

Monsters manufactured: the human animal hybrid in science fiction and Donna Haraway's "A Cyborg Manifesto"

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Evelyn Tsitas

B.Ed, Grad Dip (Media, Communications and Information Technology Law), Master of Arts

School of Creative Media

Portfolio of Design and Social Context

RMIT University

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work that has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

Evelyn Tsitas

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By Evelyn Tsitas

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Abstract

In Mary Shelley's 1818 novel *Frankenstein*, the monster created by science was denied a place at the table of humanity, despite being endowed with intellect and language. Since philosophers of the Platonic Academy debated about what constitutes a human, man has defined himself against the animal. From Frankenstein's creature, to the Beast Creatures in H.G. Wells 1896 novel *The Island Of Doctor Moreau*, and on to the genetically created hybrid Dren in Vincenzo Natali's 2009 movie *Splice*, the species barrier is brutally enforced even as it is penetrated by science.

In the 27 years since the publication of Donna Haraway's seminal essay "A Cyborg Manifesto", the human-animal hybrid in science fiction, unlike the man-machine cyborg character, has not been similarly accepted as having the status of personhood. In this exegesis, I identify the human-animal hybrid in science fiction as a cyborg, according to Haraway's manifesto. I argue that Haraway's cyborg theories are valid ways of understanding the hybrid in science fiction.

The hybrid character exists in a state of confusion and apprehension, never knowing which side of the species boundary they sit or whether they have a place at humanity's table or are to gnaw the scraps thrown under it. Using Haraway's theories in "A Cyborg Manifesto" for guidance, this exegesis will examine the character of the hybrid as a literary device. In doing so, the objective of this research is to answer the following questions:

1. According to Haraway, how do we define the cyborg in science fiction?
2. How might we apply Haraway's key criteria to the hybrid characters – the creature in *Frankenstein*, the Beast Men in *The Island of Doctor Moreau*, and Dren in *Splice*?
3. How useful or not are these criteria in developing hybrid characters and forming writing techniques for my own creative project, and for science fiction writers in general?

Together with the author's own creative work *Almost Human* this exegesis will explore how the hybrid in science fiction is a trope in which the character's internal conflict mirrors our anxiety about notions of humanity and the relation between the animal and the human. The research will also explore whether there is a unique life-cycle for hybrids that emerges in fiction.

While the miscegenation of the human and the animal has long held sway over the human imagination, resulting in both terror and curiosity, the species barrier, despite long practiced bestiality, is a firm biological one. That has not stopped both scientists and writers from imagining that the merging of the biological identities would result in improvements for both species. However, the desire to preserve separate categories for animals and humans that is now being extinguished in biotechnology is one that can be traced back to the Middle Ages. When early Christian thinkers established what they believed to be clear categories that separated animals from humans, they not only were making a theological statement of humanity's dominance over the natural world but were actually defining what it meant to be human (Salisbury 1994).

In this exegesis, I began with an interest in understanding how the principles of cyborg existence embedded in Haraway's theories could be applied to hybrid characters in science fiction. In examining the hybrids in three key works of science fiction, I have identified this particular form of hybrid as a way of taking ourselves into the animal world and out of it at the same time. This hybrid reflects the struggles that the human has to alternatively, and at times simultaneously, efface and recognise its animal side.

Introduction

Morphos: Description of creative project, Almost Human

As a writer of science fiction, I am drawn to telling a story about our place in a world that is transforming the human body through transgenic organ donation, hybrid embryos and genetic manipulation, thereby creating what Margaret Atwood describes as “another kind of ‘other world’ – our own planet in a future’...because the future is an unknown” (Atwood 2011 p.5). The questions raised in the novel are explored in this exegesis, and are ones that are exciting and generative. If we radically enhance the human and merge human with animal to delay aging, prolong human life or enhance human capabilities (Savulescu 2003), will we still be human? What is it that makes us human? Is it appearance? Is it language? Or is it the capacity for rational thought that separates the human from the animal? We might also consider the consequences for humans’ co-habitation with and power over other species on the planet when the species barrier is blurred.

My research suggests the hybrid serves as a vehicle, be it literary, cultural, or metaphorical. It serves as both contrast to the animal and mimetic in relation to the human. As a fictional character, the hybrid endows the idea of exploring our hidden animal selves with consciousness and ontological sense. Here the hybrid becomes a way of taking ourselves into the animal world and out of it at the same time. The metaphorical hybrid is embedded in culture and the creative arts. Mythology and fiction have long entertained the fantasy of the animal and human fused into one being.

Atwood writes of “the very thin line between gods and monsters” (Atwood, 2011, p. 44) where people are transformed by gods into natural beings such as animals and birds. These hybrids were the result, said Atwood, of “crossing boundaries, offending divinities, of breaking taboos” (Atwood 2011, p.44). Semi-human mythological creatures such as the Centaur, the Siren, Cynocephali and the Chimera have been the subject of art and literature for centuries. We could understand creatures like the Chimera as coded representations of the hybrid self of humanity – reflections of the uninhibited, strong and instinctual animal within us and the socially responsible and repressed aspect of the human upon the natural world. This dislocation between the human and the animal is featured in struggles between Centaurs (representing the human tendency to anarchy) and Lapinths (representing emergent civilized culture) in the metopes of the Parthenon; in the animals and monsters of the human imagination that are depicted in the illustrated bestiaries of the Middle Ages; in the

illustrated Fairy Tales of the Brothers Grimm, who reshaped oral and literary tales for a popular audience for the past two centuries (Grimm 1987. P. xxxvi); and in the moral lessons of Greek classical myths that are told as European folktales in their own right, such as the version of the Oedipus myth, that of the wandering 'Swellfoot' who liberates a kingdom from a monster, the Sphinx (Graf 1993, p. 7).

This introduction is titled '*Morphos*', a Greek word meaning shape, form, figure or appearance. This chapter will outline my creative project and research methodology using Donna Haraway's influential essay "A Cyborg Manifesto". The deliberate use of specific Greek words for the chapter titles also takes into account the pivotal word '*xenos*', or foreigner. In my creative project, *Almost Human*, Xenos is the name of the government agency that tracks down hybrids or foreigners within Australia. *Xenos* is also a word that reflects my own sense of identity in Greece and within Australia growing up as a second generation migrant. Moreover, it is also a word that resonates with my own journey from journalism into the academy and into ownership of the word 'writer' through this doctorate.

Feminist theorist Donna Haraway understands the importance of science fiction in telling stories about ideas (Haraway 2011, p.5). My novel is set in a not too distant future dystopian Australia, where hybrids live within the human population. These 'human-animals', a majority of which look like humans, are the result of wide spread use of biotechnological procedures.

Australia has set up a national intelligence agency called Xenos to enforce species classification and protect Australia's geographical border. My protagonist, Ariadne Stephanopolous, leads the Melbourne Xenos task force that tracks down the "impures" - those who have an animal DNA balance above the usual 0.1 % for a human. Given the precarious status of the AH hybrid, Ariadne must be vigilant in keeping a biological secret - her own. For Ariadne herself is an outsider, existing in a borderland between human and animal.

Ariadne is forced to reconsider where her species allegiance lies when she discovers that her own eggs, which she had surgically removed and frozen when she was young and fertile, have been stolen from safe storage in a bio-bank. Moreau, the violent hybrid activist group, inform Ariadne that she has an eleven-year-old daughter she never gave birth to. That child is being held hostage. Ariadne must hand over to them the antidote for a powerful virus the government is planning to release to render hybrids infertile. If Ariadne does not comply before the next full moon, her child Kally will die.

Background to Research

To complete my creative project, I investigated the character of the hybrid in science fiction. I explored Haraway's influential essay "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" (Haraway 1991) and her examination of the cyborg. In "A Cyborg Manifesto", Haraway outlines key criteria for the emergence of the cyborg, and its existence. I have taken what I consider to be the most useful of these for my own creative project, and explored them in depth in the following chapters in my exegesis.

Haraway uses the cyborg as an ironic metaphor to suggest a new way of constructing ideas of feminism outside traditional ideas of the women's movement and politics. Haraway says that "irony is about contradictions that do not resolve into larger wholes" (Haraway 1991, p.149) and challenges the nature-culture binarisms, asking us to reflect on what is really 'natural' (Haraway 1991, p.161). I find Haraway's work most useful because of her prediction that "by the late twentieth century...nothing really convincingly settles the separation of the human and animal." (Haraway 1991, pp.150-152) and also because she sees cyborgs as being able to tell many different stories, as being "simultaneously relentlessly real and inescapably fabulated. Like all good science fiction, they redid what counts as—what is—real." (Haraway 2011, p.6).

Although Haraway cites the cyborg as a post World War II creation in "A Cyborg Manifesto" she has also argued for its use in a wider context since the manifesto was published, proposing that the cyborg image can be extended into other historical configurations, allegorically or analogically (Haraway 2004, p.323).

Haraway's manifesto asks us to consider where the cyborg exists within the power structures of society. As a construct of technological, and often military intervention, it has a subservient existence within a culture where the dominance of the human - male and white - prevails. Haraway's metaphor of the cyborg is used in the manifesto to explain the power that liminality gives to women outside the traditional structures of Marxist feminism. This is what Haraway refers to as the "ubiquity and invisibility of cyborgs" (Haraway 1991, p.153).

Haraway concludes "A Cyborg Manifesto" by proposing that "cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves" (Haraway, 1991, p.181). The cyborg does not exist as nature *or* culture, but is rather a hybrid of both and more. Using Haraway's manifesto, this exegesis argues that the human-animal hybrid is a cyborg, as it is

both human and animal, and exists because of science and technology and thus exists outside the accepted binaries.

In this exegesis, “cyborg”, “hybrid” and “monster” are refer to figures that cross borders between the human and the animal.

For the purposes and parameters of my research, the term ‘hybrid’ will be used when referring to the scientifically created human/animal character in science fiction, rather than ‘Chimera’. In Greek mythology Chimeras were fire-breathing creatures composed of the parts of multiple animals. As Chris Danta (2012) observes in his analysis of H.G. Wells’ 1896 novel *The Island of Doctor Moreau*, scientific Chimeras – or human-made hybrid animals – are a gleam of classical memory on the part of their creators. Joseph Campbell says that male-female gods are not uncommon in the world of myth. They emerge with a certain mystery, taking the mind to a symbolic realm where duality is left behind (Campbell 1973, pp.152-53). Jay Clayton sees Wells’ novel as being relevant today, as it raises important questions about the ethics of creating hybrids. (Clayton 2007) Danta argues that *Doctor Moreau* anticipates certain key developments in late-twentieth-century molecular biology, and is the first science fiction novel to use technology and science to create hybrids (Danta 2012). *Frankenstein* is the first science fiction novel in which the hybrid appears. We can see a direct lineage from *Frankenstein*, through to *Moreau* and to *Splice*, which fully explores the ethical issues regarding producing inter-species hybrids, and presents an evolution of the tropes developed in *Frankenstein*.

In science, there are several categories of Chimeras, including human-animal embryonic Chimeras that transgress species boundaries. These are distinguished from hybrids in that they are genetic combinations resulting from the fertilization of an egg from one species by the sperm of another species (Sherringham 2008). Broadly speaking, modern biotechnology constructs ‘Chimera’ to include organisms ‘comprised of at least two genetically distinct populations of cells originating from independent embryos’ but not necessarily existing as a result of sexual reproduction. As the Chimera is genetically encoded with more than one species, this would discount Dr Frankenstein’s creature and Moreau’s Beast Folk from being Chimeras because they are created from vivisection. As a monster of biotechnology, only Dren, the DNA spliced creature from *Splice*, a case study used in my textual analysis, is a true Chimera.

In nature, hybrids are created as a result of sexual reproduction across species and contain recombined genes throughout their bodies (Bennett 2006).

Hybrids exist in nature and through animal husbandry, such as liger and tiglon (lion/tiger), the dingo/wolf, and the more common mule (horse/donkey). In scientific practice, there is no one authoritative definition of species (Robert & Baylis 2003, p. 3) and no universal definition of a Chimera. There are many groups in different countries involved in producing definitions for these new human-animal mixtures in science and the terms are debated (Hinterberger 2011). US President George W. Bush referred to “human-animal hybrids” when calling upon the US Congress to pass legislation prohibiting the bio-technological creation of entities possessing human and animal tissues (Sherringham 2008).

In literary and cultural studies, the term hybrid and its use have been reinterpreted many times, but are understood to contest hierarchical binaries of nature/culture, self/other, male/female, human/nonhuman (Heffernan 2003). In “A Cyborg Manifesto”, Donna Haraway refers to the cyborg creature as a hybrid, and this hybridity opens up the possibility for breakdowns in dualities such as the animal/human divide. For Rosi Braidotti, Haraway’s work “dislocates the centrality of the human” (2006, p.199) and argues that “as a hybrid, or body-machine, the cyborg, or the companion species, is a connection-making entity” that deliberately blurs categorical distinctions and suggests how we should go about rethinking the unity of the human being (Braidotti 2006, p.200). Haraway signals three crucial boundary breakdowns that, she argues, made her analysis of the cyborg possible. The first is the breakdown between human and animal, the second boundary breakdown is between organism and machine, and the third boundary breakdown is between the organic and inorganic (Haraway 1991, pp.151-153). In “A Cyborg Manifesto”, Haraway affirms that “a cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction” (Haraway 1991, p.149). For Haraway, it is better to be “a cyborg than a goddess” (Haraway 1991, p.181). Like her manifesto in general, it can be argued none of her comments are to be taken literally. It is Haraway’s metaphorical use of the cyborg that we are interested in.

Two types of hybrids have found resonance in popular culture. The first is the werewolf, who transforms from man to beast every full moon once a curse has been imparted via a bite of another werewolf. Even in contemporary times, stories of werewolves continue to resonate because they represent both human and something profoundly other that operates on impulse and instinct (Skipp 2010, p 2). The werewolf’s duality is acceptable and feared because its animality is beyond its control and intermittent. With the transformation that takes place each full moon, werewolves

are torn between their human form and culture and wild animal form and instinct. According to film theorist Barbara Creed, some of the most compelling images of horror in modern cinema are “were creatures” whose bodies signify a collapse of the boundaries between human and animal (Gelder 2000, p.60). Compelled to act monstrously by supernatural forces, the werewolves do things we both fear and wish we could, and as such, “specifically pinpoint the schism between our natural selves and our socialized selves” (Skipp 2010, p.2).

The human-animal hybrids in science fiction explored in this exegesis owe their existence to the intervention of science alone, not the supernatural. In this age of Artificial Intelligence, stem cell research, advanced transgenics, IVF, cloning and xeno transplantation, the physical, chemical and atomic bonds between body tissues are often tested and recombined. This means the borderlines between the human, the non-human, the animal and the machine are constantly shifting. This is where the hybrid creature I am examining in my case studies is located.

This hybrid is a human-animal manufactured through science as imagined in fictional works such as Mary Shelley’s 1818 novel *Frankenstein*, to H.G. Wells 1896 novel *The Island Of Doctor Moreau*, and on to the genetically created hybrid Dren in Vincenzo Natali’s 2009 movie *Splice*. In these works, the species barrier is brutally enforced even as it is penetrated by science. Yet as in the paradox of the werewolf, we look at these hybrids as being creatures that occupy an unacceptable area of conduct, not quite animal or human. This is the hybrid’s dilemma. By assigning human behavioral patterns to animals, human’s darkest moments are exposed (Otten 1986, p.5).

In an age of biotechnology and genetic manipulation, the possibilities for the merging of the human and the animal can now occur at a molecular level. From pig cell insulin to transgenic animal organ transplants and chimerical eggs that are almost human, the boundary between the human and the animal is becoming increasingly blurred. In this exegesis, we will explore the manufactured hybrid as represented in science fiction. This research focuses on the creation of the hybrid through the merging of human and animal in the science lab, on the birthing process, on the struggle between its human and animal selves, on its search for identity, and on the potentially erotic nature of its relationships with humans. In exploring what authors, ethicists, scientists and philosophers consider makes us uniquely human, we may consider the ramifications of pushing the accepted boundaries of our species.

Rationale

Using Haraway's theories in "A Cyborg Manifesto" for guidance, this exegesis will examine the character of the hybrid as a literary device. In doing so, the objective of this research is to answer the following questions:

1. According to Haraway, how do we define the cyborg in science fiction?
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3. How useful or not are these criteria in developing hybrid characters and forming writing techniques for my own creative project, and for science fiction writers in general?

Haraway's metaphorical cyborg opens up possibilities for other breakdowns in dualities, such as human domination and exploitation of the animal. It is therefore interesting to examine whether the depiction of the hybrid over the past two centuries reflects cultural progress on thinking about animals.

In this examination of the hybrid in a range of texts from the science fiction genre a preoccupation has been identified with humanity's separation from the animal. This is expressed through the monstrous body of the hybrid, a creature that breaches the taboo of bestiality and species contamination. I am interested in exploring this anxiety about the species barrier in my creative project, along with an examination of how writers use the associated science fiction tropes when writing the hybrid.

In close analysis of science fiction narratives, I am interested in whether common traits I have observed in different stages of the hybrid's life can be developed to chart a fictional lifecycle of the hybrid. I first observed such lifecycle traits in my Masters research, in which I explored the lifecycle of the scientifically created human from *Frankenstein* to *Blade Runner* and *Never Let Me Go* (Tsitras 2008) The cyborgs and clones in fiction were created, developed, lived and died in predictable scenarios. This caused me to speculate whether the hybrid in science fiction had a similarly uniform lifecycle.

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In doing so, I situate this research as a contribution to the evolving field of Human-Animal Studies (HAS) using science fiction as a mode of exploration. HAS scholarship requires rethinking the human-animal boundary (Vint 2010, P. 211). While using science fiction in this area is being utilized by researchers (Vint 2010, Fudge 2009, Ferreira 2005, Birke 1998) I am contributing to the research as both a practicing science fiction writer and a researcher. I believe that this multidisciplinary approach of research and storytelling in the science fiction genre is important. Haraway argues “It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what ties tie ties. It matters what stories make worlds, what worlds make stories” (Haraway 2011, p.4).

The strength of my research is illustrated by the fact that three chapters of this exegesis have been presented at international conferences on Human-Animal Studies, cyberspace and monstrosity, resulting in three papers accepted for publication so far in peer reviewed journals. One further paper, based on chapter five and the erotic nature of the hybrid, has been selected for an international conference in September 2013. Preliminary research has been presented at a further three Australian conferences. These were important in my understanding of the impact that research into science fiction narrative could have in the interdisciplinary research (see Appendix).

With the rise of Human-Animal Studies there has been a renewed interest in science fiction that explores transgenic species. Margaret Atwood’s trilogy *Oryx and Crake* (2003) *The Year Of The Flood* (2009) and *MaddAddam*, to be published in September 2013, explore the fate of transgenic animals and the consequences of genetic engineering. I anticipate my novel *Almost Human* will take its place in this canon. A sub genre of transgenic pregnancy books feature women choosing to give birth to bonobo-human hybrids, an area for further research that we will explore in the final chapter.

The author of *Gorsaga* Maureen Duffy argues that scientists need the moral scrutiny of the humanities, and of writers to warn of the danger of embarking on social or environmental changes “without trying to see where they might lead us, as we have so often done and monstrosly done in the past” (Duffy *The Independent* 1995). Amongst the examinations of the post human in science fiction literature (Elaine L Graham, *Representations of the Post/Human* 2002 and N. Katherine Hayles’ ‘The Life Cycle of Cyborgs: Writing the Posthuman’ 1996), I have not uncovered significant research into the lifecycle of the hybrid in science fiction. By

examining the Haraway's criteria in "A Cyborg Manifesto" and applying it to the hybrids in science fiction texts and films, this research seeks to identify whether there is a discernable lifecycle for a hybrid character in science fiction.

Science fiction works to be examined

In my research, and in my creative project, the following science fiction texts and films provide an opportunity to critique a range of Haraway's theories about inherited dualisms. My research is a multidisciplinary study that observes literary and cinematic works, and these will form my textual case studies. The novels, Mary Shelley's *Frankenstein* (1818), *The Island of Doctor Moreau*, by H.G. Wells (1896) and the film *Splice*, directed by Vincenzo Natali (2009) are science fiction works that pose the questions of what it is that makes us human, and what it is that distinguishes the hybrid from both humans and animals. They are also concerned with the socio-political status and rights of the hybrid, starting with its alienation from birth.

In my examination of the hybrid as a manufactured monster, the shadow of Mary Shelley's *Frankenstein* looms large. Regarded as the first science fiction novel, (Botting 2005) *Frankenstein* is a cautionary tale about science without moral or social responsibility (Turney 1998). Dr Victor Frankenstein's hubris in artificially creating life heralded the trope of the mad scientist (Mellor 1988, p.38). Frankenstein made a man from the corpses of *both* animal and human—"The dissecting room and the slaughter-house furnished many of my materials" (Shelley 1818, p. 55)—and the creature that emerged from Shelley's literary treatment of the social and technological conditions of the industrial revolution is a hybrid that has endured as a trope in science fiction.

According to literary critic David Punter, discoveries in the sciences only served to aggravate a sense of alienation and further disturb notions of human identity. One can detect a parallel between technological change in the last half of the eighteenth century and the huge advances in biotechnology in the late 20th and early 21st century. Just as in Shelley's age, there is enormous debate and discussion in society about what these technological leaps mean for humanity (Heffernan 2003, Clayton 2007).

Atwood identifies science fiction as a genre that explores the nature and limits of what it means to be human in very explicit ways (Atwood 2011, p. 94). She observes that science fiction can be used to write about the future because the present contains the seeds of what might become the future. Similarly, she says

science fiction narratives can interrogate social organizations by showing what things might be like if we rearranged them; for instance, the genre can be used as a way of reconsidering gender structure.

Science fiction Tropes

In exploring the dual nature of the hybrid body in my creative project, I will investigate a range of tropes that are used in pertinent science fiction novels. In this exegesis, I am interested in why these tropes are so pervasive when writing the hybrid into science fiction.

The word trope has a broad meaning, standing for any recurring feature, term or image in a text, a genre or culture (Fahnestock 2011, p.100). Patterns or conventions in storytelling, noted by the Greek philosopher Aristotle, who wrote on poetry and theatre in 330 BC, are shorthand for concepts that readers will instantly recognize - these conventions are useful in writing science fiction, along with Aristotle's theories of character psychology and creating dramatic tension within the plot (Dethridge 2003).

I will investigate whether the trope of the hybrid as presented in *Frankenstein* has evolved in the past two centuries.

