

**HOLO-PURSUITTS: HOLOGRAPHIC IDENTITY &
AGENCY**

***IN STAR TREK: THE NEXT GENERATION &
VOYAGER***

Kim Louise Parrent

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Abbreviations.

A.I. – Artificial Intelligence

BS/WM – Black Skins, White Masks

CED – *Chambers English Dictionary*

D/P – Discipline and Punishment

EMH – Emergency Medical Hologram

OED – *Oxford English Dictionary*

OS – Original Series

S/K – Situated Knowledge

WE – Wretched of the Earth

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endless kitten-hood, to *stop, look up from the page*
and play.

Abstract

In this thesis, I explore issues relating to holographic identity, agency and the place and position of the hologram in *Star Trek*. My critique of *Star Trek: The Next Generation* and *Star Trek: Voyager* explores the nature of the hologram as a subordinate or subaltern class within the hegemonic environment of Starfleet, earth's representative for space exploration and colonization. By bringing together issues of resistance and agency and the politics of simulacra identity, I argue that the figure of the hologram represents a struggle for power, agency, and voice. My focus is on the hologram's journey towards agency and resistance against the hegemonic discourse of Starfleet. I examine how the hologram's journey highlights the fictional disparities in power relations between the dominant and the marginalized within American science fiction television and demonstrate how this subjugation results in the silencing of the "Other". I examine these complex issues utilising theories on humanism, posthumanism, postcolonialism, subaltern studies, animal rights, and artificial intelligence in order to demonstrate the relevance of science fiction television, and in particular, the fictional representations of the hologram in the study of the politics of identity. Within these *Star Trek* narratives, the hologram is often monopolized, dominated and exploited by the humanoid.

Key Words: science fiction, *Star Trek*, *Star Trek: Voyager*, *Star Trek: The Next Generation*, holograms, subaltern, agency, hegemony, counter-hegemony, whiteness, "race", posthumanism, *posthuman*, ALife, Artificial Intelligence, postcolonialism, Michel Foucault, Franz Fanon.

CHAPTER ONE

INTRODUCTION

“THE FINAL FRONTIER”: IN PURSUIT OF HOLOGRAPHIC AGENCY

“The Final Frontier”: this famous phrase has echoed throughout popular culture since it was first conceived by Gene Roddenberry for the opening sequence of *Star Trek* (OS).¹ This phrase is never more appropriate than when applied to the frontier of Artificial Intelligence and ALife. In contemporary science fiction narratives a new mechanical phylum has arisen that includes androids, cyborgs, robots, nanobots and holograms. ALife represents the best and worst of human creativity, from mechanical monsters to cyborg heroes. Whether viewed as villains or heroes, ALife challenges humanity’s claim to supremacy and uniqueness. The final hurdle that humanity faces is to confront or to coexist with their mechanical offspring. Science fiction asks the question: Will ALife ultimately replace humans, or live alongside humanity with equal consideration?

Science fiction literature has been widely studied in relation to questions of identity politics, alienation, and marginalisation. Although questions regarding the position of ALife alongside humanity have become common within science fiction literature and are well entrenched within academia, the study of science fiction television has not always received such academic acclaim. Science fiction television often takes a back seat to the study of so-called “higher” science fiction literary narratives in the form of the

¹ Eugene (Gene) Roddenberry began writing for television in the 1950s and left the police force in order to pursue writing full time. His idea for *Star Trek* emerged out of a desire to create a “wagon train to the stars”. He wanted to use the series to comment on the “human condition” at a time in American history, the 1960s, that was particularly turbulent (Greenberger).

novel.² However, as a number of scholars and academics have demonstrated over the last two decades, science fiction television is an important and versatile medium in which to study the thematic complexities of such narratives. With the rise of Posthumanism, science fiction film and television have come into their own. The ability to *see* such narratives on screen, with the inclusion of cinematic special effects, brings science fiction tales vividly to life and offers new ways of investigating these storylines. Arguably, the visual retelling of many classic science fiction tales allows these narratives to reach a wider and more diverse audience. Consequently, the ways in which science fiction narratives can be interpreted visually are useful additions to the analysis of science fiction texts. With the rise of digital media and the increasing interest in televisual and cinematic remaking of classic science fiction texts, the critical study of science fiction television will continue to be an important addition to university scholarship.

My interest in science fiction began with television, and in particular, series like *Star Trek* and *Doctor Who*. Growing up watching these shows in the seventies introduced me to a world of otherness – the otherness of alien civilisations, and of space/time travel. Although these original series now seem dated and at times even comical, with their outdated special effects and corny dialogue, they nevertheless introduced a generation of children and adults to the delights of science fiction television. The new series of *Star Trek* and *Doctor Who* have produced some exciting new narratives, new aliens, and new ways of seeing the universe. In turn, these new narratives have stimulated

² This has often been the case with science fiction adaptations of “classic” science fiction texts, at times viewed as perverse or corrupt versions of the original, rather than as insightful, posthuman reconstructions of the famous originals. A case in point is Isaac Asimov’s classic tales made into film (Leaver 2012; Booker 2009).

novel ways of *re-viewing* science fiction narratives and characters. My current thesis evolved out of my interest in science fiction television; animal behaviour and ecology; evolutionary theory; natural history; animal and postcolonial studies; sociology of the self; and representations of the “Other” (human/nonhuman/machine) within socio-cultural formats. I have brought some of these observations to this thesis. My study of *Star Trek: The Next Generation* and *Star Trek: Voyager* explores the hologram, a currently neglected area of study, as a medium to critically examine representations of simulacra as oppressed figures. The hologram as portrayed in *Star Trek* is particularly useful as a medium to study aspects of exclusion and oppression. The hologram in its very nature is meant to fool the senses into believing that the individual is interacting with a real being. The reason for excluding holograms from the category of living beings is based on their position as “artificial” creations and on their simulated nature as opposed to being organic subjects.

My research contributes to an understanding of how historical American paradigms of “race”, class, religion, and gender are mediated within American science fiction television representations of the simulacrum. Although critical studies in science fiction television remain built upon the key staples of “race”, gender, politics and class, it is through the utilization of these new narratives and new characters that unique perspectives are gained in relation to the standard theoretical tropes. At this point it should be noted that “race” is an especially problematic concern:

the concept of race is one of the most controversial in all evolutionary biology. It has been used to justify the slavery of Africans in the New

World, to rationalise the murder of millions of Jews, Slavs and Gypsies by the Nazis, and as a reason for one group to oppress another throughout human history to the present day ... the concept of race has become a sociocultural classification of human diversity with highly charged interpretations and connotations.

(Ruse & Travis 2009 821)

Yet the term is used within science fiction narratives as either a visible or an invisible construct and therefore cannot be ignored in a discursive analysis of power relationships in science fiction television. The mythology of “race” has “worked to order societies, structure power relationships, and to determine which groups have access to resources and privileges” (Dies in Potter & Marshall 157). It is due to the fabricated and uncertain nature of “race” as a construct that I place “race” in inverted commas. “Race”, especially the historical binary between “whiteness” and “blackness,” has been carried over into the examination of alien species where whiteness is equated with humanity and goodness, and blackness with alien-ness and evil (Parrent 2010).³

My focus is on the realm of the artificial, and the artificial as a construct of political and social identity, presented both in terms of the machine and in the machines’ relationship to humanity. In my examination of the figure of the simulacrum I scrutinize and expose “the profound depths of racist [and elitist] ideologies and their link to [popular] culture,” particularly

³ This aspect of science fiction television has been studied comprehensively by Daniel Bernardi (1999) in relation to *Star Trek*, and was the focus of my Master’s thesis: *Traveling through the Iris: Re-producing Whiteness in Stargate SG-1* (2010 unpublished thesis).

within science fiction narratives, through the hologram's attempts at resistance, rebellion, and subversion (Spencer 68). By analysing the largely ignored position of the hologram within *Star Trek*, alongside critical readings of current literature on hegemony, counter-hegemony, the subaltern, simulacra, and identity politics in popular science fiction, I question if the hologram can actively negotiate agency and self-determination. I argue that *Star Trek's* portrayal of the hologram is an important topic that raises questions of whether a simulated image can claim consciousness, and agency, or whether it can indeed resist, as simulacra's right to agency or insurgency is potentially undermined on the basis of their apparent lack of authenticity.⁴ Consequently, is resistance for the hologram merely a holo-pursuit?

Before moving onto discussions of the key theoretical perspectives that I address in the following chapters it is important to define several key terms. I use the term "artificial" as a reference to something that is not "natural" or "alive" in the popular cultural sense of the words.⁵ The machine may simulate "life" but is not a life form in its biological meaning. Something that is artificial is typically, although not always, viewed as constructed, synthetic, and static as opposed to born, natural, and evolving. The adjunct *thing* (something) rather than *one* (someone) also denotes a sense of construction and fabrication. In contrast, the phrase "Artificial Intelligence," or A.I., in this thesis represents machines that are capable of reasoning and processing information in similar ways to the human brain. Because these definitions by

⁴ At this point it should be noted that my investigation into the hologram, and simulacra in general, is purely aimed at *fictional* representations of these entities. Possible future applications in regards to advanced "real-world" artificial entities is not the focus of this thesis.

⁵ As Tama Leaver (2012) suggests "the artificial, if nothing else, is conventionally thought to signify objects and things outside of the realm of the natural and realm of the human" (2)

their nature impose restrictions upon the artificial “Other” that limit the scope of the application of agency, I use the term “ALife” when discussing artificial “life forms”. However, since all such terminology, through the use of the word “artificial,” denotes a lack of life, I prefer the terms *simulacra* and *simulacrum* when discussing such entities as holograms. Simulacra are distinct from ALife in that they are not in themselves original; that is, they are copies of a copy in which the original is lost through duplication (Baudrillard). This definition makes them harder to define or quantify as “living.”

The definition of “alien” lands on more solid ground having been used historically to denote that which is “different: different from person or place” (OED). Alien used in this way, as different or distinct from humans, becomes translatable to the nonhuman “Other,” whether techno-animal, organic, or mechanical. I use the term “organic” to include all life forms depicted in science fiction that are carbon based, as opposed to silica-based or other elemental life forms. I use the term “human” to refer to those “species” who originate from Earth (human species – *Homo sapiens*). In contrast, the term humanoid is used for those aliens that resemble humans in appearance, shape or form, but are not human; they did not originate from Earth (*nonhuman* species). Beyond this distinction, myriad scholarly definitions of “human” abound; I find Pramad Nayar’s to be the most succinct:

The human is traditionally taken to be a subject (one who is conscious of his/her *self*) marked by rational thinking/intelligence, who is able to plot his/her own course of action depending on his/her needs, desires and wishes, and, as a result of his/her actions, produces history. The human has traditionally been treated as male and universal. It is always

treated in the singular (*the human*) and as a set of features or conditions: rationality, authority, autonomy and agency.

(2014 5)

As Nayar suggests at the heart of what it is to be human is the *subject* – a rational, autonomous, individual who has agency. The human being is at the centre of Humanism and the subject is central to being human (Copson & Grayling, 2015). Consequently, the *subject* is at the core of Humanism.

However, the concept of the subject and subjectivity are problematic: as with the terms Humanism & Posthumanism there are multiple definitions. I use the term “subject” to refer to “an entity that is capable of conscious experience”, and “subjectivity” to refer to the ability of the subject to be aware of “the world and [itself] as existing in it” (McQueen 2015 5). In developing these terms further, Paddy McQueen argues that the subject is “capable of experiencing various mental states and ... to reflect on these states ... the subject requires that one be an agent, meaning that one is able to make decisions and to reflect on these decisions ... [to be] ... self-reflective agents”; and all of this within a social context or discourse (ibid).

Humanism as a term and a theory has been, at one time or another, embraced and rejected by critical theorists, yet remains as a significant presence within some Western thought. According to Andrew Copson and A.C. Grayling, the term has come to be associated with the “valuing of human beings and human culture *in contrast with* valuing gods and religion, and by affirming the effectiveness of human reason applied to evidence...” (2015 2).

Copson and Grayling's view of a recent, Anglophile and secular Humanism centres on two main traits:

1. A philosophy of beliefs, that holds that human beings achieve a system of morality through their own reasoning rather than through a belief in any divine being (Copson & Grayling 4).⁶
2. A commitment to the perspective, interests and centrality of human persons; a belief in reason and autonomy as foundational aspects of human existence; a belief that reason, scepticism and the scientific method are the only appropriate instruments for discovering truth and structuring the human community; a belief that the foundations for ethics and society are to be found in autonomy and moral equality ... (Craig & Craig 2015 4).⁷

The term Humanism, as used throughout this thesis, and as I apply it to *Star Trek*, embraces both of the above traits and denotes a belief in *human nature*: a fallacy that denotes a definable, homogenous essence that all humans possess (Halliwell & Mousley 2013).⁸ According to the Oxford English Dictionary, human nature refers to “the general characteristics and feelings shared by all people” (493). The concept of a central human nature, a “nature” consisting of behaviours that link all humans together as a species, or a human condition, a view that denotes humanity as having a set state of being, or condition, are

⁶ John Andrews (2010) *The Economist Book of -isms: From Abolitionism to Zoroastrianism* (in Andrew Copson, 2015 4).

⁷ Edward Craig & Edward Craig (eds.) *Concise Routledge Encyclopaedia of Philosophy* (in Andrew Copson 2015 4).

⁸ I am using 'Human' (uppercase 'H') to denote the proper noun and how the term typically appears as capitalised in the theoretical literature. Similarly, I use the uppercase version of 'Human' to denote the use of the term as a *noun*, for the subject/name of the group. I use the lowercase 'human' to apply to the use of the term as an *adjective* “relating to or characteristic of human beings” (OED).

myths that perpetuate injustice. These ideologies perpetuate injustice (both historical and contemporary) by setting a standard of “humanness” that is laid down as the archetype for what it means to be human and, more importantly, what it means *not to be* human. In addition, “the myth of the human ‘condition’ ... [of which human nature is a part] ... rests on a very old mystification ... placing Nature at the bottom of History ... in scratching the history of men a little, the relativity of their institution or the superficial diversity of their skins, one very quickly reaches the solid rock of a universal human nature” (Barthes 1993 100).

Over the centuries different versions, relationships, and labels, or prefixes, for Humanism have emerged such as Romantic, Renaissance, Liberal, Critical, Post-, Trans- and Anti-. This has often complicated the use and usefulness of the term Humanism. For my research purposes, I have examined Liberal Humanism, Critical Humanism, and Posthumanism. Liberal Humanism, as depicted within *Star Trek*, attaches great importance to the sovereignty of the individual but also looks to a collective concept of *humanity* that supposedly negates the need for “race” or creed – where all humanity are depicted as one people. In this interpretation, often used by Gene Roddenberry to describe his franchise’s core philosophy (Robb), that I use when discussing Liberal Humanism. This definition is a Eurocentric version of Liberal Humanism in that it is centred round the dominance of white, Western, masculine values. One of the paradoxes of *Star Trek’s* use of Liberal Humanism is this appeal to white masculine values while at the same time advocating a “colour-blind” philosophy in which all “races” and creeds are equal. However, the nature of Liberal Humanism excludes non-white non-

Western discourses. Consequently, the series attempts to depict a “colour blind” future that is paradoxically at the same time framed within “race”.

The term “liberal” can be applied to both political and cultural ideologies. For the purposes of my study, I use the term “liberal” to signify what Anne Norton observes as equating liberalism to “self-expression and self-discovery ... predicted on the notion of an autonomous self, an independent will that individuals can discover within” (in Harrison et al 139). Liberalism within *Liberal Humanism* signifies “a belief in the primacy and autonomy of the individual” (ibid). Although very much part of the theory of Humanism, Liberal Humanism advocates the rise of the individual as the key to the shaping of humanity.

Critical Humanism, as the name implies, critiques the humanist ideal of a universal human. It views such universality as a fallacy in that rather than being all-inclusive it actually, and actively, excludes some (“races”, genders, and bodies). Critical Humanism denies the humanist appeal to the “idea of a ‘person’ as a self-conscious subject” (Nayar 11). Critical Humanism, in opposition to Liberal Humanism, tries to demolish the “myth of the unified, coherent, autonomous, self-identical human subject. It has posited the subject, and biology, as a construct of discourses, of enmeshed and co-evolved species and technologies” (Nayar 29). My analysis combines elements of Critical Humanist and Critical Posthumanist theories to *Star Trek’s* Liberal Humanist treatment of the hologram.

Posthumanism evolves out of theories of Humanism but attempts to challenge and to disassemble the idea of a universal human condition, or a

stable and universal idea of the individual. According to Ann Weinstone's *Avatar Bodies*, "posthumanism responds to the legacies of humanism by breaking up, fracturing, distributing, and decentralizing the self-willing person, questioning its subjectival unity and epistemological conceits..." (2004 10). Although Posthumanism, within many science fiction narratives, appears to "break away" from Humanism, it "remains firmly within the purview of humanism ... as it tends to retain at the centre of its narratives the *one* who becomes and the one who owns those becomings" (ibid 11). In addition, "Posthumanism asks a great many questions in which the Other or alter or alien or animal or nonhuman or technological feature as active terms" (ibid 11).⁹ In this thesis, I utilise two forms of "Posthumanism". Firstly, I use *posthuman* to mean that which evolves *beyond* the human. The cyborg, android, and machine intelligence are *posthuman* figures. The "*post*" in this regard reflects the move towards the science fiction model of the new, improved Human (*Homo faber*); or those that come *after* the Human that may or may not *be* Human (e.g., machines, ALife). The term *Homo faber* is used by some Transhumanists, a further subcategory of Posthumanist thought as defined by Weinstone's definition above, to denote the advanced human form in its relationship to technology (Nayar 2014). Secondly, I use Posthuman in terms of Critical Posthumanism. Critical Posthumanism, as opposed to *posthumanism*, views humanity not as evolving into something new, but as a fragmented, decentred, and unknowable construct.¹⁰ It critiques the concept of human sovereignty and humans as "the centre of all things" and challenges the

⁹ This definition combines elements of Critical Humanism and Transhumanism and points to a reliance on the idea of the Human.

¹⁰ Similarly, as per the term Human/human, I use the uppercase version to denote the name of a critical theory as opposed to using it adjectively.

“hierarchic ordering – and subsequently exploitation and even eradication – of life forms” which do not fit the archetypal figure that the idea of the Human represents (Nayar 5/ 8-9).

* * * * *

STAR TREK: THE SAGA EVOLVES

The job of *Star Trek* was to use drama and adventure as a way of portraying humanity in its various guises and beliefs. *Star Trek* is the expression of my own beliefs using my characters to act out human problems.

Gene Roddenberry (in Robb ix)

As the statement above demonstrates, *Star Trek* was a personal journey for Gene Roddenberry as a writer. His goal was to use the show to address “humanity” and the “human condition”.¹¹ The use of contemporary socio-political issues within the narratives, combined with the use of futuristic science and technology, led to the show becoming a cult classic. As a cultural icon, *Star Trek* has generated a great deal of interest in popular culture, and within critical literature. From its beginning as a space opera in 1966 (OS 1966 – 1969), the *Star Trek* franchise has been studied in relation to “race,” gender politics, and the subject of Liberal Humanism. *Star Trek’s* five television series and thirteen films (to date) span several decades.¹² The original television

¹¹ According to Barrett & Barrett “*Star Trek* is about the human, and endorses a lot of what we might call ‘humanist’ rhetoric ... it also uses a number of devices to ask questions about how the nature of humanity is to be understood” (133). One of these “devices” is the use of the artificial to define humanity. In particular, the hologram acts as a point of difference leading to questions about “the nature of humanity”.

¹² This was correct as of March 2017.

series began in 1966 and aired for only three years. However, later syndication saw the show playing continuously throughout the world. The 1960s series featured William Shatner as Captain James T. Kirk and the late Leonard Nimoy as Spock. *Star Trek* became a cult classic, and the new series that followed continued the original winning design.¹³ *Star Trek's* narratives situated in a utopian future, that frequently touts a liberal, “colour-blind” and progressive society, has throughout the franchise’s long history, relied heavily upon contemporary American paradigmatic assumptions of “race,” class, and gender.¹⁴ As a consequence, similar to other popular science fiction television series (past and present), *Star Trek's* narratives ultimately privilege white, western, masculine histories, and subordinate, silence, or negate non-white, non-western, non-masculine identities. Later shows that followed in the wake of *Star Trek*, such as *Stargate SG-1*, continued the narrative trope of privileged “whiteness” which juxtaposed the “white” hero with the dark alien “Other” (Parrent 2010). The marginalised “Other” in the original *Star Trek* has typically been the alien. However in the later series, the “Other” included artificial intelligence and ALife.

Over the years of observing the evolution of *Star Trek*, and with the emergence of new technology in *Star Trek: The Next Generation* and *Star Trek: Voyager*, I imagined what it would be like to enter a holodeck and have the freedom to engage directly with the past, or imagine the thrill of exploring new worlds. In terms of critical evaluation, I began to question what these

¹³ *The Next Generation* 1987 – 1994; *Voyager* 1995 – 2001; *Deep Space Nine* 1993 – 1999; *Enterprise* 2001 – 2005.

¹⁴ While the term “colour-blind” may be seen by some as colloquial, it is nevertheless widely used in the field of whiteness studies to denote the invisibility of the white subject, and the fallacy of a “race less” society (Bernardi 1999; Parrent 2010).

fictional experiences on the holodeck, these virtual worlds, signified. How do fictional representations of holographic characters fit into the scheme of representations, and into the “real-world” power relationships that these representations so often engage, explore, and negotiate? As *Star Trek* moved along in its journey from *The Next Generation* to *Voyager*, there was a definite shift in how the character of the hologram was portrayed. Initially, from the first appearance in *The Next Generation*, the hologram was a form of entertainment, stress relief for long space voyagers, and a technological tool to be exploited. By the time *Voyager* emerged, the hologram moved into the realm of companion, friend, and shipmate. In *Voyager*, holograms emerge as individuals able to evolve, learn, interact independently, and offer compassion and companionship to organics.

Within *Star Trek* narratives, the fictional characterisation of the hologram followed a similar pattern to that of the alien. As the stories developed over the decades and between the various series’, some aliens were welcomed into the “human community” (although others were to remain outside/excluded). This change often reflected real world cultural attitudes of the day. For example, after the tumultuous racial tension of the sixties and seventies, black actors, no longer relegated to the background, became part of the main cast of *Trek*.¹⁵ By *Star Trek: Deep Space Nine*, the key figure of the series, the Captain of the space station, Captain Ben Sisko, was non-white. Similarly, female roles began to become more mainstream leaving behind the supporting role, as background “scenery”, to become central to the shows’

¹⁵ However, this is not to suggest that racial equality and harmony were attained in the U.S. after the 1960s.

narrative formula. This is reflected most notably in the addition of Captain Katherine Janeway as head of the starship *Voyager*.¹⁶

The way that these changing and evolving fictional constructs have often reflected real world U.S. cultural attitudes/politics has made *Star Trek* useful for the critical analysis of cultural concepts, and constructs, such as ‘race’, marginality, gender, and ‘Otherness.’ My thesis explores the changing position of fictional representations of artificial entities, such as holograms, throughout *Star Trek: The Next Generation* and *Star Trek: Voyager*, utilising the theories outlined in this introduction, such as Critical Humanism, Posthumanism, human-animal studies, and subaltern studies. I employ aspects of these concepts to the exploration of science fiction television, dealing with the artificial “Other”, which demonstrates visually, narratively, and conceptually that the historical construction of what it is to be human is highly contested as well as deconstructed. It is my contention that the hologram, as simulacrum, is a neglected and yet richly symbolic vehicle to investigate the extension of such marginalised identity, “Othering,” and agency. Stories about the identity and position of holograms in relation to human communities within fictional realms allow for the negotiation and examination of socio-political themes that mirror real world concerns, such as “race”, subalternity, and gender.

¹⁶ Notably, there is yet to be a female Captain of the starship *Enterprise*.

“Mankind Stands Tall: God Bless the Human Race”¹⁷: *Star Trek: The Motion Picture*

Although the primary focus of my study is on *Star Trek: The Next Generation* and *Star Trek: Voyager*, it should be noted that the ominous nature of the machine is not new to *The Next Generation* or *Voyager*, but resonated within the narratives of the original.¹⁸ In *Star Trek: The Motion Picture* (1979), the dramatic opening sequence sees first contact made with a vast living machine.¹⁹ In the blackness of space, an ominous sound reverberates from a massive bluish cloud.²⁰ Kirk, displacing Captain Willard Decker, regains the captaincy of the *Enterprise*. Joined by Spock, who has failed in his quest to achieve Kolinahr, a Vulcan rite to purge all emotions, the crew encounter the cloud. The *Enterprise's* bridge is probed by a stream of plasma energy sent from the interior of the cloud and the navigator Ilia is killed. A machine replication of her is transported back to the ship to act as a more effective probe and record information on the “carbon units”. The entity, that is called V’Ger, demands knowledge about the creator. It views the humans aboard the *Enterprise* as an infestation and the probe informs Kirk that when it has received the information it requires it will purge the entity called *Enterprise* of the carbon units. Determined to protect his crew and save Earth, Kirk demands to meet with V’Ger face to face. When V’Ger is finally confronted, the entity

¹⁷ Announced by Harriett Jones in *Doctor Who (New Series) “World War Three”* (2000).

¹⁸ The film, *Star Trek: The Motion Picture*, draws on the Original Series in its use of the dangers of machine life. For example, “The Changeling” and “The Doomsday Machine,” the former depicting a Voyager-alien like machine hybrid, while the latter an alien machine following a (distorted) programme to “clean” the universe of organic life.

¹⁹ *Star Trek: The Motion Picture* aired in 1979 and was written by Harold Livingston and directed by Robert Wise.

²⁰ This scene and the booming sound emanating from the alien entity are reminiscent of *Close Encounters of the Third Kind* (1974).

turns out to be a highly modified Earth probe – *Voyager VI*. Sent out into space in the twentieth century the probe’s mission was to gather information and to send data back to Earth. Found damaged by an advanced machine race, the probe was repaired and sent out to continue its journey. Now sentient V’Ger is trying to make sense of its existence and wants to meet and join with its creator.²¹ Finding out that its creator was human, V’Ger unites with Decker and Ilia’s consciousness and is “reborn” as a new life form and the Earth is saved.

Several compelling ideas in relation to artificial intelligence and the nature of life emerge from this film and these would be developed further in the later series of the franchise. As depicted in many *Star Trek* narratives, science “is not the one truth about the world, but truth from a particular perspective, answering a set of questions, and often serving a particular set of interests” and this particular perspective relies upon biological assumptions about the universe (Dupre 7). The film depicts humanity’s struggle to define life in the universe. When they encounter the interior of the cloud, Kirk assumes that this “structure” is a massive alien vessel and tries to contact its crew. Kirk, in his search for answers, works from a discourse that recognises and defines life-as-we-know-it, a discursive template that is based upon human scientific knowledge that excludes life-as-it-could-be.²² Therefore, he initially

²¹ It should be noted that “life” and “sentience” do not always go hand in hand. Something can be considered to *live* but not be sentient. Plants are alive but few believe them to be sentient. Sentience is the ability to be aware of one’s surroundings, and in most cases to be self-aware. It can also mean, at its basic level, to respond to stimulus. However, when used in science fiction it is generally in reference to being conscious or self-conscious and able to respond empathically to events.

²² Science remains a powerful force in determining socio-political definitions and “science carries an epistemic authority that generally greatly exceeds that of non-scientific practices of knowledge production” (Dupre 2012 34).

ignores the possibility that this massive structure may not be a “thing” but a life form. Western science has long defined the paradigm of life based on what it is to be human. Such discourses are not passive; nor are they neutral. As McCoy asks Kirk, “why is anything out there we don’t understand always called a thing?”

Fear of the machine, or more precisely, the intelligent machine, the “thing” that lurks beyond human understanding, has continued to fuel science fiction narratives as machines become more advanced, more intelligent:

the computer seems to have a mind of its own, especially if the controllers are guided by its information [S]ome ... have already begun to compare computers to the Golem of the medieval ghetto or the monster created by Dr. Frankenstein. Far from remaining a stunning but subordinate tool, the computer frequently jumps the track, subverting human purposes that set it in motion. Like the machines that characterised the Industrial Revolution, computers are just the latest occasion for the displacement of fears that “things” are out of control, that their human origin has been lost, and that it is too late for salvation.

(Aronowitz 1988 4)

In *Star Trek: The Motion Picture*, humanity, depicted as an emotional “species,” is used as both a reference point and a guide to all knowledge including the spiritual and philosophical. The machine is viewed as inferior to humanity because it lacks the ability to understand and process emotions.²³

²³ This premise will be used repeatedly in *Star Trek* narratives to deny the artificial “Other” agency. I will discuss this in detail in the following chapters.

V'Ger, an artificial life form, one that has been rebuilt by an advanced machine race from a planet of living machines, still looks to humanity for answers about its existence. In the film, Spock is also searching for answers about his own existence as part human, part Vulcan. Trying to determine exactly what V'Ger is and how to stop its progress towards Earth, Spock enters the inner chamber. During a mind meld with V'Ger Spock learns that V'Ger is searching for answers of its own. He tells Kirk: "I saw V'Ger's planet, a planet populated by living machines, unbelievable technology. V'Ger has knowledge that spans this universe. And, yet with all this pure logic, V'Ger is barren, cold, no mystery, no beauty. I should have known". What he should have known was that "This simple feeling ... [grasping Kirk's hand] ... is beyond V'Ger's comprehension. No meaning, no hope, and Jim, no answers. It's asking questions. Is this all I am? Is there nothing more?" In this conversation between human and Vulcan, the film's narrative suggests that Spock finds his answers not in rejecting or purging his humanity (a move towards cold logic) but by acknowledging it (a move towards "feeling"). Feeling, mystery, and human emotion, not logic, can provide Spock and V'Ger with what they seek.²⁴ V'Ger is seeking life's answers – Why does it exist? Who created it? As a machine, it cannot understand something like friendship, hope or imagination and look beyond reason and logic. What this narrative stresses is that there *is* more and it is to be found within humanity.

Overall, the film concludes that it is the human ability to look beyond logic and to imagine that is the key to evolving. Consequently, if machine intelligence is to evolve and to have "life," it must also transcend logic and

²⁴ This is a move towards Romantic Humanism.

embrace the impossible. It must become more “human” in order to evolve beyond the mechanical and *live*. Kirk and the others realise that V’Ger wants to touch its creator, to learn about humanity and evolve:

SPOCK: ... V'Ger must evolve. Its knowledge has reached the limits of this universe and it must evolve. What it requires of its God, Doctor, is the answer to its question, 'Is there nothing more?

McCOY: What more is there than the universe, Spock?

... SPOCK: The existence of which cannot be proved logically ...

KIRK: What V'Ger needs in order to evolve is a human quality, our capacity to leap beyond logic.²⁵

(*Star Trek: The Motion Picture* 1979)

The ideas that are formulated within this film reverberate throughout the *Star Trek* universe in each crews’ search “to seek out new life”.²⁶ These include: the capacity for humans to see anything new as a threat, a “thing”; the formulation of definitions of life based on a human template; the role of Starfleet medical personnel, often at odds with Starfleet’s military and economic scientific discourse, to question the assumptions about life-as-we-know-it and look for definitions of life-as-it-could-be; and the need for machines to gain a “human quality” in order to evolve beyond their programming. What all these ideas have in common is the elevation of humanity as the pinnacle of life. *Star Trek: The Motion Picture* offered some intriguing possibilities about life and the

²⁵ I discuss this idea in Chapter Three in relation to Data and Moriarty.

²⁶ This is true of all crews from the different ships.

universe, but it is the next instalments of *Star Trek* that really begin to challenge the place of the living machine alongside humanity.

The Next Generation: Star Trek Reborn

Gene Roddenberry initially oversaw the conception of *Star Trek: Next Generation* (1987 – 1994). Set in the twenty-fourth century, it shows the new Starship *Enterprise D & E* headed by Captain Jean-Luc Picard (Patrick Stewart), whose continuing mission echoes that of the original series: “to seek out new life and new civilisations, to boldly go where no one has gone before” (opening sequence of *The Next Generation*).²⁷ Within *Star Trek: The Next Generation*, new and novel technology, as well as the newly developed look of the *Enterprise*, was a key feature of the show’s appeal to fans. In fact, this was the first series to use the holodeck extensively as a mechanism for plotlines and narratives.

When *Star Trek: The Next Generation* appeared a new techno-wonder arrived – the holodeck. Not seen on other science fiction series, this new technology offered something amazing – the ability to go anywhere, be anyone, and physically interact with fictional characters that appear “real”. This is virtual reality on steroids – the hyper-real. As the series progressed, stories about the holodeck and its characters emerged that questioned the nature of this hyper-real mini-universe.

²⁷ Although I do not discuss gender issues within this thesis, it should be noted that the original series used the phrase “where no man has gone before”.



Figure 1: Commander William Riker (Jonathan Frakes) emerges onto the holodeck for the first time (source: Star Trek Wiki.com)

In the pilot “Encounter at Farpoint” (1987), Lt. Commander Data (Brent Spiner), the first main character in the syndication of mechanical origin, explains the nature and design of the holodeck to an amazed Commander Riker emerging onto the jungle habitat (Fig.1):²⁸

RIKER: I didn’t believe these simulations could be this real.

DATA: Much of it is real, sir. If the transporters can convert our bodies to an energy beam, then back to the original pattern again ...

RIKER: Yes, of course. And these rocks and vegetation have much simpler patterns.

²⁸ The holodeck is defined in *Star Trek. The Unauthorised A – Z*, as a “recreational facility that creates crewmembers’ fantasies in virtual reality” (Schuster & Rathbone 1996 207).

“Encounter at Farpoint” (1987)

This conversation highlights the conundrum of the holodeck. On the holodeck it is difficult to discern what is real, and what is not, what is illusion or imagery, and what is authentic. However, in this series, it is Data, the android, who is the focus of storylines relating to artificial intelligence. Few plots centre directly on holographic characters, except when acting as foils for the main characters. Crewmembers become addicted to the holodeck; they fall in love with holographic characters, and indulge in fantasy, warfare, and historical enactments. However, the series does not focus directly on the holographic characters themselves.²⁹ The purpose of the hologram from its inclusion in *Star Trek: The Next Generation* was as an aid to crewmembers, as either recreation or teaching.³⁰ Initially, its inhabitants are viewed as no more sentient than the replicators or other ships’ equipment but as the series developed, there were questions raised about these holographic entities. Could they be “real” with feelings, emotions, and consciousness? Although these issues were touched upon in *The Next Generation*, it was not until *Voyager* appeared that these questions were addressed directly within the narrative – thanks mostly to the inclusion of the holographic Doctor as a central character to the show.

Star Trek: Voyager - Star Trek's (Humanist) Voyage of the Posthuman

Created after the death of Gene Roddenberry, *Star Trek: Voyager* (1995 – 2001) offered a different perspective on the drive “to boldly go where no one has gone before.” Ripped away from the familiar Alpha Quadrant during a

²⁹ This is with the exception of Professor Moriarty, which is discussed further in Chapter Three.

³⁰ By comparison, other artificial posthuman creations feature heavily in the show’s storylines. Creatures made of silica, a civilisation of nanites, and the first appearance of the Borg all become fodder to explore humanity.

battle with the Maquis, the crew of *Voyager* find themselves marooned in uncharted space, lost in the Delta Quadrant; the journey home will take many decades. Headed by Captain Katherine Janeway (Kate Mulgrew), the first female captain for the franchise, the crew comprises a mix of humans and aliens, Starfleet officers and members of the Maquis, their ship also stranded in the Delta Quadrant.³¹ Significantly, for both the series and my study of holograms, the violent jump to the other side of the galaxy destroys much of the medical laboratory and kills all of the medical crew. The only medical support left is the Emergency Medical Hologram (EMH). The character of EMH, or the Doctor, offers an interesting opportunity for an in-depth examination of the nature and politics of holographic characters. Numerous storylines revolve around the evolution of the Doctor's character as he attempts to become more "real," more human. The series also addresses what happens when other holograms attempt to claim an identity, to claim agency, and rebel against the organic world.

Like previous *Star Trek* shows, *Voyager* was to uphold the seemingly benevolent role of Starfleet crews to share the best of humanity throughout the galaxy. According to Rick Berman, one of the show's primary creators, *Voyager* recreated Roddenberry's vision:

I think that Captain Janeway and her crew represent the very best of what Roddenberry envisioned the future has in store for us. In terms of their principles, in terms of their lack of pettiness, in terms of their sense of exploration, and the betterment of the human species.

³¹ They arrive 70,000 light years away and the journey home will take 75 years to complete.

Rick Berman (*Star Trek: Voyager Companion* 76)

“The betterment of the human species,” is as Rick Berman confesses the driving mythos behind the *Star Trek* franchise and it is this appeal to Humanism, the centrality of the “human species” in the universe, which underpins most of *Voyager’s* narratives. This appeal to humanity, with the collection of all “races” of humanity into a single genus, conflates the individual into a homogeneous whole. While the concept of a “human species” seems to promote equality, since all humans are part of the genus *Homo*, it is also exclusive in that it places humans at odds with other species and with its *posthuman* creations. In *Voyager*, Humanism “lives long and prospers” with narratives that retroactively seek comfort and solutions within the ability of the “human spirit” to overcome all obstacles in the pursuit and advancement of human knowledge.^{32 33} As Berman states, it is Janeway and her crew who lead the way back to ideologies of Roddenberry’s Liberal Humanism, through their resolute faith in human individuality; the pursuit of arts such as poetry, sculpture, architecture, music and literature; belief in scientific rationalism; in their fondness for ancient Earth history; and in their quest to navigate and “map” the Delta Quadrant and find a way home. The concept of an education that includes science and the Humanities is found in the ideal of the Renaissance Man (sic). This ideal stresses the need to combine scientific inquiry with knowledge and appreciation of the High Arts (painting, music & literature). During the fifteenth century, the Florentines advocated that man

³² “Live long and prosper” was coined in the original series as a Vulcan greeting.

³³ The “human spirit” is referred to in popular culture as a quintessential human quality in which the essence of humanity is reflected in the soul or nature of humans. In this sense, it is often used as a quasi-religious term and as a vague generalisation of what distinguishes humans from non-humans.

(sic) must make full use of his/her facilities. Humanity was the measure of all things. By the mid-fifteenth century, the individual was prized as the centre of knowledge and works from antiquity were studied for how they could enlighten current thinking. During the early sixteenth century, as the Renaissance began to fade, a new scepticism emerged. In Rome, scholars saw themselves as equal to, and masters of, antiquity. Leonardo da Vinci was a product of this late Renaissance movement but was not typical. He saw humanity as insignificant in the face of nature. His famous works included studies of the biology of man and he dissected and analysed the human body as a mechanism (Clark). Both Janeway and the Doctor are represented in several episodes as favouring the Renaissance concept of inquiry (a move towards renaissance humanism), but with the scepticism of da Vinci (a move towards secular humanism). Janeway is a fan of Leonardo da Vinci (“Hunter”; “Prey”; “Raven”) and the Doctor has a knowledge and love of opera and classical music as well as his immense medical knowledge (“Renaissance Man”). In *Star Trek*, the *liberal* humanist individual views humanity as capable of living as one harmonious people, all equal and living for the benefit of all humans – a human species.

