations, it risks neglecting the understanding of the deep bio-anxiety that is driving reactionary groups to cling to concepts of biopolitical order. Xenofeminism and cyborg feminism, to an extent, do not deal enough with the fallout for mutant women (or morphed people), or the specific possibilities of abuses of biotechnology in the *future*. The forward thinking also risks the assumption that certain bodily rights - i.e. the right of a pregnant person to control their own pregnancy – have been permanently won when access to bodily control is unstable under Western government systems. Xenofeminism and cyborg feminism are utopian ideals, but this thesis

advocates for the rights of mutants, morphed people, or, non-normative people, under technodemocracies and dictatorships. Shildrick (2002) writes on the destabilising relationship between biotechnology and bio-social-security, stating that society embracing or rejecting normative reproduction through other forms of reproduction, paternity testing, the chase for the perfect (mutant) child (such as Miranda, see chapter six), cloning and all manner of genetic tampering have seen a reaction through anxiety. This shifting ground results in the “aspiration to fix the uncertainties and to override the unruliness and excessiveness of women and their reproductive powers remains undiminished” (Shildrick, 2002, p.44). The desire to control the rise of biotechnologies stems from those fearful of those consequences; those who cling to order or those who feel disempowered and results in the management of populations from restricting access to those biotechnologies (often through wealth control) to the way we define populations, such as applying the label of ‘man’ or ‘woman’ liberally, without knowledge, and often without the consent from those very individuals who must wear the labels and pronouns that are assigned to them.

With emerging technologies inevitably comes new laws. Biolegal specialists have helped develop a new constitution for this new era; “it is the making and engineering of life that more and more defines biolegality in the present time. ...Here, law is confronted not only with the way biology is being used or manipulated but rather with the way it is fundamentally remade” (de Leeuw and van Wichelen, 2019 p.3). The explorations for potential biotechnological innovation have not led to a biofuturist utopia; husks exist in a universe without effective healthcare, and become victims of biopolitics as the reapers seek to transcend a biologised life through technological amalgamation. In the year that *Mass Effect 2* was released (2010), the UK passed the Health and Social Care Reform Bill accelerating the process of privatisation of the national health service. In the last decade,

the NHS may have been celebrated at the London 2012 Olympics but services have been cut, workers have been on strike repeatedly, and the COVID-19 pandemic threatened to overwhelm the healthcare service, with the UK having one of the highest death per capita figures in the world showing how the nation had failed to get to grips with the pandemic. Marx's critiques of capitalism referred to the market and economy as monsters, consuming workers. Comparisons extend to the monstrous, demonic, zombies, spectres, ghouls and even werewolves (Smith, 2010, p.12). Husks, as a tech-zombie, symbolise the fear that after death or loss of consciousness, our bodies will be used without consent. Not only are people's personhood lost in the transition to becoming a reaper; their bodies are used as soldiers for the reaper cause either killing or helping to indoctrinate the rest of the population.

Mass Effect shows the complete destruction of healthcare. Missions such as Sanctuary highlight how those claiming to care for people (and body management) have a legacy linked to exploitation. People may desperately need help, only to be preyed upon by those claiming knowledge – it has not always been a comfortable relationship between patient, family, and healthcare practitioner. The suspicion and sometimes hostile relationship between patient and health institution dates back centuries. There has been resistance from civilians to the idea of the medicalisation of the body, as a form of early body liberation politics. For instance, in the 1700s it was a key part of the working-class effort toward solidarity to fight to protect the bodies of condemned men as under English law, after their execution their bodies could be donated to surgeons for dissection (McNally, 2011, p.1). It did not become common or standard practice in Western medicine - including in the United Kingdom and United States - to seek consent from patients, or their kin, until the twentieth century. Medicine at an institutional level has been rooted in the idea of the body first, and

the patient second, with the anatomy of the patient meaning far more than the integrity or respect they deserve.

Under Foucault's 'medical gaze', hospitals become arenas of body management or, more specifically, the careful management of death. Patients are seen not as people with dreams, loved ones, or non-material value, but simply as bodies that require a form of intervention.

A hospital's primary function is to manage death, to take people into a transition that is carefully staged and curated. Death takes place in resuscitation rooms or hospice settings.

Loved ones are told similar speeches that every effort was made to save the patient, and they are told in quiet rooms away from the rest of the hospital so as not to disturb the management of other patients, as next-of-kin is selected through databanks of knowledge.

The bodies are then transported to morgues, to be handed over to funeral directors to carefully carry out a performance of grief (at great expense to relatives).

This management of death was exposed most thoroughly during the COVID-19 pandemic in the United Kingdom. The government's response was not to save the most lives possible during a pandemic, but to protect the economy by ensuring that the National Health Service (NHS) did not become overwhelmed and therefore non-functional (Payne and Hughes, 2020), avoiding the images of mass deaths in hard-hit countries such as India and Brazil.