Each of these three texts were written at key points in medical science that caused profound reflection within society about the status of the human. They also place the hybrid in the centre of the narrative. Other relevant science fiction texts with hybrid characters will also be briefly explored in the following chapters for their value in extending analysis of specific tropes. One such work is Maureen Duffy's 1981 novel *Gorsaga*, a novel concerning transpecies pregnancy that is significant in that it gives a voice to the hybrid (Squier 1998, Ferreira 2008). Its publication coincided with the emergence of IVF as a commercially viable method of artificial reproduction.

Splice has been included because I view the character Dren as important in the evolution of the hybrid in science fiction. Cinema has consistently responded more creatively and critically with the character of the hybrid in the past decade than literature, displaying "a robust exploration the implications of Darwin's theories for the modern world" (Creed 2006, 46.).

Structure of chapters

Chapter one, "*Genos*", meaning groups claiming common ground, reveals through a literature review the common ground shared by hybrids in history, literature, science and philosophy. I begin with an investigation of the distinctions between

species and how Transhumanists and Bioconservatives have argued for a quintessential definition of the human. This has been challenged by the hybrid as technology and medicine have stretched notions of the human body and mind. I examine how the hybrid in science fiction emerges from the Gothic genre, and in turn, explore how theories of the monstrous body prove useful in my arguments. In discussing the range of science fiction texts that focus on the hybrid, I demonstrate how it is notions of humanity that position the hybrid as monstrous.

In chapter two, "*Xenos*", a Greek word meaning foreign, I will look at Haraway's boundary breakdowns for the emergence of the cyborg, analyzing through these texts how they are crucial to the rise of the hybrid in science fiction. I will explore the necessary boundary transgressions in science that must be in place for the hybrid to emerge. In this chapter, I will begin a critical examination of Haraway's 'Cyborg Manifesto' that places her criteria of boundary transgression between the human and animal as vital for the emergence of the hybrid within an historical overview of scientific experiments to artificially create a human-animal. From this perspective I explore the trope of the mad scientist.

Chapter three, "*Tokos*", a Greek word meaning the act of childbirth or something begotten, explores conception, birth and childhood of the hybrid. The previous chapter's investigation into boundary transgression allows me to approach, in this chapter, the trope of monstrous birth and Haraway's theory that cyborg replication is uncoupled from organic reproduction. In this chapter, I will explore the product of the unnatural reproductive act and its 'monstrous issue'.

In chapter four, "*Logos*", from the Greek word meaning word or rational thought, I will look at education and identity, and take up the trope of the struggle between the hybrid's animal and human nature, including the trope of cannibalism, and the questions of the moral and legal status of the hybrid that I introduced in chapter two. I will also focus on Haraway's arguments that cyborg politics is the struggle for language and the struggle against perfect communication.

In chapter five, I will look at the adolescent hybrid's erotic nature and activity and conclude my analysis of the science fiction texts. This chapter is called "*Eros*", from the Greek word love or sexual desire. Here I explore the taboo subject of bestiality, an under researched area of animal studies (Edwards and Kiennan, 2013). For Haraway cyborg sexuality is about exploring beyond rigid boundaries, and the erotic nature of the hybrid and the human character's sexual engagement with the hybrid in science fiction raises the trope of bestiality.

This leads me to the penultimate chapter. In chapter six, "*Eautos*", I will explore my own doctoral journey and I will also look at the lessons learned from "A Cyborg Manifesto". *Eautos* is a Greek word meaning self (myself), and this chapter is about the self discovery of the journey of research, the process of writing and what Haraway's work has meant to me as both a researcher and a writer. In this chapter, I approach how Haraway's criteria for cyborgs might be applied to the hybrid characters in my creative project, as well as reflecting on the hybrid nature of the Creative Writing doctorate and my own reflections as a writer that have emerged from undertaking this research.

In my conclusion, chapter seven, "*Telos*", the Greek word meaning the end of a goal-driven process, I will identify the broader critical implications of my research and its application for Human-Animal Studies. Haraway argues that "movements for animal rights are not irrational denials of human uniqueness; they are a clear-sighted recognition of connection across the discredited breach of nature and culture" (Haraway 1991, p.152). I will analyze whether the hybrid characters in science fiction have their own unique lifecycle, and also suggest further areas for research.

Chapter one: *Genos* Literature Review

Introduction - Scope of my research

The title of this chapter '*Genos*' comes from the Greek word meaning groups claiming common descent. This chapter introduces "the family" of critical and literary texts and theorists that have been important to my research.

It is beyond the scope of this research to explore the full range of human hybrids, which includes man-machine cyborgs, clones, and human-alien hybrids. The contemporary works of cinema and fiction which privilege the hybrid character but attribute its trans-species status to mythic, supernatural or magical status are also outside of the scope of this exegesis. Certainly, a larger investigation is warranted into the full spectrum of human hybrids such as werewolves and the mythical half human creatures of fantasy and literature, and this is something I would like to pursue in future research.

After Charles Darwin's revolutionary 1859 book *On The Origin of Species* introduced the scientific theory that populations evolve through natural selection through common descent, the unassailable belief that humans were unique and unrelated to other animals was shattered. Distinctions between 'us' and 'them', previously assumed inviolable, became blurred. The destabilizing effects of a Darwinian theory of evolution undermined the anthropocentric worldview (Creed 2006). If human beings were a species like any other, given the mutability of the species, "humans might well devolve or otherwise metamorphose into some repulsive abhuman form" (Hogle, 2002, p.195). Darwin's work had profound influence on literature, art, feminist theory and psychology (Creed 2006). Public debate and panic about the threat of what was termed 'degeneration' or devolving to animal informs the narrative of H. G. Wells' novel *The Island Of Doctor Moreau*.

Cultural concerns about species identity should not be overlooked. The notion of species purity is one that has been strongly enforced by religion. Despite Darwinian notions of evolution, much of our culture operates on the assumption that humans are qualitatively different from other animals (Birke and Michael 1998, pp.245-247). This is what makes advances in biotechnology so challenging for many people. As we absorb the animal into us, via pig insulin or, as with former Australian Prime Minister Kevin Rudd (Viellaris 2011), a bovine heart valve, where do we draw the line at 'us' and 'them'? Haraway's more recent works, *The Companion Species Manifesto* (2003) and *When Species Meet* (2008) focus on human relationships with companion animals and the expansion of ideas from "A Cyborg Manifesto". With

current biotechnological experiments to create hybrids, we are confronted with the vexed question of how far interventions into the human genome can be carried out without changing a human into a different species (Bennett 2001, Hinterberger 2011).

Yet in spite of the fact that our relationship with animals even in this era of intense factory farming has, ironically, never been so intimate as a result of biotechnology, Bastian et al (2011) found that concern about the future of the animal is conflicted, with the majority of people making emotional decisions on which animals they feel should be eaten, protected, experimented on or kept as pets. I would argue that the fate of transgenic animals whose organs are currently being used in xeno transplantation does not rate so highly in public consciousness because, like the animals we are eat, they are seen as sacrificial, as a means to benefit humankind.

We will now briefly explore the philosophical and scientific basis for the species boundary between animal and human, in order to establish the debates surrounding the creation of the human animal hybrid, that are problematized throughout this exegesis. The question of what makes us human and not animal is an ongoing philosophical concern.

Since the Platonic Academy argued that man can be defined by his distinction from the animal, barriers between the species have been enforced. From Ovid to Kafka, narratives of the transformations of species have served as a vehicle for discussing human identity, its pitfalls and its limits (Pick 2006). By the late Middle Ages the paradigm of separation of species was breaking down and it was harder to determine what defined an animal and what was definitely human. According to literary historians Carolyn Walker Bynum and Joyce E. Salisbury, what lies at the heart of these myths and stories is our basic fear of change. If humans can change, can they lose both their identity and their humanity? Salisbury suggests that such literary and artistic representations may have an impact on how humans treat real animals by breaking down the barriers that exist between species (Salisbury 2011, p.140). There was a shift in attitudes during the Enlightenment as science took the place of theology and philosophy in shaping many debates about the status of the human. There was an increasing confidence about the human control of the world (at the expense of tradition, authority or Biblical revelation) as well as a focus on the beliefs of a highly educated minority (O'Hara 2010, p.25). The most influential philosophy of mind of the eighteenth century was a *tabula rasa* – a blank sheet. This was important for two reasons; the key to improvement of an individual was

education and the pursuit of happiness came to be seen as a prime reason for individuals' actions (O' Hara 2010, pp. 60-61).

Towards the end of the Enlightenment, philosopher Jeremy Bentham formulated a principle in which human action was calculated in order to maximize pleasure and minimize pain, a view of motivation that became the focus of the political doctrine of utilitarianism (O'Hara 2010, p.62). On the rights of animals, Bentham said the relevant question was not "Can they reason? Nor Can they Talk? But Can they suffer?" (Bentham 1823). As I will explore in the science fiction texts, the hybrid, like the animal, can indeed suffer. Not only that, it can reason, and it can talk. And yet, as the hybrid is permanently both human *and* animal, it has a status that is ambiguous. Not human, not animal, it is viewed as an experiment owned by its creator and not regarded as having selfhood.

The division between the human and the animal

Scientists can create Chimera with just a few human cells, Chimera with primarily human cells, and Chimera hybrids (Bennett 2006). The resulting creature can be a truly unpredictable mixture of species. In the 2009 film *Splice* Dren surprises herself and scientists Elsa and Clive when she discovers, about to fall off the barn roof, that she has wings. In my novel *Almost Human* the hybrid character Kally discovers she has super fast reflexes.

Yet the very concept of species is fraught. Only 5 % of DNA separates all the known genomes, the uniquely human part of which is limited to 0.1 %. If we are to look at human distinctiveness in terms of genetics, we must reconceptualize it as not a stable form. There is no authoritative definition of species, but one that is constantly rearticulated through scientific and especially genetic means (McHugh, 2005, Robert and Baylis 2003).

The United Kingdom's Human Fertilisation and Embryology Act 2008 legalized the use of nonhuman eggs for cloning-based, human embryonic stem cell research. By 2011, it was reported that researchers looking for possible cures for a wide range of diseases had secretly produced more than 150 human-animal embryos in British laboratories. By law these had to be destroyed within 14 days (Martin and Caldwell, Daily Mail, 2011). The possible types of animal/human hybrid embryos that can be created now are cytoplasmic hybrid embryos (cell nuclear replacement using animal eggs), hybrid embryos (human sperm and animal eggs or human eggs and animal sperm), human Chimera embryos (animal cells added to them during early development), animal Chimera embryos (human cells added to

them during early development), and transgenic human embryos (animal genes inserted into them during early development). (Human-Animal Hybrid Embryos, BBC Ethics Guide)

Through fiction and the hybrid character, arguments both for and against interspecies genetic experiments can be analyzed (Clayton 2001, p.570). One strand of the narrative in my creative project is based on the speculation – *what if* the embryo was allowed to grow? *What if* the government and/or commercial organisations or rogue scientists wanted to see what would happen if the embryo was allowed to develop into a baby? And *what if*, after a generation, problems arose as these ‘almost human’ children matured?

I will now provide a brief overview of these arguments, which are used by the Bioconservatives and Transhumanists to explain why we should preserve human species purity, or why the human species should embrace change.

Transhumanists

Transhumanism, the belief that science can be used to transcend the limitations of the human body and brain, has its beginnings in the Enlightenment and its advocacy of the supremacy of reason (Jotterand, 2010). Sometimes humans who have been radically altered by technology are referred to as transhumans, or, if the alteration is more extreme, posthumans (Persson & Savulescu, 2010).

Transhumanism holds that evolution is incomplete and we have a responsibility to further our evolution through technology (Hayles 2011). Transhumanists such as Julian Savulescu challenge the notion of human species membership as biologically determined, and thus provides a justification for human enhancement (Savulescu 2003). For Savulescu what differentiates humans from animals is not to be found in biology, but in certain psychological characteristics - capacity to reason; capacity to act autonomously; capacity to engage in complex social relationships; capacity to display empathy and sympathy; capacity to have faith (believe in a god). Savulescu argues that human beings alone have beliefs about what they should do (Savulescu, 2003).

In their journal article “Moral Transhumanism”, Ingmar Persson and Julian Savulescu argue that loss of species membership does not threaten our ability to exist as humans and fear of this loss should not prevent the desire to change radically (Persson and Savulescu, 2010). Furthermore, as science begins to enable us to enhance humans via pharmacological methods, through genetic selection and

engineering, they argue it might be best for humankind to use biomedical means of 'moral enhancement' before we use scientific technology to destroy the planet and most of the population (Persson & Savulescu 2013).

Transhumanist Ray Kurzweil terms the merging of man and machine the "singularity", when man transcends its biological roots. Kurzweil maintains that post-Singularity there will be no distinction between human and machine, or between physical and virtual reality (Kurzweil 2005).

If we can live forever, if we can live without a body but with our minds uploaded into machines, if we can change gender, artificially prolong our reproductive time span, and survive with animal organs and artificial substances keeping us alive, are we still fundamentally human? Transhumanists think so. The transhumanist arguments for using transspecies genetic experiments are that they may produce enormous benefits for human beings. Kurzweil argues that the human species has already augmented its natural lifespan through our technology, with drugs, supplements, and replacements parts (Kurzweil 2005, p.302). We accept these, and do not consider ourselves less than human for doing so.

Hayles however argues that transhumanist rhetoric lacks discussion of how access to advanced technologies would be regulated or of the socioeconomic dynamics beyond the individual. Perhaps only certain privileged individuals would have access to the advantages advanced technologies would offer (Hayles 2011).

In *Almost Human*, I problematize the debate between Transhumanists and Bioconservatives, by depicting Australia as a society fearful of species contamination. It regulates and reins in the rights of its citizens by constant surveillance via bio-scans. Those deemed almost human (AH) are treated like second class citizens. Those who are even "lesser" because of their higher level of animality are treated as Cartesian machines – biological fodder – to be used as spare parts, sex, surrogacy or food. Yet, ironically, humans still seek enhancement with animal DNA because, while being caught with too much animal DNA can be detrimental to their human status, they covet animal qualities such as sexual vigor and strength.

Savulescu raises an interesting point that it is not simply altering the human that concerns people – many might be accepting of cybernetic implants and computer assisted non material parts and chemicals in their bodies to enhance and prolong life. What people find repugnant however, is the addition of animal genetic material into their bodies (despite the fact that bringing animals closer to human

beings to share their genes might paradoxically improve our humanity (Savulescu, 2003).

Chris Hables Gray argues that “humans have always aspired to be cyborgs and we have always feared that aspiration” (Gray 2001, p.193). Yet the cyborgs Gray refers to are machine/humans not animal/humans. I propose that humans fear becoming the animal, which is part of the revulsion about the scientific creation of the hybrid. This is a fear of degenerating back to our animal ancestry. This is manifest in the cultural fear of the werewolf (a human-animal hybrid, though not scientifically created like those I explore in this exegesis).

Film theorist Barbara Creed argues that some of the most compelling images of horror in modern cinema are “were creatures” whose bodies signify a collapse of the boundaries between human and animal. I find Creed theories in her book *Phallic Panic* (2005) useful in understanding the desire and revulsion the hybrid character provokes. Werewolfism in film can be associated with perverse, erotic sexual desire (Creed 2005, p. 46), and also represents man’s direct lineage to nature and the uncanny primal animal (143). The werewolf’s transformation uncovers what has been kept hidden, suggesting the animal is essential to the definition of what constitutes the human (151).

Bioconservatives

Opponents of radical enhancement are known as Bioconservatives (Agar 2010, p. 9). In his opposition to radical enhancement, philosopher Nicholas Agar argues that (as Hayles speculated) if we allow some individuals to be enhanced but not others, this would lead to a “tyranny of posthumans over humans” (Agar 2010, p. 11). Bioconservatives argue that human enhancement is intrinsically and morally wrong. For ethicist Margaret Somerville, technoscience raises ethical controversies that “go to the very heart of what it means to be human, how we relate to others and how we find meaning in life” (Somerville 2007, p.4). Rather than opting to remain “young” as long as possible, a pursuit that Kurzweil has taken up with a vengeance, Somerville argues that the inevitability of human decline may have value for society as a whole. “Might it be that becoming more conservative as we age is a safety net for society that allows the young to try out more radical approaches to collective values, without doing serious harm to those values? Without that safety net, harm is much more likely” (Somerville 2007, p.182). Somerville believes that there are elements in human nature that are intrinsic to it and therefore non-negotiable and should be regarded as “secular sacred” (Somerville 2007, p.99). For

Bioconservatives such as Somerville, the concept of a hybrid is deeply disturbing. She explains, “Most of us have a strong moral intuition that there is something deeply ethically troubling about crossing the species barrier...especially between humans and other animals” (Somerville 2007, p.168).

Francis Fukuyama places issues of body modification and machine/human interface at the centre of the debate about what it means to be human in the 21st century. Human nature, Fukuyama proposes, exists and has provided a stable continuity to our experience as a species (Fukuyama 2002, p.7). He maintains that the most significant threat posed by contemporary biotechnology is the possibility that it will alter human nature and thereby move us into a "posthuman" stage of history.

For Jürgen Habermas gene manipulation is bound up with issues touching upon the identity of the species (Habermas 2003, p.46). He argues that “whether or not we may see ourselves as the responsible author of our own life history and recognize one another as persons of ‘equal birth’, that is of equal dignity, is also dependent on how we see ourselves anthropologically as members of the species.” (Habermas 2003, p.29). Habermas is concerned that genetic interventions at enhancing a fetus reduce the potential child’s ethical freedom “insofar as they tie down the person concerned to rejected, but irreversible intentions of third parties, barring him from the spontaneous self-perception of being the individual author of his own life” (Habermas 2003, p.63). Agar argues that genetic upgrades that radically enhance children’s cognitive powers place shared experiences with their parents under threat (Agar 2010, p.191). He predicts radical enhancement will threaten the bonds of kinship with fellow humans (Agar 2010, p.197).

In chapter four, I explore further these bioconservative arguments regarding the rights of a manufactured person in this new genetic environment.

Donna Haraway: The Cyborg Manifesto and beyond

Haraway wrote “A Cyborg Manifesto” in 1985 in “an effort to build an ironic political myth faithful to feminism, socialism and materialism’ (Haraway 1991, p.149). I see its continued relevance as a manifesto for the 21st century with the hybrid representing the possibilities and vulnerabilities of the shared world of the human and the animal, where, to quote Haraway “liberation rests on the construction of the consciousness, the imaginative apprehension, of oppression and of possibility” (Haraway 1991, p.149). Haraway's metaphor of the cyborg is often deployed by transhumanists, who consider the implications of the possibility for conscious human

redesign by overcoming the human's biological limitations through scientific progress (Cordeiro 2003, p.65).

In "A Cyborg Manifesto", Haraway turns to feminist science fiction writers to provide "a myth about identity and boundaries which might inform late twentieth century political imaginations". She calls the writers (among them James Tiptree Jr, Joanna Russ and Octavia Butler) "theorists for cyborgs" (Haraway 1991, p.173). Science fiction and literature have consistently been important for Haraway in understanding the cyborg as a metaphor, and for identifying her own texts which she views as literary in character (Haraway 2004, p 333). Since writing *The Cyborg Manifesto*, Haraway's own research has branched out to work on the boundaries of the animal and the human. This has extended the concept of cyborg from a Cold War era "self regulating man-machine system", as imagined by Manfred Clynes and Nathan Kline in 1960 (Haraway, 1997, p.51) to the posthuman character that shares a kinship with the animal.

Cyborgs, claims Haraway in her expose of feminism and technoscience *Modest_Witness@Second Millennium*, are not about the Machine and the Human, "as if such Things and Subjects universally exist" (Haraway 1997, p.51). Be this OncoMouse with a grafted human ear on its quivering back, or a standard white laboratory rat implanted with an osmotic pump designed to inject chemicals continuously, animals have Haraway, points out; "gone first into the unexplored regions in the great Western technoscience" (Haraway 1997, p.52).

In *The Companion Species Manifesto*, Haraway argues that cyborgs and companion species are "hardly polar opposites." She proposes that "cyborgs and companion species each bring together the human and the non-human, the organic and technological, carbon and silicon, freedom and structure, history and myth, rich and poor, the state and the subject, diversity and depletion, modernity and postmodernity, and nature and culture in unexpected ways" (Haraway 2003, p.4).

In her most recent book, *When Species Meet* (2008), Haraway is openly critical of other theorists Jacques Derrida (*And Say The Animal Responded? In The Animal That Therefore I Am, 2008*) and Gilles Deleuze and Félix Guattari (*A Thousand Plateaus 1976*) in their attitude to animals. She challenges Derrida to think beyond an animal's capacity to suffer (Haraway 2008, p.22). Haraway asks us to be curious about animals, to respond to the animal's presence by asking the animal what is wanted. With Derrida, Haraway laments missed opportunities. She argues the philosopher stands naked in front of his cat not thinking about the cat but his own

shame at his nakedness (Haraway 2008, p.22). For Deleuze and Guattari, she has contempt for their dismissal of interactions with animals as being of little consequence. That the human relationship with the animal is political, contested, deeply personal comes across clearly in Haraway's work.

In the introduction to *The Haraway Reader* (2004), which brings together her influential critical essays from "A Cyborg Manifesto" on, Haraway emphasizes how she "written the same paper twenty times", committing to "to swerving and tripping over these bipartite, dualist traps rather than trying to reverse them or resolve them into supposedly larger wholes". She restates that science, feminism, anti-racism, and science studies, biology and cultural theory, fiction and fact closely co-habit and should do so (Haraway 2004, pp.3-4). Critical for me in this book is a lengthy interview with Haraway by Nina Lykke, Randi Markussen and Finn Olesen. Haraway reveals that her method of deconstructing the barriers between theory and literature, weaving theoretical content, methodology, style and epistemology is not necessarily intentional: "Writing does things to the writer. Writing is a very particular and surprising process" (Haraway 2004, p.332).

Braidotti reading Haraway explains that the cyborg provides "alternative structures of otherness", and argues that Haraway's techno-monsters show the way to multiple virtual possibilities. "The cyborg, the monster, the animal – the classical 'other than' the human are thus emancipated from the category of pejorative difference and shown forth in a more positive light" (Haraway 2006, pp. 203-4). The hybrid in science fiction is a challenge to the biologically tenuous dualism that is constructed and enforced socially, and represents the same possibilities for deconstructing binaries as the cyborg. In Haraway's image of the cyborg, I see the hybrid standing outside the human, detached and yet an observer. Yet I argue that it can never be entirely detached, being linked as it were, to some humanoid basis.