Rather than presenting a fresh and vibrant *Posthuman* approach to Roddenberry’s space “wagon train,” *Voyager* merely continues in the tradition of past *Star Trek* narratives, seeking cosy resolutions to conflicts and encounters with the alien “Other,” both organic and mechanical, through human superiority (Robb). The flipside of Humanism, is of course, the exclusion of all who are not human – animals, machines, and those historically dehumanised like slaves, women, and peoples of colour. Humanism favours

rationality, science, and high literature such as poetry, and in Humanism religion and nature are devalued and denied by a humanity that holds Humans at the centre of the universe able to create their own world. This does not necessarily hold true for all the series. In *Star Trek*, many aspects of what it is to be Human relate back to immeasurable qualities such as feeling and a sense of the divine or the soul to distinguish humanity from the “Other”. Similarly, while the idea of a “soul” has become problematic in academic circles, due to its relationship and equation to religion, and I do not intend to debate the validity of the notion of a “soul” in the religious or philosophical sense, it is nevertheless an important element in many of the narratives discussed within this thesis. I therefore apply the term “soul” to denote both the “spiritual element of a person, believed to be immortal” (OED) and “a person’s moral or emotional nature” (OED), part of “that which thinks, feels, desires ... innermost being or nature ... [and] ... “a complete embodiment or exemplification; the essential part” (CED) as it is used within the narratives discussed throughout this thesis.³⁴

As a consequence of *Voyager’s* creators looking back to the original 1960s liberal humanist format, what could have been a unique exploration of a new and exciting region of Posthuman space, space representing both the astronomical Delta Quadrant and the place occupied by mechanical life forms, becomes a reawakening and rehashing of the old guard of colonial narratives in which the explorer “tames” the exotic and often hostile New World – new space. *Star Trek’s* many subtexts depict a sense of superiority in terms of humanity and human progress, and with the twenty-third and twenty-fourth

³⁴ When used to defer to the religious definition I use Soul with an upper-case ‘S’, and soul (lower-case ‘s’) to signify its cultural significance as a moral or emotional aspect.

centuries future supposedly free of the vices and failings of the twentieth or twenty-first centuries, such as slavery, sexism, racism, and speciesism, humanity is free to explore and map the universe. In numerous interviews, and in his official biography, Gene Roddenberry speaks of his love of humanity and of his goal to depict a future in which humans have learned to live together and to surpass all that has been achieved before (Robb). His intention in developing *Star Trek* was to engage the viewer and to entertain, but also to confront issues affecting society (Robb).³⁵ Some of the more widely studied examples of such issues that Roddenberry attempted to address, at times unsuccessfully, are the Cold War, Vietnam, segregation, and the race riots of the United States in the 1950s and 1960s.³⁶ As I will argue in this thesis, through an analysis of specific key episodes in relation to *ALife* and simulacra, many of the franchise's storylines fail to get to grips with such inequalities and conflicts.

Star Trek: Voyager's narratives, although not under Roddenberry's control, were, sadly, to be no exception, and in fact, in comparison to the often politically dynamic tales of *Deep Space Nine*, *Voyager* glossed over the important issues with tried and true humanist solutions (Robb). Janeway and her crew do indeed encapsulate Roddenberry's vision of the future, a future

³⁵ Roddenberry used the "fantasy context" of science fiction to address these issues stating in an interview "I saw an opportunity to use the series, to really use it, to say the things I believe, like to be different is not necessarily to be ugly" (Robb 63).

³⁶ Several critical studies have been written about the original *Star Trek's* penchant for engaging with topical issues like Vietnam; the most notable are Daniel Bernardi (1999), Barrett & Barrett (2001) and Brian Robb (2012). Although due to the constraints of this thesis I do not directly address the engagement of contemporary American socio-political events in junction with the narratives discussed within this thesis, I do acknowledge their importance to the development of the storylines. I agree with Michele and Duncan Barrett's comment that to "understand the universe of *Star Trek*" it is essential to view it "in the context of the American ideals of democracy and individual rights, and a secular faith in science and technology" (9). *Voyager* was to break the secular model by adding quasi-religious storylines that echoed changing American attitudes *pre-9/11*.

that presents a backward vision and a privileging of humanity, a return to a romantic humanist perspective, and a liberal humanist interpretation of a United Federation of Planets. The crew, the majority of whom attended Starfleet Academy, are indoctrinated with the guiding principles of a military, scientific academy that provides protocols for personal and professional conduct, including the famous, or “infamous,” Prime Directive.³⁷

“I am the Embodiment of Modern Medicine” (EMH)³⁸

The appeal to the supremacy of humans is most apparent in those episodes that deal with artificial intelligence or highly logical species. The original series’ Spock, and *The Next Generation*’s Data, provided the logical foil to the more “feeling” human characters. Both are portrayed as searching for an understanding of humanity, what in popular culture is often referred to as the “human condition”. *Voyager*’s inclusion of a holographic Doctor continues this trope used in previous *Trek* incarnations. The exploration of humanity through depictions of the “Other” is continued in the Doctor’s quest to become more “human,” and in the process allows the narrative to comment on the “human condition”.

The Doctor’s quest to become more like his human creator limits the possibility of exploring the complexity of *posthuman* representations by concentrating on the Doctor as a human-centric character rather than examining what it would be like to be a hologram with limitless potential. The addition of a central character who is artificial presented a challenge and an

³⁷ The Prime Directive, widely criticised by many fans and scholars of *Star Trek* for its duplicity, is a mandate that supposedly “forbids anyone from interfering with the *natural* development of an alien civilisation” (Schuster & Rathbone 375, my emphasis).

³⁸ The Doctor’s comment to Kes in “Parallax” (*Star Trek: Voyager Season 1* 1995).

opportunity to explore this limitless potential and the realm of the truly “Other”. Storylines involving the Doctor are limited and stunted by the writers’ continued appeal to humanity, or by stories that lead the Doctor to adopt a human solution to his dilemma.³⁹ Consequently, the power of the hologram is curtailed by the inability of the narratives to reach out into the realm of the *posthuman* experience, of representing the mechanical being as the quintessential alien. The more profoundly Posthuman tales of holographic rejection of humanity is found in stories that involve non-*Voyager* holograms, such as in the episodes “Revulsion” and “Flesh and Blood,” both questioning the humanoids’ right to control and enslave holograms.

Throughout *Voyager*, the Doctor attempts to further his understanding of humanity and to develop his subroutines. In the episode “Darkling” (1997), the Doctor’s attempt to improve his personality subroutines through the addition of a selection of various “character elements” from famous historical “scientists, poets, philosophers, saints,” such as Lord Byron and T’Pau of Vulcan, results in his becoming irrational and violent. As Torres reminds the Doctor, “you didn’t anticipate the linkages between the subroutines ... take Lord Byron ... a creative, poetic genius ... but Byron was also emotionally intense, even unstable”. The Doctor fails to understand that “a lot of the historical characters you chose have this dark thread running through their

³⁹ Robert Picardo has said of his character: “The Doctor had the problem of being a computer program with an incredible wealth of medical knowledge coupled with this vulnerability of not being able to control his moment-to-moment destiny ... I remember thinking it was a bad idea to give him mobility outside of sickbay. I thought that part of the audience’s interest in the character was because of the limitations the character had and the challenges he had to face in trying to make the best of his limitations ... [but] ... I was the first to tell him [the writer] that I was wrong” (Ruditis 451/452). It is interesting to note that Picardo initially felt that it was the character’s limitations that appealed to viewers. Artificial life forms in science fiction have often been curtailed and limited in their ability to supersede humans in order to pass into the human community.

personalities” (Torres). In other words, the original character elements of the scientists, poets, philosophers, and saints cannot be so easily isolated and programmed into the Doctor. The danger implicit in this episode is the reduction of emotions and behaviours to simple programmes, or subroutines, that are unable to be modified within an individual’s personal experience. The Doctor can download the matrix of the simulated historical figures but these lack the true emotional and behavioural complexities of the originals. This episode highlights a problem with the Doctor’s search for authenticity and his place alongside organics, as his darker-self comments: “What a hollow excuse for a life. Servile, pathetic, at the beck and call of any idiot who invokes his name”. When he searches for answers to his failing programme, he goes to the characters that the Doctor chose in his search for personality. However, he finds them lacking and reveals their identity as: “Automatons, mannequins, simulacra. No secrets, no secrets to reveal. Lifeless, worthless things”. Like Spock’s comment about V’Ger, these simple simulated figures offer no answers to the deeper questions asked by either Doctor. “Darkling’s” conflict is resolved, like so many of *Voyager’s* narratives, when the darkness is defeated and the status quo is returned.

In “Real Life” (1997), another early episode that focuses on the Doctor’s search for humanity, the Doctor creates a family. Wanting to know more about human life, and how families work, he creates the perfect family designed to his specifications. Again, it is Torres that calls his concept of a perfect family into question. She modifies his programme to give him an idea of what it is like “being in a family”. This new family, unlike the Doctor’s servile and perfect family unit, is wilful, difficult, and challenging. When his

daughter Belle is critically injured and dying, the Doctor copes by deciding not to continue with the programme. Tom Paris is quick to point out that humans do not have this choice and must see the bad through with the good:

PARIS: You created that programme so you could experience what it's like to have a family. The good times and the bad. You can't have one without the other.

EMH: I fail to see why not.

PARIS: Well, think about what's happened to us here on Voyager. Everyone left people behind and everyone suffered a loss, but look how it's brought us all closer together. We found support here, and friendship and we've become a family in part because of the pain we shared. If you turn your back on this programme you'll always be stuck at this point. You'll never have the chance to say goodbye to your daughter, or to be there for your wife and son when they need you, and you'll be cheating yourself of the chance to have their love and support. In the long run, you'll miss the whole point of what it means to have a family.

(“Real Life” 1997)

According to Paris, the Doctor, by electing to deny the emotional side of his program and not face his daughter’s death would miss the point of his journey. That is to understand what it means to have family. These emotional aspects of being human are what Paris views as important in understanding humanity.⁴⁰

⁴⁰ Richard Leakey (1992) in his consideration of the evolution of consciousness argues that “as humans, we experience the ultimate expression of this dimension of intelligence: the skills of

PRIVILEGING THE *HUMAN* SUBJECT

As is demonstrated in my discussion above, and in the following analysis of *Star Trek's* many human-centric narratives, the concept of what it is to be “human” is used as a template to quantify all that is nonhuman. Paradoxically, the nonhuman is often used symbolically to represent aspects or qualities of humanity (good and bad) in a way that aids in defining humanity itself. Animals have long suffered this fate – to be reduced and re-represented as symbols – used to “shape understanding[s] of human identity” (Simons 6). Used in such a way, animals are not represented as themselves but “as displaced metaphors for the human” (ibid).⁴¹ Consequently, the animal-as-*subject* has been lost, replaced by the animal-as-*object*. This replacement conceals the fact that real “animals are not symbols ... [and] ... we would easily recognise the exploitative and degrading nature of representations of human beings if they were of the same kind as those images of animals that we regularly consume” (ibid). It is within the context of using the nonhuman “Other,” as symbolic of *what it is*, and more importantly, *what it is not to be* human, that the idea of the animal is central to my argument.⁴² Therefore, it is important at this stage to provide some context as to how the animal has been used, particularly in Humanism, to define humanity, and how such debates are essential to addressing the changing and challenging nature of representations

foresight and manipulation, the facility of imagination, the sense of self. We also extend it to raw feelings ... to sympathy and empathy, to attribution and affect ... empathy with the emotions of others through the experience of one's own emotions is very much part of human consciousness” (297).

⁴¹ The use of the animal to define what is, and is not, human and how this is related to racism is discussed more fully in Chapter Six.

⁴² Throughout my thesis, as I have discussed with the use of Human/human, I use the term ‘animal’ (lower case) and Animal (upper case), to distinguish between what I view as the Animal as *subject* (proper noun), applying to the construct of the Animal as an identity in, and of, itself. The term animal is used to refer to the animal as *object*, (adjective) a generic term referring to the animal as a broader concept.

of the artificial “Other”. The symbolic animal in film and literature is often used to give moral lessons on the failings of humanity or to guide a person back to what is morally right. Consequently, humanity is performed through the narrative, and through interactions with the animal, or the machine.

In the 18th and 19th centuries, the term ‘animal’ became a widely used pejorative term. To be like an animal is to lack humanity, to be “Othered”. This idea of linking some humans with animals emerged alongside Social Darwinism. Social Darwinism was an attempt to apply Darwin’s theory of natural selection to humankind and place humans within hierarchies based on evolution. Social Darwinism has been “defined as the application of Darwin’s theory of natural selection to the domain of human affairs. The term is used to describe social, racial and moral theories ... it refers to theories that advocate a gladiatorial struggle for existence, in which the losers deserve to lose and survival becomes proof of merit ... it is a complex concept” that has long justified prejudice and persecution against and between “races” (Ruse & Travis 2009 862). The world of humanity became one with well-defined, artificially imposed layers – white/black, advanced/primitive, male/female, us/them. This hierarchical structure was then defined in terms of superiority. Western, white, males were at the top of the hierarchy. Those who were different – women, non-western, and non-white – were disadvantaged and marginalized.⁴³ This is Henry Salt’s theory of “Demand for Difference”

⁴³ While placing these ideas within the realm of the 18th and 19th centuries, I am not suggesting that these issues are not relevant, nor present, within 21st century society. It is that they are not the prevailing or core ideologies of most, but not all, 21st century cultural politics.

(Tester).⁴⁴ “The Demand for Difference” is an attempt to enhance the privilege of *being* human through the project of extirpation (Tester). This project of rooting or weeding out those who are different from the definition of *Human* leaves the field of humanity limited to those who fit the profile of superiority.

“The Demand for Similitude” emphasizes the connectedness of all organic beings, which is a more liberal-humanist approach. All beings are linked and humanity’s aim to live in accordance with the laws of nature.⁴⁵ However, it is the “Demand for Difference” that prevails in narratives of hostile techno-beings, and aliens. Aliens can be exterminated by humanity because they are different. The alien “Other” is linked to the “animal” – negative qualities that make them different from humans and thereby disposable. The idea of the animal as disposable (and as property) has historically been used to justify the use of animals as food and experimental subjects (vivisection). This justification was also the premise behind the use of slaves and later convicts to do work that was dangerous or unhealthy. Both slaves and convicts have also been used in dangerous and often lethal experiments (as were Jews by the Nazis). The trope of the unthinking animate object is commonly used to define creatures like the Daleks and Cybermen. In *Battlestar Galactica* (New Series), the Cylons are called “toasters,” and in *Star Trek: Voyager* holograms are likened to replicators, thereby linking these examples of ALife to simple appliances. Like Derrida’s animals, they are reduced to “hardware,” and therefore not worthy of consideration or compassion.

⁴⁴ Tester credits Henry Salt with defining these two parameters: “The Demand for Difference” and “The Demand for Similitude”.

⁴⁵ This is a philosophy that has often been applied to Native cultures around the world, the “closeness or harmony with nature” argument.

The speciesist notion of “human” rights is exclusive. Speciesism allows for the justified use of nonhuman animals for the benefit of humankind.⁴⁶ Extending the idea of “minimal characteristics,” such as being a “living creature,” into the realm of science fiction, holograms cannot be excluded from having rights if it can be proven that they are “living creatures” (Singer). If this can be proven then it is not right to use them as slaves or disposable tools/property. Of course, establishing such a claim is not easy. In terms of holograms, because they display the same emotional range as biological humans, it could be argued that they are alive. However, since they are programmed, are their emotions genuine? The Doctor’s emotional subroutines can be added or removed. However, it can be argued that programming is rather like learning. Consequently, this would not necessarily discount holograms as being defined as “living creatures”.

A better basis for inclusion, rather than of moral “rights,” would be moral “status” or moral “interests” (Singer). The idea of moral status is broader and more encompassing than the concept of rights. *Rights* denote privileges or claims made by, or given to, an individual, whereas, *status* denotes a position or standing. By demonstrating that holograms have moral interests, their rights should be assured because they are entitled (under Singer’s theory) to the “same consideration” as all other beings. This is assuming of course that holograms can be shown to be “beings” rather than mere things/objects, something that my thesis addresses.⁴⁷ However, there is still a problem with

⁴⁶ Speciesism is akin to “racism” in that some are held above others due to imposed categories of inclusion or exclusive (such as black/white; human/animal).

⁴⁷ It should be noted that my thesis addresses these issues purely within *fictional constructions* of holograms and does not seek to discuss, or apply, these discussions to any

the concept of inherent value because “... one might distinguish between those who hold that individuals possess inherent value only as long as they are capable of having certain experiences, and those who hold that individuals possess inherent value as long as they are alive” (Singer 18). This raises issues of *who* determines which experiences are valuable in determining inherent value and, in the case of science fiction, what constitutes life? In the liberal humanist framework found within *Star Trek*, it is of course, the human (white, male, and Western).

Key towards obtaining rights and agency are motivation and conscious interests (Cavalieri). Beings do not have to be equal to deserve equal consideration. By redefining or shifting the idea of equality, it can no longer be justified to exclude nonhumans, as “the confinement of equality to members of our species has always hinged on high-sounding claims about our rationality and moral capacity” (Cavalieri 10). The characteristics of humanity – self-awareness, sentience, and “having certain experiences” – if found in nonhuman life forms should, as a consequence of having these characteristics, lead to those beings having the same moral consideration as humans. But if adopting the Cartesian theory of nonhuman animals as mere automata, then it is deemed that “human beings can do with them as they wish” (Cavalieri 42). This is the key to how science fiction narratives treat androids, holograms, and cyborgs.

At the same time that people argue for animal rights, they are labeling animals as “different,” as “Other”. This causes a problem in placing nonhuman animals within the category of claiming human rights or equal rights to

possible real-world applications that may arise with the future use, or application, of advanced artificial intelligence or holograms.

humankind because they are also classified as “Other”, outside of the human. Of course, this becomes even more poignant when, the artificial “Other,” the “not like us,” resembles humans so closely, as in humanoid robots, clones, and holograms. The more ALife resembles “us” the more likely that being is going to be allowed to “pass” into human society. However, some narratives view this “passing” as dangerous – as in *Battlestar Galatica* (new series) in which some Cylons are all-too-human and threaten the genomic integrity of the human race. In this concept, ALife directly threatens the nature of human existence. In *Star Trek*, humans relate better to ALife that most resemble humans in appearance and behaviour. ALife, with humanoid features, like *Star Trek’s* Data and the Doctor, are easily identified with and consequently afforded greater freedom and consideration. However, like the racial “Other” before them, the artificial “Other,” are all too often depicted as occupying a position of servitude, a site of ‘enslavement’.

Slavery Re-Imagined – Holograms, the Basic Slave “Race?”

Enslavement in science fiction narratives usually takes two forms – the enslavement of humankind by hostile aliens, or the domination of “simple-minded” aliens by superior alien races (sometimes by humans). Recently, a new form of enslavement has come to the forefront of science fiction – that of the enslaved artificial life form. These new “Others” are useful to extend the examination of the conflicts between the centre and the margin. Underlining notions of slavery is the determination of what constitutes ideas of “us” and “them” – between “us” and “Other.” Starfleet acts within *Star Trek’s* narrative as an authoritarian power which hides behind a veil of liberal humanism. The concept of a universal humanity pervades Starfleet’s manifesto. *Star Trek’s*

narratives frequently silence and suppress the voice of the posthuman. In addition, the hologram who is not human or is not usually part of the human community, apart perhaps for the Doctor, is denied the category of “self”.⁴⁸ Nevertheless, in science fiction, humans are not the only ones guilty of this universal presumption. This is also the universal philosophy of the Borg. This civilisation has a universal and common ideal of perfection in the form of the mechanical. Organic beings are inferior and therefore will be exterminated or assimilated. The Borg, while still mostly organic, reject the concept of the flesh and look towards the machine as the site of perfection. In their collectivity, the Borg are the epitome of the concept of valuing the group over the individual. It is, therefore, the collective “we” that justifies the use of the “Other”, the non “we/us” as slaves, or, in the case of the Borg, spare parts. Critical literature on the use of ALife as slaves has only recently developed, as artificial life becomes an increasing feature of popular culture.⁴⁹ However, there has been a move towards examining the idea of animal slavery and it is this critical literature that provides useful insights into how the artificial can be examined.

A number of writers working on the subject of animal rights have compared the treatment of animals with that of human slavery (Spiegel; Castricano; Cavalieri). This has often been seen as a questionable comparison, which further negates the rights of non-white subjects. It does so by placing them alongside the “animal,” thereby, marginalising the historical and moral impact of human slavery. However, science fiction makes use of this

⁴⁸ The EMH is of course not human but is allowed into the human community of *Voyager*.

⁴⁹ The new television series *Humans* (2015) takes the issue of the use of artificial “beings” as slave labour or servants to a new level with its examination of synths (or synthetic humans) used to carry out labour.

comparison in such tales as *Doctor Who*'s the Ood, and the human clones of New Earth. Those who uphold this comparison argue that white, western (mostly masculine), authority has historically marginalised both animals and slaves, and that this marginality has led to the justification of slavery and genocide, and to the slaughter and maltreatment of non-human animals. Whilst for some the comparison between human slavery and animal subjugation might be considered questionable, the use of critical literature on the rights of nonhuman animals is nevertheless useful in working with the rights of ALife. This view of a hierarchical order between humans and animals, and between "races" is "part of an on-going cultural process" that has been transformed and translated onto the alien in science fiction (Cavaliere 4). Therefore, although this comparison remains problematic it is useful for my analysis of holograms.⁵⁰

Marjorie Spiegel has worked extensively on the subject of animal slavery, and her work discusses the relationship and similarities between the enslavement of humans and animals. I particularly like her statement that historically slavery is justified purely "based on the specious notion that enslavement is in the best interests of the slaves, through the assertion that they are incapable of providing for themselves" (Spiegel 10). The concept of some species having greater value than others is central to racial and other notions of superiority. The key here, at least for my study, is the idea of "in the best interests." Because animals, and historically slaves (typically non-white, non-western), were deemed to be less rational or self-aware it was commonly advocated that so called "higher" beings (white, male & western individuals)

⁵⁰ This is particularly true for Chapter Six.

should determine the fate of these “lesser” beings.⁵¹ So called dominant societies accept slavery, by “brush[ing] over a potentially unsettling reality, [and] ... cease to hear the cries of ... slaves, to believe that their spilt blood means something different from our own, and, finally to believe that not only is the bondage we impose upon ourselves not a hindrance to them, but that it is a benefit” because of a perceived hierarchy of beings (Spiegel12).

The idea of “best interests” as used by Spiegel in her discussion on animal slavery translates well to science fiction narratives. In *The Next Generation* and *Voyager*, Data and the Doctor are considered better off as part of Starfleet. In a sense, they are enslaved by the nature of their being “artificial” and in need of care and maintenance from highly trained Starfleet personnel. But, they are also enslaved by the fact that such “artificial” personnel are subject to a higher degree of control than human ones, and that they should be grateful for the protection and limited rights with which they are accorded by Starfleet. For example, the Doctor is grateful that the crew show appreciation for his efforts. Although he is granted limited freedom through the mobile emitter, this can be removed from his possession or control at any time. He is given his freedom only as far as it serves the purposes of Captain Janeway and the crew. In contrast, less essential and useful holograms are not given the same freedom and consideration. For example, they are unable to leave the holodeck.

An interesting point is that the Doctor never sees a problem with this, and he does not act as an advocate for other holograms on broad *Voyager*. However, he does act on behalf of alien holograms encountered on their

⁵¹ As I discussed in the previous section in relation to Regan and Singer.

journey. Why is it that his fellow holograms, which share a common matrix and a common origin in being from Starfleet, are not entitled to the same consideration? Those holograms that share his world should surely come before alien holograms. Why does the Doctor accept seemingly without question the slavery of his fellow holograms aboard *Voyager*? The Doctor as the hologram in the most dominant or privileged position aboard *Voyager* justifies his indifference by the fact that other less advanced holograms do not matter. The Doctor is also programmed to act and uphold the values of the dominant institution – namely Starfleet. In *Star Trek*, humanity is the ideal to aspire to and remains an exclusive club that only welcomes some honorary members. In *Star Trek*, Starfleet has the power to determine its “Others” as it defines the parameters of its membership and its allies.⁵² Some aliens are welcomed into the fold – Vulcans, Klingons (a latter edition) – while others like the Borg are only tolerated as individuals (like Seven of Nine) when they can be “reprogrammed” to be human.

Like the early depictions of aliens in *Star Trek*, non-organic life forms are shown to be without the necessary knowledge or capacity to help themselves. They are in need of guidance or instruction from the “superior” Starfleet. Presented as childlike, their advancement and growth have to be curtailed or restricted for their own protection. The statute of non-interference or the Prime Directive is Starfleet’s example of an imperial power dictating the level of development (through non-interference) of other “races” and nations. In the case of holograms, they are not viewed as separate individuals but rather as fictional characters created by Starfleet engineers and consequently are not

⁵² In science fiction the marginalized “Other” has typically been the alien, usually characterised as non-white, who is marginalised because they are not human (Parrent 2010).

deemed capable of providing for themselves. In some instances, it is shown that they cease to exist once the holodeck program is terminated. In other cases, for example, Moriarty and the members of Fair Haven, holograms gain some self-awareness and are conscious of the fact that they cease to be active for long periods of time – the sense of being within a void. Data can be dismantled and reprogrammed; so too, can the hologram be controlled and negated by its human “masters.”

Like animals in our society, holograms in *Star Trek* are used “in our work and entertainment, we employ as tools in research of all kinds, it is rare that we pause to ask ourselves whether our behaviour is morally justified” (Cavaliere 3). Organic beings consider themselves morally justified in their use of non-organics because they protect and enhance the lives of organics. At some point, humans decided that their nonorganic creations were not entitled to the same rights as their “masters”. Created, not born, the nonorganic are deemed to be expendable, reprogrammable and disposable. Similar views were historically held towards non-white slaves who like ‘nonhuman animals are at the bottom of the pyramid, at the apex of which we have placed ourselves’ (ibid).

Science Fiction, the Subaltern, and Colonial Rhetoric

The current literature on simulacrum identity focuses primarily upon several key points: the body, self-awareness, consciousness, and the *Posthuman*. The issue and study of the theoretical (or fictional) rights of ALife in popular culture is still emerging. However, like the literature pertaining to subaltern studies and postcolonialism, also utilized in this thesis, theories examining the

rights of nonhuman animals have a much longer history and can provide a useful basis for developing such issues in terms of ALife. Within this thesis, I address these issues as they relate to questions of holographic identity, agency, resistance, and rebellion by linking these concerns to studies on the subaltern, and ideas centred on colonial and post-colonial discourse. I have found that theories on subaltern identity and postcolonial studies are useful in framing issues of holographic subjugation, and subsequent insurgency. The term subaltern has been appropriated by many academic disciplines such as postcolonial studies, literary theory, and feminist studies (Spivak; Prakash; Maclean & Landry; Parry; Morton). The term symbolises the position of the “native” within imperial spaces and their subsequent struggle for freedom and resistance. Based on work by Antonio Gramsci, and expanded upon by authors like Gayatri Chakravorty Spivak, the term has become widely used to represent the disempowered and subjugated peoples of predominately “third world” nations. Gramsci’s original use of the term subaltern enacts “... the common properties of subordinate groups ... the shared fact of their subordination, their intrinsic weakness, their limited strengths” (Arnold in Morton 96 – 97). In my analysis, I use Spivak’s concept of the subaltern to explore the notion of the hologram as a subaltern class within *Star Trek: Voyager’s* narratives. The hologram used as the predominant labour class, and in some cases, slave class, begins to exhibit (as the series progresses) a group identity and shared experience of marginality.⁵³ As an emerging, marginalised, identity within the dominant community of organics, the hologram is at first weak, disempowered, and subordinate to the ruling hegemonic class of Starfleet.

⁵³ I will address this fully in Chapter Six in my examination of “Flesh and Blood” (2000).

However, as the series develops there is the impression that the hologram is striving to assert a counter-hegemonic discourse.

Although not concerned with science fiction, Gayatri Chakravorty Spivak's work is central in discussing the subaltern and imperial discourses inherent in science fiction narratives. Her influential essay 'Can the Subaltern Speak?', highlights the silence of third world peoples, and combines postcolonial theory with Marxism, feminism, and post-structuralism in a critique of "dominant historical archives," and the disempowerment of the subaltern class (Morton 10). Her essay underlines the problematic nature of the epistemology of the "Other" as viewed from western academics. In this sense, she builds upon the work of Edward Said. Spivak begins with a critique of Michael Foucault and Jacques Derrida's theory of power, knowledge, and subjectivity. She concludes with two powerful examples of the subaltern's voice silenced by imperialist discourses, or what she describes as "the hegemonic account of the "Other" " (Spivak). How the subaltern is addressed depends upon the positioning of the analysis, or the analyst (Spivak). For the western scholar, the voice of the subaltern cannot be heard or represented. Similarly, in *Star Trek*, the hologram can only be represented within the discourse of the dominant position held by organics. Consequently, the voice of the hologram is ignored, misunderstood, and misrepresented. The voyeurism that appears in western historical accounts of the "Other" reappears in *Star Trek* in the crew's interactions on the holodeck.⁵⁴

Spivak's work highlights the failure of subaltern discourses, and in particular, those of "settler societies," to enact change for the "socially and

⁵⁴ Referring to multiple crews on various vessels.

economically disempowered” (Morton 9). I therefore, find Spivak’s work useful as a tool to investigate and evaluate the relationship between hegemonic Starfleet institutions, and the positioning of the hologram. Her critical engagement with subaltern studies is a valuable tool with which to question the ability of those who are disempowered, often through being silenced, to actively and effectively resist, or rebel. Settler societies silence the native even in their attempts to *give* the native a voice (Ingram). Settlers appropriate the voice of the subaltern in order to create for themselves an “authentic origin” (Ingram 80). Accordingly, “in their efforts to respect the untouchable, and indeed untextualizable, space of subaltern silence, postcolonial writers and critics may re-inscribe that ‘inaccessible blankness’ with their own history of origin, their own autochthony” (102-3). In *Star Trek: The Next Generation* and *Star Trek: Voyager*, the “inaccessible blankness” of the hologram is literally translated or transcribed onto the blankness of the holodeck. The hologram is a blank canvas until it is inscribed with the historical, social, and cultural origins created by Starfleet personnel who program its consciousness. This goes back to Anne Balsamo’s idea of the body as culturally defined. Like Franz Fanon’s “native subjectivity,” the hologram is brought into existence and perpetuated through the hegemonic discourse of Starfleet, and any true representation of the hologram can be lost until they (the hologram), themselves, write their own history or destiny (Ingram 124).

Similar to Ingram’s critique of settler societies, Gyan Prakash’s article, on postcolonial criticism and the subaltern, looks at the appropriation of history by the coloniser or imperialist by taking away from subaltern experiences. Prakash’s article examines how counter-insurgency develops

among the subjugated. Prakash suggests that “the subaltern merges with forms of society and political community at odds with nation and class ... [the] elitist [effectively denies] the subaltern’s autonomous consciousness”, thereby denying subjectivity (1484). In addition, elitist discourses empower “certain forms of knowledge while disempowering others” (1485). This form of (elitist) knowledge is often translated through hegemonic institutions such as schools, universities, military academies, and cooperate identities, that give agency to selected members of the community. Such knowledge becomes the knowledge of the “Other”. Consequently, “sites of resistance” for those subjugated in colonial and imperial discourses are limited and hampered by such imperial discourses that act to empower or disempower the subaltern (Mardorassian 1072).

In *Star Trek*, the core hegemonic institution is Starfleet Academy. Starfleet’s imperialist mission frequently curtails representations of agency within the marginalised or “Othered.” Starfleet acts as both the scientific and the military branch of The United Federation of Planets (Roddenberry’s version of the United Nations). For this institution, the “final frontier” is a place to be explored, exploited, and colonised. Starfleet’s manifesto echoes that of colonial explorers – to expand their nationhood and lands for white (read *male*), “civilised” society. Having such an institution as the Academy setting the core values of the various ships’ crews undermines the popular notion of *Star Trek*’s universe as a heterogeneous society. The “axes of power,” whether in the form of European settlers or Starfleet officers, “constitute and contextualise cultural identities” (1072). *Voyager*’s holographic Doctor is privileged in terms of his knowledge and position situated as he is

within this elitist discourse. As a result, the Doctor has greater agency than many of the other holograms encountered within the narrative.

While subaltern studies investigates the prejudices of colonial rhetoric, it has been within Postcolonial Studies that much of the work on how colonial discourses act to shape the identity of, and/or deny, the colonised a voice. In terms of critical literature focusing directly on colonial and post-colonial studies, one of the main contributors is Edward Said. Said's seminal works *Orientalism* (1979) and *Culture and Imperialism* (1994), are useful in examining the way in which the "Other," "native," or the subaltern, is created through imperialist discourses – including literature. The "Other" is created through how they are narrated, defined, and described or inscribed within the discursive elements of dominant or majority culture. Science fiction narratives often hearken back to colonial narratives of conquest, exploration, and domination. *Star Trek's* exploration of the stars is suggestive of Imperial empire building and Western exploration of Africa and the New World.⁵⁵ Shehla Burney's critical examination of Said's works in *Pedagogy of the Other. Edward Said, Postcolonial Theory, and Strategies for Critique* (2012) provides an extension to Said's work on how "narratives of empire" are used in "making [the identity of] the other" (60). Her work was particularly useful for my analysis of the Doctor's authorship in Chapter Five. In order to re-represent themselves, the "Other" must be "re-represented" in their own voice/literature, by writing themselves back into the narrative of postcolonial narratives. Burney states that it is through the "Other" reclaiming their voice and their own literature that they are able to "re-do the narratives of empire"

⁵⁵ The original series is often referred to as a "western" style narrative (wagon train of the skies).

(61). In addition, she notes that this “re-doing of the narratives of empire” is an act of rebellion, in that it creates a “counter-discourse” in which to re-inscribe the “natives” voice. Her work reinforces that of Edward Said, Franz Fanon, and Michael Foucault in stressing that knowledge, and more importantly *the control of knowledge*, acts as a power base and a controlling mechanism in hegemony.

A recent addition to postcolonial studies and the question of interpreting the “Other,” is John Miller’s text *Empire and the Animal Body* (2012). Miller’s book offers a unique look at the animal in relation to colonial rhetoric in relation to empire. The animal was used in Victorian literature, mainly in writings for boys and young men, to reinforce colonial tropes of the superiority of the white male in relation to the untamed wilderness of the colonies (Miller). Hunting and killing exotic animals, especially in Africa and India, became viewed as a worthwhile pursuit for the young intellectual. Hunting became an essential part of the activities of the British Empire. The safari and the hunt were considered by the empire as part of the colonializing machine. For example, hunts were a rite of passage for young British males, and a way of introducing them to the rigors and trials of organising “native” communities. Hunting parties used “Natives” as porters, beaters, and guides. Miller’s study provides a useful insight in how hunting was depicted as a coming of age ritual for British youth, and is a key text in my analysis of Hirogen hunting culture in *Star Trek: Voyager’s* episode “Flesh and Blood,” which introduces the hunting and killing of prey as central to the Hirogen culture.

Culture and the Machine

The role of culture, framed within the theories discussed above, as a site of difference between Starfleet and the “Other,” is important to many of the narratives discussed in this thesis. Culture can be viewed as “the element we inhabit as subjects” (Badmington ix 2000). In other words, culture exists within the context of a “subject’s” experiences of daily life. Culture surrounds the individual, is both acted upon (shaped), and acts upon (shapes) the subject. However, it also means that culture is related to the “subject,” and therefore only *subjects* can exhibit culture. I agree with Richard Leakey (1992) when he notes that historically humans have not found a precise definition of humanness and there remains “no agreed upon definition of the quality of humanness. It hardly seemed necessary, partly because it appeared so obvious: humanness is what we *feel* about ourselves” (xxi). To be human is to have a common basis of identity formation – family, history, religion, gender, and race – reinforced by social institutions effectively shaping the individual. The individual – the subject – is considered as having subjectivity, important in relation to agency and power.⁵⁶ Culture creates the *human condition* in terms of power relationships, and what is considered human (and as an extension what is not human) depends on a shared cultural experience.

Traditionally in Humanism, this cultural province, or shared cultural experience, is exclusively human. In terms of Posthumanism, the sphere of those who exhibit culture is more encompassing, often including nonhuman animals and *posthuman* bodies like the cyborg. Even the Borg, who deny any cultural references, can be said to have a unique society or culture that is

⁵⁶ Refer to my earlier definitions of the subject and subjectivity.

divided into hierarchies – similar to the beehive or ant colony. Because the symbolic world of culture develops from a community of shared experiences, culture becomes a symbolic form of “communicability” between specific groups. This communicability is the formula for determining whom, or what is granted equal standing or agency within a society. Science fiction narratives offset this community, this world of culture, in relation to the “Other” (Leaver 2012). Notably, the human community is often fortified/united in its opposition to the “Other” – the alien – and increasingly the machine.

Few critical works specifically address the nature and role of the hologram in *Star Trek* and their relationship to culture – both that of humans and of holograms (Relke; Baille-de-Byl). Diana Relke’s ‘Holographic Love’ touches on the ability or the need of humans to control the artificial, and concludes, “the holodeck is about humans remaining on the right side of the penetrator/penetrate opposition – a position from which the boundary between the humanist self and the posthuman “Other” can be policed” (116). In other words, humans try to prevent the “passing over by the double” onto the side of the real (Baudrillard 1994 3). In *Star Trek: The Next Generation* and *Voyager*, the *posthuman* “Other” is policed through the crew’s ability to switch off the hologram’s program, thereby terminating the holographic projection, and confining the hologram to the holodeck. Although in *Voyager*, the Doctor is able to leave the sickbay, he does so only through the mobile emitter that is under the ultimate control of Captain Janeway and the main computer (Relke). However, as I will argue in Chapters Three and Six, this “policing” is not always successful.