Lives were not protected, but the respectability and order of death was maintained. As Foucault insisted, healthcare is political and the work of doctors is concentrated on a war with bad governments (1973, p.49). Disease is political; driven by social and economic inequalities, the hospital thus becomes a space of healing, taking on work that used to be left to families and local communities. The doctor is an agitator, healing and highlighting these inequalities that allow disease to spread while hospitals themselves inevitably become spaces of disease spread through their close quarters. Death is inevitable as doctors give

their pronouncements and move onto the next patient - until death overwhelms the system (due to poor government protections) and the machine breaks down.

The reaper's visceral destruction of healthcare reflects the growing anxiety around medicine, patient rights and access to care that has been building in the West. These concerns are not separate from the rise of the far-right, so-called 'economic anxiety' where wealth inequality grows and migrants are blamed for a lack of social security and secure wages, and a migrant crisis brought by the West's wars and contributions toward climate destruction. The neoliberal competition for resources drives the feeling of uncertainty and security in our care, at a time when society at large is still trying to decipher what exactly the biotechnological innovations mean for our future. In one moment in *Mass Effect 3*, the player can overhear an argument between a hospital worker and a visitor, with the latter arguing that President Huerta – who the hospital is named after – is, in fact, still alive even though a virtual intelligence makes all of his decisions since he had a stroke. Shepard can intervene and agree or take the side of the hospital worker who claims the President is dead and Shepard can assert that having a "VI drive your body isn't life". The moment encapsulates the philosophical preoccupation of defining life when the possibility to extend a lifespan is ever growing, the nature of choice in that liminal position, and what exactly biotechnology can offer us toward bodily security.

Section 9.5 Expanding genetic possibilities: the future of biotechnology, autonomy and democracy.

Mass Effect Andromeda contemplates the possibilities of biotechnological intervention that could transcend species in the chase for perfection, sometimes at odds with contemporary concerns regarding biopolitical anxiety. *Mass Effect Andromeda's* main antagonist are the kett – a species invading and colonising much of the Andromeda galaxy, described in the

games as genetically altered with their species having genetic data of many other species after their own biology began to stagnate. The kett thus have become hybrid mutants, through taking on the genetic resources of others to create a new species from a mix of old. The kett and hybrid mutants more generally expand upon intrinsic ideas of reproduction, and biotechnological possibilities. While biotechnological interventions have largely been obscure, it is Canada (the home of BioWare) which arguably took the most steps to allow biotechnological projects to become democratically considered. From 1999, the Canadian government launched a report and surveys into attitudes toward xenotransplantation (or transplants between species, most likely from animals to human) to evaluate whether this would be an avenue that the government should proceed with to address the national organ shortage. The report released its findings in December 2001. *Animal-to-Human Transplantation: Should Canada Proceed? A Public Consultation on Xenotransplantation* (Canadian Public Health Association, 2001) was designed to strengthen democracy in public health policy (Tallacchini, 2013, p.183). Interestingly, the report found that as participants become more involved and more informed in xenotransplantation, they became more likely to oppose this area of medicine.

“The conclusion that ‘Canada should not proceed’ was envisioned as a special form of knowledge, merging science with social wisdom. Reflecting on their new awareness, representatives of the Canadian public wished to know more both about science and about cooperative behaviour, healthy lifestyles, and fair allocation of resources. The precautionary principle was invoked as part of a democratic call for a moratorium: informed Canadians were not opposed to XT in principle, but thought that those who wished to proceed with XT (the scientific community and industry) had to demonstrate the level of risk and how

benefits would outweigh risks. Finally, these citizens asked for continued public discussion on XT” (Tallacchini, 2013, p.183).

Of note is that: “at the end of the forums, 46% of the panellists said Canada should proceed but all of them qualified their response with conditions such as the need for stringent and transparent legislation and regulations” (Canadian Public Health Association, 2001, p.5). The emphasis on transparency reflects the bio-anxiety around biotechnological breakthroughs when the Canadian Government had been democratic in ensuring this public consultation in the first place and basing their proceedings on (sampled) public opinion, and yet still reassurances were sought.