In "A Cyborg Manifesto", Haraway outlines key criteria for the emergence of the cyborg, and its existence. Haraway signals three crucial boundary breakdowns that, she argues, made her analysis of the cyborg possible. The first is between human and animal, the second boundary breakdown is between organism and machine, and the third boundary breakdown is between the organic and inorganic (Haraway 199,1 pp.151-153). I will look at these breakdowns in depth in chapter two of the exegesis, analyzing how they are crucial to the rise of the hybrid in science fiction. In chapter six I conclude that rather than simply using "A Cyborg Manifesto" as a criteria for writing the hybrid, it is Haraway's overarching ideas about what is

possible when binaries are broken down that have influenced my doctoral research and writing.

Aware that she is criticized for lack of clarity in her methodology, Haraway argues that “there is a tyranny of clarity” and that she likes layered meanings (Haraway 1991, p.333). She also observes that categories are not frozen, and that you can use categories to trouble other categories: “You can turn up the volume on some categories and down on others” (Haraway 1991, p.335). I have used this concept in this exegesis, where I am seeking to observe a life history for the hybrid from within “A Cyborg Manifesto”.

A revelation in my reading of Haraway is her importance of the literary aspect of analyses. Haraway explains that:

I cannot believe the number of people who, in the face of the word “narrative”, think that all of a sudden you are “merely” in the realm of culture and entertainment – that all of a sudden you are not talking about what is serious. This is a terrible prejudice, which some standpoint theorists share with most political scientists and a vast majority of philosophers, too (Haraway 2004, p. 337).

As a consequence of immersing myself in Haraway – not just “A Cyborg Manifesto”, but her other work and style of writing, I have found myself exploring the ideas that informed my creative project in a greater depth and narrative style than I imagined when I began this journey four years ago.

Science fiction works to be examined

The Science fiction texts and films I examine in the subsequent chapters, *Frankenstein*, *The Island Of Doctor Moreau*, *Splice* each attempt to give a voice to the hybrid. I mean this as both a narrative ‘voice’ – providing the hybrid with a point of view and an identity in the human society, and also a literal voice. In chapter four, I argue that in both cases this is a challenge to be overcome, because the animal is without human language, and for the human-animal hybrid, human language and speech is not easily attained – and is easily lost. Despite their dual biology, a key aspect of *Frankenstein’s* creature, the Beast Men of *Dr Moreau*, and *Splice’s* Dren is the struggle of the hybrid to inhabit a human identity for itself and its quest to merge into human society that looks upon it as an object of horror.

I begin the overview with Mary Shelley’s *Frankenstein*, a novel that heralds the start of an investigation in fiction about the scientific impulse to create hybrids

(Squier 1998, Clayton 2007, Heffernan 2003, and Ferreira 2008). *Frankenstein* introduced to fiction the scientifically created human monster and established a new strand of gothic horror genre that uses the human body as the site of power and control. With the notable exception of Carol J. Adams (Adams 1993, pp.108-199). Frankenstein's creature isn't generally read as being a human-animal hybrid. This is despite being created from both human parts and animal organs and tissues. I regard the creature as being a 'covert' hybrid - that is, having species ambiguity. This is a term I have created that refers to a hybrid who can pass for human. For hybrids who cannot pass so easily as human because of their obvious animality I use the term 'overt hybrids'. I take my cue for the reading of covert and overt hybrids in these works from Haraway, who argues in "A Cyborg Manifesto" that "in a fiction where no character is 'simply' human, human status is highly problematic (Haraway 1991, p.179)

Angel Anderson's analysis of Doyle, the half-human, half-demon side kick of the title character in the TV series *Angel* who 'passes' for human, was useful in the formation of my concept of the covert and overt hybrid. Anderson examines American literature of racial passing, from the early literature of slave narratives to the present day. Anderson finds that a person's ability to pass stems from a mixed heritage, which, if they have the eye and skin color that allows for racial ambiguity, provides the opportunity for others to mistake them for a heritage of greater social privilege (Comeford and Burnett 2010). Anderson reads Doyle's character in relation to the five standard tropes of a passing text as outlined by Jude Burnett in *The Passing Figure: Racial Confusion in Modern American Literature*.

In "A Cyborg Manifesto", Haraway argues that "the cyborgs populating feminist science fiction make very problematic the statuses of man, woman, human, artifact, member of a race, individual entity, or body" (Haraway 1991, p. 78). This is true of the first 'overt' hybrids we encounter in fiction in 1896, when H.G Wells published *The Island Of Doctor Moreau*. These are hybrids that I argue are harder to accept as humans by their visual appearance. Prendick confuses human, animal, and race when he sees the "black-faced man" who "turned with animal swiftness" on the Lady Vain after he was rescued from sea (Wells 1896, p.13).

The creatures in this narrative of surgical xenogenesis gone wrong are "humanized animals" created by Dr Moreau via vivisection and chemical and other surgical processes (In an example of how science fiction adapts to the times the 1996 film adaptation of *The Island Of Doctor Moreau*, directed by John Frankenheimer, updates Dr Moreau's scientific procedure from vivisection to

biotechnology). They exhibit the scientist's intent to "erase the mark of the beast" from the animal by turning it into a human.

In the novel shipwreck survivor Edward Prendick slowly realizes something is amiss on Noble's Island where he finds himself after being rescued by Montgomery, who is Dr Moreau's liaison with the outside world and supplier of animals.

To Prendick the strange Beast Men who inhabit the island look like animals but also behave like men in that they speak a certain halting language. They appall and then disturbingly excite Prendick, who imagines he may be experimented on as well, and turned into an animal. He recalls Dr Moreau had to leave England suddenly after the press revealed his secret and horrific experiments on animals (Wells 1896, p.34). Prendick discovers Dr Moreau has continued his work on the island, and learns of the scientist's quest to create a new race.

By comparing Shelley's 1818 novel *Frankenstein* with the late Victorian novel *Doctor Moreau* (1896) and the 2009 movie *Splice* I am deliberately using works of fiction that range almost two hundred years apart to analyze how distinctions between the human and the animal in Western thought have changed over that historical period.

Splice, directed by Vincenzo Natali, introduces the monstrous hybrid Dren, created through biotechnology. Genetic scientists Clive Nicola (Adrien Brody) and Elsa Kast (Sarah Polley) secretly conduct their own experiments within a pharmaceutical company that funds their research. Blending DNA with that of other animals, they put a 21st century spin on Frankenstein and Moreau's vivisection, fashioning the hybrid from the molecular level up to create their monster. Elsa secretly uses her own egg to create Dren and is protective of her from conception. Despite her traumatic birth and monstrous appearance, Elsa convinces Clive to keep Dren alive as she is growing rapidly 'days within minutes' and will soon die naturally, allowing the scientists to publish their groundbreaking research.

I will also be referencing where useful the following texts: *Gorsaga*, *Lives of The Monster Dogs*, *A Dog's Heart* and *Organo* that provide an insight into the hybrid. Maureen Duffy's 1981 novel *Gorsaga* (televised in 1988 in a three part mini-series called *First Born*, starring Charles Dance) uses the figure of the hybrid to explore social justice, animal rights and gender issues. It is a literary response to the successful birth of the world's first "test tube baby" in 1979, which raised the possibility of species miscegenation via IVF. In *Gorsaga*, Duffy explores transspecies pregnancy as a new and troubling medical-scientific capability (Ferreira 2008). Her

'mad scientist' Dr Forester is a brilliant biological researcher intent on creating a new form of life and new species. Using IVF and his own sperm, he inseminates a gorilla, Mary. The result is the hybrid Gor. After starting out as a hairy baby, Gor develops normally except for his Simian vocal cords, which are operated on. Like Frankenstein's creature, he discovers the truth of his creation from his father's scientific papers, and is overcome with disgust at what he is – a monster even though he looks human.

One hundred years after *Doctor Moreau*, Kirsten Bakis wrote *Lives of the Monster Dogs* (1998), which revisited vivisection and added cybernetics as a means of creating the monstrous hybrids. Like Shelley, she gives the hybrid a voice, with the novel exploring the demise of the Monster Dogs, highly intelligent dogs with artificial voice boxes and prosthetic hands, unveiling their tragic secrets and longing to be human while trapped in an existence that confines them to being neither truly animal nor human. Unlike Frankenstein's creature or the Beast Men, Monster Dog Ludwig von Sacher, has the dignity of a full name. He is a dog scholar who is compelled to tell the story of the monster dog's creation to student journalist Clea Pira before he loses the power to communicate. The Beast Men can only speak in halting language, and eventually lose their ability to communicate as humans. Ludwig tells Clea how Dr Augustus Rank secretly created the Monster Dogs artificially through vivisection, cybernetics and some sort of chemical manipulation to the brain. They were brought into existence as perfect soldiers for the world's strongest army. Created for another's purpose, the Monster Dogs struggle to embrace their autonomy even after they escape to New York from isolated Rankstadt.

We have money now, perhaps we are not slaves, but we are still monsters.
From the moment Augustus Rank conceived of us, our fates were sealed
(Bakis 1997, p.71).

In the following chapter, I will explore Dmitri Shostakovich's 1932 opera *Orango*, and Mikhail Bulgakov novel *A Dog's Heart*, written in the same year. Both feature the hybrid as a central character – one born through artificial insemination, the other as a result of xenotransplantation.

Throughout this exegesis, as I examine Haraway's criteria that human status is problematic for cyborgs, I will investigate how the hybrids in these works are either 'covert' hybrids, and able to pass as human (Gor in *Gorsaga*, the creature in *Frankenstein*, Sharikov in *A Dog's Heart* and Jean Or in *Organo*), or are 'overt' hybrids, who seem too visually animal to be accepted as human (the hybrids in

Monster Dogs, Dren in *Splice* and the Beast Men in *Doctor Moreau*). Covert and overt hybrids is a term I have coined to describe the visual appearance of the hybrid.

The works I am using in this exegesis have been chosen because they place the human-animal hybrid within the centre of the narrative and provide readers with what Barbara Creed dubs 'a zoocentric perspective' or 'zoocentric voice' (Creed 2006, p.46).

Conclusion

In this chapter, I have provided a context for understanding the importance of the scientifically created hybrid in fiction, and explained why I consider the hybrid creature to be a cyborg. I have outlined the reasons for choosing Donna Haraway's influential essay "A Cyborg Manifesto" and her later works for advancing the trajectory of my research. I have provided an overview of the philosophical and scientific reasons that people fear the contested species boundary represented in the hybrid. I have introduced and explained why I have chosen to explore the particular science fiction works in this exegesis.

In the following chapter I will explore the importance of the trope of the mad scientist for hybrid conception and for the boundary transgression between the human and the animal that Haraway judges necessary to the cyborg's existence.

Chapter Two: *Xenos*

Monsters Manufactured: Boundary transgressions and the trope of the mad scientist.

Introduction

In “A Cyborg Manifesto”, Haraway outlines key criteria for the emergence of the cyborg, and its existence. Haraway signals three crucial boundary breakdowns that, she argues, made her analysis of the cyborg possible. The first boundary breakdown is between human and animal, the second boundary breakdown is between organism and machine, and the third boundary breakdown is between the organic and inorganic (Haraway 1991, pp.151-153).

In this chapter, I will explore these boundary breakdowns as proposed by Haraway analyzing through key science fiction works how they are crucial to the rise of the hybrid in science fiction.

This chapter is called “*Xenos*”, the Greek word for foreign or stranger that has been adopted by medicine for the word ‘xenotransplant’ to indicate an animal organ placed into the human. The science fiction works examined are fictional responses to developments in science that have pushed the boundaries of what we perceive to be human. I will focus on representations of human-animal hybrids in science fiction that are inspired by breakthroughs in ideas about evolution, medicine, biotechnology and genetics.

According to Haraway, the first boundary to be breached is that between the human and the animal (Haraway 1991, p.151) that implodes the Christian doctrine that decries the animal as having no soul and being simply a machine available for humans. As biology and evolutionary theory erodes the differences between the human and non-human animal that began with the publication of Charles Darwin’s *On The Origin of Species* in 1859, many people also affirmed a deep connection with other living creatures. But there was also the fear than if man evolved from animals, he could degenerate back to animal, an anxiety illustrated in H.G. Wells’ 1896 novel *The Island Of Doctor Moreau*.

The second boundary breakdown Haraway identifies for the emergence of the cyborg is the distinction between the human-animal and the machine. As computers and machines invade our bodies and minds, the blurring of organic and mechanical means that we can no longer rely on definitions of “nature” (Haraway 1991, p.152). It is perhaps no coincidence that some of the most disturbing science

fiction has its roots in actual scientific experiments. From Joseph Stalin's sanctioned program of inseminating women with primate semen to create super soldiers (Rossiianov 2002), to scientists creating human-animal hybrid embryos in British laboratories (Baylis 2009), fiction's role is to give a narrative to science and expose the possible consequences of its hubris. While the scientific and technological aspect of hybrid experiments could not be successfully achieved until the advent of biotechnology, the possible ethical consequences were explored in fiction.

In the third boundary breakdown, Haraway writes of the ubiquity and invisibility of the cyborgs as the boundary between the physical and non-physical becomes very imprecise. She argues that a cyborg world "might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanent partial identities" (Haraway 1991, p.154). I explore this fluid boundary and identity in analysis of key science fiction works, where hybrids exist between human and animal, and in the case of Dren in the film *Splice*, between gender. This final boundary breakdown points to the lack of space within the world the hybrid can inhabit, and its struggle to know itself as a being. In writing about the body, Jean-Paul Sartre describes how he knows what his body must be like because he has seen cadavers of men dissected, and understands he must be the same (Sartre 1943, p.303). This is not the case for the hybrid. Moreau's Beast Men were evolving experiments, ranging from a limbless thing that slithered and killed in anger, to Moreau's final success, a puma more human than the other hybrids. Moreau was catholic (from the Greek word '*katholikos*' meaning universal) in his efforts to create a hybrid menagerie, and many were *sui generis*. Frankenstein's creature had no companion made in his likeness, and neither did Dren. I was reminded of Sartre's comments about cadavers when I watched the scene in *Splice*, where, shortly after she is born, Elsa and Clive sedate Dren and scan her body to reveal its secrets; the dimensions and attributes of her anatomy can only be known to others.

Science fiction is created not in a vacuum, but as a response to and as a textual imagining of scientific achievements and research. While human-animal hybrid experimentation provides us with compelling representations of human identity in a biotechnological age, it also reveals deep levels of speciesism. Science fiction about hybrids highlights how we use animals without regard for their own needs, safety or comfort, how we tame the animal body, and how we mold and break the animal spirit.

In this chapter, the textual case studies I examine are fictional responses to developments in science that have pushed the boundaries of what we perceive to be human. For centuries stories about hybrids between humans and apes have been told by travelers, naturalists and novelists, with interest mixed with disgust and fear (Rossiianov 2002). Nineteenth-century fiction that explored the relationship of hybrids and humans revealed historically determined human attitudes towards animals is as much to be found in literature as in scientific texts (Kenyon-Jones 2001). Works such as Thomas Love Peacock's 1817 novel *Melincourt*, in which Sir Oran Haut-ton the baronet is also an organ-utan who speaks English and plays the flute and is about to be elected to Parliament; and Gustave Flaubert's 1837 *Quidquid volueris* featuring Djalioh, a hybrid human-ape ("*l'homme-singe* ") demonstrate a desire to explore the similarities between the species. Our relationship with animals as explored in fiction gives us vital clues to how we view our own humanity and superiority as a species.

Science fiction works to be examined

Mary Shelley's *Frankenstein* signals the start of an investigation in fiction about the scientific impulse to create hybrids (Squier 1998, Clayton 2007, Heffernan 2003 and Ferreira 2008). Mellor says that from a feminist perspective, *Frankenstein* is a book about a man trying to have a baby without a woman. Victor Frankenstein uses science to create life without women. H.G. Wells' novel *The Island of Dr Moreau* (1896) anticipates certain key developments in late-twentieth-century molecular biology and speculates on the possible consequences of this scientific research (Danta, 2012). Mikhail Bulgakov's 1925 novel *A Dog's Heart*, Dmitri Shostakovich's recently resurrected 1932 satiric opera, *Orango*, and Vincenzo Natali's 2009 transgenic science fiction horror film *Splice* make imaginative use of the scientific procedures of their time, such as vivisection, xenotransplantation, experiments in hybridization between human beings and apes, and the creation of cybrid (human-animal) embryos through biotechnology.

The depiction of the hybrid illustrated in these textual case studies displays the anxiety about the notion of what is considered human. Here the hybrid symbolizes not only the disrupted boundary between not just the animal and the human, but the fragmented modern identity. Its sexuality blurs species boundaries too, resulting in ethical dilemmas for other characters. Dren, the central hybrid in *Splice* engages in transgressive sexual activity with her parents that forces viewers to confront taboos such as bestiality and incest (This is examined at length in chapter five).

In these works, the eventual fate of the hybrids, either death or devolution, epitomizes the cultural acceptance and presumed inevitability of animal sacrifice. It also points to their liminal status as persons. In “Chimera and the Continuum of Humanity” D. Scott Bennett argues that personhood is the necessary threshold requirement to the application of specific constitutional rights and therefore personhood of various types of Chimera is crucial. “Given the state of Chimera technology, the division between human and animal has become a continuum not a bright line” (Bennett 2006, p.349).

Does the moral or ethical intent matter to the outcome of the fate of the hybrid? Julian Savulescu says while creating human-animal hybrids may be questionable, he also says that it may have value in medical purposes, in delaying aging or prolonging human life or by enhancing human capabilities (Savulescu 2003).

Although humans are animals, the desire to preserve separate categories for animals and homo sapiens is one that can be traced back to the middle ages. When early Christian thinkers established what they believed to be clear categories that separated animals from humans, they were not only making a theological statement of humanity’s dominance over the natural world but were actually defining what it meant to be human. (Salisbury 2004) Concerns about hybridity and an anxiety of race and species reveal a preoccupation with issues of origin and hierarchy (Squier 1998).

Kirill Rossiiianov argues that while ‘degeneration’ – regression to the primitive and ‘animal’ state was widely regarded as a major biological and moral threat to the human race, it was easier to address hybridization as a scientific problem in Bolshevik Russia where social barrier and hierarchies no longer appeared ‘natural’ and/ or inevitable (Rossiiianov 2002).

In the 21st century, with biotechnology and transgenic animals and the creation of human-animal embryos for research purposes, the boundaries between animal and human are now called into question.

That has not stopped both scientists and writers from imagining that the merging of the biological identities would result in improvements for both species. Let us now investigate examples in fiction of what happens when the boundary between human and animal breaks down.

Frankenstein and The Island of Doctor Moreau

Despite wanting to create a species that would 'bless him', Victor Frankenstein is fearful and appalled at his experiment. He is in sheer terror after bringing to life his creature 'after two years of toil'. He runs to his friend Clerval, who asks what is wrong when he sees a wildness in Victor's eyes that frightens and astonishes him:

"Do not ask me," cried I, putting my hands before my eyes, for I thought I saw the dreaded spectre glide into the room; 'he can tell. – Oh, save me! Save me! ' I imagined that the monster seized me; I struggled furiously and fell down in a fit

(Shelley 1818, p.62).

The trope of the mad scientist traces its roots to the clinical association between genius and insanity that emerged in the mid-eighteenth century (Stiles 2009). We see a shift in the mad scientist trope between *Frankenstein* and *Dr Moreau*. Darwin's *Origin of Species* placed the human at the top of the evolutionary ladder, because it is only humanity according to Darwin who can assess the "grandeur in this view of life" (Fudge 2009). Like *Frankenstein*, Wells' novel is concerned with the role of science in the construction of a new race. Both the scientists Dr Frankenstein and Dr Moreau see themselves as gods and the creators of a new class of being. Frankenstein is horrified at what his scientific endeavors have produced and abandons his 'child', Mellor says that Victor Frankenstein's reaction to his creature gives shape to Shelley's deepest fears about being able to love a deformed child (Mellor 1988, p.41). Dr Moreau has no such anguish.

Doctor Moreau was published shortly after Wells' hugely successful novel *The Time Machine*, and written in a highly productive period when Wells did not expect to live long because of ill health. The works from this time, like *Doctor Moreau*, are dark and frightening, baiting readers to imagine a world where the veneer of civilization has been stripped away by catastrophe (Lodge 2012).

In Wells' novel, the "animalized victims" and "animal-men" who inhabit Moreau's island have been created by a reclusive scientist who has been forced out from his career in London because of the public outrage at his cruel experiments on animals. This mirrored public sentiment at the time, especially amongst women reformists, regarding vivisection which is the experimentation on live animals to understand the mechanisms of the liver, pancreas, spleen and other organs (Kalof 2007, pp.135-140). What I find interesting in Wells' novel is not *how* Moreau's

Chimeras are created, but *why*. As Margaret Atwood explains in her introduction to the 2005 edition of *Doctor Moreau*, “no man ever did or ever will turn animals into human beings by cutting them up and sewing them together again” (Wells, 1896, p xiv).

Dr Moreau’s reasoning is that he wishes to drive out the evil in the human and thus the consequent hybrid will be a more rational creature than man. The fact that these experiments and surgeries cause horrific pain is of no concern to him. Shipwreck survivor Prendick listens to Dr Moreau’s explanations for his experimentations during which “he was simple and convincing. Now and then there was a touch of sarcasm in his voice” (Wells 1896, p.70). Indeed, Moreau sees himself as a father figure, ruling his hybrid species with a loving but iron fist. They are bound by strict rules; not to go on all-Fours; not to suck up Drink; not to eat Flesh or Fish; not to claw Bark or Trees; not to chase other Men (Wells, 1896, p.59).

Prendick is preoccupied with understanding what distinguishes human life from animal life. It is a concern for the Beast Men as well. They have their rules – not to eat meat, walk on four legs, and so on – but adhering to the rules as laid down by Moreau doesn’t make them men. They look uncannily human, so much so that Prendick is scared they are human turned to animals and that will be his fate.

For Prendick, it is a combination of the *loss of things* that make the Beast Men human that so isolates him as truly alone among his species at the end of the novel. He observes that their speech gradually disappears, becoming more simian; they walk erect with increasing clumsiness; they are unable to use their hands as humans and eat like animals; they have no regard for decency or sexual prudishness, and make themselves lairs; “at night the air was hideous with their calls and howling” (Wells 1896, p.126). In short, the Beast Men have self-awareness, which they lose, and it is this anxiety that man can devolve back into animal that arose after Darwin published his thesis. It was this acceptance of the mind/body split that allowed Descartes and his followers in the 17th century to justify inflicting pain on animals (Birke and Michael 1998). The Cartesian notion that animal bodies are mere machines underpins the use of their bodies for supply parts such as for xenotransplantation.