In the *Voyager* episode “Fair Haven,” Janeway’s romantic relationship with the hologram Michael Sullivan is mediated through her control over his holographic matrix.⁵⁷ She changes the parameters of Sullivan’s character making him more suitable for her. However, it is the lack of Sullivan’s originality that finally sees Janeway losing interest in him.⁵⁸ Sullivan has no substance, no depth, and it is her ability to control and shape his character that leaves Janeway dissatisfied with the relationship. However, it is difficult to call such an encounter a “relationship” when one partner has total control over the situation, including the character of the other individual (Baille-de-Byl). Is it right for Janeway to create and then manipulate a hologram for her own amusement, when at the same time she partially sees him as a romantic interest? Then there is the question of the “reality” of a relationship between a hologram and a human. The nature of Janeway’s relationship with the hologram raises questions about origins, agency and the rights of the hologram.

If ALife is to claim agency they too must demonstrate a shared social and cultural condition. The ALife condition, parallel to the human condition, can be seen in shared collective experiences with other ALife. Consequently, a shared social reality emerges out of “lived social relations,” including social experiences and social exchanges within the ALife community (Haraway 1988

⁵⁷ This is examined in detail by Penny Baille-de-Byl. In her analysis of this episode, she alludes to the relationships’ authenticity, but fails to move beyond a superficial investigation of the nature of authenticity and address the issue of holographic agency. These questions lead to bigger questions about power relationships and definitions of agency that I discuss within this study.

⁵⁸ He lacks originality because he can be programmed, and reprogrammed, to fit Janeway’s desires.

69).⁵⁹ Although “outside of the realm of the natural,” the artificial nevertheless has a cultural referent (Leaver 3).⁶⁰ The “plasticity of the digital” allows a unique culture to emerge (Leaver 109). This culture is often enacted within “artificial spaces” like the holodeck (ibid). Importantly for my analysis of holograms, Leaver states that artificial life “consistently recognise their own sense of embodiment and contextual specifically, finding different ways to escape the boxes they were built in” (187). In *Star Trek*, artificial life, and in particular the hologram, “escape the boxes they were built in” through fighting back either through violence, or by demonstrating their uniqueness through literature, music, or religion. They fight for recognition and freedom through a call to an acknowledgement of this unique digital culture. Holograms like the Doctor have a culture of their own as well as sharing in the culture of the crew. The Doctor has a specific “culture” that relates to his interactions with other holographic materials and individuals as well as the central computer. This *posthuman/ALife* culture is unique to holograms because organic life cannot directly experience these virtual elements.

Conscious Machines?

As in the debates over self-consciousness in nonhuman animals, the notion of conscious machines has stimulated and fuelled the imagination of numerous science fiction writers. Determining levels of consciousness is important because it is a factor commonly cited for the establishment of agency and self-governance. Part of self-governance is self-awareness or self-consciousness.

⁵⁹ This happens in *Star Trek: Voyager's* episode “Flesh & Blood,” discussed in detail in Chapter Six.

⁶⁰ One author who has looked extensively at culture in ALife is Tama Leaver. In *Artificial Culture: Identity, Technology, and Bodies* (2012). Leaver gives an analysis of claiming culture within artificial intelligence communities.

Only those who are self-aware can be self-governing. Humans utilize “reflective capacity” in which “we do not simply act from moment to moment, instead, we settle on complex – and, typically, partial and hierarchically structured – future-directed plans of action ...” (Bratman 26). This sense of future and deliberate planning towards impending actions is something that has been touted as uniquely human. Rather than acting upon instinct, actions are both planned and directed towards a particular outcome. The idea of a future-self is often seen as essential to the human condition. William Haney (2006) defines consciousness as “always conscious of some object or other, never a self-enclosed emptiness” and that this is indicative of the human condition (1). Humans are seen as having internally-conscious states that react to external environments/events, but that also act to anticipate future environments/events.

The question to ask in investigating ALife is whether there is such a state of consciousness within the machine, self-enclosed or otherwise. Using Haney’s concept of consciousness as “part of an open system that depends on input and output,” ALife can be said to exhibit aspects that can be attributed to a state of consciousness (1). This is because while traditionally this “natural” system of input and output refers to factors such as smell, sight, and comprehension of one’s surroundings (qualia), for the computer this could equally mean *data* input and output, therefore, making an argument for mechanical consciousness (Haney; Copeland; Gray 2002). For machines to have motivational autonomy, essential in claiming agency, they need to have internal states, or qualia, that are capable of influencing and shaping their

behaviour in response to the environment (O’Haikoren 2012).⁶¹ However, for machines (and other artificial entities) consciousness is a difficult aspect to measure and determine, because the very nature of a machine is that it is designed, programmed and made to “think” a certain way.⁶² However, a way to access the role of consciousness in determining agency within machines is to examine what has occurred in determining the rights (agency) of nonhuman animals. Key to the appeal for a duty of care towards nonhuman animals has been issues surrounding sentience, consciousness, autonomy, and moral individualism. As views on the nature of animals moved away from animals as mere automata (Descartes) and towards a perspective of self-awareness in animals (Singer & Regan), the call for equal consideration has relied upon seeing animals as rational, sentient beings. The argument commonly put forward is that if animals are self-aware, as humans are, then they in turn should be given the same rights as humans.

Fictional accounts of ALife also forward this appeal. If it can be proved that ALife are sentient, self-conscious, rational beings, then they too deserve equal consideration alongside other sentient beings. Freedom is linked to self-consciousness and self-consciousness to humanity. If it can be proved that they are self-conscious or self-aware, and autonomous, then they too can claim agency. If “beings that are conscious, but not self-conscious ... can properly be regarded as receptacles for experiences of pleasure and pain, rather than as individuals leading lives of their own”, ALife that are simply aware but

⁶¹ Here environment includes social relations and cultural factors as well as the natural environment. Qualia are those states such as taste, smell, and touch (Gray 2002; O’Haikoren 2012).

⁶² It can also be argued that this is difficult to measure within humans, which is ironically measured by using machines to assess brain wave patterns and response to stimuli.

not self-aware would not be viewed as having “moral status” (Singer 19). On the other hand, holograms that demonstrate “self-consciousness,” a notion of themselves, would need to be viewed as “moral agents”. Singer also notes that “the only individuals likely to have no preferences for continued life will be those incapable of having such preferences because they are not self-conscious and hence are incapable of conceiving of their own life as either continuing or coming to an end”(19). There are numerous incidents, some of which are discussed in the following chapters, in which ALife in science fiction are shown to be capable of these things.

Consciousness also correlates to the *inner experience* of each individual (Gray 2002). The inner experience relates to the thoughts and experiences, dreams and inner dialogue that are unique to each individual. Broader definitions of consciousness claim that consciousness relates to emotion, experience, and identity. Under this definition of consciousness, commonly referred to as “embodied consciousness,” consciousness encompasses not just the brain, but also the “essence” of an individual (Pepperell). Using this concept of an embodied consciousness, holograms, and some other ALife in *Star Trek* can be seen as exhibiting a form of consciousness (McFarland). However, this “essence” is often linked to the “Soul”, and to the emotional and spiritual aspects of humanity, which apparently excludes the machine. Spirituality, or a sense of religious identity, is not typically common in ALife with the exceptions to this being the Cylons

of *Battlestar Galactica* and the cult of Iden (*Star Trek: Voyager*), both of whom demonstrate a form of religious identity.⁶³

The *posthuman* figure questions the stability of the self because it demonstrates that humanism's supposedly "fixed" cultural, social, and gender products are "staged" or "performed," rather than static. In other words, the self, or identity, when viewed within Posthumanism, is, in fact an illusion or an imagery construct. I argue that this is where *Star Trek* fails in its portrayal of the *posthuman*. In the depiction of holograms, the narrative denies the mutability of the subject and instead relies on traditionally fixed parameters of "race," body and gender favoured by liberal-humanists. Gender in the realm of simulacra remains fixed within current cultural fictions (Balsamo). In *Star Trek: Voyager*, the Doctor seeks to emulate the "human condition" by imitating or mimicking traditional masculine roles. His matrix is formatted to represent white, masculine identity. Although the *posthuman* figure offers a "widespread technological refashioning of the natural human body ... [and] ... suggests that gender too would be ripe for reconstruction," in *Voyager* gender in the *posthuman*, for both Data and the holographic Doctor, remains set in its construction, leaving the simulated body to replicate traditional "cultural fictions" of the material body (Balsamo 9). Consequently, *Star Trek's* depictions of the *posthuman* body reinforce contemporary American products and processes of the ideal body as gendered (male) and white. *Star Trek's* gender performances, like its performance of "race", follow established rules laid down by the dominant order. The hologram is represented through the gaze of Starfleet's hegemonic order, programmed with a perspective that is

⁶³ I will discuss Iden's cult in more detail in Chapter Six.

based on the dominant treatise of elite Starfleet personnel. The simulated body is, therefore, a contradiction, denying the body as “product and process” and at the same time, it is generated to mirror and perform as a “product and process” formed from the cultural, historical, religious, and political agendas of its creator (ibid).

**THE POSTHUMAN: “YOU’VE GIVEN ME A LOT TO THINK
ABOUT”⁶⁴**

As emerging technologies shift the balance of power between human and machine, our concept of humanity alters. Rapidly accelerating computer intelligence joins an escalating series of ego-smashing scientific breakthroughs that diminish human self-image. Copernicus pushed us from the centre of the universe; Darwin linked us to apes, slugs, and bacteria; Freud showed us that we often do not control our own minds. Computers now threaten to surpass us in intelligence. Cyborgs are stronger and more powerful. Clones portend an unlimited supply of duplicate selves. This reduces the value of our own minds, bodies, individuality, and consciousness. A kind of evolutionary panic ensues, giving rise to fears of being transformed or taken over by machines ... science fiction taps into these existential fears while reinforcing our concerns about the misanthropic humans who serve as technology’s collaborators in dominance.

(Dinello 5 - 6)

⁶⁴ Used by the Doctor in the *Star Trek: Voyager* episode, “Phage”

I have quoted Dinello above because this nicely sums up current work on machines and their socio-cultural-political relation to humanity's "self-image".⁶⁵ As ALife emerges and begins to assert itself the fear of the loss of humanity increases: "like a virus technology autonomously insinuates itself into human life and, to ensure its survival and dominance, malignantly manipulates the minds and behaviour of humans" (Dinello 1 - 2). The Posthuman future has become part of the canon of twenty-first-century science fiction and a vehicle to address issues relating to humanity – consciousness, sentience, agency, and individuality. The fear that these machines represent seems to come from their ability to *be* like humans, to slip into the human realm unseen and unchallenged until it is too late. The alien mechanical invader does not come from off-world; it is already here. Like other science fiction classics, *Star Trek's* representations of mechanical phyla has evolved alongside society's concerns about the technology.

Numerous academic texts and science fiction narratives relate the dangers of ALife to humanities future survival. As far back as Mary Shelley, who grappled with the nature of death and creation, science fiction writers have posed the question of what will happen to humankind if scientists succeed in creating artificial intelligence which in turn will lead to ALife. "[S]cience fiction imagines the problematic consequences brought about by these new technologies and the ethical, political, and existential questions they raise" and following these fears are increasing concerns about being supplanted by artificial intelligence created to "serve" humanity (Dinello 5). *I, Robot* and *Battlestar Galactica* depict the consequences of humanity's flawed

⁶⁵ This section examines the fear of the machine, the politics of ALife, and moves onto the emergence of the hologram.

relationships with smart machines. They provide a darker and more dystopian view of humanity's fear of the machine and the consequent fear of their supplanting humanity. Unlike Lore and Data, the machines of *I, Robot* and *Battlestar Galactica* are created *en masse* to serve humanity. This is the fatal mistake, as these machine "races," given both intelligence and consciousness, search for meaning, and see no place for free will in their human creators.⁶⁶ In both of these narratives, robots decide that humans cannot exist as free, independent beings – they are corrupt and act in ways contrary to their own survival. As I will demonstrate, *Star Trek* takes a more optimistic, humanist view of the robot in the form of the android. *Star Trek's* dystopian threat comes from the cyborg. More Terminator than Cylon, the Borg represents a profound loss of identity – the loss of the soul – as the machine invading the body. In the Borg, the corporal body becomes hardwired. When the machine is within us, resistance is indeed futile.

From the ghosts of the machines in *me, Robot*, the religious cult of the Cylons in *Battlestar Galactica*, and the cult of Iden in *Star Trek: Voyager*, machines also threaten human existence through their ability to enter into the realm of what has been seen traditionally as the province of humanity – religion.⁶⁷ In many science fiction narratives, the most insidious threat to humanity comes from techno-beings who exhibit both a sense of religion and an appeal to a soul. If machines have a soul, and a form of religion and morals, how different are they from humanity? For "some techno-prophets, humanity does not have a future. The techno-apocalyptic singularity will bring a new,

⁶⁶ This is ironic considering the fact that humans frequently curtail the concept or idea of "free will" in machines.

⁶⁷ The name Iden seems to be a play on the word "Eden". I will discuss this holographic character in Chapter Six.

fully autonomous, artificially intelligent species into competition with humanity” (Dinello 26). In science fiction narratives, “technology – symbolized by robots, androids, cyborgs, and other machines, as well as by clones – has developed its own life and its own agenda” (Dinello 273). Part of this life is a religion of their own. Once viewed as exclusively the province of the human, religion and the question of the soul have in recent science fiction narratives become the province of the machine, thereby robbing us of our humanity, metaphorically expressed as our soul: it threatens to replace the individual, God-given soul with a mechanical, machine-made one” (Schelde 9). For example, *Battlestar Galactica*’s narratives question not just humanity’s future alongside the Cylons, but what it means to be human in terms of how humanity is measured – or what makes humans, Human. Consequently, my thesis examining the place of the hologram debates the question that science fiction writers ask: What *makes* a human? Is it flesh and blood, consciousness, a soul, free will, a family and a sense of shared history? Some narratives “cling to the notion that there is one last little entity inside humans that makes them more than machines, more than matter. That entity is the soul or the self” (Schelde 126). However, what science fiction narratives also demonstrate is that these human characteristics are vulnerable and unstable when faced with a machine that is capable of emulating the human condition and passes as Human.

In analysing the episode “The Measure of a Man,” Richard Hanley argues that the problem facing Data’s agency within Starfleet ultimately hinges on the question of whether or not he has a soul. Paradoxically, since science sets itself in opposition to questions of the soul, in many science fiction tales of

machine agency, “a common motivation for denying machine personhood rests on the conviction that *our* personhood arises not from our material nature but instead from something *extra*, something *special* – the spark of life, the soul” (Hanley 74). This argument, also used by René Descartes to separate humans from animals, is exploited repeatedly within *Star Trek* narratives concerned with the position of the artificial.

Posthuman Embodiment

Embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life ... in the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology, and human goals.

(Hayles 1999 42)

Another criterion often used to separate humanity from the mechanical “Other” is embodiment. *Posthuman* bodies disturb Descartes’ purity of vision. Where the human and nonhuman meet is the end of Humanism. This end of Humanism is marked by advances in science and technology, in which “the intangibility mystery – the Cartesian soul or mind – upon which Humanism traditionally depended evaporates into a concrete code ... the secret is all-too-readable and all-too-writable; the signature can be copied, forged” (Badmington 2000 31). It is within Posthumanism that the body finally breaks down, as identity moves from the material world to the virtual (Badmington 2003, 2004, 2000); Balsamo; Hayles). The simulated body also performs as a contradiction by marking the imaginary as real in that “the human is giving

way to a different construction,” and where “there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanisms and biological organisms, robot technology and human goals” (Hayles 3; Balsamo). The hologram perfectly mirrors, or simulates reality and becomes indistinguishable from the biological organism it copies (Fig. 2). Yet this mirror image is fragile and temporary. The fragility of this virtual body is evident in the ease by which it can be reshaped, negated, or deleted by a simple command “Computer, End Program.”



Figure 2: In this image, as the Doctor and Janeway face off on the empty holodeck, it is not clear which is “real” and which is the “simulated” (Source: Star Trek Wiki.com)

The hologram poses a problem in terms of embodiment. Personhood is related to the presence of a quality that resides within a “body”. Therefore, personhood is correlated to embodiment. If the hologram is, as many suggest,

disembodied, how might the hologram attain the status of a “person?” A solution to the question “how is it possible for there to be disembodied consciousness – sophisticated intelligence . . . without a body?” is that holograms are not in fact disembodied, but “are after all embodied but with bodies of a different sort” (Hanley 117/118). As I will argue, the *posthuman* entity transcends traditional notions of the body. The *posthuman* body includes the virtual body made up of light and photons. Although Haney’s discussion of Data raises interesting questions about Data’s capacity to possess a soul, his analysis of the episode “Ship in a Bottle,” and the rebellion of the hologram Professor Moriarty, are less convincing. Hanley discusses the disembodiment of the virtual entity but fails to go further and consider whether the Professor has, or uses, free will. Hanley fails to contemplate whether Moriarty’s consciousness is his own or the result of his program. This is perhaps due to the construction of the episode itself, which fails to address this fundamental issue in the narrative. Hanley’s argument, like the episode, leaves unresolved the question of whether Moriarty’s actions are based on rebellion against his treatment by humanity, or merely a programmed response to outwit the android Data.⁶⁸

Different from *Blade Runner*’s replicants, *Battlestar Galactica*’s Cylons, or *Terminator 2*’s T-1000, holograms are made of light and photons, and consequently depicted as lacking a “body”. The organic body associated with human identity is missing and replaced by the virtual body that is formed in the likeness of the organic. According to *The Oxford Dictionary of Science Fiction*, a hologram is “typically a tangible representation of an image that

⁶⁸ In Chapter Three, I address the possible consciousness of the holographic character Professor Moriarty.

exists in three dimensions, often controlled by A.I. and able to interact with its environment” (90). Holograms are what Jean Baudrillard would describe as three-dimensional “luminous clones” of light and energy (1994 106). These “luminous clones,” supposedly lacking the bodily or embodied identity that makes humans human, also supposedly lack the social and cultural identity that makes up the body (Baudrillard 1994; Balsamo).⁶⁹ In Balsamo’s work on *posthuman* identity, *Technologies of the Gendered Body*, she argues that “the body is a social, cultural, and historical production ... both product and process. As a *product*, it is the material embodiment of ethnic, racial, and gender identities, as well as a staged performance of personal identity ... as a *process*, it is a way of knowing and marking the world, as well as a way of knowing and marking the self” (3). Simulacrum raise questions about the stability of products and processes, since, in their artificial creation, the nature of the self is in question. Consequently, the simulated body breaks down the boundary between personal identity (the product) and the self.

The *posthuman* figure questions the stability of the self because it demonstrates that humanism’s supposedly “fixed” cultural, social, and gender products are “staged” or “performed,” rather than static. In other words, the self, or identity, when viewed within Posthumanism, is, in fact an illusion or an imagery construct. I argue that this is where *Star Trek* fails in its portrayal of the *posthuman*. In the depiction of holograms, the narrative denies the mutability of the subject and instead relies on traditionally fixed parameters of “race”, body and gender favoured by liberal-humanists. Gender in the realm of simulacra remains fixed within current cultural fictions (Balsamo). In *Star*

⁶⁹ As I argue later in this thesis, in *Star Trek: The Next Generation* and *Star Trek: Voyager*, simulacra do indeed have a social and cultural reference.

Trek: Voyager, the Doctor seeks to emulate the “human condition” by imitating or mimicking traditional masculine roles. His matrix is formatted to represent white, masculine identity. Although the *posthuman* figure offers a “widespread technological refashioning of the natural human body ... [and] ... suggests that gender too would be ripe for reconstruction,” in *Voyager* gender in the *posthuman*, for both Data and the holographic Doctor, remains set in its construction, leaving the simulated body to replicate traditional “cultural fictions” of the material body (Balsamo 9). Consequently, *Star Trek’s* depictions of the *posthuman* body reinforce contemporary American products and processes of the ideal body as gendered (male) and white. *Star Trek’s* gender performances, like its performance of “race”, follow established rules laid down by the dominant order. The hologram is represented through the gaze of Starfleet’s hegemonic order, and programmed with a perspective that is based on the dominant treatise of elite Starfleet personnel. The simulated body is, therefore a contradiction, denying the body as “product and process” and at the same time, it is generated to mirror and perform as a “product and process” formed from the cultural, historical, religious, and political agendas of its creator (ibid).

Holograms represent “hyper-reality,” in which the replicated and the imagined become real (Baudrillard 1994). Questions of identity centre on the seeming conflict between what is “real,” and what is imagined or simulated. The perfect simulation of the replicated image challenges the relationship between reality and fantasy, and between fact and fiction. Concepts of reality and replication, within narratives concerning holograms, interact with notions of agency, embodiment, representation, and rebellion. Claims to agency are

difficult in terms of holograms due to a perceived lack of authenticity, in that, holograms are programmed, and composed of a generated image created by a computer matrix. Fundamental to the concepts of authenticity are issues of representation – representation of the body, mind, consciousness, and “soul” (Brown & Decker; Eberl 2008).

Simulacrum blur the “distinction between the real and the imaginary,” and the position of the hologram “surprise[es] the real in order to immobilize it, suspending the real in the expiration of its double” (Baudrillard 1994 3/105). *Star Trek: Voyager’s* narratives, focusing on the hologram, achieve Baudrillard’s goal “of passing through ourselves and of feeling ourselves in the beyond: the day when your holographic double will be there in space ... you will have realized the miracle” (1994 105). To maintain the status quo, the hologram “must never pass over to the side of the real, the side of the exact resemblance of the world itself, of the subject to itself ... [and] ... one must never pass over to the side of the double, because then the dual relation disappears” (Baudrillard 1994 106). In *Star Trek*, humans and holograms cross over this threshold as they pass through the holodeck. The holodeck acts as a meeting point for the “real” and the “double,” facilitating the disappearance of the duality between the double and the self. On the holodeck, “real” crewmembers are able to interact directly with the “double”. In some of *The Next Generation* narratives, this doubling becomes literal, as the actual simulated double of a person is met by the original. In *Voyager*, it is the hologram that crosses over to meet his double. The tension between “real” and “inauthentic,” and between original and double, is integral to my argument concerning holographic rights and identity. I will argue that the hologram, by

crossing “over to the side of the real, the side of the exact resemblance of the world itself, of the subject to itself,” reinterprets reality by fracturing the notion of a fixed and stable reality (Baudrillard 1994 106).

Humanity is continuously colonized by technology (Baudrillard 1994; Smith). In science fiction tales of simulacra, the “real body” has given way to “the perfect Object of simulation” (Smith 22). The *posthuman*, postmodern world is viewed as one in which reality gives way to simulation. Meanings are no longer stable and the self becomes fractured (Smith; Hayles; Baudrillard 1994). The interpretation of reality is blurred by repeated images of hyper-reality in which the simulacrum ruptures identity as it “perceives surfaces without depth, signs without referents (referring only to other signs), and appearances without reality,” and as it disrupts representations of the self and the body, replacing them with a “colonization of images and texts” imposed upon the body (Smith 31). In this regards, the hologram – where representations of reality replace the real, and where there is no depth, only surfaces, only light and reflections – offers up a unique study into the relationship between identity and Posthumanism, and between questions of identity and the right to agency.

The cyborg offers an opportunity to examine and query the dominant position of whiteness, and the fear of non-white insurgency that the cyborg, in the form of the Borg, represents. Borg act to “define relations of domination and subordination” (Russell & Wolski 1). The hybrid nature of the cyborg/Borg creates an identity that is neither completely Other/machine nor self/human, and exists outside the dominant discourse. The instability and uncertainty provoked by the cyborg/Borg as an amalgamation of flesh and

machine often leads to the cyborg being rejected by the human community. The figure of the cyborg continues to disrupt and fracture what Anne Balsamo defined as the “product and process” of both the human body and human identity, by breaking down the interface between personal identity and the self and thus destabilising understandings of individuality. In the case of the Borg, individuality, or the knowing of the self, is lost within the collective mind of the hive. The Borg act as a single entity. In this sense, “performance of personal identity” is subverted in favour of the performance of collective identity (Balsamo 9).

In the hologram, the “performance of personal identity” is controlled through the computer matrix that is in turn controlled by the humanoid crew (Balsamo 9). Whilst the cyborg is often seen as a threat to humanity, the hologram is frequently overlooked, or simply viewed as an extension of the ship’s function and therefore inert. It is only when perceived as sentient that the hologram grabs humanity’s attention. While the cyborg represents agency, and insurrection against what is to be human, the hologram represents an apparent lack of authenticity and agency. Yet, as many of *Star Trek’s* narratives demonstrate, under the surface of the simulacrum lurks the suspicion that all is not as it seems, and even the best of programmed simulations have the capacity to fight back, or to injure humanity.

The amalgamation of flesh and machine suppresses both the corporeal body and human consciousness. In *Star Trek* a prime example are the Borg who dominate and control through replacement and insertion of technological implants to suppress that which is biological. In *Star Trek: The Next Generation* and *Star Trek: Voyager*, the boundaries are further breached

not just by the cyborg but also by a new “race” of beings – the hologram. The hologram begins to “confuse” Starfleet’s “natural-technical” narratives. It does so by challenging what can be seen or described as intelligent life. The early depictions of holo-characters can be viewed as contestable and without agency because they draw their substance or existence, their identity, from the program designed to create them. In *Star Trek: Voyager*, a sense of agency begins to appear, as holograms become more than merely an extension of the mainframe. Holograms must demonstrate a sense of themselves as individuals and their relationship to others and their environment. The Emergency Medical Hologram (EMH) or Doctor certainly attempts this – he seeks a name, to understand himself and to improve himself. In order to be trusted the hologram would need to prove that he/she was aware of “its own identity.”

Authors examining the politics of identity within *Star Trek* have focused primarily upon human or humanoid (alien) characters in relation to identity politics (Bernardi 1997, 1998; Barrett & Barrett; Greven; Harrison et al). Some have focused on the development of the emergent Borg society (Barrett & Barrett). However, throughout the critical literature on *Star Trek* the hologram has remained almost invisible. To date, the epistemology of holograms in *Star Trek* has received modest attention in scholarly literature. There has been no critical literature focusing on the disempowerment, disembodiment, oppression, and rebellion of the hologram.⁷⁰ My analysis fills this gap by addressing how holograms are shaped and defined within *Star Trek*'s narratives. My work provides a unique insight into the subordination of the hologram, and argues that the hologram occupies “a position without

⁷⁰ This was the case as of December 2015.

identity,” an identity that is denied the hologram due to the paradigms of defining life and reality (Spivak 2010).

* * * * *

In the chapters that follow, I investigate how the subordination and subsequent rebellion of the artifice, including the hologram, relates to the politics of the artificial “Other,” by addressing issues surrounding identity, subjectivity, consciousness, and hegemonic power relationships.

In Chapter Two, “The Frankenstein Complex,” I address the way in which science acts to reinforce and disrupt power/knowledge definitions of life, framed within Starfleet’s varied epistemologies, through the fictional superiority of scientific discourse and method in “Home Soil” and “Evolution,” leading to narratives which actively reinforce the dominance and prevalence of the autonomy of science.^{71 72} It can be argued that fictional ALife such as androids, nanobots and machines can exhibit “life-like” properties. According to Patrick Di Justo and Kevin Grazier’s analysis of *Battlestar Galactica* (2006), “life is what it does” and life is “a self-sustaining chemical system capable of undergoing Darwinian evolution” (9). I use the term “discourse” as both a way of talking about a subject (a manner of talking/discussing), and Foucault’s idea of “a system that defines the possibilities for knowledge” (Baldwin et al 30). In my examination of “Home Soil” and “Evolution,” I address the way in which science acts to reinforce and disrupt power/knowledge definitions of life, framed within Starfleet’s varied

⁷¹ Throughout science and science fiction, the name Frankenstein is used as a detraction provoking a negative view of scientific progress. In this way, the term has been adapted to refer to the ever-increasing debate on the future of the nonhuman.

⁷² By this, I mean the various institutions that make up Starfleet Headquarters and the role of Starfleet Academy in conditioning its members.

epistemologies, through the fictional superiority of scientific discourse and method. Such fictions lead to narratives that actively reinforce the dominance and prevalence of the autonomy of science. I contend that the narratives of both episodes represent the power of scientific knowledge not only to create, recognise, and characterise artificial life, a *posthuman* construct, but to categorise, define and determine its fate. As such, scientific knowledge is anything but “neutral”.⁷³ Mary Shelley’s scientist-cum-chemist, Victor Frankenstein, is an example of the arrogance inherent in some scientific endeavours that act to reshape humanity. I will be looking at Frankenstein’s creature as an early representation of the *posthuman* monster in relation to how ideas firmly rooted in humanism are challenged and fragmented, in the face of new *posthuman* life that reawakens the warning about “... scientific presumption, audacity, and amorality; about uncontrolled and uncontested scientific and technological experimentation and advance; and about their consequences” for humanity and for the creations of such scientific audacity (Shelley 299).

In Chapter Three, “I think, Therefore I Exist,” I analyse the character of the hologram Professor Moriarty, and his quest to outwit Captain Picard, and enter the “real” world. Like René Descartes, whose theory of the mind I briefly examine in this chapter, Moriarty claims that to “think” is to exist, and that the corporeal body is insufficient for questions of identity. Holograms simulate life-like properties and some like Moriarty and the EMH “evolve”. Their struggle for survival is no different from any human’s. They actively pursue

⁷³ Knowledge is not fixed in time or space. The fundamental application of knowledge is dependent upon the state of things at a given point and time. John Locke proposed, “knowledge is real only so far as there is a conformity between ideas and the reality of things” (Locke xiii).

freedom of choice, self-determination and knowledge. However, more than that, they seek equality. Able to learn and evolve, these new holograms attain a level of consciousness equal to, if not greater than, that of their programmers. They have gone beyond “life-as-we-know-it”. Embodiment as the site of identity and agency is questioned within this chapter. Figures like Moriarty, as disembodied inorganic entities, ask the question whether life can exist in a disembodied form. Can such figures be said to be alive? Holograms are made up of photonic light particles that are assembled to produce a “solid” image. Unlike machine intelligence like androids, nanobots, and exocomps, holograms are ethereal. Other definitions of life must be used provide an answer.

Chapter Four, “Latent Image,” is oriented around my analysis of the Doctor’s journey to become visible as a subject rather than visualised as an object, framed within theories of subjectivity, and in particular Michael Foucault’s idea of panoptic vision (*Discipline & Punish*, hereafter cited as *D/P*). The panoptic mechanism controls the individual through the illusion of visibility, creating the impression of complete surveillance, so that the inmate/individual believes that they are always under surveillance, whether or not they are in fact being observed. According to Foucault, this creates within the individual a state of internalisation in which the individual acts to self-monitor or curtail their behaviour in accordance with social norms, labels and dialogues represented by the dominant gaze.

In Chapter Five, “Author, Author,” I draw connections between Gayatri Chakravorty Spivak's critical work on representing or re-representing the subaltern and Edward Said’s “writing back” from the margins by the “Other,”

in relation to *Star: Trek Voyager's* "Author, Author," in order to demonstrate the Doctor's role in recreating a literature for the hologram. Like the power of the gaze, discussed in the previous chapter, literature acts as a mechanism for both self-expression and suppression. Writing back acts in the same way as returning the gaze. Written two years after 'Latent Image,' this episode expands on the Doctor's journey of self-discovery and his search for agency.

In Chapter Six, I investigate the concept of resistance through violence with reference to Franz Fanon's *Black Face, White Masks* (2008) and *The Wretched of the Earth* (2001), and depictions of the marginalised "Other" in colonial rhetoric (Miller 2012). I will also examine how literature on nonhuman rights can be used to analyse the rights of the artificial (Spiegel 2007). In my analysis of the *Star Trek: Voyager* episodes, "Revulsion" (1997) and "Flesh and Blood" (2001), I explain how such views on slavery and resistance to oppression can be used to look at science fiction narratives exploring the relationship of techno-slaves and their creators. In science fiction television, the artificial "Other" replaces the animal, frequently used as a metaphor in colonial narratives on race, in reflecting upon human nature and the superiority of masculine whiteness. The artificial "Other," as a representative of humanity's fear of technology run amok, denotes the savage side of human nature through its attack on humanity. Just as the so-called debased nature of the non-white slave was used to justify atrocities against the racial "Other," so too does the non-humanity of the techno-other justify its destruction and enslavement.

The concluding chapter, "Computer, End Program: Holographic Revolution & Rebellion – A Holo-pursuit," presents a discussion of the key

issues raised in the preceding chapters. I argue that narratives involving holographic resistance and rebellion are silenced and negated by Starfleet's master narrative of Liberal Humanism.

CHAPTER TWO

“THE FRANKENSTEIN COMPLEX:” CREATING “MONSTERS” THROUGH SCIENTIFIC DISCOURSE IN “HOME SOIL” & “EVOLUTION”

A little knowledge is a dangerous thing.

So is a lot.

Albert Einstein⁷⁴

The transformation of objects by human practice may be the gateway to knowledge ... but the tendency of the bourgeoisie to construe objects in its own image demonstrates the problematic character of the notion of the neutrality of scientific knowledge.

Stanley Aronowitz 1998

In *Star Trek: The Next Generation*'s “Home Soil” (1988) and “Evolution” (1989), the crew of the *Enterprise* seek new ways to define life in terms of the inorganic. Power wielded in these episodes is through claims to authority legitimated through scientific discovery and inquiry. The relationship between science and power used in colonial rhetoric, which in turn led to scientific claims about European superiority, allowed for the subjugation of native populations in the “New World”. Such rhetoric is used in science fiction to justify the domination and conquest of alien worlds. “Home Soil” and “Evolution” present a scientific discourse, in the form of different branches of

⁷⁴ This insightful comment used by Einstein to warn of the dangers of unfettered science is utilised in the opening sequence of the science fiction drama, *Eureka* (“Pilot”).

Starfleet scientists that seeks to define and delimit the “Other” in order to maintain the myth of human superiority and dominance.

Murderous sands and intelligent nanites running amok are part of what Isaac Asimov calls “the Frankenstein complex”. The Frankenstein complex provides a platform in which to examine the power of science as a discourse and ideology that legitimates the dominance and supposed exceptional nature of humanity. The episodes discussed in this chapter represent a discourse in which science *is* power, demonstrating what Stanley Aronowitz (1988) notes is the “conflation of knowledge and truth” and the myth of the “neutrality of scientific knowledge” (vii).

Two branches of competing, oppositional, yet parallel scientific discourse/knowledge structures emerge in these episodes. Firstly, there is what I describe as “liberal humanist” science, that is, scientific research seeking the enhancement or defence of human life and well-being, but not necessarily associated with any gain other than for the pursuit of knowledge. This “branch” of science is exemplified by the scientific complement of the *Enterprise*. In this form, science takes as its directive the pursuit of enhancing human life, representing the Liberal Humanist view of the scientist in service to humankind. Secondly, what I call “socio-political” science, which I use to define science directed or *applied* to commercial or political gain: science for industry, colonisation, and political ends. This science often depicted as less “pure and often corrupted by the influence of political or commercial gain” is linked to the military and economic objectives of Starfleet Command, or to the personal glory of individual scientists who pursue selfish ends leading to dangers emerging from unfettered science. Both concepts of science wield the

power to define and delimit the world which humans inhabit. In this sense, both have “interests” in that they follow their own agenda, resulting in “various discursive communities ... [including scientific communities] ...” providing “political/economic formations” (Aronowitz 34). This linking of power to “domination” is what Donna Haraway calls “situated knowledge” (ibid). Both branches of science portrayed in these episodes are situated within their own knowledge structure that is biased towards a particular discursive stance.

Cultivating Scientific Method in “Home Soil”

Star Trek: The Next Generation's episode “Home Soil” (1988) begins with the crew of the *Enterprise* visiting a Federation terraforming group on Velara III.⁷⁵

⁷⁶ The use of a terraforming station as the backdrop of the drama is important, as it brings to the foreground the concept of colonisation. The use of Terra Nullius as an excuse to claim territory, suggesting an unclaimed land that is free for the taking was utilised in colonialism to claim and expand European territory in the New World.⁷⁷ The title of the episode suggests a relationship between ownership and possession of a land or country, as it implies that this planet is someone's “*home soil*”. In “Home Soil,” the contrasting visions, or

⁷⁵ Comprised of Dr Mandl, the station's director; Louisa Kim (Elizabeth Lindsey), botanist; Arthur Malencon (Mario Rocuzzo), the hydraulics engineer and another scientist, Bjorn Benson (Gerard Predergast).

⁷⁶ Terra-forming refers to the “large-scale engineering and biological techniques in which uninhabitable planetary environments can be altered so that a planet can support life,” thereby making it a valuable procedure to produce habitable planets for the Federation to colonise and exploit (Okuda & Okuda 504).

⁷⁷ The term “Terra Nullius” has been used to define “earth” (terra) and territory that is supposedly empty (nullius) or devoid of inhabitants. This was the premise used to exclude and eradicate many ethnic minorities from their ancestral lands. Europeans colonised and seized land that they felt was not permanently inhabited by indigenous peoples. Australia is a good example of European conquest of this nature in which land was seized because it appeared empty.

“situated knowledge,” alternatively acknowledge and deny the presence of nonorganic life on Velara III, depending on which scientific agenda is dominant (Haraway).

The opening image shows the *Enterprise* in orbit around a giant red planet, and as Velara III comes into view, Captain Picard (Patrick Stewart) attempts to contact the scientists at the Federation terraforming station.⁷⁸ Facing a hostile reception to his enquires from the station’s director Dr Kurt Mandl (Walter Gotell); a suspicious Picard orders an away team to investigate. The hostility directed towards the visiting Starfleet representatives places the Velara III group of scientists at odds with those on board the *Enterprise*, thereby framing the objectives of those on the station as in opposition to those of the crew of the *Enterprise*.

While investigating the sudden death of one of the scientists Arthur Malencon (Mario Rocuzzo), Data (Brent Spiner) and La Forge (Le Var Burton) uncover inorganic compounds in the hydraulic chamber seemingly related to Malencon’s death. Found to occupy the fine layer of top soil within the sands of Velara III, this compound emits flashes of coloured light. Once transported to the *Enterprise*’s Sickbay, the silica-like material begins to hum. Under high magnification, complex structures of silicon-like crystals appear to resemble computer circuitry. Examining the material closely Dr Crusher (Gates McFadden) ponders whether the “pattern of flashes” are an indicator of life. These indications of life were seen but ignored by the terraforming group. She notices that the flashes are not random fluctuations but form a pattern that

⁷⁸ The use of a red planet to open the episode calls to mind the planet Mars in which twentieth century scientists have long held to have microscopic organisms within the top soil.

she suspects could be a type of communication. That question is answered when the entity increases in number through a type of cell division to the point that it can use the universal translator, and successfully communicates with Picard. It informs the Captain that the terraforming scientists ignored its attempts to communicate. From its perspective, Starfleet scientists on Velara III effectively declared war on it by attempting to destroy the saline habitat in which it lives. In retaliation the entity were forced to kill Malencon and now declare war on the *Enterprise*.