Morelock states that ambivalence to science began with the dropping of the atomic bomb (Morelock, 2012, p.40). No longer were scientists seen as working toward the common good, but as esoteric figures choosing to implement systems that oversee the management of life – without democracy and sometimes with devastating results. The abstract systems of science and biomedicine are felt to be out of the control of ordinary citizens’ lives while simultaneously the threats to – and *from* – these systems feel more overwhelming and threatening than ever before. In contrast, Foucault (1973) argues that the decline of the clinic began when “writing and secrecy were introduced, that is, the concentration of this knowledge in a privileged group”, or, as doctors became subjects themselves of the institution, and patients subjects of both. But for Morelock, this backdrop of tensions comes to a head in the twenty-first century due to the frightening pace of technological developments, outstripping the everyday understandings of the general populace. As Morelock states, “whether nuclear annihilation, cataclysmic climate change, emerging infectious diseases, terrorism, or some other apocalyptic scourge, we are dependent upon science, technology and globalization, which simultaneously threatens to end the world as

we know it, if not our species” (2021, p.40). Within the Canadian government's report on xenotransplantation, the threat of pandemics from the mutual meeting of different biological tissues became a concern cited by participants (Canadian Public Health Association, 2001, p.6).

The attempts by the Canadian government to democratise biotechnology offered a new path for helping participation from the public in crafting public health policy. But even with information, the wisdom of repugnance (Kass, 1997) is enough to create an ‘ick’ barrier to public health innovations even as education improves. Additionally, there are still reports latent in spectacle and morbid curiosity whenever organ matter derived from animals is utilised in procedures, with one donor recipient (from three different species) was treated as a curiosity in December 2022 (Tompkins, 2002).

The kett, as villains of the galaxy of *Mass Effect Andromeda* are creeping foes, for their encroachment upon worlds not theirs (not that humans characters are held to the same standard, in part because of the next point) and for using the genetic matter of other species; for violating norms of natural and respectable life they are held as the only worthy villains to the reapers, who stole genetic data from trillions. Hybrid mutants – or mixtures of species – are creatures “that evokes revulsion” (Felton, 2013, p.104), are understood “as a transgression of boundaries” (Lee Six and Thompson, 2013, p.238), and are an “ontological liminality” (Cohen, 1996, p.6). The hybrid mutant is perhaps the one who most fundamentally violates the laws of humanism and of the organisation of allo-cisheterosexual patriarchal society; beyond the species of humanity and coupled with multiple more species. They are a hint to the biotechnological possibilities which still prompt squirms from viewers.

Conclusion

The thesis set out to answer: What is a mutant? What may lead us, or non-mutant humans, to become mutants? What does an emphasis on biology imply for humanity's relationship to mutants? How can this fictional mutant framework be adapted and applied within cultural theory? And, finally, how can this analysis add to understandings and theories relating to the positioning of non-normative bodies within society and culture?

These questions have been crafted through the lens of a science fictional landscape that continues to speculate on (bio)technological developments and their relations to populations and the body as humanity continues to be morphed by changing normative expectations of biotechnological interventions. This thesis defined mutant characters as those whose reproduction, creation or physical being as being interrupted and transformed by some form of intervention, including (but not limited to) genetic tampering to even morphing due to infection, even allowing the transition from humanity to a mutant being. From the establishment of the definition of a mutant, a taxonomy was designed, and this was tested and analysed in subsequent chapters. The future of relations to biotechnology and the body was probed through the anxiety and tension presented in a neoliberalist far future state; as biotechnology advances, democracies crumble as the management of populations is at the behest of corporations and bureaucracies.

Biological and technological entanglements are – at this point – nothing new to media, but the rate of expansion of this (mutant) media has been argued to be unprecedented and a trigger point for a need to rethinking of bodies (and environments) (Smelik and Lykke, 2008, p.x). This project urges us to consider biopolitical anxieties and how they operate within society through their depictions in science fiction. Michaud questions whether science fiction is merely a mythology, or whether it is an “ideology in the making” and a

“justification of research and innovation” (2017, p.83). Science fiction’s place in making sense of innovations is secured in this era of biotechnology, particularly when Hughes predicts fundamental questions being posed about access over biotechnology, including universal access to technology amplifying intelligence in the future (2004, p.41). The twenty-first century has already been defined by bioinstability, as Schmeink identifies viral pandemics, human-made ecological disasters, and the attack on healthcare by corporations as a foundation of the modern era, meaning that death cannot be avoided by living ‘right’ as life becomes ever more precarious (2016, p.212-13), allowing this thesis as a space to reflect upon these anxieties depicted in media.

Further, this thesis has been shown to act as a framework for the analysis of non-normative populations, employing literary theory and cultural theory into a framework which ultimately advocates for the liberation of all bodies from the subjugation of neoliberalism. The mutant taxonomy acts as an ecology of non-normative characters. Mutant liberation is the desire for the emancipation and freedom of bodies, from the whims of population management, to full autonomy and access to meet our needs and fulfil our rights. This thesis demonstrates solidarity for non-normative populations, recognising their individual struggles as well as the wider role population management plays in directing their bodies and the broader ordering of society.