A Dog’s Heart and Orango

In Mikhail Bulgakov’s long banned 1925 novel *A Dog’s Heart* it is Bulgakov’s use of contemporary scientific ideas that is used as both allegorical plot device and the basis for the creation of a hybrid that interest us.

In Bulgakov's novel, the trope of the mad scientist is revealed in the character of a famous doctor, Professor Preobrazhensky; a name that means 'transfiguration' (Fudge 2009). He takes a stray dog into his home and experiments on him by transplanting human testicles and a human pituitary gland into the dog. Like Dr Moreau, his arrogance is on display:

"A new area of science is opening up: a homonuclus has been created without any Faustian report. The surgeon's scalpel has brought into being a new unit of humanity! Prof. Preobrazhensky, you are a creator!" (Bulgakov 2007, pp. 64-65).

Yet his hubris is quickly undone. Sharik the dog becomes a foul-mouthed, lecherous human who names himself Poligraph Poligraphovich Sharikov. As a hybrid who has acquired language, Sharikov can speak for the animals subjected to scientific experiments who have no voice, and demands to know why he was operated on without giving his consent. What is at stake here is the dog's own species identity, something that human arrogance cannot fathom is important, but that Sharikov realizes he has lost. Through Sharikov we see that xenotransplantation results in a loss of identity, forcing us to ask at what point are we fundamentally altered when we accept parts from another species (Heffernan 2003). Yet while Bulgakov provides us with shifting species boundaries that are echoed by the shifting narrative voices (Fudge 2009), Sharikov is portrayed as having instincts that, like Moreau's Beast Men, cannot be erased. He chases cats, and this is his undoing when it results in the flat being almost destroyed. Angry his experiment is out of control, the Professor reverses the experiment and turns Sharikov back into Sharik the dog – again without his consent.

Although readings of *A Dog's Heart* point to it as a political allegory and criticism of the Soviet System (Bulgakov, 2007, p.xiv), it can also be argued that it has something to say about the constructed notion of human (Fudge, 2009).

The political upheaval of the 1920s in the Soviet Union paved the way for real life interest in the creation of the human-animal hybrid through artificial insemination that inspired Dmitri Shostakovich's recently resurrected 1932 satiric opera, *Orango*. Planned as an opera in three acts with the forty-minute prologue, Shostakovich's opera was completed only in piano vocal score and languished in a Russian museum archive until 2004, when it was rediscovered. The prologue was orchestrated by British composer Gerard McBurney and given its world première (semi-staged by

Peter Sellars) by Esa-Pekka Salonen and the Los Angeles Philharmonic in December, 2011 (ClassicTV.com. 2012).

In the late 1920s Ilya Ivanov, an eminent Russian biologist at the Institute of Experimental Pathology and Therapy in the former Soviet Union, carried out experiments with doctors inseminating female primates with their own sperm. Ivanov was sent by the Soviet government and Academy of Sciences to Africa in 1926 to carry out experiments involving the artificial insemination of female chimpanzees with human sperm. Upon his return to the Soviet Union in 1927, Ivanov continued this controversial research at a primate station in Sukhumi. It is claimed these experiments were part of a Stalinist experiment to breed a human-ape hybrid (Rossiiianov 2002).

The opera, with a libretto, by writers Alexei Tolstoy and Alexander Starchakov, sets up the tale of the rise and fall of Orango, a.k.a. "Jean Or," a human-ape hybrid who becomes an anti-communist and newspaper baron, swindler and blackmailer. Finally, his corrupted humanity causes him to revert like Moreau's Beast Men, to his animal state, becoming more like his ape mother in his features the older he gets. The refusal to take rigid social borders as unchangeable allowed Marxist biologists in the Soviet Union to support the experiments of hybridization between human and animal (Rossiiianov 2002).

Like Ivanov's experiments (and eventually the Soviet Union), the hybrid state of Jean Or is doomed to failure. The species boundary is preserved. Kelly Hurley maintains this characterization of "science as a liminal art" is prevalent in popular literature of the modernist era. Hurley says science describes both 'monsters manufactured' and the "unpredictable strangeness of the natural world, and the bizarre, shifting nature of the human subject itself." These, she argues, belong to a tradition that straddles the gothic, horror and science fiction; genres that investigate in their texts the "thoroughly loathsome nature of the abhuman bodies", as well as other characters responses to them (Hogle 2002, p.192).

When writing *A Dog's Heart* Bulgakov had plenty of scientific evidence to draw on for his research into the creation of a hybrid. He studied medicine at Kiev University in 1909 and worked in front line hospitals in World War I. He would have also been aware of the experiments by Russian scientist Serge Voronoff (1866–1951), working in Paris. Voronoff was one of the first to transplant testicular tissue from a monkey into a human reproductive gland in 1920. Five years later he had already performed this procedure on 300 patients and attracted patients from around

the world (Schultheiss and Denil, 1997). Voronoff argued that the grafting of slices of monkey testicle onto the testicles of men would lead to rejuvenation of flagging virility. Animal sexuality is seen as forceful, driven by primal instinct and unhindered by human anxieties. Erotic fiction of a bestial nature plays upon this insatiable lust and virility, so it is perhaps no surprise that after Voronoff began by experimenting with ageing rams in 1917, he made a fortune creating temporary “Chimeras” of human males until their immune systems rejected the grafts.

It is more unnerving if tampering with the human body to overcome illness or cheat death via xenotransplantation is seen to alter the obvious physical nature of the human. A critique of a framework for determining if and when the U.S Constitution and the rights it confers should be applicable to Chimera and Chimera research (Bennett 2006, p. 349) concluded that different categories of Chimera should be afforded differing levels of protection in relation to the fundamental characteristics of humanity they possess. Those fundamental characteristics are higher-level human cognitive traits and the possession of crucial human biological tissues (Bennett 2006, p. 387). I would argue that it is not only appearance that humans use for acceptance into their species. As we can see from *Doctor Moreau*, and *A Dog's Heart*, language and compliance with social mores are regarded as key criteria for being human. What constitutes or defines what is human is generally not written down in law or legislation, and instead is rooted in historical, cultural and ethical understandings of what it means to be human (Hinterberger 2011).

In *Orango*, the loathsome and animal nature of Jean Or is epitomized when he is put in a cage and displayed as a cautionary tale (LA Times, 2011). Human Zoos that featured at world's fairs shaped international relations for over a century (1851-1958), a time when scientific racism enabled people to view The Other as a spectator sport and in which racism, segregation and eugenist ideas were able to penetrate public opinion (Blanchard 2012). Here, Jean Or, as the animal Other, is cast perfectly as the spectacle in a cage. When his animal side emerges he is deemed savage and inferior, worthy only of a zoo. In this libretto, we identify the hallmarks of the classic hybrid tale – the mad scientist is a French biologist who impregnates a female ape with human sperm. The scientist later invites the hybrid into his home and introduces him to his daughter, with disastrous results when the hybrid tries to rape the daughter. This is a similar plot line to *Gorsaga*.

Splice

In Vincenzo Natali's transgenic science fiction horror film *Dren*, the ultimate Chimera is created when scientists Elsa and Clive splice animal and human DNA. The Chimera, with its origins in Greek mythology had the head of a lion, the body of a goat and the tail of a serpent. Its form was symbolic of its monstrous nature. Along with the hybrids such as the Minotaur, the Gorgons and the Sirens, the Chimera was seen as a sign of impending disaster. In modern biotechnology, the term Chimera describes an organism comprised of at least two genetically distinct populations of cells originating from independent embryos. Chimera technology has rapidly left the realm of the hypothetical and this technology opens up a potential minefield of legal and ethical questions by intimately mixing human and animal.

The blurring of boundaries through biotechnology results in *Dren's* traumatic birth. Although she is expelled from the artificial womb as a writhing, hissing lump with a long tail, *Dren* has accelerated growth and rapidly develops into a grotesque creature that looks like a plucked chicken with long emu legs, a kangaroo tail and a porpoise like head with side set eyes. She quickly transforms into a girl who has a normal torso and arms, an increasingly normal looking head, and animal legs and hooves. She becomes a strange but beautiful young woman, with animal legs, wings and a deadly tail, and then finally, a larger and ferocious male, vengeful and powerful.

It is intellectual curiosity and hubris that drives Elsa and Clive to artificially fertilize a human egg with multiple animal DNA. It is only after *Dren* is born that the scientists pause to consider the implications of what they have done. They subject *Dren* to Xrays and MRI scans to investigate her internal structure. They marvel at how the human and animal are fused. Clive wonders if her more deadly characteristics may turn out to be human or animal. Yet it is Clive who tries to kill the newborn because it is so grotesque and he reasons it must be in pain. Elsa is constantly driven by the desire to see what eventuates from the experiment. *Dren's* life is one of isolation, agony and surveillance, culminating in her scientist parents plotting to kill her when she becomes a rebellious teenager and deemed out of control. *Dren* is only ever considered a scientific experiment and property, able to be exploited or disposed of as seen fit. At the end of the movie, Elsa, heavily pregnant with *Dren's* baby is told by the head of N.E.R.D that the price for signing a very lucrative deal to give birth so the hybrid progeny can be used in medical experiments is silence – for commercial reasons. The company will be 'filing patents for years'. *Dren* is, and will remain, a commercial product, to be created, used, destroyed for commercial reasons.

Conclusion

In this chapter, I have shown that the breakdown of the boundary between the human and the animal, Haraway's criteria for the emergence of the cyborg, is made possible by scientific experimentation. As scientists use technology such as xenotransplantation, artificial insemination, IVF and biotechnology to merge the animal and the human, the species boundary becomes blurred. I also explored the trope of the mad scientist and illustrated how hybrids embody the ambitions of scientists whose aims may have gone disastrously off course.

The monsters that captured the medieval imagination by the late 12th century were seen as the exact antithesis of humans; they were covered with hair, they lived away from the civilization of settlements, lacked speech and ate raw meat. Joyce E Salisbury says that this creature – a negative human – comforts because “it threw into focus precisely those qualities that defined humanity; rational thought, social behavior cleanliness, and clothing.

Biotechnology is now advanced to the point where ethical concerns about the personhood of hybrid are being seriously debated. The science fiction works discussed in this chapter can be read as more finely nuanced critiques in which those working within science are now being held accountable to ethical standards of research.

Having considered the genesis of the hybrid, in the following chapter I will examine the trope of the monstrous birth, with specific reference to Haraway's criterion that cyborg replication is uncoupled from organic reproduction, as well as the isolated places where monsters are born and raised away from the surveillance of society.

Chapter 3: *Tokos*

Monstrous Spaces: hybrid breeding grounds

Introduction

This chapter explores the locations where the human-animal hybrid is first created. To do so, I will examine Haraway's argument from "A Cyborg Manifesto" that cyborg replication is uncoupled from organic reproduction. In calling this chapter *Tokos*, the Greek word with a range of meanings regarding childbirth, and something considered a burden, I will also investigate the trope of monstrous birth as manifestation of our fear of technology.

To introduce the concept of the cyborg, Haraway signals "three crucial boundary breakdowns" which make her analysis possible (Haraway 1991, pp.152-153). As I outlined in the introduction, these are firstly that the boundary between human and animal is transgressed; that secondly, the distinction between animal-human (organism) and the machine has broken down; and thirdly, that the boundary between physical and non-physical is very imprecise.

It is the third distinction, the breakdown of the boundary between physical and non-physical, that is of concern in this chapter. In a world where there is no "natural", sexual reproduction is no longer the ultimate strategy for reproduction. Coupled with the breakdown between the animal and human, the biotechnological leap to the creation of a human-animal hybrid such as Dren in *Splice* is no leap at all.

In *Companion Species Manifesto*, Haraway proposes "species is about the dance linking kin and kind. The ability to interbreed reproductively is the rough and ready requirement for members of the same biological species" (Haraway, 2003 p.17). However, what happens when technology can intervene in a way that nature cannot, and the species barrier can be breached, and the hybrid is now kin and kind to both animal *and* human? Today we are long past sex as our sole means of generation. The concept of species is no longer tied to reproduction. (Blake, 2012)

In this chapter I will argue that the secret locations chosen as the birth place for the scientifically created hybrid are specifically selected for their isolation and serve as a particular incubator for the monster. As I will explore through my textual case studies, it is a paradox that these isolated locations in which these births take place, out of the view of the external, social regulatory apparatus, are subject to the rigorous internal regimes enabled by science and technology.

It is a vital first stage in the hybrid's lifecycle that they must begin their short and painful journey through an unnatural birth that involves both scientific assistance and surveillance to monitor their evolution to almost human. Here, the work of theorists N. Katherine Hayles, Nina Lykke and Rosi Braidotti and their focus on the ways in which science and technology interact with gender roles is useful in understanding the role of the monstrous, scientific birth as a crucial element in the lifecycle of the hybrid.

The places where monsters dwell has invariably been in the darkness of the human imagination - dragons in caves, unimaginable creatures at the edge of the world, and terrors that lurk in places where we should not go. From the secret laboratory in *Frankenstein*, to the uncharted Noble's Island in *Doctor Moreau*, the dystopian spaces of birth in these case studies cast their shadow over the monstrous work carried out in their midst. In *Splice*, Clive and Elsa create their hybrid Dren in secret hidden within the company they work for, taking over a disused laboratory and commandeering N.E.R.D.'s resources, such as the artificial womb dubbed "Betty" they have used for other less ambitious transgenic experiments and projects.

Moreau created the Beast Folk in isolated exile on Noble's Island "the only island known to exist in the region". In Kirstin Bakis' 1998 novel *Lives of The Monster Dogs* the hybrids are created by Dr Augustus Rank in the remote and eponymous Rankstadt "on an obscure creek high in the Canadian wilderness, at a site chosen for its utter isolation". As I will examine in this chapter, these are monstrous sites of violence, restriction and incarceration. Their "untamed beauty" provide an ironic contrast to the work of Moreau and Rank, who tamper entirely with nature, making over animals into human form.

Monsters

Monsters have persistently been deemed unnatural, abject, suspect, different, the other. Monsters represent a defect of nature, either of excess, or lack. Monsters are relegated to the outskirts of society, or dragged back in as spectacle. The history of literature features monsters that scare the reader, shock our sense of propriety and blur the biological distinctions between human and "other." However, the way monsters have been created through science and laboratories in science fiction is now almost commonplace in science (Picart and Browning 2012, pp. 7-11). In 2012, the 28th Meeting of the European Society of Human Reproduction and Embryology (ESHRE), Istanbul, Turkey, heard that five million babies have now been born as the result of IVF technologies (Medical News Today, 2012).

Gender theorist Judith (Jack) Halberstam argues that as reproduction and kinship relations become more and obviously artificial, the concept of ‘the human’ tends to absorb the critique of the natural. Halberstam says this legacy finds its way into the incorporation of the new technologies of artificial insemination, cloning, and regeneration into new narratives about the horror of human embodiment (Picart, 2012, p.146).

In *Splice* Dren is a monster of the biotechnological age, whose creation is mechanical. Elsa secretly uses her egg and she and Clive “splice” it with multiple animal DNA. After countless failures, they are successful and transfer the embryo to the artificial womb which suspends like a spaceship in the laboratory. The hybrid grows so fast the scientists are caught off guard, rushing from bed to deal with the early labor. Elsa, seeing the hybrid is in distress, attempts a caesarean section, cutting away the silicon skin of the womb and inserting her arm, which is attacked. Clive must pull her away and revive her with an adrenalin injection when she goes into shock. The tadpole like creature drops from the gash in the torn artificial uterine wall and slithers hissing across the floor.

Elsa: What was that? What was that?

Clive: A mistake.

Monsters demonstrate things, usually of a cautionary kind. Originally the province of teratology – (from the Greek word *teras*, meaning monster) –anomalous births were considered ominous, portents of disease and disaster (Skal 2012). In this chapter, I will argue that the births in my case studies are indeed ominous, yet the monstrosity resides in those who have created the hybrids.

Elsa and Clive joke “we could splice a dog and a pony” and after their research funding is cut they decide to use their expertise to create a new life form because, as Elsa says “I’m not spending the next five years digging through pig shit looking for proteins.”

As *Frankenstein* allows the reader a journey into scenarios of what happens when science usurps the role of the maternal (Mellor 1988), the same can be said for *Splice* and *Doctor Moreau*. In utero, Dren represents the monitored, technological pregnancy, constantly under surveillance. This portends what will happen in her life. She is an experiment, one to be recorded. Her birth shocks, and her grotesque and deformed appearance frightens Clive. Dren is a monster, but she is also a disabled

child, and, like Dr Frankenstein, Clive doesn't want to live with the consequences of his actions and decides to put an end to the experiment.

Origins: The workshop of filthy creation

Frankenstein draws on the long tradition that links monstrosity with maternal aberration (Baldick, 1987, p.30-31). Shelley's creature became the archetype for the industrial age monster by remodeling the Gothic genre, wrenching its ghosts and monsters away from supernatural origins and introducing a man-made scientific cause for the terror.

While the creature is the result of Frankenstein's desire to create a new species who would "bless" him as its creator and source, he is instantly repelled by the ugly creature, and then frightened by it. Like a fearful parent rejecting a deformed child, he turns away from his creation: "Now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart" (Shelley 1818, p.58).

Graham says it was "being formed from fragments of morality" and emerging from the world of death that is the key to the creature's monstrosity. But she also queries whether the creature is the real monster in the story. Might not the monstrous circumstances of the creature's genesis condemn him to a non human status? (Graham 2002, p.14). Mellor argues that Victor Frankenstein's unhealthy and obsessive imagination at the moment of conception could only result in creating a monster. She says that by originating a new life form quickly, by chemical means, he reverses the evolutionary ladder described by Darwin (Mellor, 1988, p.101).

Shelley's actual description about how Frankenstein animates the creature reveals little about the scientific process, concentrating instead on Victor Frankenstein's lonely endeavor. Baldick says that Frankenstein's 'secret toil' to create the creature in the shadow of guilt and concealment can be taken as embodying the socially irresponsible logic of private production itself (Baldick 1987, p. 51). Where did Frankenstein "pursue nature to her hiding places?" Where did he do his "secret toil"?

"In a solitary chamber, or rather cell, at the top of the house, and separated from all other apartments by the gallery and staircase, I kept my workshop of filthy creation" (Shelley 1818, p.55).

In *Doctor Moreau*, Noble's Island is literally a prison: a place where Moreau escapes to after being driven out from England because of revelations in the press

about the methods of his research. Dr Moreau confides in Prendick that he has created these Beast Men in the knowledge no one would be censuring him as in London. It is ironic that a location of natural beauty serves as an incubator for Dr Moreau's sordid experiments in making a new species. The island also becomes Dr Moreau's training ground in making the Beast Men human. Atwood observes that Noble's Island "is both semi-alive and female, but not in a pleasant way" (Atwood, 2011, p. 159) and the locale becomes the site of a moral breakdown that is specifically sexual when the Beast Men lose their humanity. Graham says that one way of defining what was quintessentially human was to contrast it with bestiality and hybrid creatures of mythology represented a sexualized nature "which rampaged through the ordered institutions of city and family" (Graham 2002 p.47). Monsters merging women and animals embodied particular danger, as their oozing, disruptive sexuality threatened the social orders. Sex could lead to babies and sex with monstrous women would beget monstrous babies. The ontogenesis of monsters lay in 'unnatural' acts that offended the laws of God (Graham 2002 p.48).

Lives of the Monster Dogs straddles a space between Frankenstein and Doctor Moreau, using hybrids created from vivisection who are like the Beast Men mostly animal to begin with, but with the self awareness of Frankenstein's creature. The Monster Dogs tragedy is longing to be human while trapped in an existence that confines them to being neither truly animal nor human. They believe they are afflicted with a terrible illness, which will turn them back into dogs. Unlike Frankenstein's creature, or Moreau's Beast Men, the Monster Dogs are accepted by society. After killing their masters and destroying their home in the Canadian wilderness, the Monster Dogs take their newfound great wealth to New York, where they become celebrities. As Graham observes, for many cultures, the existence of any living thing that seemed to transgress the laws of nature was an object of curiosity (Graham 2002, p. 47).

Frankenstein's creature knows he is alone, cast out by his maker, as does Dren, after having been rejected by her parents. The Monster Dogs, on the other hand, like the Beast Men, kill their creators – Dr Rank and Dr Moreau – and escape to New York. What provides the Monster Dogs with their freedom is the common bond forged through the communal knowledge of their painful births. The Monster Dogs grew up knowing about their creation as it formed the town's history and collective memory. Graham says that it is recognition that humanity has a shared origin in birth, which necessarily embeds us in common experiences, both biological and social, and commits all living beings to sociability, interdependence and

embodiment (Graham 2002). In this sense, the Monster Dogs reveal they are more human than hybrid, for as Haraway proposes in “A Cyborg Manifesto”, cyborgs do not have an origin story in the Western sense (Haraway 1991, p.150).

Surveillance

The farmhouse where Elsa and Clive take Dren after the laboratory and storeroom at N.E.R.D become compromised serves as panopticon, where Dren is watched and punished if she does not adhere to the rules of conduct designed to shape her personality. Dren adopts a cat who is taken away from her by Elsa. When Elsa returns the animal, Dren kills it and is punished by having her human markers such as clothes, jewellery and makeup removed to further emphasize her status as an experimental animal. Elsa places Dren naked on the table, bound and spread like an animal about to be sacrificed, as she cuts off the stinger at the end of Dren’s tail. Dren is docked, like a captive pet. Later, after Clive tries to justify having sex with Dren, he confronts Elsa about the reason they created the hybrid.

Clive: Why the fuck did you want to make her in the first place? You never wanted a normal child because you were afraid of losing control. But an experiment –

Elsa: I love her.

Clive: But we fucked up. We chained her up. We maimed her. We hid her away from the world.

The theories of surveillance proposed by David Lyon (1994, 2001, 2007) are useful in understanding why the isolation and surveillance of the farmhouse is so crucial in Elsa’s determination to control Dren as an experiment. Lyon, who is influenced by Michel Foucault’s work in *Discipline and Punish*, maintains that everyone is implicated in surveillance, both as watchers and as the watched. With surveillance, Lyon argues, some purpose is present, which may appear on a continuum between care and control. Moreover, in order to work, many surveillance processes depend on the involvement, witting or not, of those who are watched. The surveillance at work in the panopticons of Dren’s farmhouse and Noble’s Island forces adherence to the rules designed to mold the hybrids into a version of human. Dr Moreau and his human helper Montgomery enforce rules in order to make sure that the Beast Men do not revert to their “animal natures”. This ‘law’ forbids the hybrids to act like animals. It is disseminated by the Sayers of the Law – thereby using

hybrids against each other as a form of control. To break the law is to risk punishment.