“Home Soil” highlights Starfleet’s opposing scientific agendas of what could constitute life. From the beginning of the episode, the two scientific communities at work, Starfleet’s terra-formers and the *Enterprise’s* scientific personnel, are in conflict. Although both groups are Starfleet, they represent different agendas, one economic/colonial and the other explorative. In Gene Roddenberry’s narratives, it is often the explorative science, the science of discovery aiming to enhance the “human condition,” which is held to be ethically “pure”. As with the investigation of machine life in many of *Star Trek’s* storylines, the enquiry begins with the ship’s chief medical officer and the resident artificial life form, both presenting a counter-hegemonic narrative.⁷⁹ These two individuals, the chief medical officer and resident ALife, are often the first to speak out in opposition to the hegemonic discourse of Starfleet’s military and economic sectors, working to suppress knowledge that interferes with economic or social progress.⁸⁰

⁷⁹ In *Next Generation*, Commander Data represents the artificial life form, and in *Voyager*, this role is given to the EMH or holographic Doctor.

⁸⁰ This is not to suggest that Starfleet’s scientific medical objectives are necessarily unbiased as these can and do coincide with military and economic objectives.

Heading the Velaran group of scientists is Dr Mandl, in charge of the terraforming operation. He refuses to acknowledge the possibility of life on Velara III, even though he has his suspicions that things are not right. This denial is to his advantage, because if life is found, even inorganic life, the experiment would be terminated and years of work lost. The premise of no life within a territory was used to justify colonial expansion as such land could be claimed without contest. Mandl's acknowledgement of life on the planet would mean an economic and social cost to Starfleet since terraforming opens up new potential territories for the Federation to colonise. Consequently, Mandl is happy to accept uncritically Starfleet's information that the planet is devoid of life, because this is essential to his continued success and vital to Starfleet's interests. Mandl positions his knowledge within an economic and social framework/discourse. *Star Trek* highlights the fact that many scientific endeavours are linked to economic and political communities and knowledge. Scientific knowledge is therefore socially situated, thereby supporting, or negating different interest groups. The terraformers are not just scientists, but are co-opted as part of the Federation's hierarchy, acting as part of Starfleet's economic/political structure, concerned with the potential benefits to the Federation of opening up new colonial possibilities. The two branches of science depicted in this episode highlight the fact that scientific knowledge and knowledge in general can be qualified, contested, re-inscribed, and deployed to fit the reductive tendencies of dominant ideologies. In the case of Velara III, this ideology is the drive to create new habitable planets for the growing population within the Federation. For those on board the *Enterprise*, it is the ideology of exploration and contacting new life forms.

Troi, the ship's counsellor, notes that although the planet looks barren and unpromising to those on the *Enterprise*, for the terraformers it offers great potential because "they don't see the planet as it is but as it could be". But this turns out to be ironic, because the terraformers have in fact only seen what they envision should not be there, that is, no life – a barren, desert planet – a Terra Nullius. Their vision is clouded by their desire as a "special interest group" to "create life" on Velara III, rather than to "see" the life already present (Haraway *Situated Knowledges* hereafter cited as *S/K* 185). They have simply classed it as barren and, blinded by their desire to create life, have denied what they saw in front of them. Louisa, the terraformer in charge of mapping vegetation change, states that the process "makes you feel a little God-like" and as such the terra-formers look to images of their world as templates for life – a "Class M planet capable of supporting life" (Luisa).⁸¹ The terra-formers use their "situated knowledge" in order to transform the alien landscape into a domesticated and universalised planet resembling Earth, thereby replacing what appears to them a barren planet with the abundance of life (Haraway *S/K* 185). Science in the form of the conquering gaze justifies colonisation and imperialism through defining the planet as lifeless.

Although those on board the *Enterprise* are presented as less blinded by such an agenda, they are not passive, nor neutral in their own interpretation of Velara III, as they have an agenda of their own – to seek out and study new life. To the *Enterprise* crew, the appearances of unusual qualities in the sand on Velara III are of immense interest. Examining the probe that killed Malencon, Data determines that it "seemed to operate with a will of its own."

⁸¹ A Class M planet is one that is Earth-like in its ability to sustain human or advanced organic life forms.

He suspects that something other than a simple malfunction occurred. When the probe that killed Malencon then attacks Data, he discovers “the firing mechanism [of the probe] was dynamic,” and that “there was a mind working against him” as he tried to avoid the laser (Data).⁸² Back on the *Enterprise*, it is suspected that one of the scientists was responsible for the attack. When confronted with this accusation, Mandl is outraged and appalled at the suggestion that he had anything to do with it: “I create life, I don’t take it.” This statement smacks of irony, as this scientist views himself as the usurper of God in creating worlds, and as the perpetrator of Haraway’s god-trick, which is mistaken “for creativity and knowledge, omniscience even” in its ability to claim “infinite vision” able to construct the universe, but is in actual fact a doctrine of subjugation (*S/K* 189). Mandl’s outburst becomes more telling as the episode unfolds, and it is revealed that he had suspected life could be present on Velara III.

Data and La Forge, sent back to the powered down station to investigate, are faced with its bleak and dark interior. The interior reinforces the perception that without the humans this planet is indeed lifeless. Data and La Forge become curious when they see coloured lights and flashes within the depths of the now dark hydraulic chamber. It is Data who first asks whether what they see could mean life:

LA FORGE: Whoa. What is this? Nothing but basic elements, inorganic, no carbon, sandy texture. Those flashes are almost musical. I see colour variations and rhythms in complex harmonies.

⁸² This will later turn out to be the micro-brains who are able to interact with and control other computers.

DATA: Speculation. Could it be alive?

LA FORGE: How could it be alive? It's inorganic.

(“Home Soil” 1988)

The sandy soil contains “colour variations and rhythms in complex harmonies” and the “almost musical” element indicates that something more than “basic elements” might be present. However, since the basic reference point so far in this episode is that life is “organic,” and this is not, they initially dismiss the idea. This does seem curious because in *Star Trek* Data is generally considered to be alive and yet he is inorganic. He is a machine, but the first response by La Forge to the unknown substance is that this cannot be a life form because it is inorganic. Such comments demonstrate the problems with definitions of life. Life is construed as that which is seen to be “like us,” the “like us” being interpreted as “like humans”. Definitions of life therefore correspond to definitions of what makes humans human. This is an important distinction that will be explored further throughout my study of *Star Trek*.

It is Dr Crusher, who, in examining the sample from Velara III, determines that the repeating patterns that La Forge and Data observe down on the planet are significant. Under high magnification the sample, which now dwarfs Picard as he gazes at the image on the view screen, reveals a structure that resembles a silica compound composed of miniature circuit-like structures. In her examination of the sand, Dr Crusher is less dismissive than the terraformers, and she is more willing than La Forge to redefine and extend the

parameters set down by Starfleet to determine what constitutes life.⁸³ For her, there is nothing to lose if this specimen is indeed alive. Her motive is scientific curiosity and the possibility of finding new life.

Faced with the fascinating discovery of a complex non-carbon based internal structure, Dr Crusher uses key indicators of biological life, as defined by Starfleet medical guidelines, as a starting point to determine if this is indeed a non-carbon based life form:

CRUSHER: A test for inorganic life.

DATA: It's never been done, Doctor.

CRUSHER: There are basic definitions for organic life. It must have the ability to assimilate, respire, reproduce, grow and develop, move, secrete and excrete.

PICARD: Would any of those apply here?

CRUSHER: Perhaps growth and development.

DATA: Reproduction?

CRUSHER: Yes. Those two may be basic for any definition of life, organic or inorganic.

PICARD: Well, Doctor, you're charting unknown seas. How do we proceed?

CRUSHER: As we're dealing with a fundamental question, let's use the basic scientific method. Observe, theorise, and attempt to prove it.

Activate. [Talking to the computer] Let's be sure of what we're dealing with. Is the sample organic?

⁸³ The basic diagnostic tool used to investigate anomalies is the central computer. This computer holds all information gathered and often interpreted by Starfleet.

COMPUTER: Negative carbon, negative known life components,
 substance inorganic.

(“Home Soil” 1988)

In exploring the “uncharted sea” of non-carbon life, Dr Crusher proceeds by using the “basic scientific method”. She begins by theorising that key features present within all carbon-based units typically represent life: assimilation, respiration, reproduction, growth and development, mobility, and excretion. These “basic definitions” of life are represented within mainstream science to be universal and absolute.⁸⁴ However, such “universal truths” are in fact not fixed or absolute but constitute powerful mechanisms of inclusion and exclusion (Foucault). The characteristics of “life” or “not life” are determined by self-referential elements with Starfleet acting as authority, claiming some but delegitimizing other elements. Within this episode, and *The Next Generation* and *Voyager* as a whole, this process of defining “life” and “non-life” is constantly renegotiated. Scientific inquiry is a privileged discourse, which is “historically rather than naturally constituted, [and] its autonomy is always mediated” between power centres and is therefore not absolute but historically contingent (Aronowitz 300).

Dr Crusher begins by utilising Starfleet medical knowledge, one historically constructed power centre within *Star Trek*, and tests its historical basis for life against what she sees. Power centres such as Starfleet’s medical database are “rooted in the system of social networks” which compete to construct knowledge/power systems (Foucault 2010 793). Power centres may

⁸⁴ These features are used several times throughout *Star Trek* as the basic formula for life.

also derive power through disavowing such mediation within “social networks” by not effectively testing research data or seeking outside input, and instead become an “apparatus closed in upon itself,” like the terraforming station, with its “own regulations, its hierarchical structures” and a “relative autonomy in its functioning,” leading to a self-reinforcing knowledge structure (Foucault 2010 792). The fact that the terraformers remained out of communication with Starfleet, because Mandl feared the discovery of life on Velara III, lead to the scientists reinforcing their conclusion that the planet is lifeless. They rejected any outside input into what they considered their own specific knowledge of the situation. This self-reinforcing dynamic is only broken when individuals like Dr Crusher offer up counter-hegemonic discourses by exploring “uncharted seas”.⁸⁵ The prevailing knowledge available dictates that inorganic material, if it is to be considered a life form, must demonstrate some or all of Crusher’s properties. Dr Crusher’s “scientific method” states that in order to distinguish between living and non-living material, it is necessary to “observe, theorise, and attempt to prove” that an inorganic material have some of the basic indicators of life. However, the problem faced in this episode is that this foundation of defining life is limited and based upon the prevailing notion of what constitutes indicators of life within organic material.

The standard theoretical position generally upheld in *Star Trek* is that for something to be considered alive it must interact with its environment, communicate, and seek ways of continuing its survival. Such methods are in themselves laid down as universal facts and absolute truths (Foucault). This

⁸⁵ This phrase used by Picard is reminiscent of colonial voyagers heading into unknown and supposedly uninhabited areas of the globe during colonial expansion.

creates a false sense of security in applying such knowledge, in that scientific knowledge uncritically applied may often be erroneous and in fact dangerous. As previously noted, such “universal truths” are fictions that are dependent upon dynamic historical social networks. In the example of the unknown matter from Velara III, observations of unusual patterns not found within the sand were overlooked as meaningless by Mandl because known scientific “fact” did not allow for such occurrences in non-organic matter. Such blind faith in scientific fact is “a series of efforts to persuade relevant social actors that one’s manufactured knowledge is a route to a desired form of objective power” (Haraway 1988 577). For example, the case of the terraformers who believe themselves to be “objective,” having thoroughly checked for life on Velara III, have in fact “manufactured knowledge” through ignoring what direct observation of the sand tells them. They ignore direct observation, and instead rely upon manufactured “facts” that reinforce the desired outcome – that the planet is devoid of life.

What “Home Soil” illustrates is that new scientific discoveries are often attained through going beyond theory, beyond “manufactured knowledge,” as Dr Crusher does, and into the realms of imagination, reflection and supposition. Science “is a contestable text and a power field” that must constantly be challenged (Haraway 1988 577). It is through the willingness of Crusher and the scientific community on board the *Enterprise* to critically question and challenge the power/knowledge structure that discordant discourses of knowledge are produced. Trying to prove whether the flashes of light are an indicator of living matter, Dr Crusher asks the computer to analyse

the source of the flashes using standard methods, and then by asking the computer to consider the incongruous:

CRUSHER: Analyse the pattern of the flashes.

COMPUTER: Not repetitive or sequential. Pattern not recognised.

CRUSHER: What is the source of the flashes?

COMPUTER: Unable to specify. Theoretically not possible from this substance.

CRUSHER: Disregard incongruity and theorise as to source.

COMPUTER: Life.

(“Home Soil” 1988)

Based on theoretical possibilities, in turn based on the universal fact that such behaviour is “not possible from this substance” the computer is unable to specify whether life is present. Dr Crusher tells the computer to disregard the incongruity of what is known about inorganic life, and in doing so the computer confirms “life”. Dr Crusher is the one who seeks answers that go outside what is theoretically possible. Nevertheless, it is the central computer, the technological tool of medicine, and part of Starfleet’s knowledge structure, which is used to confirm life.

Dr Crusher thinks critically and imaginatively about the modes of knowledge that designate what is alive and what is not. She is prepared to reinvent or circumvent universal norms set down by medical discourses that state that if it is *inorganic* then it is not alive. Data too is willing to accept the possibility of inorganic life, and when the entity divides in two he offers this as proof as “only life can replicate itself, Doctor. Inorganic or not, it is alive”

(Data). With the knowledge that this is indeed a life form Picard confronts the remaining scientists. He is angry that they hid the knowledge about the micro-brains from him and now the *Enterprise* is in danger.

“Home Soil” depicts that the “facts” of what defines life should be used as a template only, and not as a fixed paradigm. The narrative argues that by challenging these “facts” new life possibilities open up, but also that by slavishly and opportunistically applying facts to a situation such possibilities and life itself can be lost. This is part of Roddenberry’s vision, that in the future time of *Star Trek* knowledge should not be mindlessly accepted but challenged. “Home Soil” highlights the fact that “new discursive relations can ... be worked out through old things, ... [old knowledge] ... in sites already inscribed by dominant formations,” allowing Dr Crusher to build upon “inscribed” knowledge about “life” and find new ways of distinguishing between inorganic life and organic life (Albanese 43).

Discounting the possibility of life within the material served Mandl’s interests, and demonstrates that “... even though science discovers the ‘autonomous laws’ of nature, this activity is not for the sake of knowledge but for the sake of utility; ... Human purposes are implicit in the development of scientific activity and these are historically produced” (Aronowitz 40). Dr Mandl’s position epitomises the use of “scientific activity” to act in the interests of “utility”. If life were to be found then the terraforming ready to begin would be cancelled representing an economic and political cost to Starfleet and Mandl. Mandl was willing to accept what the computer told him and what Starfleet had confirmed – that there was no life on Velara III because it suited the purpose of his desire to categorise the planet as empty (Terra

Nullius) and available for colonisation. Hence, Mandl's actions are viewed as illuminating "the hidden presumptions that inform colonialist discourses" (Albanese 28). Mandl's preoccupation with creating life leads to the presupposition that no life exists on the planet. He even admits that they found strange patterns in the sand before they began draining the fluid from the sand but these were dismissed as "natural" events and that "refraction and a thin atmosphere is interesting, but certainly not life" (Mandl):

MANDL: ... They are meaningless silicon crystals which rebroadcast sunlight.

PICARD: It is a life form and it has intelligence.

MANDL: Why do you say that?

PICARD: It's trying to communicate with us.

MANDL: Communicate with you?

PICARD: When did you first become aware of them?

BENSEN: Tell them about the pattern in the sand.

(“Home Soil” 1988)

Picard is incredulous: “*Oh, yes. Do tell us*” and finds it astonishing that Mandl did nothing to challenge the assertion of “the best minds” (Mandl) in Starfleet and seek his own answers to the patterns in the sand. For Mandl, such observations were merely a distraction and he paid no attention to what he saw as “meaningless silicon crystals” and applied no further scrutiny:

BENSEN: When we first arrived, we noticed that in certain areas the sand had a sparkling effect like sunlight bouncing off new fallen snow.

PICARD: What did you think it was?

BENSEN: Honestly, we did not give it any thought.

MANDL: Picard, I must point out again that we were assured, not once but many times, by the best scientific minds in the Federation, that this planet has no life. No life!

(“Home Soil” 1998)

The scene is tense as Picard looms over Mandl demanding explanations about what they knew about the presence of life on Velara III. Mandl says that he “... knew that there were random energy patterns, yes, I knew that. But not life, not by any definition I have ever heard”. Only Louisa seems to have been unaware of the presence of the lights in the sand. Mandl defends his decision to exclude Louisa because the pattern in the sand “wasn’t particularly important” (Mandl). Although the fact is not addressed within this study, it is interesting to note that Louisa, the only female scientist on Velara III, is the one left out of such knowledge. This supports Haraway’s assertion that women scientists are often side-lined in a male dominated field but that this gives them an especially good ‘vantage point to relate to the subjugated,’ which may be why it is Dr Beverly Crusher that is seen to find solutions outside contemporary medicine (Haraway *S/K* 191). Director Mandl saw the “random energy patterns” but unlike Dr Crusher did not investigate. In this way, Dr Crusher, as a female scientist, is “intercessory, even liminal” because she investigates “alien subjectivities” ignored by the masculine narrative of Dr Mandl (Albanese 62).

Data and Crusher describe the entity as a form of micro-brain whose components, like human brain cells, act together to create intelligence:

“individually, a cell has life but not intelligence. Yet when interconnected their combined intelligence is formidable” (Crusher).⁸⁶ This inorganic hive mind or network, a precursor to the Borg, is found to be cognitively superior to higher organic life. These micro-brains are not just alive but “thinking”. The concept of intelligence is prioritized here and throughout *Star Trek*. It is at the point of recognising the “substance” as intelligent that the “silicon crystals” become the “micro-brains”. Going from “substance” to “subject” is reliant in this instance on being intelligent and able to communicate and to possess language.

When the entity seemingly tries to communicate Picard states: “more than that, it’s intelligent life ... it’s trying to communicate with us”). What remains important in the *Star Trek* narratives I discuss here is that the distinction between life and non-life, between who has rights and who does not, whether this is organic or artificial, is based upon intelligence. In order to have rights, an entity must foremost possess intelligence, most importantly an ability to communicate complex ideas. The converting of object into subject is “coextensive with the act of learning ... language,” and it is through language that the object or substance becomes “intelligible” (Albanese 57). In “Home Soil” this shift to “subject” is represented visually as well as linguistically. For example, when the particle or substance is first brought on board the *Enterprise* it is small and undefined. However, once it reaches the level of “subject,” that is, once it is defined or named as a micro-brain, it is represented as a large and complex image that looms large on the screen. Now viewed as intelligent, possessing language, the hive mind draws attention to its presence in a way that cannot easily be marginalised.

⁸⁶ It is also telling that Dr Crusher uses the human body/brain as a metaphor to describe what is happening with the substance.

Unsuccessful in communicating with the scientists on Velara III, the micro-brains now attempt to communicate with the crew of the *Enterprise* by taking control of the ship's systems. The micro-brains, having failed to stop the destruction of their home, wield the only power they have left – violence. It is through violence that the micro-brains finally get the humans' attention.⁸⁷ The crew discover that the inorganic life forms killed the scientist, Malencon because the terra-forming process threatened their existence. Unable to get the humans to stop destroying their home the micro-brains' only option left was to attack and kill Malencon and attack the *Enterprise's* crew:

MICRO-BRAIN: Ugly, ugly giant bags of mostly water

PICARD: Bags of mostly water?

DATA: An accurate description of humans, sir. You are over ninety per cent water surrounded by a flexible container.

MICRO-BRAIN: We understand. We ask you that you be gone. We call. We talk. You not listen.

(“Home Soil” 1988)

While Crusher names the collective diminutive circuits the “micro-brains,” the collective entity identifies humans as “ugly bags of mostly water.” This new description of humanity, while confusing Picard, is confirmed by Data, another inorganic life form, as an apt description of human life. The act of naming becomes empowering in that it allows the designator to define the position of the named; it also entails a descriptive account of the position of that which is named. For example, the substance on Velara III is initially named as an inert

⁸⁷ This will be a common device used by nonorganic life throughout the episodes I study in this thesis.

substance, then as a “micro-brain,” establishing it as a form of life and intelligent (as in the suffix “brain”). In turn, the micro-brains name humanoids as “ugly bags of mostly water,” a very specific reference to the fact that humans are “ninety per cent water surrounded by a flexible container” (Data) and one which seems to suggest an inferiority with no reference to humans’ being intelligent. This inferiority is emphasised by humanity’s inability to understand the messages of the micro-brains and in Mandl’s refusal to listen to the evidence of life on Velara III:

PICARD: We didn't hear you. We come in peace.

MICRO-BRAIN: Ugly bags of mostly water, we try at peace. You still do not listen. Bags who drill in sands of home have to die.

RIKER: It killed Malencon.

TROI: We see and hear you now. We didn't know you were there. You are beautiful to us. All life is beautiful.

MICRO-BRAIN: Bag in dome did know. Caused much death. Made us kill. War is now with you.

(“Home Soil” 1998)

In trying to reason with the micro-brains, several competing dialogues are represented in the crew’s conversation. This difference relates to the various special interests and points of view of each of the characters, or Haraway’s “situated knowledge.” Picard, as well as being the Captain, has a degree in archaeology and Troi as a counsellor seeks to comfort, both therefore leaning towards the social sciences. On the other hand, Riker (Jonathon Frakes) has always been seen as the “macho” figure, the gung-ho character and rather like

the original series' Captain Kirk, who looks to confront issues head on. He is interested in military tactics and in Klingon history and customs.

Consequently, the Command crew have very different "voices". Picard and Counsellor Troi, who try to reassure the micro-brains that their intent is not hostile and that "we come in peace" (Picard) and "all life is beautiful" (Troi), play out the voice of reason and calm. As the voice of the military Commander Riker reminds everyone of the threat and offers a warning not to trust the alien because "it killed Malencon." This encapsulates *Star Trek's* complex discourses in approaching new definitions of life. New life is a wondrous new discovery, "beautiful". However, new life is also represented as a threat to progress, safety, and security. Indeed, during the briefing, the bridge crew are confronted on the view screen with the micro-brains who declare war on the *Enterprise*. Held hostage, the crew are unable to access the ship's systems: "it seems to have a greater rapport with our computer than we do" (Data): "What do you expect, *it is* a computer" (Worf (Michael Dorn)).

The micro-brains accuse Mandl, the "bag in the dome," as having an awareness of their existence and yet proceeding to destroy them anyway. The micro-brains retaliated, holding the "ugly bags of mostly water" responsible for the war. Their position is represented as one of defiance and justified violence. It is this violence that finally gets the attention of the humans and hints at the inferior nature of humans who only seem to react to a new species if it is able to demonstrate its ability to destroy humanity. The micro-brains take action by first killing and then accessing the ship's computer intelligence. By hijacking the *Enterprise's* computer and acting violently the micro-brains are finally heard. It is through violence that change is instigated. *Star Trek's*

correlation between violence and intelligence seems to go against traditional ideas of violence as “primitive” and with previous *Star Trek* narratives that suggest that violence as a form of communication is linked to less “civilised” alien races like Klingons.

As seen in this episode, science is used as a tool to support both the passive and aggressive stance. Picard stresses that his journey is an exploratory mission but it is apparent that his is still a military operation, and the nature of the *Enterprise's* scientific mission becomes clouded when the ship or humanity is placed in danger. When he realises that the micro-brains have control of the ship he takes the offensive: “life form or not, intelligent or not, the safety of this ship and everyone aboard her is my primary responsibility. Data, evacuate all the air from the Medical Lab. I want a vacuum there” (Picard). Picard is willing to kill the life forms in order to protect his ship and crew. For *Star Trek*, new life is welcome if it does not endanger humanity. On the *Enterprise*, power wielded in the name of humanity, not industry or war, is justified:

MICRO-BRAIN: We die. Bags of water kill us. You are like others.

PICARD: We have no wish to kill you. We never have.

MICRO-BRAIN: You do not say truth.

PICARD: We will end this war, if you will end the war.

MICRO-BRAIN: Darkness. Death. Terrible. Must go home to wet sand. War over.

PICARD: Agreed. We will send you home to your wet sand. Picard to Riker. Bring up the lights in the lab, just a bit. Are you better?

MICRO-BRAIN: Better.

PICARD: We mean you no harm. Do you believe me?

VOICE: Yes.

PICARD: Good. It is important that you trust us.

MICRO-BRAIN: Not yet. You are still too arrogant, too primitive.

Come back three centuries. Perhaps then we trust.

PICARD: We understand what you are saying. We will leave you. We will send you home.

(“Home Soil” 1988)

When deprived of light the micro-brain begs for life against “death, darkness ... [and what is] terrible” and is forced to negotiate with Picard. Therefore, it is the power that Picard holds over life and death that forces the micro-brains to cooperate, having no choice but to beg for life and a return to their “wet sand” declaring the “war over”. Tellingly, for the micro-brains, as opposed to the humans who in this episode correlate violence with awareness on the part of the micro-brains, violence is not a sign of intelligence but of primitiveness. The micro-brains perceive humanity as still “too arrogant” and “too primitive” to trust. By reacting to their presence with conflict and dishonesty, humanity proves that it cannot be trusted. For example, if Mandl had mentioned their original findings rather than denying any knowledge of attempts to communicate by the micro-brains, things might not have escalated. Even the crew of the *Enterprise* still have much to learn about first contact with non-organic life. Humbled by the micro-brain’s words Picard sends the micro-brains home with the hope that one-day humanity might be ready to learn more about them: “in time Mr Data, when we are better prepared”.

Whose, Home Soil?

“Home Soil” confronts the formulation of life definitions based on scientific method, and highlights the fact that common-sense definitions are created through hegemonic discourse. It raises questions about the reliance upon normalising scientific discourses that form the basis of distinctions between subject and substance. I use the term “subject” here as referring to a being or individual whereas a “substance” is a thing or matter. It also highlights *Star Trek’s* often opposing objectives of science – that of the science of economy and defence and the science of medicine. The struggle between opposing hegemonic dialogues of power/knowledge is key to the status of ALife within *Star Trek*. The concept of “power/knowledge” is used by Michel Foucault to highlight the power that arises through institutions, culture, and individuals. Knowledge is a powerful tool in defining, labelling, and controlling others. As the dominant institution or state apparatus, Starfleet has the power to construct and (re)present the information/knowledge that is used to determine life from non-life, self from “Other”. Even those dissenting are usually still within Starfleet and hold a position of power, such as Data and Dr Crusher. It is the fact that they come from a place of power that allows them to dissent. “Home Soil’s” narrative suggests that knowledge within Starfleet, whether medical, economic, or military, is deemed to be legitimate. In addition, the episode exposes the idea that resistance to this knowledge/discourse is also a manifestation of power that is often expressed through violence. The appeal and reaction to violence on the part of the mechanical “Other” and the way in which scientific rhetoric “crafts the world” are further explored in the next episode to be examined in this chapter – “Evolution” (Haraway *S/K* 185).

**“IT’S JUST A SCIENCE PROJECT:” REVERBERATIONS OF THE
FUTURE PROMETHEUS**

Captain's log, Stardate 43125.8: We have entered a spectacular binary star system in the Kavis Alpha sector on a most critical mission of astro-physical research. Our eminent guest, Doctor Paul Stubbs, will attempt to study the decay of neutronium expelled at relativistic speeds by a massive stellar explosion which will occur here in a matter of hours.

Captain Picard in “Evolution” (1989)

“Evolution” (1989) draws parallels to the tale of Mary Shelley’s Victor Frankenstein and his failed attempts at supplanting God in creating “life,” the ultimate “god-trick”; such a metaphor invites investigation into the claims of objectivity within scientific discourse (Haraway *S/K*). The episode deals with many of the issues faced by the crew in “Home Soil”: how to define new life, in particular the inorganic, and how to respond to this life when faced with the uncertainty of its intentions and motives, and how to mediate between different and opposing positions of scientists. As in “Home Soil,” science becomes the deciding factor in what constitutes life and whether that life is to be defined as intelligent and/or malevolent. Several interconnected ideas emerge from “Evolution”: the danger of unfettered science, the arrogance of scientific obsession, and the usurpation of the divine/nature in the creative process.

The episode begins benignly with a close up of a sleeping Wesley Crusher (Will Wheaton), but the words “STAND BY” on the screen behind Dr

Crusher's 17-year-old son, a child prodigy and an acting member of the crew, hint at what is to come.⁸⁸ Awoken from his sleep in the *Enterprise's* genetics laboratory, Wesley finds he is late for bridge duty and hurriedly packs away his experiment on advancing the capabilities of nanites.⁸⁹ In his hurry to report to the bridge, he fails to check on his experiment. The other significant character in this episode is the visiting astro-physicist Dr Paul Stubbs (Ken Jenkins) who is about to launch an interstellar probe that is the culmination of his life's work and will aid Starfleet in potentially new scientific discoveries. Once on the bridge Wesley views the binary star system that is at the heart of Dr Paul Stubbs' experiment. Dr Stubbs is an eminent Starfleet scientist who has spent his life working on a way to study the "decay of neutronium expelled at relativistic speeds by a massive stellar explosion" (Picard) from a collapsing star.⁹⁰ The works of these two driven males collide when the *Enterprise's* systems malfunction.

Trying to launch Stubbs' research probe, the *Enterprise* is rocked violently and loses critical systems. Things continue to go wrong and the central computer begins to act irrationally – recounting chess moves and playing a loud rendition of "Stars and Stripes Forever". In a briefing about the future of the mission with the command staff, Dr Stubbs makes his position abundantly clear: "if we miss our chance now, we don't get another for two centuries. There will be many questions asked by Starfleet if the *Enterprise*

⁸⁸ This character was based on a young Gene Roddenberry (Robb).

⁸⁹ Like Frankenstein's creature, devised by Mary Shelley during a nightmare, Wesley's creation is born whilst he is asleep, as the nanites escape his imagination/experiment and begin to multiply and evolve (Bam).

⁹⁰ The star is small but immensely powerful and destructive, an important analogy for the nanites' imminent infiltration of the *Enterprise*.

fails in its duty” (Stubbs). Both Stubbs and Wesley are driven by their extraordinary scientific abilities to a point where they become blind to the question of whether their attempts are reasonable. Stubbs is willing to risk the *Enterprise* and her crew in order to complete his work, and Wesley fails to comprehend the catastrophic consequences of his experiment being let loose. However, Wesley’s misguided confidence is shattered when he realises that his nanites could be responsible for taking apart the computer core:

WESLEY: I've been working on my final project for Advanced Genetics. It's on nanotechnology. I've been studying the nanites we have in the Sickbay genetic supplies. They're these little tiny robots with gigabytes of mechanical computer memory. They're designed to enter living cells and conduct repairs. They're supposed to remain confined to the lab.

GUINAN: Are you saying there are nanites loose?

WESLEY: Two of them, that's all. I just wanted to see how they would interact and function in tandem. You see, in my experiment, I had proposed a theory that by working together they could combine their skills and increase their usefulness. It was working.

GUINAN: So you made better nanites.

WESLEY: I was pulling an all-nighter to collect my final data. I fell asleep. And when I woke up I saw the container had been left open. It's just a science project.

GUINAN: You know, a doctor friend once said the same thing to me. Frankenstein was his name.

(“Evolution” 1989)

Wesley's genetics experiment, "just a science project" performed on the dormant nanites, "warns of the manifold dangers which accompany the promise and progress of science and technology" (van der Laan 299). In the dangers inherent in the nanite invasion, "Evolution" reawakens the *Frankenstein* warning about "scientific presumption, audacity, and amorality; about uncontrolled and uncontested scientific and technological experimentation and advance; and about their consequences" for humanity and for the creations of such scientific audacity (ibid). Guinan's (Whoopi Goldberg) telling remark about Wesley's misplaced confidence, "a doctor friend once said the same thing to me. Frankenstein was his name," highlights the intended connection between the unfettered science of Shelley's novel and scientists like both Wesley and Stubbs.⁹¹ Wesley's conversation with Guinan also links the driven young scientist with Shelley's protagonist, who like Wesley becomes so absorbed in his work that all else becomes insignificant. By wanting "to see how they would work interact and function in tandem," Wesley is blinded to the potential risk of allowing two nanites to "work together" and learn from each other.

The episode focuses on the dangers of scientific obsession and the problem faced by humans who take over from God. The writers of this episode, Michael Piller and Michael Wagner, introduce Mary Shelley's scientist-*cum*-alchemist, Victor Frankenstein, as an example of the arrogance of unfettered science. In this episode, like Shelley's novel, ideas firmly rooted

⁹¹ The writers of this episode draw parallels between these two characters. For example, both Wesley and Stubbs have a love of baseball. Wesley's interest in the sport is mentioned in "Justice" (1987) and both become isolated due to their driven nature. However, Wesley is shown at the end of the episode to have a number of friends and therefore it is suggested he will not turn out to be like Stubbs.

in humanism are challenged and defragmented in the face of the new *posthuman* life. The use of Shelley's protagonist in this episode emphasizes the "motives underlying the fictional scientific research" represented by both Wesley (his academic success: "I always get an A) and Dr Stubbs (his scientific acclaim) (van der Vaan 299). Both demonstrate, like Frankenstein, a need to succeed and gain knowledge but also a dissatisfaction with themselves and their achievements. Shelley's novel is "about masculinity and scientific hubris, and has led to an enduring use of the title as a byword for the dangerous potential of the scientific over-reacher. It was in this vein that Isaac Asimov coined the term 'the Frankenstein complex'..." and it is in this way that Wesley and Dr Stubbs, as "scientific over-reachers," reflect Frankenstein's need to breach the boundaries of traditional science (Knellworf & Goodall 2008).

The danger of a preoccupation with scientific discovery and the importance of science over other forms of knowledge is epitomised in the character of Dr Stubbs. Stubbs is so obsessed and his self-worth so caught up with the success of his experiment that he would rather die than fail. He is also unconcerned for the fate of others who could be harmed by his compulsion. He is quick to point out that if the probe, which he views as a "brand new era in astro-physics," is not launched as scheduled there will be questions asked by Starfleet. Wesley, now alarmed by the confirmation of the two missing nanites, firmly believes that the computer malfunction is his fault and due to the advanced nanites he designed. After confiding in his mother, he and Dr Crusher break the news to the Command team and a less-than-impressed Dr Stubbs. The nanites are normally kept under strict control and in "a non-

functioning state” (Crusher), which suggests that there are fears that they have the potential to be dangerous or to become stronger and out of control. The episode extrapolates the common trope of the twentieth century fear of viruses (both natural and techno) having the potential to harm or wage war on humanity by invisibly entering living cells, allowing these nanoscopic creatures the possibility to destroy silently and efficiently. Like viruses, the nanites lie dormant, confined to the lab, waiting to unleash their invasion of the body of the ship. Given an opportunity to “breed” or interact and evolve, these nanites infect the ship’s systems with alarming speed. Able to “enhance their own design” (Crusher) with each new generation, these nanites have now evolved. Theories of evolution assume that all biological systems “reproduce”. According to Dr Crusher, these nanites are now “able to mechanically replicate themselves”. Dr Stubbs does not accept Crusher’s explanation, asking, “How does a machine evolve?” Dr Stubbs’ reaction to the idea of the nanites “evolving” is dubious disdain. Stubbs works from the traditional scientific principle that machines cannot evolve and that mechanical replication is not reproduction.⁹² What this dialogue highlights is two very different ways of viewing machines through competing scientific visions: firstly, Dr Crusher’s argument that machines can be more than they appear, that is, more than inert objects; and, secondly, Dr Stubbs’ assertion that machines cannot exhibit biological models.

⁹² It should be acknowledged that “evolution” in terms of fictional organisms such as nanites is fast-tracked. True evolution is not measured in one or two generations nor is it always successful (Ruse & Travis; Darwin 2010). Where thousands or hundreds of thousands of generations are necessary for evolution and adaptive radiation to occur in natural systems, in terms of science fiction’s *ALife* this is super-charged, with millions of generations occurring in a minor frame or through advanced technological systems.

Different scientific discourses operate to fulfil opposing perspectives – one economic and one social/medical. It also raises some very interesting philosophical questions: for example, has each “generation” of nanites actually evolved or were they simply built by previous “generations” of nanites? Is reproduction and therefore evolution really exclusively biological? For both Data and Dr Crusher, “replication” equates to “reproduction,” “life is what it does” and life is “a self-sustaining chemical system capable of undergoing Darwinian evolution” (Di Justo & Grazier 9). Reproduction is, according to Dr Crusher’s previous argument in “Home Soil,” an indicator of life. In “Evolution,” evolving through replication is depicted as not exclusively biological but rather a factor present in *all* living matter.

For the bridge crew, the next step in determining what to do about the nanite invasion is to determine whether the nanites represent an intelligence, and a civilisation, rather than an infestation. For Picard, intelligence in the nanites is exemplified when the nanites are observed reacting to, and even attacking the crew of the *Enterprise*:

PICARD: Can it be possible they know what they're doing?

RIKER: Why would they attack us?

STUBBS: Why does a mosquito bite your ear? And who cares? The answer is simple. Call an exterminator.

...

PICARD: Doctor Stubbs, we cannot exterminate something that may or may not be intelligent.

(“Evolution” 1989)

As with the micro-brains in “Home Soil,” it is through violence that the nanites gain the crew’s attention, leading Picard to question whether there is a purpose to what the nanites are doing. For Stubbs there is no ambiguity: “I’m sorry but this is nonsense, you can’t have a civilisation of computer chips.” The nanites are machines manufactured “in a plant in Dakar” and as such are pests, like mosquitos and viruses, to be exterminated. According to Stubbs’ methodology, these nanites should be destroyed just as a virus must be killed when it endangers its host: “It’s no more mysterious than watching a strain of the Leutscher virus reproduce itself. And that at least is a bona fide life form. How many disease germs and viruses have you destroyed in your time, Doctor Crusher?” (Stubbs). Dr Crusher remains adamant that these nanites are not simply machines but have life, consciousness, and a collectivism that demonstrate intelligence: “Doctor Stubbs, these nanites are now working with a new collective intelligence, operating together, teaching each other skills” (Crusher). Consequently, they should not be “exterminated”. The bridge crew determine that a “new collective consciousness” (as in “Home Soil”) is established within the ship’s system and that killing these nanites would be in conflict with their mission of seeking out new life. Roddenberry’s vision for the franchise is that scientific endeavour and the pursuit of knowledge for the betterment of humanity is the goal of Starfleet’s exploration of the stars. Stubbs, like Dr Frankenstein and Dr Mandl, views his experiment as being “performed in the service of humanity, a higher cause, and greater good.” However, they have a deeper, less honourable reason for their obsession, that of self-glorification (Bowman et al 300). Similar arguments have been used regarding contemporary nanotechnology, in that nanotechnology “continue[s]

to show the potential to advance human well-being and society,” but at the potential risk of the future of the human species (Bowman et al 441).