This thesis called upon Foucault’s concerns regarding biohistory and bio-medical and biopolitical advancements. Examining the role of mutants as a cultural figure then becomes necessary for understanding, shaping and confronting contemporary biopolitical exclusions and anxiety to further support true body liberation. The analysis of fictional mutants is also a philosophical reading of media in a biotechnological age, informed by scholars such as Nakamura, who claimed that “...in order to think rigorously, humanely, and imaginatively

about virtuality and the ‘posthuman,’ it is absolutely necessary to ground critique in the lived realities of the human, in all their particularity and specificity” (2022, p.7), adding that science encourages a multitude of “different readings and revisions of the body” (2002, p.7) which has encouraged the growth of much postcolonial and feminist critiques.

Much of the thesis engages with transgressions of normativity, and depictions of body horror through the figure of the mutant. Horror “channels social fears” and therefore it “allows for a representation of how we should respond to and manage them” (Reyes, 2016, p.12), and this thesis demonstrated how *Mass Effect* is an encompassing series based upon body management across a galaxy based on a biofuturist setting, allowing for a comprehensive analysis and discursive interrogation of mutant representation. The first part of this project therefore spent considerable time identifying the player relations to embodying mutant characters as well as player agency over mutant characters, before turning to analysis of specific mutant characters and, finally, analysing broader populations transformed (without consent) by biotechnological interventions, changing their populations to a marginalised group and now seen as non-normative. The result is an overarching view of the different categories of mutant tropes, and analysis of personal and structural tensions stemming from their mutations.

This thesis was built upon monster theory. The monster tradition is rooted in the social location of the monster, but the mutant framework situates contemporary anxieties and influences over the monster. The project identifies the struggle that the mutant has to cleave their own autonomy in late-stage neoliberal capitalism, a system designed for lowest cost infrastructure that is above collapse or public revolution, but offers little more. As services fail to provide for the public, our own sense of insecurity – including over identities and bodies – increases, causing further societal tension and, ironically, for those non-

normative populations that are at the brunt of funding cuts as accountability for these decisions remain opaque. The analysis identifies this trend, and these heightened anxieties that can be observed through narratives and popular cultural forms. From this, this thesis can encourage and show solidarity with non-normative populations and subjugated peoples.

This project also dared to consider what a mutant future may entail. Recent history is fraught with tensions to control bodies – in the early to mid-twentieth century this was often at the behest of state governments (with supremacist agendas), whereas the twenty-first century era especially has seen a shift to biotechnological companies leading the way, as states strip back funding for healthcare services. The future of a morphed humanity – and those marginalised for non-normativity - will be inextricably linked to the future of post-capitalism; and only if there is an advocacy for a liberated time after capitalism will there be liberated mutants. This is where the mutant framework can be a guide for analysis; urging considerations of contemporaneous body management that are in perpetuity, and how bodily and biological justice can be argued and advocated for through media.

This is an expansion on existing theory, inviting new conversations and discourses on pressing bodily issues such as the right to housing, the right to food, and the right to healthcare, at a time when services are dilapidated, and arguments are muddled by disinformation and misinformation, especially on the argument of women's rights, and what makes a biological female. It adds to understandings and theories relating to the positioning of non-normative bodies within society and culture as this thesis urges us not to shy away from these false flags - instead, redoubling our efforts into pointing out that access to free public bathrooms everywhere is under threat for everyone, that healthcare for everyone is under threat for everyone (including trans people), and that greater technological

capabilities have so far only sated the imaginations of billionaires. There have been few successes in recent years to shore up access to basic services and support for those who are most marginalised, and those who are non-normative and on the periphery of society. This thesis is a framework of consideration within literature, media and broader cultural studies to enact a policy of deciphering and negotiating the space (and justice) given to non-normative beings, and specifically, to mutants, whose creation was the inevitable result of the consumerism and ambition of capitalism, but whose long-term existence was never considered within the paradigm. Monsters, ghouls, ghosts, and aliens can all have contemporary readings, and have experienced revivals within the neo-Gothic, but mutants are thoroughly rooted in the modern era, the era that has seen vast developments in biotechnology and promises further still. Mutants have been present within our texts for decades, even centuries; Frankenstein's creature was not the only, but is just the start of the modern mutant story, the ultimate subject of resource-driven capitalism and ambition. The mutant is in our pages, on our screens, in our audiobooks, and born from laboratory experiments, nuclear fallout, cloning, contagions and viruses. Mutants have gone from society's nightmare to a fundamental trope of science fiction and the thesis has sought to shift the term away from pejorative meanings to assert their dignity and advocate for their autonomy. Mutants then, are deserving of the attention that this thesis has striven to grant them; for the mutant struggle for liberation against its creator is one of the most enduring relationships for the austerity era.

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