In *Monster Dogs*, there are rumors that Dr Rank had embezzled from his original patron, the ruler of the German empire, and when he escaped to complete the project completely under his control, he took flight into Canada, finally locating a place where he can create Rankstadt at a site chosen for its utter isolation. Here, he continues with his project, and the social panopticon of the remote village he created means he had a loyal and unquestioning team around him, supporting him through generations as he tried to perfect his creation of monsters.

At the farmhouse, where Dren is made to live in the barn, she is constantly watched via CCTV. Even her water tank, where she rests, is monitored. Clive and Elsa live in the relative comfort of the house and follow her actions on their notebook computer. The CCTV effectively functions as a panopticon. Lyon points out that surveillance has two meanings, derived from the French verb *surveiller*: to watch over, and to take special note of certain human behaviours that go well beyond idle curiosity. This endows the word surveillance with an ambiguity, as in the case of parental concern and care for children - or with Elsa monitoring her progeny as part of a scientific experiment.

For the Beast Men, Noble's Island is subject to constant surveillance that takes away the hybrid's privacy and individuality and makes them conform to Dr Moreau's social norms. This is observed after a rabbit is killed and eaten – an act forbidden against Moreau's laws. Prendick watches as Moreau sounds a horn in a "shallow natural amphitheatre" to call the creatures to attention. The island serves as a natural form of monitoring as it allows Moreau to gather his Beat Men and watch over them to his advantage. In the amphitheatre, they are in his line of sight, under his watch, his gaze. Moreau does a head count, and notices four missing from the 63 gathered. When he looks into the eyes of Leopard Man, he warns him, with the Sayers of the law's assistance that he who breaks the law is evil and shall go back to 'The House of Pain', the brutal vivisection laboratory (Wells 1896, p.89). Likewise, the CCTV footage of Dren, and her constant medical monitoring are aimed at taking away privacy and exerting control. The price for Dren's rebellious adolescent behavior such as hiding the cat and not wanting to eat her dinner is the same as the Leopard Man – punishment and pain.

Lyon argues that whatever the purpose of surveillance - to influence, manage, protect or direct - some kind of power relations are involved. Those who establish

surveillance systems generally have access to the means of including those in their line of vision (as with Moreau's amphitheatre, or Dren's CCTV), whether that vision is literal or metaphorical. This surveillance leads to abuses, misuses and oppression. Indeed, Clive watches Dren swim naked in the water tank and then seduces her.

Conclusion

In this chapter, I have shown how *Frankenstein*, *Doctor Moreau*, *Splice* and *Monster Dogs* share an interest in the "scientific" or technological processes that contribute to the creation and reproduction of artificial life. The full title of Shelley's work is *Frankenstein or The Modern Prometheus*, and in using the Promethean motif for her novel, Shelley casts a warning about the role of science in usurping the natural laws of nature and procreation. In *Doctor Moreau*, the Beast Men devolve into animals once the surveillance structure of the island and Moreau's control cease upon his death. The island's artificial social structure collapses, as does the Beast Men's humanity.

As the trope of the mad scientist evolves, to create life as Dr Frankenstein does, then abandon it, is not enough. By *Doctor Moreau*, the mad scientist must also be vigilant raising the hybrid to reveal its human qualities. Seen as an experiment, a product, rather than a life with its own autonomy and needs, the mad scientist has God like power, and that means he can kill life as well as create it. Elsa and Clive in *Splice* create Dren, nurture her human sensibilities then treat her like an experiment, deciding to kill her when she becomes inconvenient. Moreau creates Beast Men using only his brilliance and instruments of pain, but kills those creations that disappoint. Dr Rank does the same with the *Monster Dogs*, disregarding the psychic pain that the hybrid endures through being torn by its human and also animal nature, and therefore never feeling at home in society.

In this chapter I have shown that an inhuman birth is essential in the generation of the scientifically created human monster. These births take place in isolated locations because subverting the natural law by creating monsters must be done in secret and I argue, raising a hybrid demands constant surveillance. The mad scientists featured in this chapter represent a clear evolution from Dr Frankenstein. In the following chapter, I will examine what happens when the hybrid attains language, and why it is never able to achieve selfhood in human society.

Chapter Four: Logos

Are We Not Men? When the human-animal cyborg talks back

Introduction

As is fitting for a chapter called 'logos' from the Greek word meaning 'word', I will survey one of the key aspects of the hybrid – its language and marginal social status, in *Frankenstein*, *Doctor Moreau*, and *Splice*. I will examine this against Haraway's claims in "A Cyborg Manifesto" that 'cyborg politics is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly, the central dogma of phallogocentrism' (Haraway 1991, p.176). One of the main standards by which humans have asserted dominance and difference over non human animals has been language. It is the failure to communicate across the species barrier that allows humans to justify exploitation of animals for food, clothing, labor, and even sexual gratification.

The trope of the hybrid as monstrous is used to reinforce the supremacy of the 'normal' humanity, for although we might covet aspects of the animal (strength, virility, heightened senses) we regard the human as occupying a superior position because of rationality and language.

From the Beast Men in *Doctor Moreau*, to the genetically created hybrid Dren in *Splice*, and *Frankenstein's* creature, the species barrier is enforced even as it is penetrated by science. It is one thing for a scientist to create a hybrid, it is yet another for society and even its creator to regard it as being worthy of human rights, because it is part animal. Here we can see Haraway's second crucial boundary for the appearance of the cyborg in the "leaky distinction" between animal-human (organism) and machine. In short, Haraway writes, what counts as nature "is undermined, probably fatally" (Haraway 1991, pp.152-153).

Hybrid rights

Hybrids are not born free – they are created and are regarded as property. They have no dignity or rights, and whether they have reason or conscience is debated by their creator and society as I will outline in the following examples from the case studies.

While unique in its DNA and status on the planet, the hybrid is given the status of the animal rather than the human, by both the creator and society. Yet it is the hybrid's struggle to be human that creates the pathos in the narratives I am exploring. The trope of the hybrid brings together the struggle to be human, the

denial of the animal and the refusal of society to accept them. We can see this in the examples of how the hybrid remains an outcast in *Splice* as Dren reverts to being a monster; in *Doctor Moreau*, as the Beast Men turn back to animals, and in *Frankenstein*, when both creator and creature are cut adrift from the world and float to their deaths on the Arctic ice. The representations of hybrid creatures in these fictional works have much in common with the real life exploitation and brutality society inflicts on animals. The debate about the legal status of these creatures also occurs in reality, with questions regarding the status of any hybrids that might be born as a result of current scientific experimentation. Whether they become objects of property or not depends on whether they are seen to be human, or non-human, or part of life, or non-life (Hinterberger 2011). Fictional representations of hybrids reveal a recurring theme to marginalize creatures who are created from animals merged with humans, and privilege the animal aspect over the human. In *Doctor Moreau*, Prendick observes that the Beast Men long to be animals:

Before they had been beasts, their instincts fitly adapted to their surroundings, happy as living things may be. Now they stumbled in the shackles of humanity, lived in fear that never died, fretted by a law they could not understand; their mock-human existence began in agony, was one long internal struggle, one long dread of Moreau – and for what? (Wells 1896, p.95).

In his book *Zoontologies: The Question of the Animal*, Cary Wolfe suggests that the humanities are struggling to catch up with a radical re-evaluation of the status of nonhuman animals that has taken place in society at large. What, he asks, now separates us from animals when the "old saws of anthropocentrism" such as language, tool use and the inheritance of cultural behaviors have been shown through research to apply to the complex world and cultural behaviors of animals? (Wolfe 2003, p. xi). Citizenship rights for hybrids in my case studies appear to be conferred on a perceived hierarchy of humanity, which is based on the acquisition of language and human appearance. In *Splice*, Dren will never be accepted by humans or as human because she looks quite monstrous, with her animal legs and tail and odd, hairless face.

Language

The struggle to acquire language is a defining feature of the hybrid and the acquisition of language is what removes the hybrid from the realm of the animal and

into the human. When the hybrid has the capacity for language – as the hybrids do in the case studies here – then the balance of power is shifted between species. One of the defining features of the human, along with language, is that it can walk in an upright posture and that it cannot just *see*, but also can *behold*. The hybrid's acquisition of these attributes enables humans to see them as more than animal. While the hybrid is still not accepted into the human community, language does provides a level of confusion for the humans as to their status.

Haraway argues that the cyborg attains power by seizing language as a way to tell their history. I will argue the same applies to hybrids, and from *Frankenstein* on, the acquisition of language, and then of speech, is the source of any power the hybrid might obtain.

Even without spoken language, Dren's ability to communicate through language, by understanding the spoken word, and using the written word, and through drawings, indicates to Elsa and Clive that she has selfhood. According to John Gray, what is distinctly human is not the capacity for language. It is the crystallization of language in writing (Gray 2002, p. 56).

For Frankenstein's creature, the Beast Men and Dren, the use of language informs the hybrid's view of themselves, and yet ironically their understanding of who they are is tied to the narrative constructions of others.

The Beast Men, the creature and Dren have the voice to tell their own story, though Dren also uses a word board to convey her messages. It is significant that the Beast Men lose language when they devolve, and that Dren, on the other hand, gains a voice when she mutates into a stronger, more monstrous and terrifying male version of herself at the end of the movie. Only Frankenstein's creature becomes truly articulate, yet his sophisticated use of language further isolates him as his monstrous appearance marks him as outcast. Language for the hybrid then is never a fixed point. It is a struggle to acquire and doesn't provide the acceptance they seek.

Moreover, the acquisition of language enables the technical understanding of narrative and character development. When the hybrid has the ability to communicate via language, how does this effect the relationship the hybrid has with itself, with humans and with the reader? In *Frankenstein*, the creature is an autodidact, forced to live by himself after being banished from society and abandoned by his father/creator. He teaches himself to read and write and watches and mimics a family through a peep hole in a woodshed. Mellor explains that it is a mystery why the creature's appearance is so repulsive, when Frankenstein himself

chose the parts and perhaps this reflects Frankenstein's guilty state of mind. Whatever the reason, each of the characters in the novel assume the creature's outer appearance is a valid index to his inner nature (Mellor 2003, p.20). Mellor argues that it is Shelley's reader, who listens to the creature's voice as recorded in Walton's letters, who has the opportunity to judge the creature through the ear, and not the eyes. In Haraway's manifesto, cyborg politics is the struggle for language. Mellor writes that in *Frankenstein*, human beings construe the unfamiliar, the abnormal, the unique as dangerous or evil, a construction given their language (Mellor 2003, p.22). Haraway's cyborgs must struggle against 'the central dogma of phallogocentrism'. The hybrid's struggle to be understood is a political act. Language is tied up with power, with identity, and with their place in the world. Without language they are animals, with language, they may be able to make a case for their humanity.

Dren shocks Clive when it becomes clear she can communicate via the written word, and understand what they are saying. Suddenly he has to consider her to be human as well as animal.

On Noble's Island Moreau has imposed a set of rules on the hybrids, to discourage any acquiescence to their animal nature. It is the acquisition of language that provokes doubt over their status – for both Prendick, and also for the Beast Men themselves who use language to reiterate their own non animal status. Prendick observes:

The dark hut, these grotesque dim figures, just flecked here and there by a glimmer of light, and all of them swaying and in unison and chanting: -

'Not to go on all-Fours; *that* is the Law. Are we not Men?

'Not to suck up Drink; *that* is the Law. Are we Not Men?

'Not to eat Flesh or Fish; *that* is the Law. Are we not Men?

'Not to claw Bark of Trees; *that* is the Law. Are we not Men?

'Not to chase other Men; *that* is the Law. Are we not Men?'

(Wells 1896, p.59).

Prendick is both shocked and dismissive of the Beast Men's use of language when he hears them talk of 'the law' for the first time. He tells himself the Sayers of the Law speak 'incontinently' and are 'jabbering'. But frightened, he runs back to Moreau and Montgomery, convinced he has seen animalized men - a 'bestial rabble',

men 'infected with a bestial taint'. He is told they are the results of vivisection, simply produced by a humanizing process. But he is not convinced. Prendick has heard them talk, and that to him is a marker of humanity. It changes his perception of them. "They may once have been animals. But never before did I see an animal trying to think" (Wells 1896, p.69). Without Moreau's medical intervention, the Beast Men revert to their animal selves, losing the power of speech any semblance of humanity. Moreau's "laws" imposed on the hybrids to humanize them are usurped by their animality. As their speech deteriorates, Prendick can no longer find companionship with them and fears them as wild animals.

***Splice* and Dorrit Cohn**

Narratology is a useful methodological tool for exploring the language, imagination and experience of characters in film and literature. (Genette 1980) Narrative techniques may be used to analyze the representation of character psychology and behaviour. Narratology has become widespread in film analysis and is useful here for examining and understanding the psychology and representation of Dren in *Splice*. With his depiction of the inner subconscious of the hybrid Dren, director Vincenzo Natali creates a situation in which the hybrid's human qualities are as confusing to her as her animal attributes and inevitably erupt into the final, tragic events at the end of the movie. The viewer perceives many of the events through the hybrid's perception visually; though our character identification and empathy with Dren's suffering intensifies when she is able to communicate through language.

From the outset, the hybrid's inner world is communicated via animal like "language" of howls, hisses, growls, hums, and clicks. As an inter-species character, Dren forces an examination of the nature of the language that has been traditionally seen as a distinguishing divide between the animal and the human. Giorgio Agamben insists that animal communication is fully linguistic. According to Agamben, the difference between animals and human beings with respect to language is that animals are identical with, and full immersed in, the language they speak (Agamben 2004). Dren is an animal as Agamben suggests, "always and totally in language", and communicates through her animal language from her birth despite having no animal mother to learn from. She has to learn human language from her human mother Elsa, and it is that process of learning language that also makes Dren human and gives her a sense of self.

The relationship between Elsa and the hybrid is shown via action, with the hybrid physically interacting as a dog or small child might, conveying emotions by

vocalizing without words, and by using its body to signal fear, happiness or distrust. After two months, when the hybrid resembles a small girl Elsa realizes it has growing human intelligence. Unable to speak, Dren nonetheless communicates verbally via scrabble letters, spelling out NERD, “free associating” her mother’s to the company T shirt she is wearing. (The creature’s name “Dren” is NERD spelt backwards.) At this point, the viewer becomes aware that the hybrid can comprehend language at a human level.

When observing the consciousness of the hybrid character Dren, the act of language acquisition forces us to confront whether the hybrid’s animality or its humanness is to be privileged. The fact that Dren is not a completely human character means that viewers cannot assume they know what she is thinking, and nor can the protagonists. In *Transparent Minds*, Dorrit Cohn’s description of how consciousness is narrated enables us to interpret the consciousness of the hybrid. Psycho-narration can effectively articulate a psychic life that remains un verbalized or obscure (Cohn 1978, p.46), which is useful in analysing the inner life of the hybrid, and yet as the hybrid develops language, it becomes an observer of the world around.

Cohn identifies three types of presentation of consciousness that can be identified in the context of third-person narration: 1. Psycho-narration - the narrator’s discourse about a character’s consciousness; 2. Quoted monologue - a character’s mental discourse; 3. Narrated monologue - a character’s mental discourse in the guise of the narrator’s discourse.

Cohn applies the terms “dissonant” and “consonant” to these two types of psycho-narration (Cohn 1978, p.275). Consonant narration is where a narrator’s presentation of events in the book or film merges with a character’s vantage-point of these events. In dissonant narration, on the other hand, the narrator’s presentation of events differs from a character’s vantage point. According to Cohn, the stylistic features of dissonance and consonance allows the narrator’s superior knowledge of the character’s inner life and his superior ability to present it and assess it. There is a sliding scale between dissonance and consonance, and in analyzing the hybrid’s use of language in *Splice*, I have found that not only does the narrator shift, so does the dissonance and consonance shift with how each narrator perceives the events and how their presentation of events differs from the hybrid’s vantage point of those events.

With Frankenstein's creature and the Beast Men, language provides a voice for the reader to understand their state of mind, their anger and confusion at being caught between the human and the animal world. By using Cohn's techniques, we can see how Elsa and Clive speak for Dren, providing an insight and motivation into her actions for the reader. These insights turn out to be largely false, with the characters projecting their desires onto Dren. It is only when we hear Dren speak, verbally or through action, that we get the truth. In an example of narrated monologue, Elsa denies Dren attacking and eating a rabbit.

Elsa: She doesn't eat meat!

Yet here the viewer sees Dren being delighted that she has broken free of the barn, and found an animal to kill. She is joyously ripping into the animal, her face covered in blood, making happy clicking sounds. Her eyes are bright. She is smiling. Her actions contradict Elsa. Other experiments Elsa and Clive have conducted could tell them this, but Clive refuses to see the patterns. He wants this experiment over. He wishes Dren was dead. Indeed, we see this through Dren's gaze: When Dren becomes seriously ill with a fever Clive takes the opportunity to try to kill her. Submerging her in cold water, he holds her down until she cannot breathe while Elsa cries and screams. But Dren does not die; she can breathe underwater and Clive's act has saved her life. At this point, in one of only three instances in the movie, we see the action via Dren's eyes as she looks up from the water at her "parents". As their "child" she should expect them to protect her, but one has tried to kill her and the other will maim her before the end of the movie.

When Dren kills her pet cat and threatens Elsa, Elsa "dehumanizes" her by removing her jewelry and clothing. Just as Clive had insisted on calling Dren "it" and not "she", now Elsa refers to Dren as "it", further dehumanizing her. Elsa reduces Dren to an "experiment" by taking her name taken away. Dren becomes "H50" again and we know this as Elsa speaks not to Dren directly but into a digital voice recorder, telling us what Dren is thinking and feeling. Here Elsa's dialogue is typical of psycho-narration with what Cohn describes as maximum dissonance: highly abstract analytical vocabulary to describe Dren's inner world.

Elsa: Although physically the H50 has evolved well, there is disproportionate species identification.

In another example of psychonarration, we see Dren refusing to eat the gruel that Elsa has prepared for her, throwing the bowl against the wall. When Elsa's packet of sweets drops on the floor, Dren rushes to eat them, and again, though at this stage a rather unformed monstrous looking creature with few human features, the viewers realize as she skips around and makes happy sounds, that she likes sweet things.

Elsa: The H50 craves high sucrose foodstuffs.

This is the first indication viewers are given that Dren is Elsa's biological child – they both prefer sweet foods. Perhaps here, Elsa is also seeing herself in Dren, and making the connection, hence, telling the truth, rather than what she would prefer to believe that Dren is. In an example of quoted monologue: a character's mental discourse, we finally have the opportunity to understand what Dren wants and is thinking when she is able to articulate this through language – but not chiefly spoken language. In an example of what I will call the hybrid's quoted monologue – through a combined human-animal response of gesture, understanding and animal sounds, I will illustrate examples of Dren's quoted monologue.

Relocated into hiding at Elsa's family farm, teenage Dren becomes bored, lonely and restless. On the Scrabble board she spells out "tedious" and "outside", indicating to the audience that she has an inner creative life and human intelligence. When Dren is upset, Clive tries to comfort her by teaching her to dance and we see her laughing and making noises of enjoyment. Dren rapidly grows into a teenager, with the torso, breasts and genitals of a woman. But she literally "tests her wings" and rebels, escaping to the barn roof where she discovers to her surprise she *has* wings. She only comes back to her creators when Clive tells her that they love her. Elsa watches, concerned, as Dren hugs Clive. Like a mythological siren or mermaid, Dren later seduces Clive, tantalizing him through the CCTV coverage of her swimming in the water tank. Dren uses hand gestures and a direct gaze, luring Clive to her in the silent language of desire.

We see a change from what Cohn terms dissonant to consonant narration at the end of the movie, when Dren morphs into the deadly male version of itself, and is finally able to speak. At the end of the movie, she defies Elsa and Clive, who have come back to the barn to kill her. But Dren appears to have already died, and the scientists bury her and burn her belongings, preventing anyone else discovering what they have done. But Dren rises from the ground, and has changed gender, and

seeks revenge. She kills Clive, and then rapes Elsa, who struggles to escape and pleads, “what do you want?”

Dren: Inside You.

In Dren’s dialogue, we hear anger, the betrayal of a child demanding to know why their mother has tried to kill them and has lied to them. Dren knows that she has been treated like an experiment. She has been brutalized and maimed by Elsa mother. She is now enacting her revenge. Here we see with two words, Dren reversing Elsa’s earlier conversation about how she loves Dren (example of quoted monologue):

Elsa: You know I love you, don’t you? You are part of me and I am a part of you. I am inside you.

At a time when Dren has metamorphosed into something unlike anything that exists, except in mythology, and yet rapes like a human, this fearsome dragon like creature can speak human language for the first time.

These are examples of how Cohn’s speech-category approach provides a method of studying representations of consciousness in narrative and allows us the insight into the structure of the fictional hybrid’s mind that is part animal and part human. Cohn says that these stylistic features in psycho-narration reveal the narrator’s superior knowledge of the character’s inner life and his superior ability to present it and assess it (Cohn 1978, p.29).

Conclusion

In this chapter, I have examined how humans continue to assert dominance and difference over hybrids using nuanced and sophisticated language. As language is traditionally the barrier between the human and the animal, the hybrid’s ability to use language is confrontational to the human. What is most interesting in the scope of this chapter is Haraway’s claim that cyborg politics is the struggle for language and the struggle against perfect communication, “against the one code that translates all meaning perfectly.” Dren, through language, aspires to be human. We have seen how Dren struggles to communicate her needs and desires as a new species to those around her; using both animal and human language. In this chapter, I also

explored how the hybrid's diminished moral status is a result of entrenched notions of what it means to be human. Haraway writes that 'in a fiction where no character is 'simply' human, human status is highly problematic' (Haraway 1991, p.179). According to Margot Norris, the cyborg helps us understand how humans can no longer logically privilege the rights of the human over those of other forms of life (Norris 2006).

In the following chapter, I will explore the hybrid's erotic encounter with the human, and look at the trope of bestiality in science fiction. I will explore Haraway's rule about cyborg sex and examine it against my textual case studies.