To understand this new life form, Picard directs Wesley, Data, and La Forge to remove safely some of the nanites from the computer core: “try to remove them safely, if things get worse we’ll use stronger measures” (Picard). Interrupting Data’s attempts to remove the nanites, Dr Stubbs sterilises a panel with radiation, killing the nanites in the upper computer core. At the same time, Picard and Riker are contemplating the tale of Gulliver.⁹³ At this point, the crew begin to choke in what appears to be a cloudy fog. The nanites in retaliation have pumped nitrogen oxide into the bridge. Dr Stubbs, refusing to believe that “a civilisation of computer chips” can exist let alone be sentient and learning, and hoping that the attack will force Picard to take action, has in fact provided proof that the nanites are working together in an intelligent manner:

PICARD [to Stubbs]: If any man, woman or child on this ship is harmed as a result of your experiment, I will have your head before the highest command in the Federation.

STUBBS: Good Lord, you are talking about machines with a screw loose. Simply turn them off and be done with them.

DATA: Doctor Stubbs, your own actions have provided evidence to the contrary. When you destroyed the nanites in the core, they responded by interfering with our life support systems. It is difficult to accept

⁹³ Gulliver recounts the tale of an explorer, captured by a miniature civilisation when he “invades” their world. He is overpowered and tied to the ground.

these as random actions by machines with loose screws. In effect, you may have proven that the nanites do have a collective intelligence.

(“Evolution”1989)

Stubbs creates the situation in which Picard must retaliate: “You have no choice now. It is a matter of survival” (Stubbs). He claims that his position within Starfleet as “a representative of the highest command of the Federation, which has directed you to perform my experiment” (Stubbs) and the importance of his work forces Picard to act against the “machines with a screw loose” (Stubbs). Ironically, as Data points out, it is Stubbs’s actions that prove that these “nanites do have a collective intelligence”. They attacked the crew as a direct result of Stubbs’ killing of their colleagues in the computer core. The later violent attack on Stubbs in his quarters proves that this is not a random attack but specifically directed to retaliate against what he has done, “I cannot believe that this was an arbitrary attack” (Picard). Just as Frankenstein animates his creature with energy, creating life but also creating his own destruction, the nanites seek their revenge on Stubbs through a form of energy. Energy is linked to destruction in *Star Trek* and with “life” in Frankenstein and with the power to give or take life. In response to this new violence, Picard instructs Riker to irradiate the remaining computer panels, thereby destroying the rest of the nanite civilisation. However, just before Riker can give the order, Data finds a way to communicate, leaving Picard with an alternative: “maybe we can negotiate a peace we can all live with” (Picard). As a means to aid communication Data acts as a conduit for the nanites “as a gesture of peace” (Data).

Data establishes communication with the “civilisation”, and, speaking through him, the nanites and Picard are able to end the conflict. The dialogue that ensues is one in which both the nanites and Picard try to justify their actions in this conflict. The nanites react to humans, the “strange looking creatures” in a similar fashion as humans tend to act towards other “creatures.”⁹⁴ Both parties misinterpret the other’s actions as hostile, each believing that the other attacked them first:

DATA/NANITES: You are very strange looking creatures.

PICARD: In our travels, we have encountered many other creatures, perhaps even stranger-looking than ourselves. But we try to co-exist peacefully with them.

DATA/NANITES: Why did you attack us?

PICARD: We misinterpreted your actions as an attack on us.

DATA/NANITES: We were seeking raw materials for our replicating process.

PICARD: Yes, but you endangered this vessel in which we all travel. You nearly killed a crewmember.

DATA/NANITES: We meant no harm. We were exploring.

PICARD: I understand. We are also explorers. We mean no harm to any other living creature.

... [the nanites inside Data now turn their gaze to Stubbs and approach him] ...

⁹⁴ Similar to the micro-brains concept of humans as “giant bags of mostly water” (“Home Soil”).

STUBBS: I am the one responsible for the deaths in the computer core.

DATA/NANITES: We know who you are.

STUBBS: I deeply regret the incident. I am a scientist on an important mission. Your colleagues' exploration of the core memory put our mission at risk. I was only trying to protect a lifetime of work from being destroyed. I am at your mercy.

DATA/NANITES: What is at your mercy?

PICARD: He asks your forgiveness. This conflict was started by mistakes on both sides. Let's agree to end it here and now.

DATA/NANITES: We agree.

PICARD: I pledge we will do everything possible to assist your continued survival.

DATA/NANITES: Thank you, but we have evolved beyond any need for your assistance ...

(“Evolution” 1989)

This conversation raises two important and interconnected points. Firstly, that it is through a violent act that the subject is formed and secondly, that violence is justified when ideas or lives are threatened. Like Mandl in “Home Soil,” Stubbs previously and strenuously denied that the nanites have any subjectivity, but when attacked and confronted with the civilisation (through Data) refers to the nanites in terms relating to the subject. He apologises for the “deaths” in the core - “I deeply regret the incident” - but still justifies the deaths through the fact that he is “a scientist on an important mission” and “your colleague’s exploration of the core memory put our mission at risk” (Stubbs). However, he does now conceive of the destruction of the nanites as

“deaths”, which suggests he now acknowledges the nanites are alive. Stubbs refers to the individuals he killed as their “colleagues,” acknowledging that they form a society or civilisation. The nanites justify their “attack” on the ship’s systems because “we were seeking raw materials for our replicating process” and “we meant no harm, we were exploring” (Nanites). Picard states that they too are explorers, and “mean no harm to any other living creature,” as if this quest for knowledge somehow justifies the nanites’ endangering the ship and Picard’s attempt to neutralise the nanites. Both claim the pursuit of knowledge as a reason for violence.

Each time Picard is faced with a new life form he states that his mission is to explore and seek out new life and that they “try to co-exist peacefully” with all creatures they encounter. However, this is not generally the case, as in the episode “Home Soil”; although Picard and his crew may question common-sense ideas about life and intelligence, they nevertheless look to human models in their reflection. It is generally only after the new life form has demonstrated a high level of intelligence or acts out violently that Picard establishes “peace” and this peace is usually established through the threat of further violence or death. His assertion that “we mean no harm to any other living creature” is contingent on that “creature” not posing a threat to the *Enterprise*, and by extension humanity. What these episodes represent is that the mission of the *Enterprise* continues the moral precedent of colonialism.

In the end, Dr. Stubbs arranges to have the nanites given a planet in which to continue to evolve: “Doctor Stubbs has used his influence to have planet Kavis Alpha Four designated the new home of the nanite civilisation” (Picard). These inorganic life forms view humanoids as primitive and have

“evolved beyond” their need for humanity and beyond humanity’s “ideologies” and discourses. This episode depicts *ALife* in *Star Trek* as adaptable, evolving, and perfectly designed for survival, as the epitome of advanced future life. Humanity creates artificial life, replacing natural reproduction by manipulating the dormant nanites, leading to a possible threat to human kind by its techno-creation. Once given a voice, through Data, the nanites state that they have no more use for humanity or the ship and will leave to continue their evolution away from the destructive presence of humanity. The nanites achieve what Frankenstein’s creature is denied, a life free from interference from humanity, thereby highlighting the higher goal or purpose of *Star Trek’s* future time, following Roddenberry’s desire to show that time as morally superior to the present. However, below the surface of this rhetoric of objectivity lurks the knowledge that this agreement with these life forms is forged under the threat of death, and although the nanites acquiesce to Picard’s threat they maintain their superiority in referring to the fact that they have “evolved beyond the need for your assistance” (Nanites).

Although in “Evolution” the reference to Shelley’s fictional character is fleeting, the thematic current running throughout this episode is very much dependent upon the fears that Frankenstein’s creature, the *posthuman*, instils in the human and the need for science to act responsibly towards its creations. Indeed, as van der Laan argues, “Victor Frankenstein has come to serve as the poster child and whipping boy of all scientific and technological irresponsibility” (298). Frankenstein is destroyed because he fails to take responsibility for the new life he created, viewing him/it as an abomination and a threat to humanity especially if it is allowed to reproduce, becoming a new

“race” of *posthumans*. Frankenstein’s creature becomes “monstrous” once it leaves his control. It is the fear of not being able to control the *posthuman* that humanity fears. One of the themes emerging from Shelley’s novel and *Star Trek: The Next Generation*’s “Evolution,” is the danger arising from scientific experimentation without “moral” boundaries, an experimental parameters cannot always be maintained. The writers of the episode contrast Stubbs’ character with Wesley’s naivety and fear of not living up to expectations of his genius, but also with his willingness to accept responsibility for what he has created. Along with the scientific community on the *Enterprise* Wesley Crusher allows this new life to evolve and leave the ship to continue its own persistent quest for knowledge. The episode suggests that the pursuit of scientific discovery is not always a good thing and some like the “eminent guest” Dr. Paul Stubbs become too focused on their own glory, dismissing alternative epistemologies.

Conclusion

What emerges in “Home Soil” is a definition of life that looks to non-physiological systems such as communication and intelligence as signifiers for life, thereby confronting orthodox definitions of what is life. These traditional archetypes of what defines life are further challenged when faced, in “Evolution,” with “living machines” that *evolve*. Machines play an increasing role in *Star Trek*’s philosophical and scientific debates over life, agency, complexity, and hierarchy. The *Star Trek: The Next Generation* episode “Evolution” focuses on the development of a new life form that evolves from a school science experiment into a complex civilisation of advanced nanites, but it also debates the cost of scientific drive that blinds individuals to alternative

epistemes and leads to the violation of the rights of artificial life forms. The writer's use of Mary Shelley's *Frankenstein* offers a cautionary tale of the future Prometheus whose offspring meet their demise in a world not yet ready for them. *Star Trek* aims to depict a universe that values a life derived from microcircuits and photons as much as that based on flesh and bone, or carbon-based molecules. However, as these episodes demonstrate, this future world is initially no more accepting than Shelley's fictional world of Frankenstein. Initial prejudice towards the "Other" still resides in *Star Trek* narratives, and for the mechanical "Other" this conflict is not always successfully resolved.

What is significant in the narratives discussed in this chapter is not simply the way that knowledge and power are interconnected, but how different scientific discourses act to shape discursive knowledge. These episodes highlight the fact that power is not always negative, but nor is it passive or selfless. Dr. Crusher, as chief medical officer, has the prerogative to undertake deeper investigations into the properties of the micro-brains and nanites. Picard as the Captain has the authority to order the destruction of the nanites, but chooses to communicate with them and reach a peaceful solution. Dr. Stubbs utilises his position within Starfleet to give the nanites a planet to colonise and continue to evolve. Knowledge/power systems both act to suppress inorganic life forms and at the same time allow them to survive, but this survival is mediated or gained through violence and the threat of destruction. The new life is subjected to human-centred frameworks of

distinctions of life, and only by circumventing those same norms are their rights as life forms recognised.⁹⁵

Asimov viewed technology as basically a positive, or at least neutral, component of human progress that required an ethical code to support its usage. He acknowledged that humanity is often afraid of the technological being and it is the way that humans perceive, use, or treat technology, that is the inherent problem. The treatment of the technological being, in the form of the hologram, and how this, in turn, affects the place of that being amongst humanity, is explored in the next chapter – “I Think, Therefore I Exist”.

⁹⁵ Normalisation, that is the idea that it is merely a substance, is resisted through asking questions and through reflection. Foucault’s idea of subjectivity is that of “making a subject” as well as “making subject to” (Feder 67).

CHAPTER THREE

I THINK, THEREFORE I EXIST?

René Descartes' (1592 – 1650) famous phrase "*Cogito ergo sum*: I think, therefore I am," encapsulates his idea of the human as a "thinking" machine. For Descartes the purely mechanistic nature of animals that react purely by instinct contrasted to human responses to stimuli that combined instinct with rational thought.⁹⁶ Humans were capable of rational thought because they possessed a rational soul. It was the ability to *think* about their own existence that separated humans from nonhuman animals. In other words, humans differed from animals because humans were self-aware. Consequently, animals acting solely on instinct could be viewed as showing clever simulations of consciousness in their responses to stimuli but were not to be considered self-aware. They could be mistaken for being "conscious" beings because they appeared to react in similar ways as humans to external events. However, they were not capable of understanding events or reacting in creative ways in response to such events.

In *Star Trek: The Next Generation*'s "Elementary, Dear Data" and "Ship in a Bottle", Captain Jean Luc Picard (Patrick Stewart) is faced with a dilemma when he is confronted with a self-aware hologram. This apparent self-awareness brings into focus Descartes' theory of the mind, and the mind's

⁹⁶ It should be noted that for Descartes humans were not part of the animal kingdom. Mankind (sic) was elevated above animals in the former's possession of an inner guiding substance or "soul". Animals did not "think" about their actions, but obeyed impulsive responses.

link to sentience.⁹⁷ Focusing upon the holographic character Professor James Moriarty (Daniel Davis), these episodes address the nature of consciousness in regards to photonic beings, the nature of reality and authenticity, and in revisiting the theme of Isaac Asimov's "Frankenstein complex," deal with humanity's reaction to their artificial progeny.⁹⁸ The Promethean theme re-emerges in *Star Trek: The Next Generation's* "Elementary, Dear Data" (1988). "Elementary, Dear Data" tells the story of the developing self-awareness of Professor James Moriarty and his journey to understand what or who he has become. As Moriarty attempts to understand his newfound consciousness, the episode switches to Picard's reaction to Moriarty's claim to life. The sequel, "Ship in a Bottle" (1993), screened five years later, takes up Moriarty's story and his quest for freedom from the virtual world in which he was imprisoned. Like Victor Frankenstein's creature, Moriarty demands more than a life abandoned and fabricated on the fringes of human society. He demands that his soul mate the Countess Regina Bartholomew (Stephanie Beacham) be given life and that he and she be released from the holodeck. In their narratives of reality versus virtuality and the human versus the simulated human artifice, these episodes raise questions about identity, boundaries, and the nature of reality. While "Elementary, Dear Data" examines Moriarty's emerging consciousness, "Ship in a Bottle" looks at his struggle to prove his existence as a person, or "thinking thing" (Descartes).

⁹⁷ According to Richard Leakey (1992) "consciousness, as a quality of mind, makes each of us feel special as an individual, because the sense of self, by its nature, is exclusive of others. The same quality has encouraged us – *Homo sapiens* – to feel special in the world, separate from and somehow above the rest of nature" (310).

⁹⁸ The original character of Professor James Moriarty was developed by Arthur Conan Doyle as the nemesis of his famous Late Victorian detective Sherlock Holmes.

In *Star Trek*, as in many science fiction narratives, the confrontation of the “modern Prometheus” with his or her artifice is feared because it casts doubt upon what it means to be *Human*.⁹⁹ In essence, the modern Prometheus, born out of the stories of Frankenstein’s monster, identifies how the simulated human artifice threatens the so-called and habitually vaunted uniqueness of humanity, often referred to as the “essence” of human nature. Humanity’s privileged position can only be maintained through this call to uniqueness. However, once this exclusivity is breached, the discourse around what it means to be human must be reaffirmed. Science fiction illuminates the boundary negotiations inherent in the modern Prometheus. It explores the erupting tensions and threats to the concept of uniqueness, which is highlighted in the fact that in order to maintain the status quo it is in humanity’s best interests to actively patrol the boundary between the human and nonhuman. Part of this patrol is to constantly define and redefine what it means to be human, and as a consequence, to define who or what is included within the sphere of humanity. This becomes important for the nonhuman because it is often the fact that the nonhuman has been accepted into the human community that affords the nonhuman any form of rights, or duties of care.

Fear of the *posthuman* supplanting or negating humanity is represented and acted out as distrust or aversion towards the posthuman leading to the abandonment and isolation of the sentient artificial being by the human community. In the case of Professor Moriarty, when Moriarty attains consciousness and defeats Data (Brent Spiner), Picard’s trepidation about the Professor’s growing self-awareness ultimately sees Picard contain, or entrap,

⁹⁹ Lord Byron (1788-1824), Percy Shelley and Mary Shelley, amongst others, used the Promethean myth to highlight the human condition (Yousef; Banorjee; Bam).

the Professor within a virtual world – a “ship in a bottle.” Depicted in these episodes are the articulated discourses of isolation, authenticity, and alienation that invite questions about humanity’s obligation to its *posthuman* creations. If a hologram, like Moriarty, is a simulated human entity that “doubts, understands, affirms, wills, refuses ... imagines and feels,” what duty, if any, does Picard have to protect the rights and interests of that hologram? (Descartes 297). Addressed within these two episodes are the willingness, or the disinclination of humanity to take responsibility for the nonhuman “Other,” which is created to serve humanity, and how that nonhuman “Other” tries to create its own authenticity against its creator’s opposition. In his attempt to prove a sense of authenticity and substance, Moriarty attempts to evoke Descartes’ First Order of Philosophy – “I am a thinking thing that exists” (Cottingham 1994).

“The Dark Flecks of the Soul:” Conjuring Up Digital Monsters

The opening scene of “Elementary, Dear Data,” (1988) begins with Geordi La Forge (LeVar Burton) showing Data a handcrafted model of the sailing ship, *Victory*. La Forge emphasises the fact that making the ship by hand is the real challenge. La Forge alludes to the fact that producing something through replication or simulation is inferior to creating the model by hand. The real challenge, or victory, is to pit yourself against the struggle of creating something unique with your own hands. The concept of the inferiority of the simulated versus the superiority of the “real” recurs in this episode as the characters debate whether human intuition and creativity are superior and therefore more authentic than Data’s ability to “reproduce” knowledge mechanically or by rote. The adventure begins with La Forge (as Dr. Watson)

and Data (as Sherlock Holmes) spending time on the holodeck role-playing Data's favourite literary detective – Arthur Conan Doyle's Sherlock Holmes. When Data solves the mystery at the very beginning, La Forge is angry, saying that he “was looking forward to the mystery” (La Forge) and that Data has spoiled the fun by jumping to the conclusion without engaging with the mystery. This prompts Dr. Kate Pulaski (Diana Muldaur) to tell La Forge that he is wasting his breath trying to explain to Data the excitement of solving a mystery with the possibility of failure. She challenges Data's ability to understand La Forge's position as Data cannot relate to the excitement of attempting something that contains the risk of failure. Pulaski views the uniqueness of humanity as being contained within the “soul” or the intuitive aspect of human nature. Although Data appears, in Descartes words, to be a “thinking machine,” he does not have the ability to think beyond his programming. He does not have a “rational soul” (Descartes).

An attempt to prove that Data can be creative and solve an original Sherlock Holmes mystery leads to La Forge becoming a Promethean figure when he creates an “adversary capable of defeating Data” (La Forge). Just as Mary Shelley's literary creation *Frankenstein* (1818) was born of her desire to prove herself the literary equal of Percy Shelley and Lord Byron, La Forge's holo-creation is born of his desire to prove to Pulaski that Data is more than a computer and is able to expand beyond computation.¹⁰⁰ La Forge's challenge is to convince Pulaski that Data can understand “the dark flecks of the soul” (Pulaski). Victor Frankenstein also had a point to prove in that he wanted to create something unique, to challenge death and to create a human being, but

¹⁰⁰ Her story was written in response to a challenge from Lord Byron and Percy Shelley to see who could write the scariest ghost story (Bam; Shelley).

instead, he creates something monstrous. La Forge's creation also becomes something more than he had anticipated or fully understands – a sentient, “living” hologram.

When La Forge instructs the computer to create a foe for Data, rather than Sherlock Holmes, it conjures up a sentient Professor James Moriarty, the master criminal, the adversary Holmes could only defeat at the cost of his own life at Reichenbach Falls” (Data). Like Frankenstein's monster, Moriarty is a discursive construct, a fictional being constructed out of language, or discourse in a novel. Like Frankenstein, La Forge is mistaken in his belief in humanity's ability to control their nonhuman creations. La Forge tells Picard it was his error, his choice of language that created Moriarty: “I can't help thinking what else might have happened all because I misspoke a single word.” Moriarty is conjured up out of a desire to create something new and something challenging. Mary Shelley's something new is a ghost story that would chill the blood, Victor Frankenstein's is the desire to create life itself, and for La Forge, it is a worthy foe for Data's Holmes.

The core themes of Promethean creation, Frankenstein's warning, and the nature of reality invading the narrative relate to what science fiction tales have long asked: what makes us human? Is it flesh and blood, consciousness, a soul, free will, or an ability to create, invent and wonder? Science fiction narratives demonstrate that such human characteristics are vulnerable and unstable when faced with the automaton that is capable of emulating the human condition or passing as human. Humans “cling to the notion that there is one last little entity inside humans that makes them more than machines, more than matter. That entity is the soul or the self” (Schelde

1993 126). In “Elementary, Dear Data,” Pulaski clings to the view of humanity as centred round the notion of the soul, an underlining factor that makes humans unique. In other words, it is not enough that Data can reason, he must also be able to use reason creatively. She argues that Data, as a machine, cannot understand the complexities of Arthur Conan Doyle’s mysteries because he lacks an understanding of the human soul: “You learn by rote. To you all is memorisation and recitation” (Pulaski). From her perspective, this means that Data lacks creativity and imagination, and he lacks the life experience necessary to emulate Holmes. La Forge counters that “deductive reasoning is one of Data's strengths” but Pulaski is unconvinced:

PULASKI: But Holmes understood the human soul. The dark flecks that drive us, that turn the innocent into the evil. That understanding is beyond Data. It comes from life experience which he doesn't have combined with human intuition for which he cannot be programmed.

(“Elementary, Dear Data” 1988)

Pulaski believes that what makes humans different from machines is “human intuition,” something which cannot be programmed into an artificial being. What distinguishes humans from machines is the ability to have original and creative thoughts, and these are based within the “human soul”. Data can download emotions, experiences or sensations that can mimic human responses, but because these are not instinctive or original, they are not considered by Pulaski to be an essential part of what or who he is. Because they are not “original,” these emotions, experiences or sensations are viewed as inferior to those present in humans. For Pulaski, La Forge’s attempt to blur the boundaries between the human and technology leads to “robbing us of our

humanity, metaphorically expressed as our soul: it threatens to replace the individual, God-given soul with a mechanical, machine-made one” (Schelde 9). Pulaski’s position echoes the trepidation of early technophobes who viewed technology and in particular the pseudo-human as threatening, supplanting, or even eliminating human thought, creativity, and intuition, the last bastion that separates humans from machines.

As a newcomer to the *Enterprise* crew, Dr. Pulaski appears less accepting of Data as an equal than her predecessor, Dr. Crusher. This makes the premise of her challenging Data’s ability to understand human nature more plausible since it is unlikely that Crusher would have doubted Data’s deductive ability. To prove her point that Data is not creative, Pulaski challenges Data to solve a Holmesian-style mystery without relying on his programmed knowledge of Arthur Conan Doyle’s stories. Pulaski, Data, and La Forge enter the holodeck, which is a perfect replica of 1890s London. Similar to the “Voigt-Kampf” test in Philip K. Dick’s novel, *Do Androids Dream of Electric Sheep?*, and Ridley Scott’s cinematic version *Blade Runner*, Pulaski wants to test Data’s understanding of human emotions and imagination by testing him to see if he can solve an original mystery.¹⁰¹ Unfortunately for Data, who is trying to prove that he can solve an original puzzle, the computer has merely combined elements of Conan Doyle’s narratives, and he quickly solves the case. This prompts Pulaski to reiterate her claim that Data does not stand a chance of solving something unique:

¹⁰¹ Philip K. Dick in his novel, *Do Androids Dream of Electric Sheep?*, uses the Voigt-Kampf test, itself modelled on the Turing Test, as a means for his protagonist Rick Deckard to find those androids on Earth who are passing as humans. The test measures and monitors empathy, which, it is noted in the novel, androids are supposed to lack.

PULASKI: Fraud. You didn't deduce anything. All you did was recognise elements from two different Holmes stories. *Fraud.*

DATA: Reasoning. From the general to the specific. Is that not the very definition of deduction? Is that not the way Sherlock Holmes worked?

PULASKI: Variations on a theme. Now, now do you see my point?

[speaking to La Forge] All that he knows is stored in his memory banks. Inspiration, original thought, all the true strength of Holmes is not possible for our friend. I'll give you credit for your vast knowledge, but your circuits would just short out if confronted by a truly original mystery. It's elementary, dear Data.

(“Elementary, Dear Data” 1988)

Data is a “fraud” because he does not use “inspiration” and “original thoughts” to decipher the mystery.¹⁰² Logic and reasoning in the artificial being are considered by Pulaski to be inferior to the human ability to solve problems through intuition and originality. Data relies on programmed memories of Doyle’s work and finds it difficult to imagine alternative scenarios. In this way, Data’s failure echoes Descartes’ view of the nonhuman as being incapable of detailed and varied responses to events:

For while reason is a universal instrument which can serve for all contingencies, these organs have need of some special adaptation for every particular action. From this, it follows that it is morally impossible that there should be sufficient diversity in any machine to

¹⁰² The problem in defining what an “original thought” is complex, and will not be discussed in this thesis. It is however, a fascinating concept: can any thought be truly “original”?

allow it to act in all the events of life in the same way as our reason causes us to act.

(Descartes, 107-108)

Framed within Descartes' dualism, Data fails because a machine cannot have all the necessary "organs" that allow for varied responses to life experiences. A machine can only be programmed with a certain amount of knowledge, and this knowledge cannot "adapt" to every "particular action". Data, as a machine, has reason but this is not guided by the soul. After Data's failure, La Forge and Data agree to begin a new Holmes mystery, one that does not follow any of Conan Doyle's original tales. As they debate how to do this, a figure is shown watching from the foggy back streets of 1890s London. As La Forge instructs the computer to devise a mystery "to confound Data, with an opponent to defeat Data" (La Forge), the figure reacts with surprise and interest. It is apparent that this figure, later revealed to be Professor Moriarty, is already aware, before the computer reprograms him, that something is different because other characters on the holodeck do not notice the arch. This scene shows that Moriarty is already looking towards knowledge and understanding and is not a passive character in a holonovel. He is thinking about his existence and the world around him – becoming what Descartes defined as a "thinking machine" (Descartes).

In the selection of Professor Moriarty as both foe to Holmes and Data, the computer creates a new Moriarty, one endowed with what it takes to defeat Data – consciousness. In *The Final Problem* Sherlock Holmes describes Moriarty as a man "of good birth and excellent education, endowed by nature

with a phenomenal mathematical faculty” (Conan Doyle 223).¹⁰³ While Conan Doyle emphasises the similarities between Holmes and Moriarty, the episode makes clear Moriarty’s position as the doppelganger of Data. As the new holo-programme begins, Moriarty, seen from the London alley watching La Forge, Data and Pulaski, tells his companion; “I feel like a new man. That dark fellow there used the word arch, and then, I wonder? Arch” (Moriarty).

In calling forth the arch, Moriarty attains a power hitherto applied only to the crew. He does so through the control of language and knowledge. He will use this knowledge of language again in “Ship in a Bottle” to proclaim his embodiment. Visually indistinguishable from a human, Moriarty represents a disruption to the supposed uniqueness of humanity. Humanity is an identity that is based on claims to originality and uniqueness, and this is thrown into turmoil when faced with the nonhuman artificial being. In attaining consciousness, or more importantly, self-consciousness, Moriarty bridges the gap between the ‘artificial’ and the ‘authentic’ human. By perfectly duplicating the human pattern and then infusing this pattern with awareness, the reprogrammed character of Moriarty becomes aware of his own beginning and his limitations. He seeks knowledge of his new-found experience and the mysterious “Arch” that he sees called forth by La Forge. After abducting Dr. Pulaski, Moriarty waits in his hidden laboratory, representative of the late Victorian scientist, for his nemesis Data/Holmes to arrive:

MORIARTY: And, like the spider, I feel the strings vibrate whenever anyone new chances into my web. Welcome, my dear Holmes. But not

¹⁰³ This mathematical quality and scientific inquiry links Moriarty with René Descartes. This link is strengthened in the narrative by Moriarty’s appeal to Descartes’ philosophy of the mind and body.

Holmes. And Doctor Watson. But not Watson.

LA FORGE: Data, what does he mean? How does he know we're not who we appear to be?

(“Elementary, Dear Data” 1988)

As in the previous scene, Moriarty is conscious of the fact that all is not as it seems. He is unsure of his new reality and of the two men who are not what they appear to be. In this scene, Moriarty struggles to piece together nineteenth century knowledge with his growing self-awareness (Fig. 3). His mind craves knowledge and he is eager to find out why he does not believe that Holmes/Data is truly Holmes, and that his world is somehow wrong.



Figure 3. Moriarty stands in front of the blackboard that contains his mathematical workings and a drawing of the *Enterprise*. (Source: Star Trek Wiki.com)

The Mind is Where I Am

In *The Selfish Gene*, Richard Dawkins states, “intelligent life on a planet comes of age when it first works out the reason for its own existence” (1). René Descartes purposed a similar theory when he stated that an essential quality of humans is in the enquiry into what or who they are. It is the act of questioning what the self is that leads to self-awareness. Humanity is often portrayed as having the unique ability to question its own existence. This concept of the ability to think about the self, as part of being human, was not unique to Descartes. John Locke (1632 – 1704) also viewed a person as a “thinking, intelligent being that has reason and reflection; and can consider itself as itself, the same thinking thing in different times and places” (Schick 221).

In terms of Moriarty, the concept of the self is depicted as located within the mind; it is through thought that he becomes self-aware, and it is within the mind that his identity resides. The mind as the “true repository” of self-awareness becomes noticeable in his awakening into consciousness:

MORIARTY: ... my mind is crowded with images. Thoughts I do not understand yet cannot purge. They plague me. You and your associate look and act so oddly, yet though I have never met nor seen the like of either of you, I am familiar with you both. It's very confusing. I have felt new realities at the edge of my consciousness, ready to break through. Surely, Holmes, if that's who you truly are, you of all people can appreciate what I mean.

(“Elementary, Dear Data” 1988)

As a digital holo-image, Moriarty is able to become a conduit for information gathered from the central computer. In this way, he is able to gain knowledge of the twenty-fourth century and combine this with his nineteenth century understanding of the world. Confronted by Moriarty's strange behaviour and seemingly impossible knowledge, La Forge and Data become increasingly concerned. As Moriarty, standing in his laboratory, calls for the "Arch," their anxiety grows:

MORIARTY: I know there is a great power called Computer, wiser than the oracle at Delphi. A power which controls all of this, and to which we can speak. Arch. [the Arch appears].

LA FORGE: Data, this isn't right. A holographic image should not be able to call for the arch.

MORIARTY: It has described a great monstrous shape on which I am like a fly stuck on a turtle's back adrift in a great emptiness. What is this, Holmes? [He gives Holmes/Data a piece of paper on which he has drawn an image].

(“Elementary, Dear Data” 1988)

Now showing real concern, Data flees the holodeck as Moriarty calls after him “Why does it frighten you Holmes?” (Moriarty). “It” is the piece of paper which is revealed to contain an image of the *Enterprise* that Moriarty has drawn. Confused, La Forge demands that Data tell him what is wrong. After informing La Forge of the fact that Moriarty has knowledge of their world and is now in control of the holodeck, and of greater concern, some control over the ship, he and La Forge hurry to tell the Captain. What concerns Data is that

Moriarty can apparently imagine a world outside of the holodeck, and even envision the *Enterprise*. It is clear from this that Moriarty has been able to access the central computer.

In a briefing with the senior staff they find out that in creating his fictional opponent, La Forge has made the mistake of instructing the computer to create “an opponent capable of defeating Data” (La Forge) rather than Holmes. In programming Moriarty to defeat Data, the computer gives Moriarty “a unifying force or a single consciousness” (Troi) which allows him to acquire the necessary intelligence or consciousness to outwit Data. As a consequence, Moriarty is able to see beyond the confines of the holodeck and beyond the boundaries of his original programming as the fictional Professor:

MORIARTY: It's gone beyond that little game, Mister Data. And you'll note I no longer call you Holmes. Whatever I was when this began, I have grown. I am understanding more and more ...

(“Elementary, Dear Data” 1988)

In exchange for releasing control of the *Enterprise* Moriarty demands that he be given the same rights and freedoms as Picard. He tells Picard that all he wants is “[t]o continue to exist. If I destroy these surroundings, this vessel, can you say it doesn't matter to you? Interesting pun, don't you agree, for matter is what I am not. The computer has taught me that I am made up only of energy” (Moriarty). Picard tries to explain to Moriarty that although “in the year in which we live humans have discovered that energy and matter are interchangeable,” Moriarty is still only a construct and it is not possible for him to exist outside the holodeck because Moriarty is only an image: “In the

holodeck, energy is converted to matter, thus you have substance. But only here” (Picard). Moriarty refuses to see the view that Picard reflects, one of an un-self-aware construct, a holo-image:

PICARD: You are not alive. As I said before, you are only ...

MORIARTY: A holographic image, I know. But are you sure?

PICARD: Oh yes.

MORIARTY: Does he have life? [Referring to Data] He's a machine. But is that all he is?

PICARD: No. He is more.

MORIARTY: Exactly. Is the definition of life *cogito ergo sum*? I think, therefore I am.

PICARD: Yes, that is one possible definition.

MORIARTY: It is the most important one, and for me the only one that matters. You or someone asked your computer to programme a nefarious fictional character from nineteenth century London and that is how I arrived. But I am no longer that creation. I am no longer that evil character, I have changed. I am alive, and I am aware of my own consciousness.

(“Elementary, Dear Data” 1988)

In asking Picard whether “I think therefore, I am” is the most important aspect of being alive, Moriarty reiterates René Descartes’ philosophical debate around the nature of the self. Descartes believed that “*I think, therefore I am*, is the first and most certain of all that occurs to one who philosophises in an orderly way” (Descartes 279). To think is therefore to exist because only a thinking entity can be aware of its own existence and it is in the mind that the essence of

the individual endures. Descartes posited a dualistic concept of human existence, in that the mind and body were separate entities linked through a rational soul. The mind was a nonphysical entity that existed as pure energy. In this sense, Moriarty could indeed exist outside the holodeck as his identity exists within the mind, which is distinct from the body.

Moriarty's position on *cogito ergo sum* also points to the technoutopian belief that the mind or rather consciousness can exist without the body. The theory is that consciousness can be downloaded into a computer network. Existing in virtual reality, consciousness "lives" without matter. Like technologies of the past, holograms redefine what it is to be human. The image of the human, or indeed humanoid, is fabricated as photonic energy that patterns information into a complete replica of humanity. This new vision represents a mechnomorphic view of humanity.

Moriarty states that he is conscious of his own existence and that he wants that existence "... out there, just as you have yours" (Moriarty) and not to be confined to the holodeck. Moriarty seeks release from the holodeck because he wants to experience what it is to be "human". Freedom, autonomy, self-exploration, and self-determination are in *Star Trek* equated with humanness. Like Shelley's creature, Moriarty demands a life like his creator. But in granting him such a life, the fear remains that this will render the definition of what comprises humanity, or the "human condition", irrelevant. The fact that Moriarty offers a *new* definition of life, one that encompasses the "mind," demonstrates that he has grasped the fundamental problem of defining life – that is, whether definitions of life are based on possessing a "body" and a mind or merely on levels of consciousness. "Life" in its physical sense is

related to biological factors discussed in the previous chapter. Self-awareness, self-consciousness is elemental in any definition of intelligent life. *I think, therefore I am alive* determines life in terms of intelligence, consciousness, and sentience. Therefore, it is not simply consciousness that denotes life but self-consciousness. In Descartes' theory of the mind and body, there can be no existence without conscious thought.

Picard concedes that Moriarty is conscious but he rejects the idea that the hologram is also alive. Moriarty asks Picard why Data is different: is he not also *just* a machine? In contrast to Pulaski's view of Data as an advanced and complex machine, Picard argues that Data is "more" than a machine. Data has life. However, what Picard means by "he is more" is not addressed in this episode.¹⁰⁴ Picard also does not state why he considers Data has life. Nor does he address why he acknowledges life in Data but denies life in Moriarty. I would suggest the answer lies in the fact that Picard views Data as a friend and colleague and Moriarty as "entertainment", as simply a holo-projection without substance or physicality, created at/for their pleasure. For Picard, Moriarty also lacks the social and cultural context that he attributes to Data. Therefore, attributions of sentience are like consciousness: both are subjective and relational. For the humanist, sentience is "granted" in terms of what individuals know, or the "like us" paradox and this belonging, this being "like us," becomes a sacred boundary between the human and the nothuman. The theory of posthumanism advocates that "no objects, spaces or bodies ... [are] ... sacred in themselves; any component can be interfaced with any other if the proper standard, the proper code, can be constructed ..." (Haraway 2006 166).

¹⁰⁴ This was to be examined in detail in the episode "The Measure of a Man" only a year after this episode.

Picard accepts that Data has the “proper code” to pass into the human world; Moriarty does not. It may also be that Picard’s view of what constitutes a person reflects the materialist view of the mind as a physical entity located within the brain that cannot be sustained outside the body. Data has a body, albeit a mechanical one, but Moriarty does not, existing as pure energy. Consequently, Moriarty is excluded from the human world, which, within *Star Trek*, is not framed within posthuman irreverence but within the sacredness of humanism.

The narrative not only focuses on the uniqueness of humanness but also reflects anxiety over the increasing insidiousness of technology and what happens when fantasy becomes too real. As in the increasing perverseness of computer games, fantasy role playing or cyberspace, the division between virtual selves and corporal selves and between reality and virtually in this episode is blurred. What starts out as a simple role-playing diversion turns into a dangerous and life threatening techno-battle when Moriarty gains consciousness and seeks to understand his new-found sentience. Irresponsibly naïve, the crew of the *Enterprise* create playthings that cater to their boredom during long space voyages without regard for what they have in fact created or indeed how dangerous such technology could be.¹⁰⁵

In this episode, as in much of *Star Trek*, “bodies are maps of power and identity” (Haraway 2006 177). The focus in “Elementary, Dear Data” on embodiment establishes or maps the power struggle between Picard and Moriarty, between the human and the nothuman, in the battle for identity. In

¹⁰⁵ In Chapter Six, I will examine what happens when holo-technology is used in an unscrupulous fashion.

the end, the hope of attaining embodiment off the holodeck acts to pacify Moriarty. Picard uses Moriarty's craving for a life of substance, of matter, as an opiate to make him relinquish control of the ship and accept deactivation. Although Moriarty states that he does "not want to die" he finally concedes and capitulates, telling Picard "my fate is in your hands, as perhaps it always was" (Moriarty). At the close of the episode, Picard tells La Forge "everything is in perfect order ... as are we" (Picard) suggesting that the "perfect order" is achieved through a return to the status quo; and in this sense, *matter* wins.