Chapter 5: *Eros*

Loving The Hybrid: Erotic Encounters With the Non Human

Introduction

In science fiction, as in myth, the shadow of bestiality is cast over the erotic encounter between the human and the hybrid character. From the well-endowed and insatiable satyrs of mythology to the sexually charged werewolf films, the desire the human and the hybrid have for each other is both carnal and inherently bestial. In this chapter, '*Eros*', derived from the Greek word love and desire, I will look at how the trope of bestiality is played out in several specific manifestations: both the original novel and the 1996 film version of *Doctor Moreau* (directed by John Frankenheimer); in the character of Dren in *Splice*, and in Frankenstein's creature.

I will examine how the hybrid has both an erotic nature and how eroticism is inherent in the hybrid. In this age of biotechnology-driven genetic modification, I submit that a new denomination should be found for this form of animal-human on human sexual interaction. When it comes to loving the hybrid, the terms bestiality or zoophilia may no longer suffice.

In this chapter, I will examine Haraway's views on cyborg sex. In "A Cyborg Manifesto", Haraway proposes "far from signaling a walling off of people from other living beings, cyborgs signal disturbingly and pleurably tight coupling. Bestiality has a new status in this cycle of marriage exchange" (Haraway 1991, p.152). Haraway is referring to the willingness to transgress sexual boundaries in ways not explored by the majority. The breaking up/resisting traditional modes of coupling, tied to social and cultural prescription and biological imperatives such as procreation, is also of the utmost importance to this consideration.

Bestiality blurs the separation between the human and the animal. Humans have long had a great fascination for sexual activity between creatures of different species. By demanding that human beings do not engage with animals in sexual acts, the act of prohibition defines the differences between the species and sex itself becomes ontologically transformative (Boggs 2010). Haraway argues that the cyborg myth is about "transgressed boundaries, potent fusions and dangerous possibilities", and in fiction, as in society, the trope of bestiality is one of the last taboos.

Historically, human society has evolved in close proximity with animals, and it is therefore not surprising that our myths, folklore and fiction have embraced the animal and our relationship with it. Fantastic beasts intertwining the human and

animal are part of the history of the human imagination, in spite of the strongly enforced distinction between human and animal (Salisbury 2011).

However, these rigid boundaries are dissolved in light of transspecies sexuality, even beyond the organic. Cyborg sexuality, as conceived by Haraway, is an emanation of the hybrid-human erotic relationship. These perspectives, and their respective criticism, will be examined in this chapter.

Bestiality in myth and history

Although bestiality and zoophilia are reoccurring throughout history, bestiality as a cultural practice only received serious attention since the mid-1990s (Beetz 2005).

The roots of these practices are deep in human history. Mythological scenes featuring animals were prevalent historically. Many of these involved the rape of a woman – or an animal - by some god who had taken the form of an animal or hybrid. In the Herculaneum National Archaeological Museum in Naples, a first century sculpture of the god Pan and a She-goat shows penetration occurring (Bishop 2001, p.231).

Accordingly, Greek and Roman mythology are rich in bestial themes, such as Leda and the Swan. In ancient Rome, pornography featuring animals was a form of erotica aimed mainly at men. However, according to Hani Miletski, who researched the history of bestiality, the practice was later institutionalized by the Romans when the rape of women by animals for the amusement of a Coliseum audience was introduced (Beetz 2005).

In the Middle Ages, sexual intercourse with animals was thought to have been healthy and a cure for many diseases. However, as early Christian doctrine started to gain acceptance, prohibitions against bestiality emerged. Early Christian thinkers urged people to have intercourse in ways that differentiated them from the animal, and from the beginning to the end of the Middle Ages, changing attitudes towards bestial intercourse revealed an increasing recognition that it was difficult to preserve the distinction between humans and animals (Salisbury 1994, p.61).

There were also fears that bestiality could produce hybrid monsters. As the fear of half-human births grew, Denmark passed in 1638 a law making bestiality punishable by burning. One story about a woman giving birth to a half-human, half-dog recurred as a cautionary tale against bestiality for nearly a century (Fudge 2000).

The character of the copulation act itself was also in question. Both humans and animals were judged by how bestial their copulation was during intercourse, and some animals, such as the bear, were said to have a more “human” copulation than others. Bears were said to embrace mutually like humans and it was believed that bear semen was compatible with humans and that they could impregnate women (Salisbury 1994, pp.66-67). This belief manifests itself in the tale that the founder of the Danish Royal House is the result of a marriage between a bear and a woman, and given credence by the fact that Johann Lassenius, a German Lutheran theologian of the Baroque period, wrote that carnal unions between humans and animals could produce rational and reasonable human beings (Williams 2006, p.50).

The last taboo?

The merging of the human and the animal occurs in depictions of the monstrous, but it also has a long tradition in erotica, where the long held taboo of bestiality and zoophilia is allowed to flourish in narratives about sexual relationships between human and almost human species. Its ethical perspectives differ. Some regard bestiality as sinful only if it involves animals one will eat (Beetz 2005). However, the act is widely outlawed in national legislation around the world. Piers Beirne (*Rethinking Bestiality: For a Nonspeciesist View of Rights*) argues that bestiality should be condemned because it is similar to abuse of women and young children by men and because animals are unable to consent (Beirne 2007).

Zoophilia is distinguishable from bestiality in that it describes sexual behavior between humans and animals, as well as feelings or erotic sexual attachment humans may have to animals. Kraft-Ebing’s *Aberrations of Sexual Life* (1951) has a chapter on “zoöphily”, the name used for sexual relations between human beings and animals. He subdivides the term into “bestiality” (with no consent from the animal); “zoerasty” (where repeated bestiality is the preferred form of sexual activity) and “zoophilia” (where animals can cause sexual arousing in humans). Apart from bestial acts committed by men who work with animals and prostitutes in “Big Town brothels and in ports such as Port Said”, Kraft-Ebing proposes that it is not a “rare perversion” and “one may confidently assume that the majority of all cases remains unknown” (Kraft-Ebing, 1951 pp.105-111).

We live in an era when many former sexual taboos, such as inter-racial sex and same sex relationships are far more visible and socially acceptable in the Western world. Sado-masochism and bondage has left the hushed back rooms of sex shops and hit the bestseller lists, through works such as E.L James’ *Fifty Shades*

Of Gray. Bestiality, however, is still not a topic that is openly discussed or deemed appropriate for mainstream erotic fiction.

In the 21st century, however, the primary socially acceptable literary outlet for this taboo is in “fantasy bestiality”, featuring mythical beasts such as dragons and satyrs. Paranormal genres allow readers to indulge in bestial sexual fantasies that are unspeakable within the wider community. These manifestations of bestiality do not entail a wider acceptance of these practices. According to Susan Squier “xenogenic desire” between species in literature can give expression to desire while simultaneously deauthorizing it as ‘only fiction’ (Squier 365).

This would explain the popularity of *New York Times* best selling author Lora Leigh’s “breed series”, which explores the border line of bestiality through relationships between humans and genetically altered Chimeras. Leigh’s Breeds characters are a mixture of animal and human species with human and lion genetics.

Much to the delight of the Adults Only ‘Breeds’ discussion group on goodreads.com, her books do not shy away from frankly pornographic sex scenes featuring humans and Breeds, who, like satyrs, have a demanding animal sexuality combined with an extra large penis complete with a menacing barb.

The science fiction and horror genres are well suited to narratives about unusual and deviant behavior (Creed 2006). I would suggest that the transgressive nature of the hybrid’s body as well as their almost human figures enable readers to vicariously indulge in the voyeuristic taboo of reading or watching such sexual encounters. The hybrid’s dual nature allows the audience to entertain the doubt as to whether they are watching a bestial encounter or not.

In *Splice* and *Doctor Moreau*, the hybrid is presented as more or less human, especially in its facial features. The body is, to a varying degree, mostly human or distinctly animal. There remains, however, the undercurrent of sexual tension between the human and the hybrid.

It is beyond the scope of this exegesis to fully explore the similarities and differences of depictions of bestiality in fiction to pedophilia and incest. What these sexual taboos have in common is that the weak and vulnerable in these relationships are invariably preyed upon by the stronger, older and more experienced for sexual gratification. The common word for the exploited person in these relationships is not ‘partner’ but ‘victim’. In the case of bestiality, the victim is the animal, who does not and cannot provide consent. In the fictional texts and films presented in this enquiry, the hybrid is primarily presented as the exploited party and the human is the predator.

The issue of reproduction is also relevant. For instance, Frankenstein's monster was not allowed a mate lest he conceive other monsters. Haraway argues that "unlike the hopes of Frankenstein's monster, the cyborg does not expect its father to save it through a restoration of a garden; that is, through the fabrication of a homosexual mate, through its completion in a finished whole, a city and a cosmos" (Haraway 1991, p.151). Here I interpret Haraway's cyborg rule as an understanding that the hybrid does not seek a mate made in its own image, and that is what makes it so much more frightening and compelling a sexual possibility than Frankenstein's creature. The hybrid, as one of Haraway's cyborg creatures, is quite happy to mate with a human. This erotic encounter between the species is a long held taboo that has shocked and titillated people throughout history. Not surprisingly, the more closely the hybrid resembles an animal, the more this specter of bestiality hovers. Accordingly, in the following examples, the human is depicted as the seeker and initiator of sexual gratification towards the hybrid.

Splice

Susan Squier argues that the very act of drawing boundaries between species using taxonomy gives rise to the desire to transgress these boundaries (Squier 1998). In the following examples, we see the human seeking the intimacy of the animal in the relationship, even if the hybrid is mostly in human form, and even if the human isn't consciously aware of the animal nature of the hybrid.

This is clearly shown in *Splice*, where the monstrous, awkward hybrid Dren rapidly grows into a teenager with the torso, breasts and genitals of a woman. Like a mythological siren or mermaid, Dren tantalizes Clive through the CCTV coverage of her swimming naked in the water tank. He goes to the barn to have sex with her while his wife, Elsa, is at work. Dren passionately pins him down with her hooves and flicks her tail in his face when his eyes are closed, barb pointed with the stinger out, its intentionality suggesting hybrid-initiated zoophilia. Elsa returns from work and finds them and runs away, distraught. Clive goes to her to explain what happened.

Clive: We changed the rules. We crossed a line between right and wrong.
There are no boundaries.

In *Splice*, the trope of incest combines with bestiality through sexual acts that violate culturally accepted boundaries. Animal incest is, according to anthropologist Robin Fox, a common practice, whereas human incest is not. He argues that there is little incest between mother and son in animals, as mother is dominant towards her

son, and mating requires that the female partner be subservient. On the other hand, the possibility of fathers mating with daughters is quite high (Fox 1973, p.53).

In *Splice*, while it appears to be consensual sex between Dren and her social father, Dren assumes the dominant sexual position (inching her deadly stinger tail to Clive's head as she straddles him), but it is Clive who goes to the barn aroused after watching Dren swim naked. It is Clive who has the power in the sexual relationship as he controls her environment and destiny. Unlike his charge, he knows Dren has an accelerated lifespan and is dying, and so can walk away from the intimacy with impunity.

I propose that the pattern of incest in the case studies is predicated on whether the hybrid is culturally located within the animal or the human world, and the perceived level of animality in each character. It can be argued that as Clive is Dren's social father only, not her biological father, he is not committing incest with her. Yet his social and emotional role is that of a father, as he is *in loco parentis*, assuming the place or position of a parent. When he has sex with Dren, she is a caged animal in the barn. She has no real choice or freedom to reject him. Significantly, Clive sleeps with Dren after he learns that his wife is the egg donor that created her.

Clive: It's your DNA in Dren. I can tell. You put yourself into the experiment.

Except for her breasts, genitals and torso, Dren looks like a "monster" – not entirely human or animal with her strange face, lack of hair and large tail. With her wings and hooves, she resembles the Arion, the offspring of the sea god Poseidon, who mated with the goddess Demeter, while both were in the form of horses. Arion was said to be partly human, its hooves resembling human feet, from its back growing eagle wings. It also possessed the gift of speech, and could prophesize events to come (Matthews 2005, p.33).

However, the notion of incest is not diluted because of Dren's inhuman character. Instead, it is heightened by the fact that Clive is the partner of Dren's biological mother and is her social father as well as guardian. He created Dren through laboratorial techniques, and was instrumental in her education. The fact that she is so obviously not human, and that Clive had already tried to kill her twice, makes his sexual encounter with her additionally exploitative.

Doctor Moreau

In *Doctor Moreau*, there are no women characters, except when Dr Moreau experiments on a female puma to turn it into one. Prendick watches with “some surprise” how once the Beast Folk devolved following Dr Moreau’s death, the women “began to disregard the injunction of decency – deliberately for the most part.” But there is no sense here that he desires the beast in this form, in fact recoiling in horror at “the lapsing of these monsters” (Wells, p.123). When he returns to England, he sees his fellow man as nothing more than animals, and notes “prowling women would mew after me” (Wells p.131). Here, the cat association is also a slang term for prostitute.

In the 1996 film version of *Doctor Moreau*, Prendick meets the puma for the first time at the hut. He sees a beautiful young woman and flirts with her. As they talk, she sees Montgomery, Dr Moreau’s human helper, and runs off, but not before sniffing Prendick. When questioned by Montgomery, Prendick replies in his defence.

Montgomery: Getting acquainted?

Prendick: She’s beautiful.

Montgomery: Yeah, she’s a pussycat.

Prendick’s body language signals embarrassment at having been found out, and his discomfort is due more to being seen to make overtures to an unknown woman. The puma is enticing not just because she is beautiful, but because she is different. Its origin is borderline unknown and, therefore, for the Caucasian and conservative Prendick, its racial ambiguity is laced with taboo. A fact reinforced by Montgomery, as Prendick expresses his suspicions about the inhabitants of the island. However, after being tipped off that the puma is in fact a hybrid, his desire is not dampened.

In this sexually charged encounter, the social implications of the cat-woman and her genetically blurred human-animal identity are confrontational for the viewer: does Prendick’s sexual desire demonstrate the cat-woman’s humanity or man’s animality? (McHugh 2006, p.72).

In the intervening century, from Wells’ book to the most recent film adaptation, women’s willingness to pursue their sexual desires has become socially embraced by men in the Western world. But, again, does Prendick secretly desire the woman as cat or the cat as woman? The fact that the hybrid character is not quite human,

nor animal, is what gives the possibility of its sexual encounter with the human such frisson.

Interestingly, Prendick's revulsion at the lewd behavior of the Beast Men once they revert to quasi-animal is directed at the Beast *Women*. Once they revert to 'stubborn beast flesh', the women were the first to "disregard the injunction of decency – deliberately for the most part. Others even attempted outrages upon the institution of monogamy" (Wells, p.123). I argue that this reflects a Victorian controlling attitude towards women's sexuality that came through in Wells' supposedly liberated attitudes (Lodge 2012). Indeed, in 1896, when *Dr Moreau* was published, women's freedoms were still very limited, as it would be another 32 years before all women over 21 were granted suffrage in England.

Atwood argues that, like many men of his time, Wells was obsessed with the New Woman and supportive of sexual emancipation (Atwood 2011, p.162). But his writing outs him as fearful of the full impact of a sexually liberated woman, a 'wild cat' able to claim her sexual desires and – if imprisoned by a man – resembling the puma who kills Moreau, at least metaphorically willing and able to annihilate her controlling male captor.

Prendick's attitude towards humans and especially women upon his return to England is also telling. He views women as predatory as the uninhibited devolved Beast Folk, alluding to their cat-like nature, resembling the puma. The association between cats and women is clearly displayed in popular notions of witchcraft and spiritualism. As thousands of women were burned at the stake for heretical or sorcerous acts, so was cat torture a popular amusement in Europe that continued well into the eighteenth century.

The threat to the body is one women strongly identify with, and according to Turney, Carol Lansbury's study of the antivivisection movement argues strongly that women's experience of medical practice and their broader awareness of sexual subordination formed an important subtext to the public debate about animal experiments (Turney 1998, p.53). Lansbury also draws parallels between violent sexual imagery in Victorian and Edwardian pornography and the iconography of animal experimentation (Rudacille 2001, p.51).

Sexuality for Frankenstein's creature is both an emotional desire for love and, when denied that, a weapon to be used for violence and revenge. This attitude is mirrored in Dren, who sleeps with Clive only after he tells her he loves her. When she

changes gender, she/he rapes Elsa, the mother, as an act of revenge and violence. Sex again is a weapon.

There is an historical progression as to how the human-hybrid sexuality is perceived between these works of fiction. The Beast Men, driven by their “animal instincts” to multiple sex partners after the death of their “father” and “enforcer” Dr Moreau, still have sex only with each other and not Prendick or other animals. Nearly two hundred years later, *Splice* depicts Clive having unprotected sex with his hybrid daughter Dren, unconcerned about the possibility of monstrous issue. He is so caught up in the taboo of bestial intercourse that contraception was the last thing on his mind.

According to Haraway, the possibilities of sexual embodiment and fulfillment can be found beyond the dualities of man/woman, and man/man and woman/woman. In “A Cyborg Manifesto”, Haraway explains “cyborg monsters in feminist science fiction define quite different political possibilities and limits from those proposed by the mundane fiction of Man and Woman.” (Haraway 1991, p.180) However, in these manifestations, there is also an aspect of violence and power that cloud transspecies sex acts – perhaps not surprising as there are well known links between these, animal cruelty and human violence (Edwards and Kiennan 2013).

Conclusion

In this chapter, I examined the hybrid’s erotic nature and eroticism and proposed that in this age of biotechnology, this form of animal-human-on-human sexual interaction may be called ‘transpecies zoophilia’. When it comes to loving the hybrid, the terms bestiality or zoophilia may no longer suffice.

I also examined Haraway’s views on cyborg sex, and her view that bestiality acquires a new status when the boundaries are blurred between human and animal, machine and nature. In the following chapter, I will turn to my own creative project, *Almost Human*, and discuss how my research and Haraway’s manifesto has influenced the writing of my novel and how her criteria for the cyborg can be used to create believable hybrid characters in fiction.

Chapter 6: *Eautos*

Writing *Almost Human*: The Creative Project as Hybrid

Introduction:

This chapter '*Eautos*', the Greek word meaning 'myself', assesses how useful the theories of Donna Haraway and her criteria for the cyborg have been for the development of my creative project.

From the outset, this exegesis has argued that the cyborg does not have to be read literally as a man-machine because Haraway's reading allows for multiple interpretations of this coming together of binaries. Haraway's cyborg exists beyond the dualities of man/machine, nature/culture and animal/human. As she explains in an interview with Thyrza Nichols Goodeve, four of her books are versions of the same problem – what counts as nature and who gets to inhabit those categories designated 'natural' (Goodeve 2000, p.51). The cyborg can be appropriated as a vehicle, be it literary, cultural, metaphorical, to explore whether the ontological idea that privileges humans is false.

Haraway reiterates her debt to science fiction writers in her acceptance speech for the 2011 Pilgrim Award, presented by the Science Fiction Research Association for Lifetime Achievement in the field of science fiction scholarship. She said "Science fiction has given me the ideas, the stories, and the shapes with which I think ideas, shapes and stories in feminist theory and science studies (Haraway 2011, p.5).

Therefore it is entirely appropriate that a science fiction writer should be able to take criteria from "A Cyborg Manifesto" and use it for writing a Hybrid in science fiction. Here are the following key criteria that have shaped *Almost Human* and the characters within in it, as well as the key science fiction tropes discussed in this exegesis.

Boundary breakdowns and the trope of the mad scientist

Almost Human is a reimagining of what happens after the conclusion of H.G. Wells' 1896 novel *The Island Of Doctor Moreau*, utilizing the trope of the mad scientist. The protagonist Ariadne comes from a long line of hybrids, the result of research continued by Edward Prendick after he returned to England in 1888 from Noble's Island. Although assumed to be a work of "scientific romance", in this alternative world, *Doctor Moreau* is in fact a journalistic account of Prendick's

encounter with Dr Moreau on the Island, and Moreau's experiments to create hybrid "Beast Folk". The author, who achieved great success with his novel *The Time Machine*, was in poor health and keen to capitalize financially on his popularity. He met Edward Prendick's nephew Charles at a Fabian Society salon in 1895. Charles, keen to impress the author, took the opportunity to reveal his uncle's amazing adventure. Wells seized the opportunity to use Edward's journals, entrusted to Charles while Edward was convalescing, as the basis for a novel. It is unrecorded as to the financial recompense that Charles received for providing Wells with these personal papers.

What Charles did not know was that Edward, who later removed himself to a remote village in the Scottish highlands, continued Moreau's research. The sensation caused by Wells' novel *The Island Of Doctor Moreau*, ensured that no one took seriously the concept of hybrids existing within the human population. Hence Edward was able to keep his hideous progeny's secret, and it remained so. Ariadne's biological hybridity is so woven into her DNA that it cannot be detected. Yet it is her animal instincts that make her such an outstanding Xenos agent. There are only two people outside her family who know what Ariadne is; her lover and boss, American intelligence agent Coben Thorley, who recruited her from university, and Nitish Singh, her trusted Xenos colleague. Neither knows that she has secretly been helping an underground cell of hybrids hiding in an empty newspaper building, providing new DNA identity for those surgically altered to pass as human.

Biotechnology has created a far darker and more complex society than the bifurcated one the general population has been told exists. There is another subclass of humans bred for scientific research who are not human, yet still not entirely animal. Those who escape the biomedical pharms and facilities hide in abandoned buildings in the city, and try to attain human status through illegal surgery and bio-serums. These are humans with a 0.10% animal DNA. To be a "10" means having an obvious tail, hooves, claws for hands, and having a sliding scale of ability to speak – some in clicks and grunts only, others with the use of surgery and prosthetic voice boxes.

In *Almost Human*, the breakdown of the boundary between the human and the animal, Haraway's criteria for the emergence of the cyborg, is made possible by scientific experimentation. A black market also exists in the recreational use of DNA animal enhancements. Unscrupulous third world transgenic medical procedures mean that deadly zoonosis – viruses that cross the species barrier – has placed the Australian human population at risk. Animal to human diseases have already crippled

the European population altered through biotechnology. The species boundary has become blurred. The other uses of the mad scientist trope can be seen in the characters of Coben Thorley and Dr Ruaridh Mackenzie, who collaborate on a project using Ariadne's stolen eggs. They create Kally using data collected from sub-space via Australia's most powerful telescope. Kally, part human, part animal, part alien, is the ultimate Chimera.