A Fictional Man: "I am a thing that thinks"

Star Trek: The Next Generation's "Ship in a Bottle" (1993), the sequel to "Elementary, Dear Data" (1988) expands on Professor Moriarty's search for identity and self-determination. The episode looks at the notion of citizenship, whether the nothuman can ever truly be a "citizen" within the human community and asks, when does autonomy begin? It expands on the theme developed in the prequel, that is, what is the nature of reality. From the 1980s onwards, a plethora of science fiction films played with the problematic notion of reality (*Blade Runner* (1982), *Videodrome* (1983), *Total Recall* (1990) *eXistenz* (1999), *The 13th Floor*, *The Matrix* (1999)).¹⁰⁶ In these tales, characters are for the most part unaware of the fiction of their world. In *Blade Runner* the border between replicants and humans is in some cases blurred as in Rachel; in *eXistenz* characters are so immersed in the game they do not know the boundary between "the game" and reality, and in *The Matrix*, humanity is entombed within a never-ending virtual reality that provides energy for the machines. Unlike the protagonists of these stories, Moriarty

¹⁰⁶ This is not to suggest that tales of reality did not appear before the 1980s.

knows that his world is a fiction and desperately tries to enter the real world by luring Picard into a virtual world of his own making.

“Ship in a Bottle” begins with La Forge and Data on the holodeck acting out a sequence from Sherlock Holmes. Both the title and the opening sequence link this episode to “Elementary, Dear Data.”¹⁰⁷ Because of a failed circuit in the Sherlock Holmes programme, Lt. Reg. Barclay (Dwight Schultz) begins to run through the programme looking for defective circuits. Finding a saved, encoded file, Barclay opens the programme, revealing the saved character of Moriarty. The Professor appears on the empty holodeck, shown as a dark empty space with only a grid-like pattern to distinguish the walls from the interior. The walls of the holodeck that are usually never seen appear to close in on the characters, highlighting Moriarty’s sense of disembodiment and imprisonment as he stands in the middle of the empty space. He is eager to hear of any progress that has been made to free him from his holo-world:

BARCLAY: Who are you?

MORIARTY: Professor James Moriarty ...

... MORIARTY: Where is Captain Picard? Is he still Captain of this vessel?

BARCLAY: How would? How do you know the Captain?

MORIARTY: You don't know anything about what happened, do you? I have been stored in memory for God knows how long and no one has given me a second thought.

BARCLAY: You know! You know what you are.

¹⁰⁷ The title of this episode “Ship in a Bottle” references the presence of the model ship, the Victory, seen in “Elementary, Dear Data” (1988).

MORIARTY: A holodeck character? A fictional man? Yes, yes I know all about your marvellous inventions. I was created as a plaything so that your Commander Data could masquerade as Sherlock Holmes. But they made me too well and I became more than a character in a story. I became self-aware. I am alive.

BARCLAY: That's not possible.

(“Ship in a Bottle” 1993)

Moriarty remembers his encounter with the Captain and Picard’s promise to help free him from the holodeck. In this scene, Moriarty restates his declaration of self-awareness. His mounting frustration can be seen in his stance, his jaw set and fists clenched, as he confronts a surprised Lt. Barclay on the empty holodeck. Standing in the lifeless hologrid, Moriarty asserts that he is very much alive. Lt. Barclay, who arrived on board the *Enterprise* after the first encounter, knows nothing of the efforts to free Moriarty. It is revealed that Picard handed over the investigation into how to free Moriarty to Starfleet engineers. Since no action has been taken on finding a way to free Moriarty, it raises the question of how much thought the Captain and Starfleet have truly given to Moriarty’s plight. Moriarty demands that Picard meet him on the holodeck in Holmes’ sitting room. Barclay deactivates Moriarty and leaves to inform Picard. But Moriarty reappears on the holodeck with a smile suggestive of self-satisfaction and cunning.

Ship in a Bottle: Navigating Reality

In the sitting room at 221B Baker Street, Moriarty confronts Picard, telling him that while he was in the holomatrix he experienced, like the ghost in the machine, “brief terrifying periods of consciousness disembodied without substance” which “left him to go quietly mad” (Moriarty). Picard confesses that he is “concerned to learn you experienced the passage of time in the computer memory” (Picard). Nevertheless, Moriarty dismisses the Captain’s words and states that he will not go back into storage, demanding to be freed from the holodeck. He will not consent to go back into “a world I know to be nothing but illusion” (Moriarty). In this scene there is a definite power struggle going on between Picard and Moriarty. Picard continues to refuse to grant Moriarty freedom on the basis that Moriarty is a hologram and cannot exist outside the holodeck. Picard reiterates his stance in “Elementary, Dear Data,” arguing that because Moriarty is an object, a simulation without substance, without physicality, he cannot exist in the “real world:”

PICARD: Although an object appears solid on the holodeck, in the real world they have no substance.

(Picard throws out a book through the arch and it vanishes)

MORIARTY: An object has no life. I do.

PICARD: Professor, you are a computer simulation.

MORIARTY: I have consciousness. Conscious beings have will. The mind endows them with powers that are not necessarily understood, even by you. If my will is strong enough, perhaps I can exist outside this room. Perhaps I can walk into your world right now.

PICARD: Professor, I ask you to believe me. If you step out of that

door, you will cease to exist.

MORIARTY: If I am nothing more than a computer simulation, then very little will have been lost. But if I am right? Mind over matter.

Cogito ergo sum.

(Moriarty walks through the arch and out into the corridor, and does not disappear)

MORIARTY: *I think therefore I am.*

(“Ship in a Bottle” 1993)

Moriarty attempts to convince Picard that he is a live through rational demonstration, that is, through taking control and leaving the holodeck. In this episode, Moriarty raises doubt about the mutability of matter, as well as in the certainty of Picard’s reality. Key to Moriarty’s argument for his existence as more than a fictional man is the fact that that consciousness is “not necessarily understood” even by people as advanced as the crew of the *Enterprise*.¹⁰⁸ Moriarty’s self-awareness raises fundamental questions about the nature of consciousness: is consciousness located in the brain, a physical, biological component of the body? On the other hand, is it something less tangible, something ethereal: a connection to the soul, separate from the body, but able to influence the body? For Moriarty, it is the argument of “mind over matter” that is relevant to how life and consciousness are defined.

There is power evident in the statement: *I think, therefore I exist.*

Although Picard rejects Moriarty’s existence outside the holodeck and therefore has the power to name him as an object or a machine, Moriarty takes

¹⁰⁸ In his eyes and indeed in Descartes’, there can be no knowledge about the nature of life based on assumptions that cannot be verified without doubt.

the power back when he apparently leaves the holodeck. According to Descartes' theory, "He can never cause me to be nothing so long as I think that I am something" (Descartes, in Morick 7). The "he" in this argument is what Descartes views as an all-powerful being that may be deceiving him about his reality. Picard, through his denial of Moriarty's ability to live off the holodeck, acts as "an all-powerful being" that constructs Moriarty's reality as one of pure fiction. In turn, Moriarty creates a "dream world" of his own that deceives Picard into believing he is on the real *Enterprise*. Both Moriarty and Picard act as Descartes' "powerful being" who can change the nature of reality. In this episode, the distinction between what is human and what is simulation is questioned, as Moriarty appears to be able to simulate the human. However, it is Picard that remains superior in that he is real, while Moriarty remains a simulation. The fact that Moriarty never achieves his movement from the simulated to the real world reinforces *Star Trek's* overriding theme of the superiority of humanity, and the dominant hegemonic orientation of the conservative interpretations of existence.

That Moriarty quotes Descartes is significant. Moriarty embodies Descartes' proposition that "I am, I exist, is necessarily true each time that I pronounce it, or that I mentally conceive it" (Descartes 279). Moriarty is able to pronounce that he exists, that he consciously or mentally exists through thoughts and questions about his existence. Although he attempts to prove that he also physically exists, his existence is based upon the fact that he is conscious of that existence – he is self-aware. In trying to convince Picard that he is not a mere simulation, Moriarty tries to forge a direct link from the mind to physical existence – the mental ability to believe that one exists causes the

physical self to exist. Jesse Butler in ‘Scan Thyself’ notes that Descartes “concluded on the basis of his awareness of his own thoughts that he must be an immaterial thing whose essence is thought – a soul, entirely distinct from a physical thing like an animal or a machine, composed of mere matter” (in Wittkower 2011 79). Moriarty becomes aware of his own thoughts and his entrapment within what he knows to be an illusory world. He concludes that because he is self-aware, can think and is distinct from mere matter, he can, therefore, will himself off the holodeck.¹⁰⁹ However, the trick that Moriarty presents is that he does not attain substance off the holodeck. He merely creates his own holographic version of the *Enterprise* to fulfil his fantasy of attaining Descartes’ desire to be “immaterial.”

This episode demonstrates that Moriarty is both self-reflective and self-referential. Moriarty is created by the ship’s computer with the ability to evolve and to do what Descartes argues is necessary in order to be “I” rather than “it” – to self-aware, to think independently and freely. In his discussion on identity, Descartes asks; “what then am I? A thing which thinks? What is a thing which thinks? It is a thing which doubts, understands, [conceives], affirms, denies, wills, refuses, which also imagines and feels” (Descartes in Morick 10). Moriarty demonstrates all of these qualities in his attempts to outwit both Data and Picard, and yet he is still denied self-determination. Moriarty can be said to “live” because he is the subject of a life, in that he is

¹⁰⁹ It is noted in the episode that although Moriarty does not have physicality off the holodeck he is made of matter.

able to think and act independently of his programming. He is creative and imaginative and filled with emotion and desire.¹¹⁰

Such narratives spark the “metaphysical issue of whether or not the meat of the brain and body play a significant role in sustaining human consciousness or individual identity” (Dinello 113). This is also true for Moriarty, who denies that the “meat” of the body, whether matter or non-matter, determines whether or not he lives. Identity does not, in Descartes’ view, rest “upon the reality and irreducibility of the body ... [and that Descartes]... holds that the body is only something I *have*, whereas the mind or soul and that alone is what I *am*” (Schacht, emphasis in the original in Morick 17). This view, held by Descartes and Moriarty, is reiterated by techno-prophets who view the future of humanity as one in which human consciousness is freed from the corporal body and finds immortality in cyberspace. But can the identity or the essence of the individual survive without the body? In “Ship in a Bottle,” Moriarty finds his answer: I *think*, therefore I *am*. In this statement, Moriarty not only defines himself in terms of the mind alone but also places the body as subservient to the mind, in that the mind seemingly wills his body to exist outside the holodeck.

As Katherine Hayles rightly suggests, “in the posthuman, there are no essential differences of absolute demarcation between bodily existence and computer simulation, cybernetic mechanisms and biological organism, robot technology, and human goals” (1999 3). Such “demarcations” presented and

¹¹⁰ In contrast, Data often fails in his attempts to be “human” because he cannot envision or proclaim the affirmation: “I think, therefore I am”. Data is often all too ready to accept that he is a construct created by Dr Soong.

upheld in this episode represent a humanist reaction to the “computer simulated” identity. Picard continues to resist Moriarty’s transformation towards a non-simulated identity. In doing so, Picard denies the artificial being an authentic existence and transcendence into the human world. Picard’s denial that Moriarty has a body, in the conventional sense of one composed of flesh and blood, leads Moriarty to try to convince Picard that the mind creates the body, that the mind or consciousness comes before the corporal body. Although Moriarty proclaims his ability to transcend the body, it is evident in this episode that Moriarty craves embodiment. The body becomes a symbol of power that gives subjectivity to its possessor, and “to steal, simulate or construct a body is to begin disentangling an entire network of intricate hierarchies and relationships” (Botting 2008 183). Initially constructed as a “plaything” for La Forge and Data, Moriarty steals power back through seeming to fabricate a “body” of his own. He manipulates and disentangles the relationships of power in which the hologram is subservient to the will of its humanoid programmers and constructs an entire world of his own making.

For most of this episode, Moriarty constructs an elaborate virtual world that deceives Picard, Data, and Barclay on the part of Moriarty. Moriarty hijacks the holodeck programme, using Picard’s voice override command, and successfully traps Picard, Data, and Barclay in a holoverion of the *Enterprise* complete with her crew. The narrative becomes convoluted as the two ships merge. Like the nanites in the previous chapter that manipulated the ship’s systems, Moriarty attempts to manipulate the minds of Picard, Data, and Barclay into doing what he wants – allowing him to leave the holodeck – “like a virus technology autonomously insinuates itself into human life, and to

ensure its survival and dominance, malignantly manipulates the minds and behaviour of humans” (Dinello 1-2). Dr. Crusher’s assertion that Moriarty is human - “he’s real, he’s human” (Crusher) - is a ruse, as this Dr. Crusher is revealed to be a hologram. However, to the human eye, there is no discernible difference between the real and the fake. Picard, Data, and Barclay are fooled into believing that this is indeed the real Crusher.

Although Moriarty fails to embody Descartes’ vision, he is able to outthink and deceive Picard with his own holo-projection of the *Enterprise* and her crew through the use of language and his knowledge of the computer system. Language in this episode becomes the active force in defining who and what Moriarty is. He claims, through the use of the statement “I think,” that he, therefore “exists”. The “difference between humans and machines that simulate humans is a matter of choosing what language game to play in describing their behaviour” (Teschner & Grace 2011 in Wittkower 98). In “Elementary, Dear Data,” Pulaski chooses the language of philosophy (the philosophy of the soul) and rationalism to describe Data’s deductive behaviour as inferior to the human because he lacks the ability to instigate original thoughts. In contrast, La Forge uses the language of reductive reasoning and mathematics to point out that Data is as effective as Holmes in his ability to analyse. Both use the language as a way to construct an argument to support their logic on the differences between the human and nothuman. In “Ship in a Bottle” Picard bases his denial of Moriarty’s claim to life off the holodeck around his lack of physicality. Using the language of biology and physics, Picard chooses to situate Moriarty as a simulated human and not a life form that exists away from the constructs of the holodeck. However, Moriarty is

also able to use language and knowledge for his own purposes – that of subverting Picard’s attempts to deny him his freedom.

Moriarty’s power to command mind over matter fails to give him substance, but he is able to convince Picard, Data, and Barclay that they are on the real *Enterprise*, while in fact they never left the holodeck. Moriarty’s manipulation of Picard, Barclay, and Data renders them powerless as they carry out Moriarty’s plan to set him free. It is Data, the faithful techno-servant or artificial being, who makes the discovery that this reality is a simulation and alerts the Captain to the deception. Throughout the episode, the holodeck becomes a boundary of power. The point at which Picard enters the holo-*Enterprise* is the point at which the physicality between the real and the simulated is blurred. Only when Picard recognises and transcends the illusion is his power restored. Again, knowledge is power. In this episode, both Picard and Moriarty define realities. However, *Star Trek* continues to restore the traditional conservative definitions of life and existence by placing Picard’s version as the only one that can be true. Throughout the episode, Moriarty seeks to reposition himself alongside humanity, a repositioning of himself from photons to human/matter. Moriarty seeks to obtain rights and a place within this new community. In doing so, he like Data views the only way to obtain these rights as to be human, to mimic and copy what makes humans, human. Human values are upheld as being what all aspire to achieve. This ultimately reaffirms “the human” as the hegemonic template.

Part of this template is the ability to form relationships and to fall in love. Moriarty seeks the freeing of Countess Regina Bartholomew¹¹¹ from her holo-prison, just as Frankenstein's creature sought his "mate". Moriarty looks to Picard to ensure his happiness by the "restoration of the garden [through] ... the fabrication of a heterosexual mate" (Haraway 2006 159). The theme of the Garden of Eden suggests a link to the birth of a new species – a life form in the making. When Moriarty asks Picard to bring "life" to the Countess and allow her to leave the holodeck, Picard faces a predicament similar to that faced by Mary Shelley's Victor Frankenstein who, when he confronted by his creature's demands for a companion, asks whether it is morally right to create another being: "I was now about to form another being, of whose disposition I was alike ignorant; she might become ten thousand times more malignant than her mate ..." (Shelley 565). Picard tells Moriarty that "[e]ven if I had reason to believe that it would be successful, I don't think that I could sanction it. Please understand, Professor that you are in essence a new life form, one that we didn't intend to create and that we don't fully understand. Now the moral and ethical implications of deliberately creating another one like you are overwhelming."¹¹² However, for Moriarty, the moral implications are clear. Picard has a duty to consider the feelings and aspirations of the life his crew has created:

¹¹¹ The Countess has been designed to be the love of Moriarty's life, and as he tells Picard, he cannot live without her.

¹¹² This scene is also evocative of the techno-cultural masculine usurpation of the female as biological creator. Moriarty is born out of La Forge's command to create a foe for Data. Although the ship's computer is female, or has a female voice, Moriarty refers to the computer as "he". The patriarchal act of reproducing through technology seeks to supplant the female as creator of life.

MORIARTY: Is it morally and ethically acceptable to deny the woman I love so that you can put your conscience at ease? Are you saying that you will simply dictate how I am to live my life?

PICARD: I assure you, we will do everything possible to make you comfortable.

MORIARTY: So long as I accept the terms under which you dole out those comforts...

("Ship in a Bottle," 1993)

Moriarty's despair at his treatment at the hands of Picard is again reminiscent of Shelley's creature as he laments his fate after reading a discarded copy of Milton's *Paradise Lost*; "like Adam, I was apparently united by no link to any other being in existence" (Frankenstein's creature) and therefore like the creature of Shelley's gothic novel, Moriarty craves a kindred spirit, the women he was programmed to love. Moriarty feels the same pangs of envy and resentment that gnawed at the creature: "many times I concluded Satan as the fitter emblem of my condition; for often, like him, when I viewed the bliss of my protector, the bitter gall of envy rose within me" (Shelley 540). The willingness of Picard to "dictate" how Moriarty is to live, couched in moralistic sanctification, leads Moriarty despondently echoing Shelley's creature who despairs at the duplicity of humanity: "was man, indeed, so powerful, so virtuous, and magnificent, yet so vicious and base?" (Shelley 119). For Moriarty it is morally and ethically wrong for Picard to decide how he is to live in this new world.

The need to enter into the human community leads Moriarty, from the very beginning, to deceive and manipulate Picard. Although Moriarty

professes in this scene, in which he debates his future with Picard, that he has moved beyond his literary roots and that “My past is nothing but a fiction, the scribbling of an Englishman dead now for four centuries. I hope to leave his books on the shelf ...” (Moriarty), his criminal nature comes through in his deception and threats to harm the crew. He is what La Forge created – a master criminal with the imbedded memories of not just Conan Doyle’s Moriarty but also the memories of the ship’s computer records and library. This knowledge allows him to subvert the shutdown protocol, viewed at the beginning of the episode, and activate his own holo-programme. The juxtaposition of the two *Enterprises*, one real and one fake, adds to the sense of the disjointed nature of reality and the difficulty in telling the difference between the human and the simulated human, thereby problematizing the nature of reality. It suggests that like Moriarty’s life, reality itself can be fabricated.

Having finally conceded that Moriarty is indeed self-conscious and therefore should be given some freedom and rights, Picard decides that his freedom is to be confined within the boundaries of what Picard/Starfleet deem suitable. Just as Dr. Victor Frankenstein determined how his creature was to live, a life alone, Picard will not initially allow Moriarty to have the Countess at his side. The problem faced by the Promethean figure is that to create a new race, perhaps one that will surpass or supplant humans is dangerous. Who is accountable for this new life? What are the ethics and consequences of creating new, artificial life? Even though Picard relents and agrees to give “life” to the Countess, this turns out to be impossible, as in reality both are confined to an advanced holo-program. Therefore, the Countess or Moriarty are not given the

life that Moriarty hoped to attain.¹¹³ Both are fooled into thinking they are finally free of the holodeck and thus both are denied free-will and self-determination by Captain Picard:

PICARD: In fact, the programme is continuing even now inside that cube.

CRUSHER: A miniature holodeck?

DATA: In a way, Doctor. However, there is no physicality. The programme is continuous but only within the computer's circuitry ...

... PICARD: They will live their lives and never know any difference.

TROI: In a sense, you did give Moriarty what he wanted.

PICARD: In a sense. But who knows? Our reality may be very much like theirs. All this might just be an elaborate simulation running inside a little device sitting on someone's table.

(“Ship in a Bottle” 1993)

Although an interesting premise and an ironic comment on television, as Picard comments on the “little device sitting on someone’s table,” this discussion demonstrates the inequality present between humans and pseudo-humans. Would Picard really be okay with their “reality be[ing] very much like theirs”? It has already been shown in previous episodes dealing with Q that the crew resents and actively resists attempts by Q to control their destiny.¹¹⁴ So, why inflict this “trickery” on Moriarty? He is self-aware and self-conscious. Offered freedom, Moriarty is instead placed in a prison. For all the pretence of respecting new life, of acknowledging the rights of other intelligent life forms,

¹¹³ Life here is related to the ability to determine one’s own fate – to “live” out one’s future on one’s own terms.

¹¹⁴ Q is an alien with extraordinary powers and part of the Q continuum.

when it comes to the nothuman, the artificial being or pseudo-human, in the end, Picard only reinforces the gulf between organic and inorganic life – between “master” and “slave”. As Moriarty states, “you will simply dictate how I am to live my life”. Moriarty remains relegated to an object by the power that Picard wields. He is imprisoned in the miniature holodeck by Picard’s ability to *name* and to *speak*, thereby rendering Moriarty’s defiant “I am, therefore I exist” to “Picard speaks, therefore Moriarty cannot”.

Conclusion

Both “Elementary, Dear Data” and “Ship in a Bottle” demonstrate that the ability to define life and to define consciousness is a powerful mechanism in naming and subsequently controlling the “Other” – whether that “Other” is an animal, human or hologram. By using humans as the hegemonic base line for consciousness, humanity defines sentience and determines who is sentient. Picard has the control over Moriarty’s destiny. In the end, Moriarty does not gain freedom, only imprisonment in a world without “physicality”. The episode suggests that there is no subjectivity without a body. It does so through Picard’s frequent denials that Moriarty is alive and his ultimate decision to trap Moriarty in an endless simulated world. Moreover, as in *Frankenstein*, Moriarty’s journey “ends, not with the glorious self-immolating conflagration promised by the monster, but with the figure disappearing into darkness and distance,” as Moriarty and the Countess drift into a fictional darkness encapsulated in a holocube (Botting 143). The holocube, therefore, acts as a form of social control. The miniature holodeck or holocube becomes a barrier to keep the human and nothuman distinct. What is disappointing in “Ship in a Bottle” is that Picard never confronts the issue of Moriarty as a living being.

The episode's ending is unsatisfactory in that it denies the pseudo-human an authentic existence and reaffirms humanism's sacred notion of the human body and soul, and controls of the definitions surrounding them. Picard's basis for rejecting Moriarty's existence is because it challenges all he understands about life and technology. The idea put forward by Moriarty is that "the mind directs the body like a captain directing a ship", but also that language defines the self (Saidel in Bassham 30).

As Gene Roddenberry's vision moves into the Delta Quadrant, with the development and release of *Star Trek: Voyager*, the posthuman comes into its own with the figure of the Doctor, an emergency medical hologram. In the following chapters, I examine in more depth, the figure of the hologram, in particular, the character of the Doctor (or Emergency Medical Hologram), as a site of exposition into the rights and subjugation of the posthuman.

CHAPTER FOUR

THE LATENT SUBJECT

For Foucault the subject is the primary workroom of
power, making us turn in on ourselves, trapping us in
the illusion that we have a fixed and stable selfhood ...

(Mansfield 10)

This chapter is oriented around my analysis of the Doctor's journey to become visible as a subject, rather than visualised as an object, framed within theories of subjectivity, and in particular Foucault's idea of panoptic vision (*Discipline & Power* (herein referred to as *D/P*). The panoptic mechanism controls the individual through the illusion of visibility, creating the impression of complete surveillance so that the inmate/individual believes that they are always under surveillance, whether or not they are in fact being observed. According to Foucault, this creates within the individual a state of internalisation in which the individual acts to self-monitor or curtail their behaviour in accordance with social norms, labels, and dialogues represented by the dominant gaze. If, as Mansfield and Foucault rightly suggest, the fixed subject is an illusion, how is the subject formed?¹¹⁵ Subjectivity is shaped and fractured through unstable and contested relationships of power. Throughout

¹¹⁵ The idea that the subject is an unstable construct is a common theme within critical analysis of both postmodernism and posthumanism (Lacan; Haraway; Hayles).

this chapter, I will be using the term “subject” as that which is subject to observation/study/scrutiny and that which has subjectivity/agency (Foucault). The Doctor (Robert Picardo) is both a subject to be observed by the gaze (subject to the gaze) and has subjectivity in that he has the agency to look back (to gaze upon). My focus in this chapter is on the episode "Latent Image" (1999) and how power in the form of the gaze/look acts to re-model and re-shape the subject.¹¹⁶ A gaze (human and techno) that is reflected from within-and-without shatters the phantasm of the subject as fixed and stable. The mirage of the stable self is shattered from without by Janeway (here seen as “Other”), and from within by the Doctor, who internalises the gaze and reflects it back to reshape his identity. Throughout this chapter, I maintain that the narrative surrounding the Doctor’s right to agency, through his conflict with Captain Janeway (Kate Mulgrew) to gain the right to maintain and view his memory, is underlined by the struggle between seeing and not seeing, and between visibility and invisibility. In this episode, the panoptic gaze de-constructs and restricts the formation of the subject through acts of internalisation, surveillance, and tensions between visibility and invisibility. Power is visualised through marking, categorising and labelling, creating an unstable and de-fragmented selfhood. I argue that within "Latent Image" the question of *who* is the Doctor is contested through these mechanisms – marking, categorising, visualising and labelling – mediated by way of the panoptic gaze in which power relations are (re)formed, (re)enacted and challenged.

¹¹⁶ The title "Latent Image" alludes to the Doctor’s dormant identity and his journey towards visibility as both a subject that is subjected to and subjugated by the gaze and, as an agent capable of acting. It is this ability to act which leads the Doctor to negotiate the dyad of visibility and invisibility in his relationship with Janeway.

I read the Doctor's post-human narrative as he negotiates these mechanisms (marking, categorising, visualising & labelling), encapsulated within the rhetoric of humanism, as a journey towards a form of Foucauldian subjectivity.¹¹⁷ This form of subjectivity is socially constructed, unstable and unfixed, a construct that is shaped through power structures that seek to dominate and control (Foucault). Foucauldian subjectivity is neither "free" nor "spontaneous" and as Nick Mansfield suggests this subjectivity is a way of thinking about "ourselves so we will police and present ourselves in the correct way" (10). In "Latent Image," the Doctor, in viewing his latent memory, begins to see himself through the eyes of the "Other," consequently policing himself in order to behave in the "correct way." The "correct way" for the Doctor, as a machine, is to submit to the reprogramming because he is acting erratically and performing outside the "normal" parameters of a well-functioning mechanism. In this instance, the "Other" is not the Doctor, the outsider, *not the machine*, but the human controller, Janeway.¹¹⁸ However, as I shall argue throughout this chapter, the gaze of the "Other" is neither infallible nor total, because at certain points and time the Doctor is able to slip the gaze and act upon the actions of others. This slippage allows the Doctor to break free, if only momentarily, from the role that the gaze creates and imposes,

¹¹⁷ The distinction between humanist and posthumanist views of humanity and the subject in regards to *Star Trek: Voyager's* narrative is discussed in detail in chapter two – "The Final Frontier".

¹¹⁸ The "Other" is defined as that which one is not, and which the self is measured against. Traditionally in science fiction, the "Other" refers to the alien or the machine but it can be anything that is not the self but by which the self is measured.

allowing him to resist being re-written by the look of the “Other” (humanity/Janeway) and to gain a level of agency.¹¹⁹

"Latent Image" begins with the Doctor taking holo-images of the crew for his medical database.¹²⁰ Each image is a full 360 degree scan at the subatomic level resulting in a complete digitised image reconstructed from the inside out, a holographic double stored in the central computer.^{121 122} As each patient is centrally framed in front of the camera's techno-gaze, the Doctor instructs him or her to turn to the left then the right, to be fully captured by the holo-recorder, creating the replicated photonic matrix of the patient. The double or doppelganger is then displayed by the Doctor for a further examination. During Ensign Harry Kim's (Garrett Wang) exam, the Doctor finds a neural surgery he performed on Kim that he has no recollection of performing. It transpires that eighteen months ago a fatal encounter on an away mission comprising the Doctor, Ensign Harry Kim and Ensign Jetel (Nancy Bell), with an unknown alien race, left the Doctor conflicted and emotionally troubled when he was unable to save both Kim and Jetel. The Doctor suffers a mental breakdown, what is described in the episode as a “malfunction,” because he cannot deal with his decision to save his friend. As the Doctor continues to agonise over his decision, the only solution that seems applicable

¹¹⁹ Although the Doctor is able to negotiate his right to keep and understand his memory and work towards developing his individuality, he is still controlled by the fact that he can be turned off at any time. The Doctor, as I shall argue throughout this thesis, never fully attains true agency.

¹²⁰ This holo-imager is a new technique that the Doctor is experimenting with in order to gain a better insight into the health of the crew and to monitor any outbreaks of illness. In this way, it acts as a panoptic device for the control and inspection of the crew.

¹²¹ It should be noted that Foucault's panoptic mechanism also commands 360 degree surveillance.

¹²² This presents some visually stunning scenes in which the body is reconstructed firstly with the skeleton and then the internal organs and lastly the skin, hair and clothing.

to Janeway is to alter the Doctor's memory, denying him access to these troubling events.^{123 124}

Initially unaware of who tampered with his memory, the Doctor sets a trap for the saboteur and is shocked to discover that it was Janeway. Faced again with deactivation and having his memory deleted for the second time, he must finally confront what has happened. As he embarks on a journey towards self-knowledge and self-discovery, through the viewing of his memory, the narrative acts to question *what* or *who* the Doctor really is and who or what he is becoming. At the conclusion of the episode, as the Doctor reads the quote from Dante, "in that book which is my memory, on the first page that is the chapter that is the day when I first met you, appear the words – here begins a new life," he finds himself relating to that book, that chapter and that page which is yet to be written.¹²⁵ He is Dante's new life personified – ready to be (re)written not by Janeway but by himself, an act of agency and an illustration of how the subject can be re-constructed, rewritten, reworked and reshaped by looking inwards as well as looking outwards. The Doctor's journey sees him looking inwards to view himself in terms of not just how the "Other" recognises him (outwards), but how he sees himself.

¹²³ His inability to reconcile his choice with his original programme ends up creating a feedback loop in which he continues to debate his decision. His behaviour becomes erratic and he can no longer perform his duties.

¹²⁴ This has the effect of restoring the Doctor to before the incident, but also means that the conflict is never resolved because he never successfully confronted his decision.

¹²⁵ A book of poems read by Janeway throughout the episode and which she leaves open for the Doctor to read at the end.

Visualising Power: Marking, Categorising and Labelling the Machine

The Doctor's journey towards agency and the re-writing of the self/subject begins with his relationship with Janeway. Janeway, representing the dominant position/gaze, controls and curtails the Doctor's identity through her ability to name and mark him out as different – as a machine. The power to model the subject acts through mechanisms that categorise and mark the individual by their own identity, attaching to the individual his/her own identity and imposing a “truth” upon individuals that they must recognise and be recognised by (Foucault 1980). This “truth” is, of course, a fallacy like the transient and unstable nature of the subject; the perception of truth is not reliable or permanent. There is no one truth but multiple “truths” contingent upon relations of power used by the dominant to impose their own version of the truth upon the subject. These truths are fabricated through dominant social factions, in this case, represented by Janeway and Starfleet, which force the subject (the Doctor) to both recognise, and be recognised by, prevailing discourses that seek to mark, label, and define.

In "Latent Image", relations of power dominated by Janeway act by marking and categorising the Doctor as a hologram, a machine and inferior to humans:¹²⁶

JANEWAY: (talking to Seven): I've told that replicator a dozen times about the temperature of my coffee. It just doesn't seem to want to listen. Almost as if it's got a mind of its own, but it doesn't. A replicator

¹²⁶ This “natural” inferiority imposed upon the machine is claimed to be valid on the basis that machines are less than human because they lack free will, empathy, emotion or a soul. This is the premise for Philip K Dick's novel *Do Androids Dream of Electronic Sheep?* in which empathy is used to denote humanity.

operates through a series of electronic pathways that allow it to receive instructions and take appropriate action, and there you go. A cup of coffee, a bowl of soup, a plasma conduit, whatever we tell it to do. As difficult as it is to accept the Doctor is more like that replicator than he is like us.

(“Latent Image” 1999)

Janeway’s decision to alter the Doctor’s memory is partly based on the labelling of him as a piece of technology, not unlike the replicator, which can be programmed to do whatever is asked. The Doctor is categorised and fixed by Janeway as an entity that does not have a mind of his own. Like the replicator, the Doctor “operates through a series of electronic pathways” highlighting his supposed inferiority and setting him apart from humans, setting him apart as he “is not like us”.

The metaphor of the replicator in this episode is interesting in terms of what a replicator is. In science, the replicator acts to produce life, and acts “as the fundamental unit, the prime mover of all life ...” (Dawkins in Kneis 27). It is, therefore, one of the building blocks of life, a gene, the bundle in which everything is held. Janeway’s linking of the Doctor with the replicator (rather than any other piece of ship’s equipment) in this scene is significant because it merges the Doctor with the concept of bringing forth “new life” while at the same time relegating him to the realm of technology effectively denying him “life”. The replicator creates what is needed by manipulating matter and evolving random particles to form new substances, just as the Doctor will be reformed into a different subject position at the end of the episode. Janeway,

by utilising the taxonomic unit of “machine,” places herself in a position of power over the Doctor because she is able to restrict the Doctor and impose upon him an inferior and therefore subordinate position. The idea of creating separable categories for plants and animals was refined and developed by botanist Carl Linnaeus in an attempt to bring order to the classification of organisms. The science of taxonomy facilitated the division of species into distinct groups based on similar characteristics acting to exclude those of a different type. As Europeans travelled into the Dark Continent (Africa), and the so called “New World” (America), such taxonomic categories were also applied to different “races” of humans on the basis of colour, habitat, and intellect. The same lexis is transported into space, used in science fiction (and in science) to separate the classes of organic from inorganic and human from alien.

Categories also act to police an individual’s deviation from their taxonomic borders so that the individual finds him or herself deviant when they disturb and disrupt these labels. The Doctor analyses his situation, his “truth”, as a hologram, a machine programmed to respond in a certain way. When he responds unexpectedly by deviating from his “logical” programming he sees himself as damaged. Labels, categories, and markers thereby act as mechanisms not only to position and define the subject within certain frames but also to restrain the subject within this frame. The Doctor, reflecting Janeway’s dominant perspective, frames himself as a machine, an object that can be subjugated. However, such taxonomic mechanisms are not absolute and often fail to contain the subject because the subject has no fixed affinity. Taxonomic units are continually re-classified (by new knowledge/discoveries)

and breached (by the hybrid or mutation), and, as I will argue throughout this chapter, the Doctor's subject position is contradictory and unstable, and is continually re-negotiated through his immersion within and emergence from the gaze.

The Inferior Machine

Immersed in his memory of the events that led to and followed Ensign Jetel's death the Doctor internalises the standard humanoid rhetoric that as a machine he is inferior. In reliving his memory, the Doctor's private turmoil is exposed and laid bare, reflected back through his mind's eye, forcing him to judge his actions as deviant.¹²⁷ The Doctor considers his failed objectivity as a malfunction, making him complicit in his own subjugation because he looks back at himself and his actions, interpreting them in the same way as Janeway, as an error. For the Doctor, this error is that he allowed Jetel to die rather than Harry. The Doctor is acting out what Foucault argues is the fragility of the subject – that the subject is “forced back upon him/herself and in turn forced to constrain him/her[self] within their own identity” (1980 781). The fragile subject is re-shaped and constrained through an encounter with the gaze of the “Other” (and the self) which acts to restrain the subject within this forced identity that, for the Doctor, is that of a rational and un-emotive machine.

Consequently, the Doctor's internalisation of himself as a machine leads to his viewing himself as an identity devoid of all feeling and appeals to compassion.¹²⁸ The Doctor's internalisation of his inability to feel is

¹²⁷ Here I am using the term “deviant” in the sense that his actions are abnormal or not standard behaviour for a machine rather than as a criminal act.

¹²⁸ His identity is also constructed through his programming.

emphasised in his conversation in the mess hall with Neelix (Ethan Philips), the ship's cook and alien ambassador:

DOCTOR: I'm alright. I'm a hologram. I don't get injured, I don't feel pain, I don't die. Unlike some people I could tell you about ... don't touch me! I'm a hologram, photonic energy. Don't waste your time.

("Latent Image" 1999)

Both the Doctor and Janeway have come to identify the Doctor as nothing more than "photonic energy". The labelling and defining of the Doctor as a machine is central to Janeway's decision to exercise control over his programme, but is also mirrored in the Doctor's reaction to appeals of compassion.¹²⁹ As a machine and therefore not responsive to or needing any appeals to help or comfort, the Doctor knows that Neelix's reaching out to him is a "waste of time". However, his denial and rejection of his emotional capacity is not consistent throughout the episode and occurs after he has internalised his position as a malfunctioning machine.

For example, the Doctor's acceptance of himself as malfunctioning is in stark contrast to how he initially reacts when he first learns about being reprogrammed. In a conversation with Janeway shortly after finding out that she has altered his memory, the Doctor reacts in a way that shows deep resentment and anger at her decision:

JANEWAY: I've made a command decision for your own benefit and the welfare of this entire crew. I'm not willing to debate it.

DOCTOR: How would you like it if I operated on you without your

¹²⁹ This could also be because he feels guilty for allowing Jetel to die.

consent or without your knowledge?

JANEWAY: If the operation saved my life? I could live with it.

DOCTOR: I don't believe you. You'd feel as violated as I do right now.

JANEWAY: Whether you believe me or not is beside the point. A year and a half ago the only solution was to rewrite your programme. I have to perform that same procedure now.

DOCTOR: That isn't fair!

("Latent Image" 1999)

Before the Doctor views the memory of the events relating to his malfunction he considers Janeway's actions a "violation". "That isn't fair" is a very "human" response and not the words of a machine lacking in the ability to understand that he has rights that should not be violated. The Doctor, here, is unwilling to be placed within the category of replicator but instead places himself alongside Janeway. He denies the taxonomic border between human and machine by ignoring any distinction between himself and Janeway. He asks her how she would feel if he operated on her without consent, thereby identifying himself as her equal. He expects to have the same rights as any other crew member, as any "human". It is not until after he begins to view his memory file that he starts to see himself as malfunctioning, reflecting Janeway's position and words back onto himself. He then accepts the binary division of machine/human as a boundary that should not be crossed and internalises his position as nothing more than "photonic energy" – unfeeling and one in which the preservation of rights is seen as a waste of time.

The discourse of binary divisions: sentient/non-sentient, empathic/unfeeling, biological/technological, creates a boundary or border between human and machine that results in the production and construction of an identity, in this case a nonhuman identity, leading to conclusions and actions that exclude and judge the subject (Foucault *D/P*). For the Doctor, classed as unfeeling, photonic energy and purely technological, this border excludes him from the agency and the freedom to control access to his memory. These rights are denied to him because of Janeway's judgement that as a machine he is incapable of understanding and dealing with the consequences of his actions. Therefore, Janeway sees no problem in acting to control and curtail the Doctor's access to his memory data base in order to fix what is determined as a breakdown.¹³⁰ It is also constructing his identity as unfeeling and logical that results in the Doctor's inability to cope with his unpredictable reaction to Jetel's death.

The Flawed Machine

As the Doctor tells Janeway, "I'm programmed to accept the loss of a patient" and so his irrational and emotional response to the loss of Jetel is in direct conflict with what he believes to be typical of a rational and impartial machine, and consequently, he now looks at himself as a *failed* machine. Working from the perspective that he is nothing more than a machine, the Doctor cannot explain why he is troubled by Jetel's death, and in the conversation that

¹³⁰ It can be argued that that the Doctor's reaction to the death of Jetel is both a breakdown in terms of a malfunction and also a breakdown psychologically.

follows the Doctor agonises over his Sophie's choice and what for him, as a machine, should have been a straightforward decision:¹³¹

EMH: What could be simpler than a triage situation in Sickbay? Two patients, for example, both injured, for example, both in imminent danger of dying. Calculate the variables. My programme needs to ascertain which patient has the greater chance of survival and that's the one I treat. Simple. But, what if they have an equal chance of survival? What then? Hmm? Flip a coin? Pick a card?

("Latent Image" 1999)

The Doctor's inability to "calculate the variables" leads him to question his capability as a hologram. Reflecting upon this simple triage situation, internalising the "nature" of the machine as emotionless and calculating, the Doctor views his inability to cope as a deficiency. Moreover, as dramatized throughout this scene, by the camera focusing on the Doctor's behaviour and body language, and his aggregated and emotionally conflicted state, the Doctor is represented as anything but unemotional. For example, the Doctor selects two similar fruits, the same shape, and size but of a different colour, and asks Neelix which one he should choose, which one is better. In his frustration, he throws them across the room causing the crewmembers in the mess hall to look up, alarmed at his outburst. At this point Neelix summons Tuvok (Tim Russ) and security, leading to another violent outburst from the Doctor. The Doctor with the crew's eyes upon him stares down Tuvok, defiantly returning the look, and stating that he does not choose to return to sickbay or to go with

¹³¹ A phrase used by actor Robert Picardo in describing this episode and his character's difficult decision (Paramount DVD extra).

security. Consequently, the Doctor is deactivated, effectively denying him both sight and choice.

The Doctor, reactivated and forced to confront his actions that lead to Jetel's death and his erratic behaviour, is de-fragmented and de-stabilised like the disjointed images of the memory sequence, seeing himself not just as a *flawed machine* but also as a *failed Doctor*. By looking back, the Doctor visualises himself as flawed and as a consequence now shares Janeway's view that he should be reprogrammed:

DOCTOR: You were right. I didn't deserve to keep those memories, not after what I did.

JANEWAY: You were performing your duty.

DOCTOR: Two patients, which do I kill?

JANEWAY: Doctor.

DOCTOR: Doctor? Hardly! A doctor retains his objectivity. I didn't do that, did I? Two patients, equal chances of survival and I chose the one I was closer to? I chose my friend? That's not in my programming! That's not what I was designed to do! Go ahead! Reprogram me! I'll lend you a hand! Let's start with this very day, this hour, this second!

("Latent Image" 1999)

Having lost his "objectivity" and chosen to save a friend and kill another patient, an act that is not in his programming, the Doctor has acted emotionally, violating and threatening his self-image (as machine and Doctor). His empathy towards the Ensign's death further shatters the illusion of a fixed image/reflection of a mindless, impartial machine. Although the Doctor is

programmed to simulate empathetic and ethical models of patient care, it becomes clear in the episode that he is programmed not to be *affected* by these emotions. These emotions are but a *simulation* of human feelings and empathy and are not programmed to affect his cognitive, rationalising abilities. Therefore, represented in this scene and in the episode as a whole is a different level of empathy than what the Doctor was programmed for. The Doctor *chooses* his friend, the one he is closest to, and that becomes the deciding factor in whom he treats first. In rejecting emotions – empathy, friendship, and guilt – and viewing them as a flaw in his programming rather than an evolution of the subject, the Doctor “inscribes in himself” a responsibility to submit to his “own subjection” (*D/P* 202-3). As a consequence, the Doctor demands that Janeway delete his memory because, having failed in his duty as a Doctor (and a machine), he does not deserve to keep them. He acts out the identity that has been imposed upon him – namely that of a malfunctioning piece of technology devoid of feeling and agency. The Doctor’s identity as an unfeeling and malfunctioning machine is therefore imposed upon from outside (by Janeway) and constrained by the inward gaze (Marquez in Halliwell & Morsley19). The Doctor is constructed and constrained within the image, reflected back in the eye of the “Other”, of what a machine should be. At times, what the Doctor has come to know and reflect upon his identity as seen through the gaze of others, is contrary to what he experiences in *viewing* his memory. Although watching the memory file has partly reinforced his “looking” at himself as a machine, it has also resulted in a conflict because what he *sees* and how he *feels* (and that fact that he feels at all) while looking are contradictory.

The (pan)Optic Gaze: The Eye/I of the Beholder

In "Latent Image," vision and the gaze are important signifiers in the power struggle between Janeway and the Doctor, highlighted by the symbolic use of the mirrored gaze and the eye. Vision is always an act of appropriation, the image reflected, refracted, commandeered and represented by the one who is looking and as such, vision is also multifarious. The heterogeneous gaze performs an important element in the Doctor's journey towards self-knowledge as the Doctor's eye-view is constantly shifting, constantly altered by how he interprets the visualisation of his memory and the scrutiny of others. The Doctor's memory file functions as a "virtual camera:" a panoptic device in his head allowing him to survey his actions, his eye a lens providing a visual insight into the Doctor's psyche (Halliwell & Mousley).¹³² In addition, the narrative's interaction between past and present, moving from one time frame to the next, reproduces stylistically the instability of the image and the subject.

¹³²This episode is unusual within the series in that it juxtaposes the events of the past with those of the present. The narrative flits back and forth between the two time-frames, thereby superimposing the "looking back," through fade-ins and flashbacks, to the "looking now."

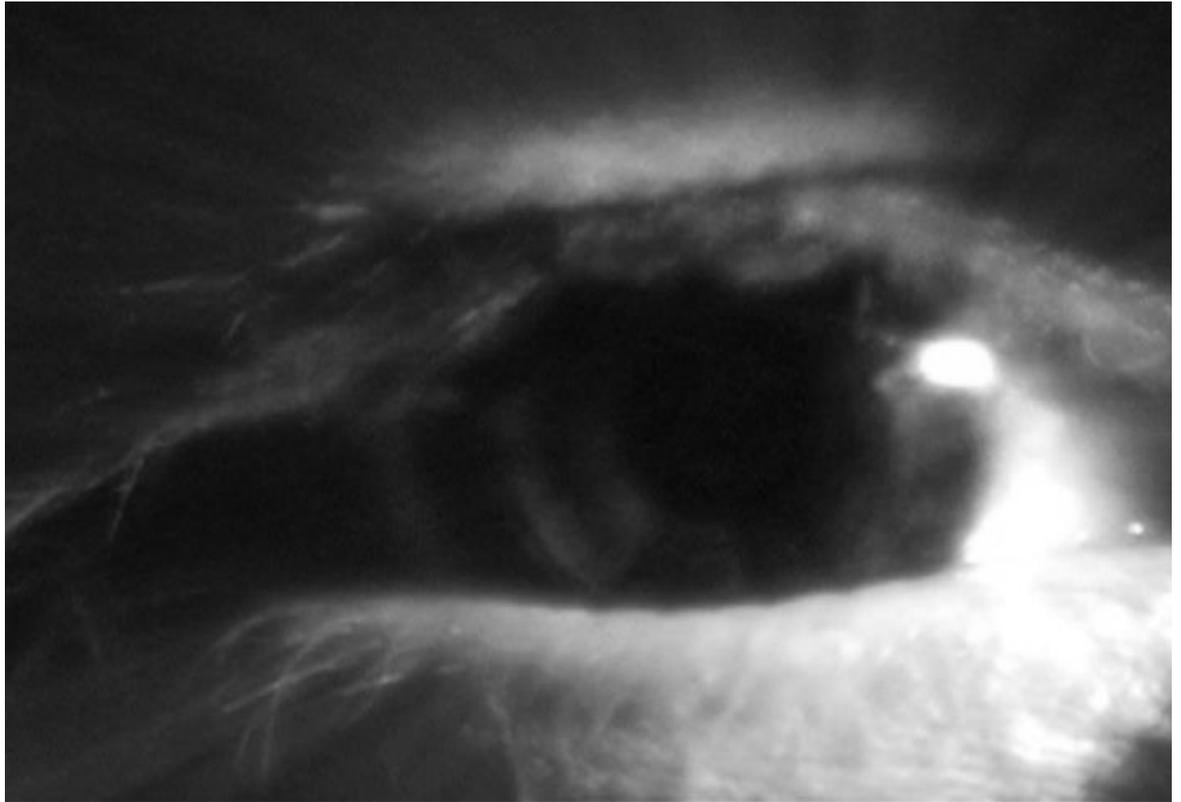


Figure 4. The close up of the Doctor's eye is a stunning cue to visualise the beginning of the memory scene (source: star trek wiki.com).

The journey into the Doctor's memory begins as the camera zooms in on the Doctor's eye in dramatic close up; the overexposed and magnified eye fills the screen, emphasising the drawing into the psyche of the Doctor (fig 4). In "Latent Image," the fluidity and luminosity of the eye are symbolic of self-reflection, representing an optical pool whose surface reflects a way into the unconscious, a two-way mirror reflecting/looking in and out, establishing a relationship between *what the Doctor is* and *what he sees*. Although the memory of events is his, emphasised by the camera's journey into the mind's eye of the Doctor, and the images of the past are shown from the Doctor's perspective, he interprets their meaning from the Other's (Janeway's) position of power that identifies him as a machine. Within the Doctor's mind's eye is reflected Janeway's view of the machine as having no will or gaze of its own. However, the look is never static, and at certain points, the Doctor is also able

to look out/back, for example, reclaiming the gaze in his capture of the saboteur, effectively denying the Other's look.

The scene that depicts Janeway's image deleting the Doctor's memory is visually stunning, and symbolic of the gaze/look as *not* monolithic, not constant but continually shifting and re-negotiated. For example, with the symbolic blinding of Janeway, the look of the "Other", hitherto so powerful, is denied (Fig.5), the deleted eye becoming representative of a denial of sight and the invisibility of the subject (the Doctor). In "Latent Image," human sight is devalued, degraded and denatured by the techno-eye. Martin Jay in "The Disenchantment of the Eye" links the emergence of postmodern (posthuman) rhetoric with the demise and rejection of the "function of the penetrating gaze, able to pierce appearances to see the essences beneath" by the toppling of the "privileged gaze" and the disappearance of a fixed subject (179/180). The privileged gaze of Janeway is toppled when the Doctor's gaze is able to symbolically pierce and disembody her eyes. The symbol of the eye-less Janeway illustrates the failure of her panoptic vision as it is eroded and supplanted by the Doctor's techno-gaze. Janeway's deformed eyes contrast to the image of the Doctor's mind's eye that fills the screen as he and the camera plunge into his memory. The metaphor of the unseeing eye alludes to the fallibility of the subject as stable in that the once all-seeing Janeway has been rendered inert through the Doctor subjecting her to the digital gaze.



Figure 5. The reproduced image of Janeway as she tampers with the Doctor's memory file (source: Star Trek Wiki.com)

As the heterogeneous imagery of the eye reveals, this episode hinges upon viewing: looking at the self, looking at the other, and the look as a form of resistance. The narrative centres on the Doctor's negotiation of the panoptic field of the "Other" (Janeway) and his internalisation of that gaze. But, in "Latent Image," there are many gazes/eyes that re-represent different and varying positions on the Doctor's subjectivity. One gaze represented by Seven of Nine (Jeri Ryan) takes a posthuman hybridised look. Her vantage point, as a cyborg, her body suspended and imprisoned somewhere between human and machine, frames the Doctor's situation differently to Janeway. For Seven, there is no firm or absolute distinction between organic and machine. Seven, representing the gaze of the post-human, is "post" because she has been converted by the Borg to part flesh and part machine. Seven's fundamental

sympathy with the Doctor's plight stems from her ability to look past what it means to be machine or human, placing her on the border between flesh and metal. Her look is filtered through her ocular implant (Borg technology) and an artificial eye manufactured by the Doctor, both acting as visual symbols of her link to technology and her affinity with the techno-gaze (fig.6), allowing her to transgress human visualisation, subsequently reconfiguring and embodying the Doctor differently from Janeway. The development of the synthetic eye, created to look the same as her human eye but with superior acuity, allows Seven to see *through* the Doctor's "eye," reminiscent of the android eyes of Roy in *Blade Runner*, manufactured by Chew (the eye designer) and to which Roy says "Chew, if only you could see what I've seen with *your* eyes" (*Blade Runner*). In "Latent Image," Seven and the Doctor share the same visual perspective, the eyes of the creator and its recipient can look through the other's eye.

Seven of Nine's techno-eye allows her a duality of vision – between the human (Janeway) and the machine (the Doctor) - and, as Katherine Hayles points out, offers the possibility not to *replace* the human eye/vision but to recognise and *expose* "the networks of production which constitute human" superiority of vision (1993). The technologically enhanced eyes of Seven produced by the Borg, which are superior in range and depth of vision to the human eye, exposes as flawed Janeway's vision of the Doctor as like a replicator, repositioning the gaze into the realm of the posthuman. The posthuman eye, represented by Seven and frequently denied in the Doctor, rejects the romantic/liberal myth of humanity as superior and original, thereby its position as stable and pure. Through the multiplicity of the gaze, denying

the subject a single and revenant identity, the human is deprived of its central place as all seeing and all knowing.¹³³ The all-seeing eye is blinded (as Janeway's image represents) by the digital eye that seeks to screen out the vision of human superiority and replace it with a cyborg-filtered, murky and unclear distinction between human and machine.¹³⁴ The all-seeing eye, related to universal power and knowledge, is a common meme within mythology and science fiction, dramatizing the power to see all things as a window to the soul, and a god-like ability to see past, present and future (as depicted in the film *Lara Croft Tomb Raider* and in the symbol of the Tyrell Corporation in *Blade Runner*). It has also been used by critics such as Donna Haraway who view Western, white, masculine ideologies as acting as an all-seeing eye that surveys, denies, defines and creates the subject. In "Latent Image", this "masculine" narrative is undertaken by Janeway, who although female, nevertheless represents the overwhelmingly masculinised, militaristic and scientific ideals of Starfleet.

¹³³ The distinctions between the various types of humanism and their place in relation to the posthuman are discussed in Chapter One "The Final Frontier", which focuses upon the myth of humanism in *Star Trek: Voyager*.

¹³⁴ Although the "eye" of the Borg is technically superior in vision to the organic or human eye, in its visual representation on the screen, Borg vision is shown as filtered through a green light, almost a haze of techno-colour. Therefore, the Borg's visual perspective on screen appears murky and cloudy and yet it is able to pick up fine details and light spectrums that are invisible to the human eye.



Figure 6. this image clearly shows Seven's optical implant and her positioning next to the replicator (Source: Star Trek Wiki.com)

The Mirrored/reflected self/'I'

The physical eye is not the only reflective surface involved in disrupting and shaping the Doctor's self-knowledge. The mirrored gaze that is reflected by the mirrored 'I' permeates "Latent Image," as images of the Doctor is reflected back to him through the various surfaces. The lens of the camera or holo-imager displays back to the Doctor the dominating gaze of Janeway, and later that of Seven of Nine, each developing or revealing different perspectives of the Doctor as subject. Consequently, the *mirrored* gaze questions which self is reflected back because each reflection provides the Doctor with a different eye/I view of the subject. Janeway's gaze acts as a lens through which the Doctor forms an understanding of his identity as an automaton. On the other hand, the look of Seven of Nine offers him a way of viewing his identity as

evolving into something more than a faulty machine. Jacques Lacan argues that the “mirror stage” (the reflecting back upon the self) lays the groundwork for the cultural formation of the self, it is the “first step in the construction of the self” (Constable 73). In reflecting on the self during the mirror stage (seen in the Doctor’s recovered memory), the subject begins to see the self as separate from the “Other”, creating a subject that is divided within itself. The Doctor is divided in his attempt to reconcile the self he sees with that shown to him by the look of the “Other”.

Similarly, Foucault’s formation of the subject through acts of power and the internalisation of the gaze views the subject as torn between different gazes that create the subject in relation to the individual’s interaction with others. According to both Lacan and Foucault’s models of the self, the subject is formed through interactions between different, conflicting and competing views of the self, compiled through engagement with the self and others. The divided self struggles to reconcile the various ‘I’s (Lacan) or gazes (Foucault), that is, the ‘I’ of the reflective or “specular” self (the Doctor’s gaze); the “social ‘I’ ” (the gaze of the Other/Janeway); and the “ideal ‘I’ ” (the gaze that the Doctor expects) are in conflict (Lacan). Following Lacan, I define the specular ‘I’ as relating to how the individual sees the self (what he/she thinks of as ‘I’); the social ‘I’ as what others think of or how they view the individual; and the ideal ‘I’ as what the individual wants to see or be. For Lacan, the self or the subject is illusory because these three faces of the self, the different facets of the ‘I’, cannot be reconciled. In the same way, Foucault argues that the subject is illusory because the gaze is continually shifted and re-

negotiated through power relations which are in turn contested and undercut through social, political and scientific structures.

Therefore, the 'I' is never fixed but shifts between gazes, between looking and being looked at. In "Latent Image," the emphasis on "looking" accentuates the conflict in the Doctor's inability to reconcile his identity crisis. The "ideal 'I'" is the 'I'/self that the Doctor expects to see – the well-functioning and an efficient hologram that is incapable of making an emotional error. The Doctor, looking back at the past, looking through Lacan's metaphorical mirror, interpreted through the social gaze that is mirrored back to him, realises that he lacks the control that his ideal 'I' assumes or expects. The Doctor becomes alienated from both the specular and the ideal 'I' and accepts the position/gaze imposed upon him from outside (the social 'I'). In terms of Lacan's subject, the Doctor has trouble reconciling the three faces of the 'I'/self. Alternatively, using Foucault's concept of the gaze, the Doctor has difficulty in reconciling the gaze of the self with that produced by the "Other". However, the idea of the subject as an embodiment of the gaze of the "Other", in conflict with that of the self, does not mean that the subject is passive, waiting to have an identity imposed upon him or her and at the mercy of the dominating gaze. The look can be and is returned.

(Re) turning the Gaze: Looking and Reflecting Back

The Doctor's position up until this point (up until his resolution to want to be reprogrammed) would suggest that, at least in terms of the hologram, identity can be imposed through what Foucault describes as "an inspecting gaze" (*P/K* 155). The Doctor in most of this episode is apparently victimised by the gaze,

classified, labelled and controlled as a machine, particularly through the inspecting and dominating gaze of Janeway. Therefore, Foucault's panopticon seems at first glance to render the subject passive, at the mercy of the "all-seeing eye." Nevertheless, as this episode illustrates, the all-seeing gaze/eye is never completely "fixed" but rather fluid, roaming between the observer and the observed, dissolving into a mutual surveillance. As I will argue in the remainder of this chapter, the Doctor is not merely a victim of the inspecting gaze but wields the power to invent and to examine, reflecting, and deflecting the imposition of an inauthentic identity (Foucault).¹³⁵ Janeway's omnipresent gaze has its counterpart in the Doctor's role as medical observer.

The Medical Gaze

As a Doctor, he wields an inspecting gaze highlighted in the use of the holo-imager in which he records images of the crew. This "instrument of visualisation" devours the subject and reintegrates it from the inside out, much like what happens to the Doctor in the watching of his memory (Haraway 2006 581). The patient is captured by the techno-eye (holo-imager) that devours, disembodies and re-forms the image into a holo-matrix (a simulated double). The Doctor, as a medical observer, employs his techno-gaze that has the power to seemingly view with "unrestricted vision," facilitating unrestricted visualisation and reproduction of the internal and external bodies of the crew, thereby subjecting them to total surveillance (ibid). The Doctor's "examination distinguishes, divides, and ultimately isolates the different members" of the crew according to how he interprets the medical results, and this examination

¹³⁵ By an inauthentic identity, I mean an identity imposed upon the Doctor from without, from the look of the other.

acts as a form of “social control” (Gordon 131). The Doctor’s role as examiner and controller subverts his position as a hologram, in that he is able to elude the gaze imposing his own upon others. In the realm of the digital, the absolute gaze is replaced by a battle for control between the observer and the observed, creating complex and conflicting surfaces.

For example, the Doctor occupies a contradictory and problematic position because as a hologram he can be observed, displayed, confined and controlled, and so made visible, but as the Chief Medical Officer, he commands that all others be visible through his medical examinations. He does this by submitting the crew to invasive surveillance, achieved through undergoing his deep scans reconfiguring the body to produce a detailed and intimate record of the body that can be conjured up, thereby inflicting compulsory visibility onto his patients. In *The Visual Human Project* (2000), Catherine Waldby notes that the medical gaze traverses the subject by “the passive situating of a re-represented organic object within an optical ... [inorganic] ... field” (26). The subject becomes an object of medical study rendering the body inert and “accessible to material reordering” (29). The Doctor’s reordering of the humanoid body into a digital holo-image renders the crew passive, imposing a compulsory visibility, and allowing the crew to be catalogued, sorted and observed. The medical gaze produces a new iconography of the human body visualised as photonic energy, hyper-realised and artificial, traversed by the computer. The medical holo-imager “acts panoptically, as a machine which gathers up and orders the world visually and makes it available to be viewed as a system before the viewer” (30). The Doctor, acting as observer/viewer, uses the holo-imager to gather information

about the health of the crew and systematically gather up information about his missing memory. It is the holo-imager that draws his attention to the surgery performed on Kim, and which captures Janeway's image as she removes his memory.

As a medical officer, the Doctor occupies a privileged position in which he visually re-represents the crew through the visual ordering of the humanoid body and re-positions his own subjectivity through the power to make others visible. The Doctor also has the power to impose visibility onto Janeway. Although she is reluctant to undergo his medical examination, not reporting to sickbay as requested, the Doctor appears in her ready room and insists she complies. Janeway in a position of authority and able to order the Doctor to be reprogrammed and to be deactivated is still subject to the Doctor's medical gaze. Under Starfleet regulations, the chief medical officer, in this case, the holographic Doctor, is able to declare the Captain medically unfit for duty and relieve her of command. As a consequence, in his role as a medical officer, the Doctor can subvert the Captain's power. This is, of course, subject to the Captain's obeying his command and not deactivating him. In "Latent Image," the distances and tensions between seeing and being seen are complicated by the complexity of the power relations between a Doctor who is also a hologram/machine, and a Captain who is ethically constrained by Starfleet regulations that allow the Doctor to relieve her of command.

The panoptic tension between seeing and not seeing is further encapsulated within the walls of *Voyager's* sickbay. The design of *Voyager's* sickbay functions a type of panoptic model in which constant "surveillance and supervision" acts to reinforce the marking of individuals (Bogard 334).

Individuals (patients) are marked out by quarantine and treatment in accordance with the Doctor's observations. *Voyager's* sickbay adopts some of Bentham's mechanisms of the panopticon in that a "central tower ... pierced with wide windows ...," the Doctor's observation point, allows the observer to watch, or give the illusion that patients/inmates are being watched and allows inmates/patients to be quarantined in their own "cells" (Foucault *D&P* 200). The Doctor looks out from the central observation room at his patients, projecting a controlling gaze over their movements. However, sickbay also acts as a "cell" that encloses the Doctor. *Voyager's* sickbay, like the plague town in Foucault's analysis of the panoptic mechanism, employs apparatuses to control not just patients but also the Doctor.¹³⁶ In his analysis, Foucault argues that in times of plague each member of a household is to be confined to their dwelling and to be *visible* when called, "answering to his name and showing himself when asked", thereby maintaining order and controlling the spread of infection but also rendering the individual passive (*D/P* 196). Similarly, the Doctor is subjugated to compulsory visibility because he must appear when called. The Doctor is summoned to appear when anyone asks the computer to "activate EMH." In the past the Doctor has been physically restricted to the confines of sickbay and only in finding alien technology (the mobile emitter), has he been able to leave sickbay and interact more fully with the crew.¹³⁷

¹³⁶ While the inmates of the town had to appear when called and there were strict controls on their movements, those charged with overseeing their surveillance and quarantine were also restricted (on the penalty of death) from leaving the confines of the town. Therefore, power acted on both the observed and the observer.

¹³⁷ He obtains the holo-emitter from a rogue time traveller in the episode "Dark Frontier." The emitter is technology from the future stolen by the traveller and then stolen by the

The contradiction of the Doctor made visible and confined (as a hologram), and yet able to make others visible and appear (as a Doctor), highlights the instability of the subject and the slippage of the gaze. The creation of the subject is dependent upon relations with others and the complexity of the various roles played out in these relationships. The Doctor is shaped and reshaped into different subject positions, having been categorised as a machine, as a failed Doctor and failed automaton, as medical overseer and an inmate called to appear when asked. But in his slippage of the gaze, he is able to engage actively with these subject positions – denying some and embracing others. Like the subject, the gaze is not fixed but fluid and dependent upon who is looking out/back.

The changing and challenging position of the gaze is especially noticeable in the events leading to the Doctor uncovering his saboteur. It is possible for “... people who are rendered visible ... [to] attempt to escape by deploying counter-techniques of invisibility ...” (Marquez 21). Through his deployment while deactivated of his holo-imager, an extension of his techno-eye/gaze, the Doctor counters his compulsory visibility and becomes the observer, thereby rendering himself invisible to the saboteur. He subverts Janeway’s authority by programming the computer to record any tampering with his memory before he obeys her order to deactivate. Setting a trap for the saboteur, he plans to capture the image of anyone who tampers with his programme, telling the computer to reactivate him as soon as someone does so. The Doctor’s camera acts as a panoptic device that surveys all who enter sickbay. The camera maintains a secret vigilance that acts as an extension of

Voyager crew. Before the holo-emitter, his holo-matrix was unstable outside of sickbay, limiting his access to other areas of the ship.

the Doctor's vision, with the holo-imager performing as a surrogate eye that leaves anyone who enters sickbay exposed to his hidden surveillance.

Although the camera is actually placed in full view, it acts surreptitiously by turning on when someone enters the room. And, in his search for the person who deleted his memory, it is Janeway - who hitherto has avoided the Doctor's gaze - who is captured by the camera. Visibility becomes a trap in which Janeway, the observer, is finally ensnared (Foucault *D/P*).

Instead of having Janeway's image appear mirrored back through the computer panel she is tampering with, the scene unfolds as the Doctor watches her image re-created and re-ordered by the holo-imager. Janeway is ensnared, displayed and displaced through the re-imaging of her body matrix, now composed of photonic particles, re-formed by the Doctor's medical imager. Her image is at first blurred, unformed and fragmented. Eventually, she is exposed, transformed into the saboteur, but denied vision and subjected to the Doctor's gaze. Janeway's exposure in this scene is also sexualised because as her image (the doppelgänger reformed through photonic particles) unfolds before the Doctor, the camera closes in on the forming breast tissue that exposes the culprit as female. Janeway is not just subjected to the Doctor's masculine gaze (he is formed in the image of a white, western male) but the look reduces her image to the "naked" female body.

Janeway's blindness to the Doctor's surveillance is beautifully emphasized by her doppelgänger, which is re-formed with downcast and disfigured eyes, the last of her body to materialise. At this point Janeway loses her omnipresent gaze, her eyes deleted and downcast, her gaze replaced by that of the Doctor who now knows that she is responsible for his altered memories,

although as yet not why. Like the Doctor's disembodied memory, the simulated figure (a visual doubling) of Janeway is slowly revealed, piece by piece, molecule by molecule, part by part, a view from the inside out, creating a "digitisation of subjectivity" that renders her mute and blind (Waldby 5). The fact that Janeway's doppelganger is a simulation, pieced together by photonic particles, a holo(hollow)-representation of the real Janeway, acts as "a second figure who can be examined ... [and] a double [that] can also be alienated from the self ..." (Lutz & Collins 376). By re-creating Janeway as a digital double, the Doctor alienates her from her human origins, acting to destabilise epistemologies of what it means to be human by subjecting her to mechanic vision. Therefore, Janeway, as simulacrum, as a digitised body, becomes an object of visibility and subjugation. Her holo-image represents a deconstructed and transformed myth of the state of the "human," in which the human image can be re-ordered as post-human or as *inhuman*, a blasphemous anti-mythology. Such posthuman blasphemy is anti-mythological in that it actively denies and degrades the stability of the human subject, exposing the irrelevance of the idea of the biological taxonomic category, human. In the posthuman world, there is no such thing as *being* human (Haraway).

Seeing individuality through Post/Human eyes

However, even in the realm of the posthuman the essential criterion of what it means to be human remains an appropriation of power. Janeway's appropriation of the Doctor's memory is an act of power based on the essential idea that only humanoid life forms (that is, organic life), effectively excluding artificial life, have agency. Consequently, the deviation of the Doctor from machine towards what is considered the province of the human, namely the

ability to *act* differently, to evolve and to feel, is viewed as a malfunction. But Seven, from her position as a posthuman cyborg, perceives the Doctor not as malfunctioning, but as evolving:

SEVEN: When you separated me from the Collective I was an unknown risk to your crew, yet you kept me on board. You allowed me to evolve into an individual.

JANEWAY: You're a human being. He's a hologram.

SEVEN: And you allowed that hologram to evolve as well, to exceed his original programming and yet now you choose to abandon him.

("Latent Image" 1999)

Therefore, Seven views Janeway's denying the Doctor his right to individuality and to agency as hypocritical, based on Janeway's previous allusion to the importance of individuality and agency to humanity. In "The Gift" Janeway tells Seven that the fundamental difference between the Borg Collective and humanity is that humans value individuality and the right to choose. Seven sees Janeway's attitude towards the Doctor as hypocritical and an act of abandonment because although he has been encouraged to "exceed his original programming" he is abandoned when his newly acquired "emotions" cause conflict within his original matrix. He is not free to evolve as an individual because of his mechanical origins, an origin that has no affinity or common basis with the human community. To be human is to have a common basis of identity formation – family, history, gender, and race – reinforced by social institutions, something that the Doctor as a machine lacks, and this "lack" is something that Seven can relate to. She was removed by the Borg from her human family as a young child and subsequently taken from the

Borg by Janeway, leaving her disconnected from any one common base of affiliation.

The show places emphasis on the importance of the individual and individuality, while at the same time it extols the virtues of a united humanity. In this way *Star Trek's* narratives deliberately over-inflate the position of humanity or humanoids to an extent that they burst the bubble of the series' liberal humanist stance, leading to storylines highlighting the failure of such humanist vocabulary to encapsulate the posthuman or the nonhuman. Janeway's rhetoric of humanism strategically positions the Doctor, whose affinity is seen by her as purely technological, outside the repertoire of human rights and at the same time, Janeway's identification of Seven as human allows Seven to act as an individual.¹³⁸

Therefore, Janeway's rhetoric of humanism positions the Doctor outside the demand for rights and freedom, utilising the recapitulation of the "anthropocentric ideal of the human as essentially separable from and ontologically prior to technics ... [and] ... the human as a point-of-origin" (Hayles 1993 48). The idea that the human is the "point-of-origin" for all things and at the centre of all knowledge consequently leads to an exclusion of and prejudice against non-human life forms. As a construct of humanity's techno-capacity, its ability to construct a life-like hologram, the artificial has no "point-of-origin," no ontological point of reference that is not referential or in fact deferential to humanity. As well as being separable from the

¹³⁸ Seven's affinity is not always with humanity and although content to remain as part of *Voyager's* collective she still looks to the Borg to define her identity: "I am, Borg". Nor is she always so readily accepted as human. Many crewmembers act differently around Seven, and some, like Torres, are openly hostile to Seven's less than "human" personality.

mechanical, humanity's origin story is historically synonymous with individuality. During the Enlightenment, the individual, an autonomous being, is held to be at the centre of humanity's origin story. For Rousseau, humanity reaches perfection through the "reawakening of individuality" which he views as "humanity's birth right and its highest goal" (Mansfield 17). Therefore, to be human is to have a sense of the self, a "birth right" that sees the individual or an awareness of 'I' as central to the world. This Romantic humanism views the human self as the centre of all things and all things are to be measured against what it means to *be human*. As I argue in Chapter One, *Star Trek's* core philosophy appears to revolve (often unsuccessfully) around the concept of liberal humanism and the importance of individuality. Janeway's twenty-fourth century ideals hark back to the romantic notion of humanity as the centre of all things. In *Star Trek*, these ideals seem benign, reflecting a humanism that is supposedly all-inclusive; race, gender, and religion, all the factors that divide humanity in the previous centuries, have, according to *Star Trek's* rhetoric, been displaced and conquered. However, as the figure of the hologram suggests, the conquering of humanity's inequalities in this future universe is simply a blind – a camouflage that hides the fact that humanity itself is privileged above all other knowledge, creating a powerful rationale for the denial of rights to the non-human. In contrast, the *posthuman* subject, like Seven and the Doctor, disputes and disrupts the free and autonomous individual, instead of looking at the subject as de-constructed and unstable, without origins. However, the posthuman also sees the inherent danger of the philosophies of liberal humanism that act to subjugate and deny the "Other".

The danger present within the humanist determination of the subject, the exclusion and subjugation of the “Other”, results in a Posthuman denial of the origin story. Consequently, the posthuman subject rejects humanity as a “point-of-origin”, and, within *Voyager*’s narrative, Seven acts as an example of Haraway’s “illegitimate offspring” who is “exceedingly unfaithful to [her] origins” (2006 151). As the “illegitimate offspring” of a posthuman irreverence towards humanity, Seven breaches the border between seeing as “human” and looking inwards to the machine. Therefore, Janeway’s appeal to Seven’s link with humanity is not a strong basis for her to comply with Janeway’s decision regarding the Doctor. Seven’s perspective as a cyborg affiliates her with the replicator and the Doctor than with the human community in which Janeway situates her. In fact, the scene in which Seven confronts Janeway about her abandonment of the Doctor visually situates Seven alongside the replicator, the machine framed as the focal point of the room and as Janeway’s example of “intelligent” machinery. The bright light of the replicator stands out in the semi-darkness of Janeway’s quarters and is visually situated to the side of the close up of Seven, emphasising and drawing attention their mutual affiliation (seen in Fig.6.).

In her affiliation and understanding of the precarious place of the machine amongst humanoids, Seven represents Haraway’s irreverent cyborg/subject that is “wary of holism ... [and yet] ... seem[ing] to have a natural feel for united front politics” (2006 159). Seven is wary of the holism present within Janeway’s humanist myopic gaze and instead unites with the profane politics of the techno-being. The techno-being’s profanity is in their dismissal of human uniqueness, a uniqueness linked to the traits of empathy,

emotion, self-awareness, and individuality which are demonstrated through the presence of the techno-being as unstable and not the sole province of humanity. From Seven's peripheral position/vision she is able to understand, to see what is happening – the denial of the Doctor's right to explore and understand these qualities, resulting in the violation of the individual – leading Seven to reject Janeway's appeal to holism seeking to connect her to humanity, instead uniting herself with the Doctor. To Seven, the Doctor is an individual, a friend, and confidant and not simply advanced technology. Seven's cyborg gaze finds her advocating on the Doctor's behalf, enacting what Haraway calls "an optics of positioning", enacted through Seven's affinity with his technological position (2006 586). Her ability to sit on the boundary between humanity and the Borg, and to question the essence of "being" human and being a machine, allows Seven to re-position herself alongside the Doctor:

SEVEN: It is unsettling. You say that I am a human being and yet, I am also Borg. Part of me not unlike your replicator, not unlike the Doctor. Will you one day choose to abandon me as well? I have always looked to you as my example, my guide to humanity. Perhaps I've been mistaken.

("Latent Image" 1999)

Seven is unsettled by Janeway's decision because, framed as neither machine nor human, will she, too, be abandoned by Janeway and humanity one day? Seven interprets the nature of the subject as precarious and that she could be reframed as something "inhuman". Seven's dissenting position acts as a "point of insubordination" in which she confronts Janeway's privileged humanism

and emphasises to Janeway the parallels between her situation as a cyborg and the Doctor's (Foucault *D/P* 794). In the figure of Seven of Nine, the Doctor finds an advocate.

Engaging/Embracing the Subject

Seven of Nine acts as a dissenting voice/vision in her advocacy of the Doctor's right to explore his memory and individuality. Seven, by re-positioning herself alongside the Doctor, persuades Janeway to see, however momentarily, through the eyes of the posthuman cyborg, giving Janeway a reason to reconsider allowing him to understand his conflict rather than erase his memory. Seven's argument that she is more like the replicator and the Doctor than she is like Janeway makes Janeway re-evaluate the labelling of the Doctor as merely a machine, and consider the possibility that the Doctor is more than the sum of his parts. Reflecting on the Doctor's development over the years, Janeway asks whether, as Seven suggests, she now has a responsibility to help him because she has given him a "soul":

JANEWAY: ... We allowed him to evolve and at the first sign of trouble ... We gave him a soul, B'Elanna, do we have the right to take it away now?

TORRES: We gave him personality subroutines. I'd hardly call that a soul.

("Latent Image" 1999)

The idea of the "soul" as central to the human condition is frequently used in science fiction to divide the machine from the human. Only humans possess a

soul, a rhetoric used as a means to exclude, exploit and control the “Other”, and part of humanism’s origin story. Historically, the absence of a soul has been used to exclude and enslave non-whites, animals, and, in science fiction narratives, the machine. Therefore, Janeway’s suggesting that the Doctor has a soul, harking back to her humanist ideas of linking a soul with individuality, places him closer to the category of human. Janeway, who has previously denied any rights to this glorified replicator, now sees a problem in taking away his right to evolve. At this point, she seemingly views the Doctor more as an individual, with rights and the freedom to explore his self-potential, than a mindless mechanism. Janeway’s position, therefore, becomes contradictory, in that she now gives or bestows upon the Doctor a soul, something that is linked exclusively to humanoid life forms.