My creative project came into being as a hybrid. It was based on a short story I started writing at a bioethics conference, where I was presenting a paper for my MA in Creative Writing. I was listening to a paper about the perils of xeno-transplantation - the use of animal parts in humans - when the voice of Ariadne came to me. It was one of those creative moments when you realize that something has clicked. The ideas I had been exploring about organ donation and reincarnation came from the Gothic, but the notion of what would happen if humans had unseen animal parts changing the very biological make up of whether they were human or not indicated some very profound concepts about identity. As a science fiction/crime writer - itself a hybrid genre, I felt a deep connection with the idea of xenotransplantation and hybridity. The short story that resulted was *Xenos*, a "hard boiled" speculative crime thriller (this is itself a hybrid of cross disciplinary genre). *Xenos* won the Dorothy Porter Innovation Prize in the 2007 Sisters In Crime Scarlet Stiletto Awards and has become a middle chapter of the creative project.

Katrin Althans argues that Gothic fiction was embraced by Australian writers as a possibility to express the colonial experience of isolation, disorientation, and hardship (Althans 2010, p.15) in the Australian landscape (Althans 2010, p.16). In my novel, as humans have been altered, so too the harsh and unforgiving landscape has been altered. It contains an inland sea, unnatural and unexpectedly fertile, created in order to grow the bulk of the world's genetically modified crops. The cities have fallen into decay, and the former gentrified city fringe, such as Parkville near the University of Melbourne, and Docklands (now Darklands) by the water, are places mostly overtaken by hybrids, or places where experimentation takes place. In a nod to Marcus Clarke's (*For the Term of His Natural Life* (1874), which established the particularly Australian convict narrative within Gothic fiction (Althans 2010, p.15) my fictional Australian landscape also harbors "garrisons and prisons" in the form of detention centres, a reminder of the convict jails that the colonial power utilized early in settlement. Like Clarke, I have used the trope of cannibalism in my novel. When she is in animal form, Ariadne eats others, and, as a 'nuanced vegan' she is disgusted with herself the next morning. Her daughter Kally also eats her way out of

dangerous situations. A running gag of black humor and puns is Ariadne's comment that 'someone you ate didn't agree with you', and 'he was too fat for a snack, Kally needed to lose weight and needed leaner meat'. Presenting a paper at an Animal Studies conference, I read out the scene where Ariadne wakes up with someone's half digested hand in her mouth. The (mostly vegan) audience where shocked. At question time I was asked if I would consider writing Ariadne as a 'were-sheep' so she'd be herbivorous.

Throughout the book, there is Ariadne's revulsion at eating meat and her desire for it, combined with the cultural traditions of her Greek heritage, especially pig shooting. Ariadne has her own species prejudices, denying mind to pigs, even though she knows they are smart. I am consciously using this research, and my book's connection with the textual case studies, in my use of the sub plot of meat eating. The more animal we accept that we are, the more meat eating constitutes cannibalism and the less easy it is to deny sentience to the animal. In *Almost Human*, I place a pivotal scene in an artificial meat factory. Ariadne discovers hybrids of a Less Than Human classification are being used as a 'starter base' for the artificial protein chain. These are the boundary breakdowns between animal and human and man and machine that Haraway writes about in her manifesto.

Hybrid pregnancy and the trope of monstrous birth and issue

In chapters two and three of this exegesis, it was revealed how the hybrid is created, birthed or constructed artificially through the intervention of science, in the same way that Haraway's manifesto maintains that the replication of the cyborg is uncoupled from organic reproduction (Haraway 1991, p.150). Haraway's manifesto was written in 1985, when the full force of the commercial and social impact of reproductive technology was still more than a decade away. Yet with prescience she argued "sexual reproduction is one kind of reproductive strategy among many, with costs and benefits as a function of the system environment. Ideologies of sexual reproduction can no longer reasonably call on notions of sex and sex role as organic aspects in natural objects like organisms and families (Haraway 1991, p.162).

Sex has now been effectively divorced from reproduction. Since Shelley wrote *Frankenstein*, the educated Western women's fear is now being childless in their forties, rather than dying in childbirth, as happened to Mary Wollstonecraft, Shelley's mother (Mellor 1988, p.41). *Almost Human*, like *Frankenstein*, speculates on what would happen if a woman could opt out of the pregnancy and birth process and have a child through a surrogate so that it didn't endanger her health. These

surrogates are hybrids designated 'Category GS'. Ariadne relies on technology to freeze her fertile eggs, a lure of a magic technological solution offering hope and shared by many women. The trope of monstrous birth in *Almost Human* is played out when a Category CG is discovered mutilated in Darklands, having the prized human foetus surgically removed and then being left to die. Ariadne doesn't even get to experience birth or pregnancy, as her eggs are stolen. Yet she in effect "births" Ruaridh as she changes him into a hybrid, a long, bloody and messy process that is also part of the trope of the monstrous birth. Ruaridh is "born" a monstrous hybrid, yet as Creed argues, he is a monster capable of assuming feminine and bestial qualities in a number of forms; as a mad scientist or womb monster (Creed 2005, p.39) he is also instrumental in Kally's birth, along with his first wife, a planetary scientist who interprets the data from sub-space that leads to Kally's conception, and Coben, who steals Ariadne's eggs.

In *Almost Human*, I wanted to explore the struggle women have between their desire for a career and their longing for children. Many ambitious young women are now seriously considering safeguarding their future desire for children by freezing their fertile eggs. Ariadne's eggs are stolen and experimented on, highlighting the vulnerability women face when they hand over their reproductive future to science as they serve the industrial enterprise of commerce.

Shelley's novel, her "monstrous progeny" that I have used as a textual case study throughout this exegesis, had its genesis in her own tragic experience of maternity (Huet 1993, p.129). Likewise, Ariadne's reproductive traumas in *Almost Human* are duplicated in my life and writing. I was attending a bioethics conference where I heard the paper that inspired my creative project. Medical technology has advanced since Shelley wrote of matters from her own experience, "too biological and too personal" in the pages of *Frankenstein* (Wolf 1993, p.4). Leonard Wolf argues that *Frankenstein* is "a living artifact beneath whose surface we can see displayed the network of dangers that women face when they take the age-old risk of loving men...women have literally everything to fear from men...it comes down to this – that lovers risk babies and babies can kill...men and women both know, but only women have to confront" (Wolf 1993, pp.1-5). I was only able to carry two babies to term because of a fleet of specialists, medication, monitoring and hospitalization. In another time, or today in a third world country, I would most certainly have died and my children would have been born too early to survive. Shelley's novel resonated with me, and my own 'monstrous' experience of maternity and this informed my research into monstrosity, and monstrous births.

During the course of writing the novel, and being concerned about how to use Haraway's theories, what I discovered was missing from the cyborg experience was the idea of love and its importance to my characters and to the novel. In my writing, and the exploration of the mother-daughter relationship, I discovered that my novel was about how to love.

Haraway doesn't evaluate the cyborg's relations to love in "A Cyborg Manifesto"; her exploration of relationships is framed by power and exploitation. My creative project represents an attempt to challenge this lack in Haraway's manifesto and reach some resolution on the cyborg's relationship to parental love. As Haraway argues "cyborgs have more to do with regeneration and are suspicious of the reproductive matrix and of most birthing" (Haraway 1991, p.181), I have raised the question of whether this will interfere with the mother-child bond in hybrids. For Ariadne, relying on technology to have a baby has unforeseen consequences. In chapter three, the examination of the trope of the monstrous artificial birth invites speculation on how far we may be able to extend the limits of our biology, and with what repercussions. Ariadne finds herself with a half-alien child she never gave birth to, stolen as an egg from her biobank storage and experimented upon.

But I do conclude *Almost Human* on a positive note. Ariadne has been betrayed by the men she loved and trusted, yet realises that she can love her daughter, and kills her lovers in order to save her child. That she acts this way I would argue is entirely consistent with Haraway's characterisation of the cyborg in her manifesto, because she discovers, like Haraway's cyborg, that she is not about to be saved by a heterosexual mate (Haraway 1991, p.151).

Language and the Creative Writing hybrid

Language is a key aspect of "A Cyborg Manifesto". For Haraway, "cyborg politics is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly, the central dogma of phallogocentrism" (Haraway 1991, p.176). To illustrate the use of this idea literally in *Almost Human*, hybrids have difficulty speaking. As I explored in chapter four, language is traditionally seen as what separates the human from the animal, and the hybrid in fiction carries this legacy. For me, as a Greek-Australian hybrid, this chapter "Logos" is important. For Haraway, Cyborg writing is about the power to survive, seizing the tools to mark the world that marked them as other (Haraway 1991 p.175). I may be half Greek, but I do not speak Greek.

My mother though born in Europe is not Greek and after migrating as a child, identifies only as Australian. My family history, like many children of post-World War II migrants, is one of displaced people, without a state or identity after the war. If I did attempt to claim a part in my heritage, I was told I was betraying people, and that Europe, anyway “was dead”. In effect, the only option I had was silence. The choice was simple – to please both parents I had to be reduced to one common language, English. Language was a highly contested space. To even form my mouth into a Greek word was a sign of utter betrayal and derision. So, for me, there is great power – and pathos – when Dren painfully moves her mouth in her final scene in *Splice*, as s/he utters two human words “inside you” to Elsa. Yes, these are words of violence, but also defiance. Dren is at this point claiming her “mother tongue” and place in a culture denied her.

In my novel, Ruaridh loses language, and therefore his identity and history as an academic, once he becomes a hybrid. Other hybrids, post metamorphosis, rely on cybernetic voice boxes to speak. I deliberately set a key scene towards the end of the novel in The Argus building, an abandoned Melbourne landmark newspaper office, to reference the evolution of writing technologies. This is also a reference to my former career as a print journalist.

Haraway writes “cyborg writing is about the power to survive” (Haraway 1991, p.175). Certainly writing is a key plot device in *Almost Human*. It is central to Ariadne’s life story, embedded as it is in a supposedly “fictional” account of her great grandfather’s experience with Dr Moreau on Nobel’s Island. Kally is named after Kaliope chief of the muses, usually represented seated with a writing tablet and stylus in her hand, and updated in my novel with Kally constantly slumped over an iPad. Kally is linked to another literary reference that hints at her alien hybridity – that of Caliban, the beast man from Shakespeare’s *The Tempest*, “not honour’d with a human shape” (Prospero, I.2.283). Caliban, like the Beast Men on Dr Moreau’s island, has been educated by his master and though depicted as a strange half beast, half devil, is a hybrid according to the parameters defined by my exegesis.

Beyond the characters and ideas in *Almost Human*, this doctoral project is a cyborg. To put it another way, the process, practice and methodology of writing it is an example of the cyborg existence Haraway articulates in her manifesto. Considering the topic of my exegesis, I should have known that it was never going to be a straightforward task of writing *just* the novel. And then *just* the exegesis. In short, the writing process was not either/or. The doctorate revealed a hybrid writing practice and literary genre, breaking down the binaries of creative/critical;

inside/outside (the text); writing/reading. Just as I explored the hybrid in science fiction – a character that exists outside binaries – so I realized that the actualized doctorate also existed outside the binaries. Throughout the exegesis I have maintained that the hybrid stands slightly outside the human, linked as it were to some humanoid basis, and yet never allowed to fully participate in the human community.

As I come to the end of the doctorate, having immersed myself not just in Haraway's essay "A Cyborg Manifesto", but the full range of her books and ideas, it has become apparent that doing so has changed me as a writer and researcher.

I argue that the hybrid exists in both human and animal categories simultaneously, challenging but never destroying either category. The great fear for the human characters is that the animal within the hybrid will harm them. Or that proximity to the hybrid will transform them too. By the 21st Century, the hybrid's danger is acknowledged to be its human side, as illustrated in this scene from *Splice*, where the scientists examine scans of the newborn Dren and ponder her potential threat:

Elsa: Not all animals have predatory elements.

Clive: There's the human element.

I argue that many creative writers embarking on a doctorate in creative writing fear the "other half" of the work required. They imagine they are "either" a creative writer *or* a researcher, and often feel they do not have the academic language or research skills required to merge the two together. In a similar way to which the right for scientific hybrids to exist is questioned, this other type of hybridization was queried by *Sydney Morning Herald* columnist Lisa Pryor in a scathing indictment of tertiary creative writing courses:

First, funding writers through postgraduate creative writing qualifications skews funding in favour of writers who already have university degrees, with all the particulars of personality, life experience and class that goes with it. Secondly, it skews funding in favour of the gutless. Enrolling in a postgraduate writing course is a hedge against failure, costing thousands of dollars, for those who are too scared to take off a year to get on with it and write. It attracts those who are everything a good writer is not: compliant,

institution bound and approval seeking. Thirdly, and most importantly, good writers risk becoming institutionalised (Pryor 2010).

Sue Norton's article in *New Writing: The International Journal for the Practice and Theory of Creative Writing*, serves as a beautiful response, advocating for "a superbly inclusive definition" of the importance of creative writing within the academy. Here I argue, we see hybrid rising up and eloquently taking down those who would declare it unfit for existence. Norton maintains that her creative writing fits the definition of research and scholarship as outlined by the Organisation for Economic and Co-Operative Development (OECD):

It defines research and scholarship as: any creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge transfer, or to develop new materials useful for teaching and learning, or to add to the stock of creative works and includes applied, oriented and basic research, consultancy and experimental development (Norton 2013).

The fear many writers have is that the research will harm them, will make them less creative, will take away their spontaneity. One side of the hybrid will dominate the other. Yet it is interesting that unlike, for instance, the skills needed to be a professional tennis player or a doctor (which, incidentally, Pryor trained as) that are the result of coaching and training, writing is viewed as an innate talent that can't be taught. If you don't have it, you can't learn it. Those undertaking higher degrees in creative writing disagree. The research, while pulling you away from the creative, deepens your involvement with it. Scottish doctoral creative writing student David Manderson said that he was lucky to go through the rigours of the course:

For me there absolutely was a flow, a development, a learning process, and it started from the moment I started to write (I wrote the book over the full four years, reading different stuff constantly through it, anything that appealed, and writing up the critical introduction at the end). Things were being learnt all the way...post-modern theory and contact with other writers on the Masters, made things like that come alive again for me in different ways. But it all really took off when I started my doctorate, because I went right back to the classics, by which I mostly mean the great Romantic novels, and read them again. My reading began to flow into my writing and vice versa (Harper 2012).

Haraway wrote "A Cyborg Manifesto" in 1985, in "an effort to build an ironic political myth faithful to feminism, socialism and materialism' (Haraway 1991, p.149).

Haraway's work continues to stand as a manifesto for the 21st century with the cyborg representing the possibilities and vulnerabilities of the shared world of the human–animal hybrid, where, to quote Haraway “liberation rests on the construction of the consciousness, the imaginative apprehension, of oppression and of possibility” (Haraway 1991, p.149). In his examination of Haraway, Joseph Schneider writes that her theories are “Always fed by imagination, metaphor, passion and figuration, [and] very often drawn from science fiction for forging different ways of putting subject/objects/worlds together” (Schneider 2005, p.162).

It is worth reiterating Schneider's critique that Haraway can be challenging reading as “she mixes things that are not usually mixed and asks for multiple and often diverse literacies from her readers” (Schneider 2005, p.58). Like Schneider I am keen to take a generous approach to Haraway's work and her cyborg manifesto, finding in it arguments for both understanding and writing about (the two are inextricably linked) the hybrid.

The creative writing doctorate, like Haraway's cyborg, is a boundary transgression between the exegesis and the creative – one informs the other, and each demanded a different approach from me.

This research found its way into my creative project. So why did I insist on agonizing about such binaries in the writing process? I had to be prepared to accept that one nurtures the other, and the two were inextricably linked. The PhD in Creative Writing demanded two different parts of my brain at once; the free form, associating, creative, fiction writing side; and the logical, deductive and analytical side that researches and writes the exegesis.

Why then should this intermeshing sit quietly within the confines of this particular chapter in the exegesis? It wanted to break out. It was the writing process unbound. And so as a writer, I jumped from insight in research to dialogue on page. Just when I thought I would spend the whole week on my creative project, it wasn't to be. I found that my ideas for plot, character, and voice, not to mention place, time and sub plot, were bound to the research.

I ended up with both files open on the computer, novel *and* exegesis, and worked from one to the other, cross pollinating between the two. There was not a point that I “took a break” from the research “just to write”. From the beginning, I felt like I was making good progress with the creative project, but I was never allowed to concentrate on “just the novel”. As I come to the end of the doctorate, having immersed myself not just in Haraway's essay “A Cyborg Manifesto”, but the full range

of her books and ideas, it has become apparent that doing so has changed me as a writer and researcher.

I presented at seven conferences, and have had three journal articles accepted for publication directly from this research. And so it would be that there was a deadline for a journal article. As I worked on the journal submission, I'd be struck with an idea for the novel. Back and forward I went – article, novel, article, novel...and back to the exegesis.

Yet when it came to my creative project, no matter what I plotted out, the threads between the research and creative would feed into each other. For instance, the evolution of the structure of this exegesis arose entirely from my research for the character of the hybrid, through Haraway's manifesto. It is not as if Haraway sets out a set of guidelines or rules in her manifesto and announces "follow these" with a step by step guide. Her writing is filled with metaphor, with references to science fiction novels, and her own narrative about her views of science and her burgeoning insights into the place where human and animal come together and the world they inhabit and share, the way we see this world, and the way our companion species might see it. This is an interesting concept much debated at the Minding Animals Conference that I attended in Utrecht in 2012. As one person observed, when we say we don't know what animals want or what they feel, surely we can say they don't want to feel pain, that they do want to feel safe, nourished and to be with their offspring and cohort. In many ways, imagining the animal, and the hybrid, is about imagining what we shared as sentient beings, not what makes us different. Here I am referring to the other Haraway's latest work, *When Species Meet* (2008) that has also informed my ideas.

Haraway calls this process "the tight coupling of writing and research—where both terms require the factual, fictional, and fabulated; where both terms are materialized in fiction and scholarship" (Haraway 2011, p. 2).

Blogging as a hybrid activity

I discovered that after a career as a journalist, I was used to writing in public, for a large audience. Working as a newspaper columnist has given way to blogging, and half way through my doctorate, I started blogging about my research. I asked questions such as 'Does a fiction writer have anything to add to the discourse about the ethical treatment of animals? Does my academic research contribute to this field?' and even 'Should academics eat their subject matter?' Topics ranged from monstrosity, animal studies, and bestiality, to the importance of story telling in

popular culture. I even blogged about having to defend my research to a peer who declared the hybrids weren't even real – and certainly werewolves weren't either.

Rather than being wasted time, or a diversion, this was in fact my way of doing my “working out” or thought process about both the research and the creative writing. By forcing myself to be concise and coherent about my nascent ideas in public, I was able to translate this into my academic work. These blogs became conference abstracts and papers. I found the great trap was in simply passive reading of a theorist's work and having no overall structure to place the ideas I gleaned from this. By blogging, and then going even further public with them to the academy at conferences, I opened myself up to feedback, criticism and fear. Of course, as an emerging academic, I felt vulnerable and timid, but it is only by placing your ideas out there, and listening to what others are saying, that can you truly engage with your research.

This hybrid approach was actually beneficial. Rather than wait until I felt “ready” to go public with a polished, finished product (be it the creative writing or research) I was able to confront a range of issues about not just my research, but also different avenues for discussing it, such as a wider public arena of blogs, and the narrower academic world of conferences. This outcome, which forces me as a writer to explicitly engage in a sustained fashion with writing in a public arena, is again a hybrid practice, as the instinct in doctoral writing is to keep it hidden until it is polished or has been given some approval from the academy. I was willing to expose myself, a brave move as I felt vulnerable anyway as an emerging researcher. And yet, this move paid off, as I was able to turn the majority of the blogs into conference papers; others found their way into this exegesis. By exposing my ideas to a global audience, I also discovered a global interest and following in my research.

This blogging-writing-researching-creative approach is very attuned to Haraway's cyborg manifesto, and her views about language. Haraway argues one of the reasons that cyborg writing has the power to survive is because it is able to seize publishing tools (Haraway 1991 p.173).

I feel that not only is my novel a hybrid, but that I am a cyborg, having taken back the tools (publishing, communications, media) from the global media corporation where I previously worked. Once upon a time, in a world before the Internet when I started in journalism, the only way to have a mass audience was to work for a media organisation. Now a global audience is a Wordpress blog away. That's cyborg power.

Conclusions

In this chapter, I have explored how useful the theories of Donna Haraway and her criteria for the cyborg have been for the development of my creative project. I have argued that Haraway's cyborg can be appropriated as a vehicle, be it literary, cultural, metaphorical, to explore whether the ontological idea that privileges humans is false. In looking specifically at how Haraway's cyborg criteria has been for my own work, I first examined three key areas in "A Cyborg Manifesto", the first being the breakdown of boundaries between the human and the animal, and that of man and machine. I examined how I used this concept to create the dystopian work of *Almost Human*, where society is bifurcated into that which privileges the human over the hybrid.

The second criteria I argued was useful for my writing was the hybrid pregnancy, cyborg birth and trope of the mad scientist, and I illustrated how this applied in my novel. The third criteria was of language and I revealed how I used Haraway's concepts of communication in *Almost Human* and how this and her broader ideas of the cyborg has been important for informing my own journey as a writer, through the doctorate, and via blogging about my research – which are cyborg activities according to Haraway's manifesto.

In the following chapter, I will examine the conclusions I have reached in this exegesis, and suggest ideas for future research.

Chapter seven: *Telos* - conclusion

Introduction

This final chapter '*Telos*', the Greek word for "the end" provides insights into how Haraway's manifesto has developed my understanding of the hybrid and its place outside the boundaries. '*Exegesis*' is a Greek word meaning critical explanation or interpretation, and the very attempt at exegesis usually implies that some serious work in grappling with many aspects of an author's work, such as usage of language, style, the context, lexical terms, syntax, and historical background. At the conclusion of "A Cyborg Manifesto", Haraway argues that cyborg imagery can help express one of her crucial arguments in the essay – that "the production of universal, totalizing theory is a major mistake that misses most of reality, probably always, but certainly now (Haraway 1991 p. 181). Yet when I embarked on this doctoral journey four years ago, my initial readings of "A Cyborg Manifesto" were simplistic. I presented my initial research proposal based on what I argued were Donna Haraway's "ten criteria for cyborgs" and I was going to diligently apply these to several science fiction texts. But as I have explored in this exegesis, Haraway's work is more complex and demands – and provides – readers and SF writers with multiple and often slippery layers of meaning and applications.

At the conclusion of my research, I argue that the science fiction writer's role in exploring the new boundaries of animal and human relationships in the 21st century of technoscience is as valid as that of a scientist, philosopher or ethicist, and that an appreciation of Haraway's work can lead to a deeper understanding of where the hybrid is situated in science and in fiction. As Haraway explains in an interview about her work, narratives shape history rather than the other way around (Goodeve 2000, p.129). In my novel *Almost Human*, I provide the hybrid with a narrative that weaves in the history of its creation and the pain of its existence that I anticipate will be a contribution to both science fiction literature and Human-Animal studies.

In her book *The Ethical Imagination* (2006), Margaret Somerville posits that some of the most challenging and unprecedented ethical issues are raised by new technoscience breakthroughs such as xenotransplantation. The resulting hybrids raise profound ethical questions that go the very root of what it means to be human. Fiction is a powerful way of exploring these issues by providing a face, a voice and a narrative to these creatures. Yet creating hybrids might not be as bad as Bioconservatives claim. It will have the effect of redefining humans as animals with a

direct kinship to animals (Alter 2007, p.644), which is what I explore in *Almost Human*.

The director of *Splice* Vincenzo Natali says his film is "about finding humanity in the monster and... the monsters that lurk within humanity." (*Splice* video, extras) In contrast to *Dr Moreau*, where Wells does not give the hybrid a stable voice, in Natali's film we have access to the world through Dren's eyes, even though she only utters two words. In power relations between animal and humans, the animal, of course, is politically voiceless. The hybrid, on the other hand, being part human, has the ability to be heard. This doesn't inevitably mean their voice will save them, or grant them selfhood or sanctuary from persecution. In Maureen Duffy's novel *Gorsaga*, Gor finds a home only among society's outcasts. The Monster Dogs, like Moreau's Beast Men, turn back into animals, and Dren is killed at the end of *Splice*, her own mother plunging a stake through her heart, symbolic perhaps of the fact that she/he has risen from the dead like a vampire.

Science fiction has continually shown itself to be a very effective genre to present the practical and human consequences of inventions, technologies, and scientific breakthroughs. Atwood argues that speculative fiction narratives can explore the consequences of new and proposed technologies in graphic ways and can also explore the nature and limits of what it means to be human in very explicit ways, by pushing the human envelope as far as it will go in the direction of the not-quite-human (Atwood 2011, pp.62-63).

The Creative Writing Doctorate as a Cyborg

Like the hybrid, the Creative Writing doctorate is viewed with suspicion for not fitting into the accepted binaries. It is neither a literature doctorate nor the accepted Romantic idea of a writer expressing their 'natural' talent. Even celebrated, experienced writers are dismissive of courses that "teach" you to write. Award-winning Australian fiction writer Sonya Hartnett admonishes:

I see a lot of people doing courses and paying vast amounts of money to learn to write, but I think the only way to learn how to write is by practicing. Well, you have to have some sort of talent for it, which people tend to forget. Not everyone assumes they could be a great painter or a great swimmer or a great musician, but they all assume they could be a great writer if only they paid a couple of hundred dollars for a CAE course. The way to learn is to write and write and write and write until you have taught yourself how to be good at it (Phelan 2005, p.118).

It is this autodidactic baggage that so many writers carry around with them and drag into their first session with their doctoral supervisor. It weighs down on them as they trudge to the library with a heavy heart and the echo of words like Hartnett's in their ears. The Creative Writing doctoral student must put aside their intuitive writing abilities in order to hone their research skills, think critically and be self-reflective. Haraway says in her manifesto "the cyborg is resolutely committed to partiality, irony, intimacy and perversity. It is oppositional, utopian, and completely without innocence" (Haraway 1991, p.151). This is also an apt way to sum up the thoughts of many – both engaged in the process and from outside the academy – to the Creative Writing doctorate. Throughout this exegesis and through my creative project, I have explored the process and the outcomes of a Creative Writing doctorate for a creative writer. I believe it to be misunderstood by many and further research into the expectations and outcomes of the doctorate, both in Australia and globally, should be investigated.

The doctoral journey also forces those who undertake the Creative Writing doctorate to examine what impact their research has had on their own writing, on their creative project and it's usefulness – to themselves as writers, the academy and also the impact of the research they undertake for their exegesis. Anecdotal evidence suggests the majority of Creative Writing students, at least to begin with, struggle with the research component of the course, and see the exegesis as "the price you pay" to do a PhD in Creative Writing. Just as the hybrid character in science fiction is seen as either a creature that evokes outrage (Frankenstein's creature), curiosity (*the Monster Dogs*), or bewilderment (*Gor*) so too has the Creative Writing doctorate been seen as a bastard amalgamation of disparate parts.

After four years of this doctoral journey, I would argue otherwise. I feel that my research has both contributed to a greater awareness of the importance of the creative writing doctorate itself, to an understanding of the lifecycle of the hybrid in science fiction and to my own practice as a science fiction writer. Haraway calls this "the practice of feminist speculative fabulation in the scholarly mode." (Haraway 2011, p.4) My novel evolved in ways that would not have been possible if I hadn't been doing the doctorate. The concepts in the novel became more pronounced as my research progressed. The title of the novel changed from *Xenos* to *Almost Human*, to reflect the ambiguous quality of the hybrid. The research also influenced the content of the novel and even the characters. As well as paying attention to "A Cyborg Manifesto", I started to explore philosophical ideas about what makes us human, the concept of transhumanism, and became involved in Human-Animal Studies, both

through my participation in conferences, and in a monthly university animal studies reading group.

In conclusion, as explored in chapter six, that rather than simply using “A Cyborg Manifesto” as a criteria for writing the hybrid, it is Haraway’s overarching ideas about what is possible when binaries are broken down that have influenced my doctoral research and science fiction writing. My findings, then, are two fold. Firstly, what has been discovered from research into the hybrid via Haraway’s cyborg theories, and secondly, what has been discovered as part of the process and practice of the Creative Writing doctorate. Here a lifecycle of development and self awareness as a researcher and writer mirrors the lifecycle of the hybrid explored in this exegesis. Just as this exegesis is explicitly constructed as a lifecycle, with deliberate use of Greek words to denote the “life stage” of each chapter, so too has my path through the Creative Writing doctorate been a journey with its own lifecycle.

As I explored in ‘*Eautos*’, I am Haraway’s cyborg, having slipped through the wide cracks in the newspaper monolith as the Internet changed the face of the media. I used writing, as Haraway’s cyborgs used writing, to tell my story; to reinvent myself, and take part in the publishing revolution on the Internet to blog about my research. Away from the demands and regulations of daily journalism, this process provided freedom – the freedom that a cyborg has to exist outside the boundaries and binaries.

There were certainly surprises along the way, as I acknowledged the hybrids in myself. The cyborg struggle for legitimacy is not, as Haraway says, where the power lies. We need to tell our own story, no matter what people tell us we can or should say. Self-belief was important in discovering my own authenticity as a writer. Especially as I made my first tentative steps into the academy, venturing out in public with my research. To say I felt out of my depth at the first few conferences was an understatement, but I put my journalism training to use to grasp ideas quickly and listen, report back (this time to myself) about what I heard and saw. Slowly, the language of the academy embedded, what Haraway refers to as the struggle for language “against the one code that translates all meaning perfectly, the central dogma of phallogocentrism” (Haraway 1991, p.176) and the names that were new to me became as familiar as the names of fiction writers. As I gained confidence, I realized that I could use Haraway’s work as a springboard to a deeper understanding of the hybrid character, rather than clinging onto a rigid set of “rules” that I first desperately sought to find in her work to appease my supervisor. At the end of the four year journey, I realized the exemplar of Haraway’s cyborg is not to teach us to fit in, but to create new categories for ourselves. I felt I had managed to craft a new

identity for myself as an emerging academic, while at the same time, not losing sight of who I was – and that is writer.

Results: The hybrid lifecycle

I commenced my research with an interest as to whether there were common traits that could be observed in different stages of the hybrid's life, and whether this could be developed to chart a fictional life-cycle of the hybrid.

The structure of this exegesis mirrors the life-cycle of the hybrid, with each chapter exploring a different stage of the life-cycle. I found these stages implicit in Haraway's "A Cyborg Manifesto", and the structure of the exegesis organically evolved from this lifecycle. The chapter titles of this exegesis – *Morphos*, *Genos*, *Xenos*, *Tokos*, *Logos*, *Eros*, *Eautos*, and *Telos* – are Greek words that symbolize the different parts of the hybrid's lifecycle that I explore here and in the novel.

As I explored in chapter two: '*Xenos*', for the hybrid to be 'conceived' (as an idea, and a creature) there must first be a desire to push the boundary of what it means to be human and to defy the rigid rules of society and the accepted boundaries of nature by using science to create new life forms. From Shelley's *Frankenstein*, which harnessed scientific experiments of its day such as galvanism (electrical currents used to animate objects and thought to bring the dead back to life) to create the first manufactured human hybrid, to H.G. Wells first overt hybrids, fashioned from vivisection, a widespread medical practice of the time, fictional hybrids have risen from the page as science has tried to manufacture hybrids in real life. These fictional depictions of hybrids brought into being the trope of the mad scientist.

Scientists' desire to create hybrids intensified when they began using artificial insemination with human sperm on primates. This followed popular practices of xenotransplantation. These endeavors sparked the imagination of authors such as Bakis (*Lives of The Monster Dogs*) and Duffy (*Gorsaga*), and continued to explore the underlying theme of what is it that makes us human, and whether this can be transferred to hybrids as they were part animal.

In chapter three: '*Tokos*', I explored the actual birth of the hybrid and its childhood, where it is raised in isolation. I revealed how these interspecies pregnancies and biomedical scenarios replay fears of degeneration that H.G.Wells explored in *Doctor Moreau*. I discussed how the presence of the hybrid body forces

an engagement with questions about the moral status of the human, and how important the panoptic and isolated 'home' was to coerce the hybrid to accept its human side and reject its animality.

In chapter four: '*Logos*', I examined what happened in the hybrid's lifecycle once it had matured and wanted its liberty and autonomy. As part human, it has language, and the ability to communicate, but was frustrated because its monstrous appearance stopped it being able to engage with the human community. I investigated how the fact that humans are considered to have language and animals do not has long been considered the defining marker between the species. However, what happens when the human-animal hybrid acquires language, as it does in my case studies? In asking what happens when the hybrid is about to communicate, I revealed how the hybrid character challenges established notions of human superiority.

In chapter five: '*Eros*' the final stage of my lifecycle exploration, I investigated the erotic nature of the hybrid; both the hybrid's own sexuality and the erotic nature humans perceive it to have. Frankenstein's creature demanded, with much pathos, a mate:

What I ask of you is reasonable and moderate; I demand a creature of another sex, but as hideous as myself; the gratification is small, but it is all that I can receive, and it shall content me. It is true, we shall be monsters, cut off from the world; but on that account we shall be more attached from one another. Our lives will not be happy, but they will be harmless, and free from the misery I now feel (Shelley, 148).

Dr Frankenstein bows to his creature's demand but kills the bride before she comes alive, fearful of the demonic issue that might spring forth from the unholy hybrid union. Although the hybrid, such as the mule, is infertile in the animal world, the human-animal hybrid is able to reproduce naturally. Sex with the hybrid therefore carries the ominous specter of the most unwanted of pregnancies. It is the prospect of 'monstrous issue' that provides the element of horror that Shelley so deftly conjures up as Dr Frankenstein kills the creature's bride, imagining the "race of devils [that] would be propagated upon the earth" (Shelley 170).

Sexual activity with a human, actual or longed for, is considered 'unnatural', and frequently takes place during a transition point for the hybrid. This sex act disrupts the 'family' structure, forcing the hybrid to be punished, either through death, (Frankenstein's mate, *Splice*) exile (*Gorsaga*), or imprisonment (*Orango*).

Future directions for research

The following stages in the hybrid's lifecycle are fruitful areas for further research:

'Thanatos' - the hybrid and death

The final stage of the hybrid's lifecycle is 'Thanatos', the Greek word for death, however, it is outside the scope of this research to explore the hybrid's death, either as a literal one for the hybrid, or the death of its human aspect instigated by its creator. In this exegesis, we have observed that the hybrid is ultimately destroyed in all but one instance. Gor, in Duffy's *Gorsaga* achieves a 'happy' ending by being banished from 'normal' society, despite being subject to the injustice, arbitrariness and hierarchies implicit in the categories and identities of hybrid existence. In the TV movie adaptation of Duffy's book, *Firstborn*, Gor is killed by Mary, his Gorilla mother, when he tries to reconcile with her as an adult, perhaps because Gor was conceived against her will, and she sees him as unnatural, because he has become 'human' or because he offends her pure category of 'animal' by being 'hybrid'. Here we have the hybrid being rejected by the animal world. Frankenstein's creature dies along with his maker floating on the ice in the Arctic Circle. In *Splice*, Dren is killed by her mother, while the Monster Dogs and the Beast Men suffer from the death of being human as they revert to animal. Why isn't the hybrid allowed to live? And how does this fit in with Haraway's manifesto?

It is also interesting to observe where the hybrid goes to die, and the manner in which it can be killed, or not. Dren is drowned by Clive, but discovers she can breathe under water. She nearly falls off the barn roof, but unfurls her wings and flies. She is then found 'dead' in bed, and Clive and Elsa bury her. But she rises up again, covered in mud, like a revenant. Only a stake through the heart – wielded by her mother – finally kills her. Though her spawn lives on. Haraway argues that "the cyborg is not made of mud and cannot dream of returning to dust" (Haraway 1991, p. 151). Moreau's Beast Men have a 'human curiosity' about the dead, but die as animals in the end when they lose their humanity. This is an area for further examination, as it must be asked if the hybrid dies as an animal dies, or as a human.

Part of death is also legacy; what we leave behind, in artifact or memory. Once Frankenstein and the creature float to their deaths, no one will remember the creature - there will be no trace he existed. Prendick refuses to talk about Moreau's island or the Beast Men on his return to England. Dren's biological legacy, however, will be exploited commercially. The Monster Dogs die in a terrible fire, and the

protagonist Ludwig escapes, never to be seen again. Of the hybrids explored in my case studies, they alone are remembered fondly. Yet even in memory they are liminal. Clea, the journalist to whom Ludwig entrusted his story, says:

I'd like to have a dream about him, just to see him again. But I never do. I miss him (Bakis 1997, p.291).

'Paroikos' - the hybrid and the alien

There is another sort of hybrid in fiction that draws its identity from mythology and tropes of science fiction that warrants exploration in the hybrid lifecycle, which is the human-alien hybrid. *Paroikos* is the Greek word for alien. Movies such as *Species*, the *Alien* series, and Octavia Butler's *Xenogenesis* novels explore these modern mythical creatures. In the *Species* film series, the human-alien hybrid has similar issues of identity as the human-animal hybrid, and is also regarded as monstrous and uncanny by society, even when in human form.

'Ektopos' - the hybrid and 21st Century fertility

Recent novels about the hybrid have an environmental theme and it can be speculated that they position the hybrid as more importantly animal than human, while at the same time exploring the zeitgeist of women deciding to take control of their reproduction via solo attempts at IVF and artificial insemination. *Ektopos* is the Greek word meaning 'out of place', and is used for the medical term 'ectopic pregnancy', where the fertilized egg grows outside the uterine cavity. In the following examples, the term *Ektopos* can be used to describe a woman offering her body as a vessel for transpecies pregnancy, rather than the male scientist impregnating an animal host. It appears that the depictions of the human-animal hybrid in the science fiction texts Laurence Gonzales's *Lucy* (2011) and Kelpie Wilson's (2005) *Primal Tears*, and Charis Cussins's (1999) story "*Confessions of a Bioterrorist*" differ from the works of fiction explored in this exegesis, as they explore a woman choosing to become pregnant with a bonobo embryo with the intention is to save a threatened species. There may be broader applications for research, in the role of science fiction in the treatment of animals and our responsibility to them and the planet. These novels can be situated as an evolution of Shelley's concerns about childbirth in *Frankenstein*.

Since Shelley wrote *Frankenstein*, articulating powerfully felt anxieties about pregnancy, the educated Western women's fear is now being childless in their forties, rather than dying in childbirth (Mellor 1988, p.41).

Future research could explore how the new transpecies pregnancy novels in which women opt to be impregnated with a hybrid embryo reflect this reality for women in their late thirties and forties, and their desire for technologically assisted pregnancy at any cost.

'Lathos' – the hybrid passing as a human

The concept of 'passing' (Larsen 2004, Bennett 1996, Dyer 1993) in which black people pass for white, while not synonymous with hybrid passing as human, is a useful concept for the hybrid's attempt at a human identity. '*Lathos*' is an old Greek word for "escaping detection", and this term can be used in the hybrid's lifecycle as it tries to establish its identity in the human world. This concept of 'passing' has a strong application to the bonobo-human hybrids mentioned in '*ektopos*' and also the alien hybrids in '*paroikos*'. As outlined in chapter one, 'covert' hybrids, those who look mostly human can more easily 'pass' for human than 'overt' hybrids who obviously look like more like animals.

Conclusion

This exegesis began by referring to Haraway's quote that it is better to be "a cyborg than a goddess". Like her manifesto in general, it can be argued none of her comments are to be taken literally. Yet her final argument is for destroying identities and categories. However, the hybrid, which transgresses the human and animal category, is *still* subject to *both* the human and animal categories, and therefore suffers alienation because of it. The hybrid is denied justice, because it is "an animal", yet it is subject to the rules of human society and is punished for transgressing them. From Moreau's monstrous Beast Men, those grotesque variations on the familiar animal, to Frankenstein's creature, that monstrous human other, the hybrid creature in fiction demands of us, the reader, that we are jolted from our comfort zone, and acknowledge our connection to the non-human animal with whom we inhabit this world.

In this chapter, I have explored the Creative Writing doctorate and the tension inherent in the exegetical-creative writing binary. I have also revealed how this exegesis is an exercise in understanding how science fiction and its tropes have provided a narrative for a particular kind of monster that has emerged since the industrial age and forces us to question long held assumptions about what it means

to be human. The science fiction works engaged throughout challenge traditional anthropocentric hierarchies that value the human over other animals. Representations of the human/animal boundary in these works become blurred and force readers into an empathetic relationship with the hybrid character.

At the beginning of this exegesis, I turned to Bentham who said the relevant question was not “Can they reason? Nor Can they Talk? But Can they suffer?” I would argue that science fiction, by providing us with the hybrid, forces us to confront not just “how human are they?” or “how animal am I?” but “how like each other are we – and is this our future?” As we have seen through the examples in this exegesis, science has and keeps pushing the boundaries of what we consider to be human. And perhaps the hybrid is the logical outcome of our curiosity. Anthropologist Robin Fox argues that man has the greatest learning capacity of all animals and his behavior has evolved to greater flexibility. “Man’s greatest instinct is the instinct to learn. It is therefore natural to man to be unnatural – to go beyond nature and supplement the genetically endowed predispositions of behavior with cultural forms not built into the chromosomes” (Fox 1973, p 43). Or as Ariadne says on the final page of *Almost Human*:

What did I know about normal, anyway? What did I care if the human race sprouted wings? Maybe Kally was the logical end point of human curiosity, just as I was part of that continuum.

The end

Appendix

Conference papers and journal articles arising from the PhD research

Chapter two: Monsters Manufactured: Boundary transgressions and the trope of the mad scientist:

- **2013 Journal article** (current exegesis chapter version) 'Stranger than science fiction: hybrid creatures inspired by animal experimentation' has been accepted for: *Relations 3. Beyond Anthropocentrism* (Minding Animals Special Edition) a peer-refereed journal of trans-anthropocentric ethics and related inquiries.
- **2012 Conference paper** *Stranger than science fiction: hybrid creatures inspired by animal experimentation*. 2012 Minding Animals Conference, Utrecht University, Netherlands.

Chapter three: Monstrous Breeding Ground - My Hideous Progeny.

- **2013 Journal article** 'Here Be Monsters: Secret sites of human animal hybrid experimentation in Kirsten Bakis' *The Lives of the Monster Dogs* and H.G. Wells' *The Island of Dr Moreau*'. In *This Darkened Space: A Geography of the Monstrous* (Inter-Disciplinary Press 2013), Montin S & Tsitas E (eds.). This peer-reviewed themed ISBN hard copy volume arose from the Inter-Disciplinary.Net 1st Global Conference: Monstrous Geographies: Places and Spaces of Monstrosity at Mansfield College, Oxford, UK in July 2012. (I am also co-editing this publication).
- **2013 Journal article** The conference presentation version of this paper is also to be published in conference publication in an ISBN eBook. Interdisciplinarypress.net
- **2012 Conference paper** *Here Be Monsters: Secret sites of human animal hybrid experimentation in Kirsten Bakis' The Lives of the Monster Dogs and H.G. Wells' The Island of Dr Moreau*. The 2012 1st Global Conference: Monstrous Geographies: Places and Spaces of Monstrosity, Oxford, UK.

Chapter four: Are We Not Men? When the hybrid talks back.

First presented:

- **2012 Journal article** *Are We Not Men? When the human-animal cyborg talks back*. Co-Authored paper with Dr Lisa Dethridge, RMIT. The 2012 7th Global Conference: Visions of Humanity in Cyberculture, Cyberspace and Science Fiction, Oxford, UK. *Paper to be published in conference publication in an*

ISBN eBook. Interdisciplinarypress.net

- **Conference paper** *Are We Not Men? When the human-animal cyborg talks back*. Co-Authored paper with Dr Lisa Dethridge, RMIT. The 2012 7th Global Conference: Visions of Humanity in Cyberculture, Cyberspace and Science Fiction, Oxford, UK.
- **Conference paper:** Expanded version of the paper also presented at the 2012 ASLEC-ANZ's conference at Monash University "Regarding the Earth".

Chapter 5: Eros: Loving The Hybrid: Erotic Encounters With the Non-Human

- **2013 Conference paper** *Loving The Hybrid: Erotic Encounters With the Non-Human*. Paper selected for the 2013 8th Global Conference: Exploring the Erotic, Oxford, UK, September.

Early research was presented at the following conferences:

- **2011: Conference paper:** *Almost Human: Bioethics, cyborgs and a study of Donna Haraway*. Presented at the 4th Biennial Australian Animal Studies Group Conference, Griffith University.
- **2011: Conference paper:** *Bad Moon on the Rise: Not all Monsters are Created Equal*. Presented at the Global Animal Conference, the University of Wollongong. Part of a series of events leading up to the 2012 Minding Animals International Conference, Netherlands.
- **2010: Conference paper:** *Posthuman evolution in science fiction: development of a unique lifecycle for cyborgs and scientifically created human monsters*. Presented at the Literature and Science, 4th annual conference of the Australasian Association for Literature, at the University of New South Wales.

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