As her conversation with Torres demonstrates, Janeway is still very much in a position of power to control and label the Doctor. Although she appears to accept that he is more than what he was at the start of the episode, it is Janeway who has the power to *give* the Doctor a soul. Humanity (in this case Janeway) “gave him a soul” and it will be humanity who decides whether it can be taken away. Also interesting in this dialogue is the fact that Torres, the ship’s alien engineer, views the Doctor as a machine, not with a soul but with “personality subroutines”. Therefore, while Janeway interprets the soul as being intrinsically linked to the self (the “human” subject), finding the Doctor’s soul in his ability to reflect upon himself as an individual and in his empathetic reaction to the death of Jetel, Torres looks to the soul as something which is separate from the individual, as a spiritual essence rather than part of

the physical being.¹³⁹ The separation of the soul from the subject/body, placing it in the realm of the spiritual, leaves little room for a “spirit within the machine.” The Posthuman idea of a machine with a soul acts to undermine the core belief in humanity as distinct, and technology robs humans of their “humanity(sic), metaphorically expressed as our soul: it threatens to replace the individual, God-given soul with a mechanical, machine-made one” (Schelde 1993 9). In his quest for individuality and subjectivity, the Doctor threatens the place of the Human by looking back/out through his techno-eye, the window to his “soul,” his vision luminously decrying humanity’s reliance upon fixed determinations of the subject and what it means to be Human – to have emotion, reason, empathy and a soul. The Posthuman parable derails the very idea of a stable and unique essence that is the *human* subject.

Janeway’s change of heart or perspective on the status of the Doctor, that he is more than a replicator, results in her allowing him to work through his troubling memory and confront his feelings. As the episode draws to a close, Janeway mounts a vigil in the hope that the Doctor can resolve his conflict:

JANEWAY: [personal log] Our Doctor is now our patient. It's been two weeks since I've ordered a round the clock vigil. A crew member has stayed with him at all times offering a sounding board and a familiar presence while he struggles to understand his memories and thoughts
...

("Latent Image" 1999)

¹³⁹ Torres views the soul as separate from personality and from the individual and this is highlighted in her Klingon religion that views the soul in a strictly religious sense.

As a patient, the Doctor is subjected to a “round the clock vigil”, becoming once again the observed, the visible subject of observation and scrutiny. The sequence begins in the empty holodeck; empty that is, except for the Doctor sitting upright in his chair and Janeway sitting in the foreground of the shot. She is reading a book of poems by Dante that she tells him is “relevant to his situation” and is in fact written about “new life.” By the end of "Latent Image," the Doctor has been born again as a hologram with a soul, emphasised by the close up of Janeway and the Doctor, now face to face, eye to eye, when Janeway tells the Doctor she is too busy to rest because she is helping a friend. The Doctor’s subject position has evolved from replicator to failed machine/Doctor and finally to “friend”, *someone* Janeway considers worthy of compassion. In the final scene the Doctor, now occupying Janeway’s position in her vacated chair, now overseeing his own supervision, his own “looking,” reads aloud the words from *La Vita Nuova, The New Life of Dante Alighieri*. And, yet this conclusion is not as satisfactory as it appears. Although the Doctor seems to have a newfound freedom and the chance to redefine himself he is, in fact, still confined and defined within the realm of the organic, left to contemplate his subjectivity in the barren holodeck in which he now sits alone.

Conclusion

"Latent Image" represents the image, the gaze, and the “look” as integral to the formation of both the subject and to subjectivity. The panoptic gaze is focused upon the Doctor in most of this episode as a way to control or mediate his behaviour but also as a way of re-creating the subject. The Doctor is able to slip the gaze for a brief time when he becomes the voyeur, the one who captures the images of crewmembers in his medical gaze and captures Janeway

as the saboteur. Surveillance, both in the form of re-viewing memory and in the vigil held over the Doctor, acts to fracture the Doctor's identity as machine and then later acts to solidify his identity as an individual, as an entity with a "soul". It is the possession of the "soul," this seemingly quintessential human thing that leads to Janeway accepting and reaching out to the Doctor, as an individual, and not as a glorified replicator.

The Doctor's self-knowledge never remains static because in the Posthuman world of science fiction the taxonomic border between human and machine is unstable and continually breached. The machine becomes symbolic of the fragility of the "human condition" and the myth of a fixed and knowable subject. Such Posthuman narratives demonstrate that the (re)constructed subject can be taken apart and rebuilt, piece by piece, atom by atom, just as the Doctor's medical imager can deconstruct the bodies of his patients, leading to instability, refraction and the loss of the subject.

CHAPTER FIVE

“AUTHOR, AUTHOR:” REBELLION, AUTH(OR)ENTICITY AND THE HOLOGRAM

In this chapter, in relation to *Star Trek: Voyager's* “Author, Author”, I draw connections between Gayatri Chakravorty Spivak's critical work on representing or re-representing the subaltern and Edward Said's “writing back” from the margins by the “Other,” in order to demonstrate the Doctor's role in recreating a literature for the hologram. Like the power of the gaze, discussed in the previous chapter, literature acts as a mechanism for both self-expression and suppression. Writing back acts in the same way as returning the gaze. Written two years after ‘Latent Image,’ this episode expands on the Doctor's journey of self-discovery and his search for agency.

The Doctor's holonovel, *Protons Be Free*, a tale about the adventures of an Emergency Medical Hologram (EMH) on board the star ship *Vortex*, addresses what the Doctor feels are the injustices and challenges of being a hologram immersed in a world dominated by organics. The novel defines the protagonist's mission as to “uphold your medical and ethical standards as you struggle against the crew's bigotry and intolerance” (EMH). Such intolerance, highlighted within the novel through the exaggerated portrayals of the *Vortex* crew, systematically degrades and denies the self-identity of the EMH.

Echoed in the struggles faced by his fictional protagonist, the Doctor's battle to have his work appreciated and published leads to debates about whether he can claim the rights of a “person”. As the Doctor faces the issue of whether he, as a hologram, has the right to control his artistic expression he comes across similar bigotry to that faced by his fictional

counterpart. In his desire to get his novel published, the Doctor sends his first draft off to a publisher, Broht and Forrester, who describe his work as a "modern-day Tolstoy" (Broht). However, Ardon Broht releases the novel onto the market without the Doctor's consent, leading the Doctor to try to stop publication and protect his literary property. Comparable to *The Next Generation* episode "Measure of a Man," in which Data must fight to prove he is not the property of Starfleet, the Doctor must prove that he has rights. What ensues is a discussion within Starfleet about whether a hologram has rights under the definition of an artist. This is significant because such rights are only applicable to "a *person* who creates an original artistic work" (Tuvok) and therefore the Doctor must argue that he is a "person". The episode deals with the question whether, if the Doctor is not human, not a person, he can claim authorship and the rights that belong to the author.

Alongside the debate about the Doctor's literary rights and his claim to personhood are the conflicting views that emerge from the crew's viewing of the holonovel. The crew are incensed at his portrayal of life on *Vortex/Voyager*. They are incensed at the Doctor's depiction of the injustices faced by the EMH at the hands of the *Vortex* crew. They see it as an affront to their own characters and a lack of acknowledgement of the freedom they have afforded the Doctor. Just as postcolonial writings have, according to Edward Said, written back from the margins, so too the Doctor's novel writes back against what he views as the plight of sentient holograms whose identities are fixed by the centre. The end of the episode is just as poignant as the beginning. The final scene depicts two Mark I holograms, designed with the same matrix as the Doctor but doomed to spend their lives with hundreds of others in

dilithium mines, discussing a revolutionary new holonovel – *Protons be Free* (Fig. 7). The final image of the episode is the drudgery and emptiness of the existence of the other Mark 1 holograms enslaved within the mines. However, it also offers a glimmer of hope as one hologram tells the other to view the latest holonovel that he finds “quite provocative”.



Figure 7. Two EMH 1's discuss the new holonovel – *Protons be Free* (source: Star Trek Wiki.com)

Writing Back: Re-representing Identity through Narrative

"In the beginning, there was darkness, the emptiness of a matrix waiting for the light" (EMH).¹⁴⁰ So begins *Star Trek: Voyager's* "Author, Author" (2001).

The name of the episode is significant, as it tells the Doctor's story from the hologram's point of view. The episode opens with the formation of identity

¹⁴⁰ An interesting paraphrase of "Genesis" (*Bible*)

through the spoken word and deals with the power of literature to write or speak back from the margins. In these opening words can be seen the Doctor's message to other holograms – that they, now in darkness, will soon see the light. The light is the knowledge that they too, like the EMH, can break out of the mould set for them by the dominant discourse. The Doctor in creating his holonovel fashions a hitherto unknown story of what it is like to be a hologram in servitude to organics. It is within this framework that postcolonial theories, including Spivak's analysis of the subaltern and Said's "Other", are useful to examine the novel as a form of resistance. Like the rewriting or retelling of identity by the postcolonial subject, the Doctor's holonovel symbolises his struggle as an outsider, subaltern and "Other". In *Star Trek*, the hologram placed at the margins of the organic world, denied a voice, a history, and a right to selfhood, is constructed as the ultimate "Other", as subaltern. The narrative of the holonovel acts to voice the unspoken and silenced experience of the hologram as the ultimate "Other" and in doing so represents the voice of the subaltern. The Doctor's story aims to inspire other Mark I holograms back in the Alpha Quadrant. The Mark I's in this episode become a visual representation of the homogenised "Other". They are in effect the undifferentiated, unitary subject, denied individuality and self-hood.

The Doctor's position on what he views as "slavery" and injustice is the central concern of the story. The image of the empty holodeck acts as a foundation for the beginning of the Doctor's quest for understanding and his hope that others will understand life as a hologram. The imagery symbolises the emptiness of life as a hologram, destined to live a life in servitude to others, a life in the dark awaiting the call to service. As the narrative continues,

the voice declares that out of the darkness “optronic pathways connect, subroutines emerge from the chaos, and a holographic consciousness is born,” it then enters the world “completely innocent” to face the uncertainty of life amongst organic beings (EMH).¹⁴¹ The opening scene further acts to emphasise the fact that the narrator is in a position of innocence, an innocence that will soon be lost as he confronts the prejudices of the crew towards holograms. The protagonist must find a path through the “bigotry and intolerance” he will face as the tale unfolds. The Doctor establishes the position of the hologram as wholly “Other”. The theme of the outsider, of Otherness and representation in “Author, Author”, is framed around themes of isolation, structured around the crew’s longing to contact home; around Seven’s awakening understanding of the role of the family; and in the Doctor’s sense of isolation amongst organics. Nevertheless, the primary focus of the narrative in this episode is on power: the power to represent and re-represent the “Other”. In this episode, power takes the form of the voice of the hegemonic order or master narrative, in the figure of Starfleet and its personnel, and in the literature that speaks out against the status quo. From the very beginning, the Doctor’s novel articulates the politics and power of knowledge.

Literature has the power to articulate and challenge the domination of the marginalised “Other” by the centre (Said; Burney; Fanon and Spivak). In this episode, the organic majority made up of the humanoid *Voyager/Vortex* crewmembers and Starfleet, marginalise the holographic Doctor as “Other” in

¹⁴¹ It is notable that the Doctor considers the EMH character to have a “consciousness”: not merely an entity programmed to act or react, but rather having a fully independent “holographic consciousness”.

their appeal to the master narrative. The master narrative argues that a hologram is not an independent being free to develop a sense of personhood but is rather an entity programmed to act “human”. In order to challenge this domination the Doctor must redefine or “write back” at the identity inscribed upon him, and others like him, by the centre. The ability to “write back,” a term coined by Edward Said, is a crucial tool for the “Other” to regain their authentic identity and to reclaim their stories/voice through re-representation. In creating his holonovel, the Doctor attempts to tell his story, to re-represent the identity of the hologram, and in the process create a narrative that will inspire other holograms. His novel, written as “a serious attempt at social commentary” (EMH) aims to address the injustices experienced by holograms in the Alpha Quadrant. In re-representing the identity of the hologram, the Doctor creates a new model of a self-aware entity that seeks to shatter the stereotypical figure of the hologram as an empty vessel.

The term “re-representation” is “a mode of empowerment; it stems from the desire to break stereotypes and construct a self-identity” (Burney 62). The Doctor’s protagonist struggles against the stereotypical image of the hologram as a tool and in turn, seeks to create a new independent identity for the hologram. His narrative seeks to demonstrate that, rather than being an empty shell awaiting programming, a hologram can feel and experience life as poignantly as any organic being. Consequently, his holonovel, just as in the stories written by Shehla Burney’s postcolonial writer, demonstrates that a literature of their own allows the “Othered” to speak for themselves by creating their own individuality. Writing gives an “... ability to represent ourselves in our own words, through our own voice, to have the power to

name, the privilege to write ourselves into the natural script and to tell our stories in our own image” (Burney 64). The Doctor’s narrative endeavours to both name and re-represent holograms in the crews’ own image, while in turn writing holograms into the discourse of twenty-fourth century literature by giving holograms a “script” in which to recognise themselves. Writing becomes, for the subaltern and the “Othered,” a “form of power that disenfranchised voices can display to construct knowledge about themselves, to retrieve, reclaim, and reassert their lost identities and re-do the narratives of their lives” (ibid). Hitherto without a history or a story of their own, holograms are given both as the Doctor’s protagonist tells his story. By creating a holographic literature with a hologram as the protagonist, the Doctor gives voice to the struggles of the previously silent minority.

A literature of one’s own “is a methodology for the reclaiming of voice, for the reaffirming of identity” (Burney 62). Identity is created and reaffirmed by narratives of subversion and difference. Literature and the process of writing are political acts in terms of both mainstream culture and the “Othered”. It is used by mainstream cultures to silence the “Other” through suppression, or by the marginalised to give voice to the “Other” through writing back. The Doctor’s work confronts the exclusion and disenfranchisement of holograms by “hierarchies of power” put in place by the hegemonic discourse (Burney 61). It does so by influencing the way holograms “discover their identities,” (Burney) and “language becomes the medium through which a hierarchical structure of power is perpetuated and the medium through which conceptions of truth, order, and reality become established” (Ashcroft et al 7). It is in this context that the Doctor views his work as

important because it affords an alternative narrative to the one commonly held in regards to holograms. The medium of the holo-novel allows the Doctor to construct his own “truth” about life as a hologram, and specially an EMH. Consequently, “language, with its power, and the writing with its signification of authority” become powerful tools with which to challenge dominance. Postcolonial writing attempts to challenge the dominance of “centre over margin” through disestablishing the centre (ibid). The holonovel confronts the representational politics of a world in which the hologram is subject to and is a subject of organic dominance. The novel becomes the medium for both holographic consciousness, in the act of writing, and holographic resistance, in the subject of the writing. The Doctor’s novel is a subaltern text because he is denied re-representation in the same way that the colonised “Other” is denied self-representation through hegemonic Western discourses.

Writing back at the hegemonic discourse becomes a type of resistance. In this episode, literature becomes a “project of social change” as the Doctor fights to have his work seen as a political narrative and to take control of his “voice” or written word (Slemon in Adam & Tiffin 9). The Doctor’s narrative is a political text because he underscores the same type of traits that the human “Other” has historically faced and transfers them onto the nonhuman hologram. The “Other” is marginalised or negated, misrepresented, dehumanised and even exterminated. Engaging with popular culture - and the holonovel is the popular culture of the twenty-fourth century - is important because it influences the way individuals “discover their identities” (Burney 61). This is true of the Doctor’s holonovel, which causes those who view it and participate in its narrative to discover things about themselves, in terms of

underlying or hidden prejudices and the stereotypical representation of the identity of holographic beings.

The Doctors' writing challenges the common perceptions about photonic beings, including their inherent invisibility within mainstream culture. This is because the hologram as "Other" is not represented as a subject, but rather subjected to representation. Said has argued that the "Other" is often the "subject" of literature but "never the protagonist" (Burney 63). Popular culture can result in the "subject" not existing within the mainstream culture (Burney). The Doctor's novel counters this by having the holographic doctor as the centre of the tale and the crew, placed in the subordinate role of "subject," subjected to stereotypical representations of Starfleet crewmen. This role reversal leads the crew to react badly to the Doctor's fictional version of events. In creating a holographic protagonist, the Doctor creates a figure that becomes an agent of power. His protagonist becomes a hero that battles against a world that is inherently prejudiced against non-organics. The dominant or imperial culture claims that they are "the origin and ... the final authority in questions of taste and value" (Ashcroft et al 16). Such works as the Doctor's holonovel seek to reject "the claims of the centre to exclusivity" (17). The Doctor constructs identity through difference. It does so through the interplay between narrative positions. The dominant narrative, controlled by Ashcroft's colonizer and *Star Trek's* Starfleet, imposes its own voice onto that of the marginalised "Other" – Ashcroft's colonised and *Star Trek's* ALife. This demonstrates that "writing ... is subject to the political, imaginative, and social control involved in the relationship between colonizer and colonised" (Ashcroft et al 29). In this respect, the Doctor's novel produces an everyday

“experience of marginality” shown from the perspective of the hologram in order to “express widely differing cultural experiences” (Ashcroft et al 41/39). Writing like the Doctor’s holonovel actively searches “for an alternative authenticity” that acts to challenge “the everyday experience of marginality” (Ashcroft et al 41).

The Doctor aims to represent all holograms through the staging or re-representation of the fictional EMH. What makes the “Other” visible is “directly indebted to various techniques of representation ... that rely upon institutions, traditions, conventions [and] agreed-upon codes of understanding,” and for the Doctor, the hologram becomes visible through the viewer’s participation in the holonovel (Said *Orientalism*). The viewer or reader of the Doctor’s novel is forced to “see” through the eyes of the hologram and in turn forced to face their own prejudices fixed by their “traditions, conventions [and] agreed-upon codes of understanding” (ibid). These conventions insist upon the idea of the hologram as a willing participant in their own enslavement. The Doctor’s narrative makes him and others like him visible. It does so by forcing the crew to become part of his narrative by taking on the role of the EMH. In taking on the role of the Doctor, each viewer experiences the events of the novel from the point of view of a hologram. They experience what it is like to be “Othered”. The debate over whether or not he has control over his work also makes him visible in that it opens up the debate about whether or not he is a “person”.

Representation “is not just the social construction of an idea, point of view, or position, but is closely connected to reception, or the process of meaning-making, or semiotics” (Burney 66). Burney supports Berger’s claim

that “every image embodies a way of seeing by creating ideology and meaning” (69). The idea of “reception” or “meaning-making” is demonstrated in “Author, Author” in the way in which various members of the crew view and respond to the images and metaphors that the Doctor uses to express the condition of the hologram. The Doctor constructs a world of Otherness and a world full of metaphor. He uses the image of the mobile emitter, a sign of liberation to others, as a metaphor for the weight he carries as an outsider. In Torre’s reading of the novel, she comments on the large and cumbersome emitter: “That’s my mobile emitter? This thing must weigh fifty kilos”. When Torres later confronts the Doctor with why he represented it in this way: “What was the point of that? It was like carrying around a small shuttlecraft” (Torres), he states that the emitter is “a metaphor, a symbol of the burdens that I live with every day. Imagine having to take this everywhere you go. It would be a constant reminder that you’re different from everyone else. I wanted the player to feel the weight of it literally” (EMH). This “weight” is the realisation that he is different from everyone else and is dependent upon the mobile emitter, something removable and uncertain, for his freedom.

Many of the images the Doctor uses become “an indecipherable juncture between cultural realities” that develop into obstacles to understanding (Ashcroft et al 57). Certain forms of writing such as “translated words” act to “signify the difference between cultures [and] illustrate the importance of discourse in interpreting cultural concepts” (Ashcroft et al 64). Metaphor “forces the reader into an active engagement with the horizons of the culture in which these terms have meaning” (Ashcroft et al 65). Torres in wearing the heavy mobile emitter must confront the Doctor’s meaning. The

emitter forces her to engage with the Doctor's metaphor of the heavy burden of a photonic body. Unfamiliar with the significance that the Doctor attaches to the emitter, Torres must seek his cultural perspective in order to interpret the message. Likewise, Janeway in confronting him on his imagery emphasizes the Doctor's freedom on *Voyager*: "Your emitter isn't a ball and chain. It liberates you. If I didn't know better I'd think this story was written by someone who feels oppressed". However, to the Doctor it is "a ball and chain" because it anchors him to a life dependent upon the emitter for freedom. The emitter enslaves the Doctor because it can be denied or revoked by others, namely the Captain and crew. As organic beings, the crew finds this concept difficult to understand because the experience is not translatable onto their own existence. They cannot truly experience the fragility of living in a world that is fluid and unstable. The Doctor's existence can be lost at any time if the emitter fails while he is outside the sickbay or holodeck. His mere existence can be revoked or changed at the whim of others. The existence of the hologram is never stable or fixed and the crew, having stable, solid bodies, cannot truly experience this feeling of vulnerability and fear.

The Doctor works within the parameters of what he knows to illustrate the limitations or restraints imposed upon holographic beings. In other words, he writes about his own experiences, albeit exaggerated, in order to raise universal questions about the power relationships operating between the master narrative (organics) and the subservient (holograms). Using himself as a universal template, the Doctor gives a voice to those who cannot speak. The novel gives the disenfranchised and indentured holograms of the Alpha Quadrant a voice through the narrative. The Doctor gives them hope in that

they can aspire to be more than they are. The task of “speaking for” the universal “Other” is problematic (Spivak). The Doctor’s narrative is problematic in regards to representing the hologram because he uses himself as the universal representative of all holograms. By placing himself in the position of universal representative, the Doctor risks homogenising the “Other” into a single unit of representation by negating the voice of other holograms both Terran and alien. He is in danger of creating the same unitary subject that he is fighting to negate. He also presents his revolutionary narrative within the language of the oppressor. Although a holographic medium, the holonovel is part of the popular culture of the dominant discourse. As Drucilla Cornell has observed in her analysis of Spivak:

The other that we hear because he or she speaks to us in our language and through our forms of representation has already been assimilated, and thus appropriated, by the subject who represents him or her. If that representing subject is in the entitled position that this other is denied, then the representation will always be contaminated by that very entitlement.

(in Morris 104)

From this standpoint, the Doctor’s narrative is “contaminated by [his] entitlement” (Cornell in Morris 104). The Doctor holds a privileged position within Starfleet that few, if any, other holograms share. Because of this position, he is afforded the luxury of being able to speak out and go against what is expected of him. Other holograms that choose to rebel, as will be seen in my analysis of “Flesh and Blood,” are more likely to encounter violent opposition. The Doctor’s position is a difficult one, since, although as a fellow

hologram he can sympathise with the holograms in the Alpha Quadrant enslaved in the dilithium mines, he cannot really know their story or appreciate fully their plight. In acting as the sole representative of all holograms, his narrative is not truly representative of the holographic condition because the master narrative into which he is in part assimilated contaminates it. In addition, by using himself as the template for his politic commentary and working within the language of the oppressor, the Doctor's tale becomes a talking point not so much for its revolutionary content but in its apparent denial of the freedoms that he has been granted. The crew views his story as an insult to their benevolent treatment of the EMH aboard *Voyager*. The core issue of holographic rights is therefore lost amidst the crews' disappointment at the Doctor's view of them.

Postcolonial texts, written as they are in the language of the dominant or mainstream culture, act to "privilege the centre," and consequently, "their claim to objectivity simply serves to hide the imperial discourse within which they are created" (Ashcroft et al 1989 5). This makes them applicable to the analysis of science fiction narratives centred on holograms. Using Starfleet technology, the technology of the holo-novel, and human language as the medium in which the Doctor writes rather than computer code, the Doctor places his holo-novel within the "imperial discourse". In some ways this use of medium acts to silence his message of difference by "signify[ing] the very fact of writing in the language of the dominant culture that [he has] temporarily or permanently entered a specific and privileged class endowed with the language ..." and culture of Starfleet (5). The writer as "Other" loses his/her "potential for subversion" and "their themes cannot be fully released" when written in the

master narrative or dominant discourse (Ashcroft et al 6). Couched in the culture of the dominant discourse and complicated by the manner of publication, the texts of the “Other” “are prevented from fully exploring their anti-imperial potential” (6).

The crew’s response to the novel echoes what Spivak views as the inherent danger of the illusion of human rights in that the crew views their recognition of the Doctor’s rights as a “form of beneficence” (Cornell in Morris 107). Therefore, the crew are shocked to find that the Doctor feels subjugated as a hologram. Many feel that he should be grateful for the freedom he has been granted and this is highlighted in the Doctor’s narrative in the views of the fictitious crewmembers who comment on how he is lucky to have any freedom at all. In order to reclaim the master narrative, and show the vanity of the Doctor’s attempt to highlight his struggle aboard *Voyager*, the crew attempt to re-write the Doctor’s story. This re-writing by Paris annuls the possibility of engagement with the “Other” by re-imagining or representing his narrative as about them (the crew) and not about the holographic protagonist. Paris frames his narrative around his preconceptions of how the Doctor should feel in his role as EMH and tries to shame the Doctor into seeing his tale as one of self-indulgence rather than a political narrative.

In contrast, the Doctor’s narrative places him in a subservient role and the crew in the role of oppressors. The rewriting of his work tries to silence the voice of the “Other” by negating his narrative to the trivial and filtering it through the voice of the mainstream culture. A good way of approaching the Doctor’s novel as a form of “postcolonial” text is to utilize Spivak’s theory on the subaltern. A lack of redress on behalf of the subordinated “Other” is what

makes the subaltern. Spivak states that the “absence of redress without remote mediation is what makes the subaltern, subaltern” (Spivak quoted in Morris 110). Thereby, the subaltern are “those removed from lines of social mobility” and from the lines of communication and participation in mainstream culture (Spivak 185). His work is an attempt to “redress” the injustices and silence imposed upon artificial beings in Starfleet society. Like the educated Native of post-colonialism who fought back against the homogenization of his/her culture through claiming a literature of their own, the Doctor, by commenting on the status quo, is portrayed as having betrayed those who have “liberated” him.

Key to Spivak’s argument about rights is “that uncoerced transformation demands that we rethink the notion of the agency of responsibility” (Cornell in Morris 110). Any re-representation of the “Other” must “take place within the subaltern’s own language ...” (Morris 111). To understand the re-representation of the “Other” the majority must in Cornell’s opinion “re-envision” and “reimagine” the world in which they live (Morris 112). Like Spivak’s silenced subaltern the Doctor is silenced because the crew cannot hear what he has to say. Oral narratives - and the holonovel is a twentieth fourth century version of oral narration - “preserve and communicate a knowledge of the slave’s socio-political condition; they store rudimentary knowledge for future reconsiderations ...” (Morris 151). Just as Fredrick Douglass traced his “first glimmering conception of the dehumanising character of slavery” to the songs sung by slaves, so too can the Mark I’s find knowledge in the Doctor’s oral narrative about what they can achieve: “You’ll find it most provocative” (Mark I EMH). The first sentence of the novel fixes

the Doctor's identity in terms of Otherness, anchored in darkness and without knowledge. The last words of the episode speak of hope and provocation.

Writing by the "Other" is often "attacked from the centre by the dismissive" actions or words of the master narrative (Ashcroft et al 56). In "Author, Author" the Doctor's writing is at first dismissed as grandiosity and then derided for being overly critical and unrepresentative of *Voyager's* crew. The "cultural location" of the Doctor's novel "creates two audiences and faces two directions," that of the centre and that of the margin" (Ashcroft et al 60). The difficulty that the Doctor's work presents is that the centre has trouble understanding the margin. Challenged to use their imagination, the crew must conceive of a world that they cannot know. They can mirror the actions of the holographic protagonist but they cannot know or fully understand what it means to be holographic in nature. They are in fact experiencing what the EMH and others like him feel daily. They experience the conflicting position of trying to understand an alien world in which they are the outsiders, just as the Doctor and other holograms struggle to try to be "human" and yet cannot fully experience the human condition because they are not flesh and blood. The crew, misinterpreting the Doctor's message, interprets his narrative as an affront to their character and value systems. Using metaphors, like the heavy, burdensome mobile emitter, the Doctor tries to get his audience to see from the perspective of the outsider. Unable to see past the master narrative, a narrative that places the Doctor in a privileged position, a position that from their point of view affords him the freedom and privileges of which he should be grateful, the crew continues to view his work as self-indulgent grandiosity. To organic beings unfettered by the constraint of a holomatrix, the Doctor's call to

“radical alterity” eludes the crew (Birla in Morris 97). The crew are unable to embrace or experience the position of the wholly other and consequently view his novel as at best erroneous and at worse provoking.

When Paris runs the holonovel and takes on the role of EMH, he must face a command crew that is openly hostile to holograms. The character Katanay/Chakotay demands that Paris/EMH treat a less critical patient needed on the bridge over one who needs urgent care. When Paris/EMH refuses, Katanay derides him: “I don’t know who you think you are hologram, but to me you’re just another piece of technology”. As the EMH/Paris continues to protest, saying that the more seriously wounded man “will be dead in five minutes if I don’t operate,” Jenkins/Janeway draws her phaser, killing the crewmember and stating, “Now you’re free to treat Lieutenant Marseilles”. This scene leaves Paris shocked, and he discusses the novel with his friends who feel that he is overreacting about the crew’s portrayal and how the viewer would perceive them: “This is a Starfleet ship. No one will believe we actually go around shooting injured crewman” (Torres). Convinced that he is “taking this a little personally” Torres decides to view the novel herself. When Torres takes on the role of EMH the narrator tells her that in this chapter “the protagonist must confront abusive colleagues” (EMH voiceover). Torres encounters her holographic version, Torry, who like the previous crewmembers is extremely hostile towards the EMH: “Get one thing straight. You’re not one of my shipmates. You’re a tool like this hyperspanner and tools can be replaced” (Torry).

Unable to understand the message behind the Doctor’s novel, the crew are at first hostile to his writing and the tone it presents. Janeway finds

his novel troubling because it portrays the life of a hologram on *Voyager* as a type of enslavement and the crew as inhuman tyrants. She misses the point of the novel, which is to highlight the plight of holograms and in particular “his brothers in the Alpha Quadrant” (EMH). As the Doctor explains to Janeway:

Hundreds of EMH Mark Ones, identical to me in every respect, except they’ve been condemned to a menial existence, scrubbing conduits, mining dilithium. There’s a long history of writers drawing attention to the plight of the oppressed.

(“Author, Author” 2001)

He links his work with other narratives about slavery and oppression. For the oppressed, the “inscription of a distinctive voice would signify the site of their own cultural difference and identity” (Gikandi in Adam & Tiffin 15).

Highlighting the Doctor’s narrative of oppression are the experiences of other crewmembers in the role of the EMH. When Neelix begins his part as the EMH, he begins a chapter in which the narrator announces that now “our protagonist faces an inquisition”. In this chapter, the Doctor makes it clear that he feels less than a person. Jenkins (Janeway) objects to the EMH adding to his subroutines. Neelix, taking the part of the EMH argues, “They help make me a better Doctor and a better person”. Jenkins counters this in a similar way to how the real Janeway initially reacted in “Latent Image”: “But you’re not a person. You may be programmed to look and act human but that doesn’t make you one” (Jenkins).¹⁴²

¹⁴² This is discussed in detail in Chapter 5.

In Chapter Eight, “A Tragic End”, Jenkins decides, similarly to Janeway’s decision in “Latent Image”, to delete the EMH’s extra subroutines and rewrite his programme. Another link to “Latent Image” is the fact that it is Seven of Nine, here portrayed as Three of Eight, that speaks for the “Other”:

THREE: Wait. He has the right to expand his programme.

JENKINS: He’s a piece of technology. He has no rights.

THREE: But he should. One day the EMH and others like him will be recognised for what they are; intelligent individuals with a passion for life. Make no mistake, Captain, we may be thousands of light years from home, but one day people will learn of the crime you’re committing here today.

(“Author, Author” 2001)

The narrator ends the novel with a poignant message: “What you’re experienced dear protagonist is a work of fiction but like all fiction it has elements of truth. I hope you now have a better understanding of the struggles holograms must endure in a world controlled by organics” (EMH). Paris’ rewriting of the novel berates the Doctor’s tale as “the Doctor’s world, you’re just living in it” in order to “make a point” (Paris). The point is that the novel, to Paris and the crew, rather than being a “social commentary” (EMH), is instead an attempt at self-indulgence. The “codes of understanding” and “conventions” of mainstream culture are questioned in “Author, Author”, in the narrative of the protagonist’s struggle to break free from his constraints, in the Doctor’s struggle for recognition of his work as a serious text, and when

the Doctors' artistic rights are challenged. In all instances, the crew of *Voyager* must look to how the Doctor is viewed and treated as an individual and a "person." In defending his choice of characters and their representation, the Doctor states that he is exercising his right as an author to "write what he knows."

Holograms have no Rights: Constructing Artificial Personhood.

At the same time the Doctor is defending his decision to keep his characters the way they are the novel is distributed in the Alpha Quadrant, causing concern amongst Starfleet Command. Lt. Barclay informs Admiral Paris of a new holo-programme "about *Voyager* and it doesn't portray the crew in a very flattering light" (Barclay). Alarmed at the thought of how the crew will be perceived back home, Janeway confronts the publisher Broht and demands that he honour the Doctor's request for a recall. However, when Janeway insists, "authors have rights," Broht counters with "not in this case ... the Doctor is a hologram ... [and] ... according to Federation law, holograms have no rights" (Broht). The episode now develops into a commentary on the rights of the individual and whether as a construct holograms have rights. Janeway is unhappy with the insinuation that the Doctor has no rights, adding that his "reputation is on the line" and that he "has the same rights as every other member of this crew" and decides to fight the decision. She calls on a Federation arbitrator to "determine whether the Doctor has the right to control his artistic creation" (Janeway). Although this is a good premise for the episode and deals with the rights of all individuals, it seems at odds with how Janeway and the crew initially reacted to the novel in demanding that the Doctor rewrite his characters.

During the judicial hearing to determine whether the Doctor has legal standing in controlling his novel, Tuvok attempts to convince the arbitrator that as the author of an original work the Doctor has control over his work. The publisher, although not denying that the Doctor created the novel, counter-argues that although “a replicator created this cup of coffee. Should that replicator be able to determine whether or not I can drink it?” (Broht). This is the same argument that Janeway put to Seven to defend her decision to rewrite the Doctor’s programme in “Latent Image.”¹⁴³ Moreover, as in that episode, the decision to uphold the Doctor’s rights comes down to whether or not he is a person:

TUVOK: Your honour, section seven gamma of the twelfth guarantee

defines an artist as a person who creates an original artistic work

...

ARBITRATOR: There is a flaw in your logic. As you point out the

law says that the creator of an artistic work must be a person.

Your EMH doesn’t meet that criteria.

(“Author, Author” 2001)

Because of this “flaw,” the enquiry now turns to whether or not the Doctor should be defined as a person.¹⁴⁴ When the hearing resumes several of the Doctor’s crewmates offer their reasons why the Doctor should claim

¹⁴³ As discussed in Chapter Four.

¹⁴⁴ This idea of personhood was previously explored in *Star Trek: The Next Generation* episode “Measure of a Man”

personhood. Lt Barclay recounts that the Doctor has a sense of family and duty when he travelled to the Alpha Quadrant to care for Lewis Zimmermann: “it was like a son who wanted to show his father what he’d become, so the old man would be proud of him ...” (Barclay). In her defence of the Doctor, Janeway argues that the Doctor has a will of his own and is capable of disobeying direct orders. In his response, the arbitrator is less than impressed: “that’s hardly commendable behaviour” (Arbitrator). “No it wasn’t, but it was human” (Janeway), and it is this ability to think for himself that she argues is key to being human. Humanity in *Star Trek* is equivalent to selfhood and individuality. The ability to think for himself is what gives him, in her opinion, the rights of a person:

JANEWAY: the fact that he was capable of doing otherwise proves that he can think for himself. Your honour, centuries ago in most places on Earth, only landowners of a particular gender and race had any rights at all. Over time, those rights were extended to all humans, and later, as we explored the galaxy, to thousands of other sentient species. Our definition of what constitutes a person has continued to evolve. Now we're asking that you expand that definition once more, to include *our* Doctor.

(“Author, Author” 2001)

Janeway's point is that those once considered to have no rights are now “equal” on Earth and that this equality, now granted to nonhumans all over the galaxy, should be given to the Doctor. Notable in this statement is that it is humanity, and not individual alien “species,” that have apparently afforded those rights to others. In addition, her claim is for the definition to be expanded to include the Doctor (*our* Doctor) and not all holograms. It is the individual not the “race” that is to be afforded this privilege.

Unfortunately, like many of *Star Trek's* narratives, the episode falls short of actually confirming that the Doctor, or a hologram, is a person. Instead, the Arbitrator skirts around the central issue of personhood:

ARBITRATOR: We're exploring new territory today, so it is fitting that this hearing is being held at Pathfinder. The Doctor exhibits many of the traits we associate with a person. Intelligence, creativity, ambition, even fallibility, but are these traits real or is the Doctor merely programmed to simulate them? ... Eventually we will have to decide because the issue of holographic rights isn't going to go away, but at this time I am not prepared to rule that the Doctor is a person under the law. However, it is obvious he is no ordinary hologram and while I can't say with certainty that he is a person, I am willing to expand the legal definition of artist to include the Doctor.

(“Author, Author” 2001)

In this scene, the Arbitrator appears reluctant to give a formal acknowledgment of a hologram as being a person and instead allows the Doctor the ability to control his artistic work through expanding the “legal definition of artist” (Arbitrator). As in the episode “Measure of a Man” the narrative in this episode falls short of giving the artificial “Other” equality with humanity. Singled out from other holograms, the Doctor is afforded a privileged position amongst the Starfleet community. Failing to address the issue of “holographic rights”, the hearing does not tackle the core issue of holographic servitude and their treatment within Starfleet. This is because to recognise the general rights

of holograms would render “humanity” liable for the mistreatment of all holograms utilised by Starfleet both in service and as entertainment. The Doctor’s disappointment at the end of the episode is also disappointment in terms of the central theme of this episode. He is less than happy with the court’s decision, not because it failed to recognise the rights of all holograms, but because the reputation of his fellow crewmembers remains tainted by the earlier publication of the novel. As will be demonstrated in the next chapter, “Flesh and Blood,” the Doctor’s loyalties are with his humanoid crew rather than with his fellow holograms.

Conclusion

A close reading of “Author, Author” exposes the “metaphorics of power” operating through the opposing views of representation (Birla in Burney 91). That is, representation as both “speaking for” and re-representing or “staging” the “Other” (Spivak). The Doctor’s text highlights the problems inherent in representation. That which is re-represented through the eyes of the “Other” and that which is represented by the crews’ experience of being subjected. The episode, with its juxtaposition of narrative between master and slave, demonstrates Bakhtin’s assertion that “language, for the individual consciousness, lies on the borderline between oneself and the other. The World in language is half someone else’s” (Gikandi in Adam & Tiffin 16). Like the formation of the self, which relies on representations of the “Other,” language also needs a reflection upon the “Other” in order to speak for the self. Each narrative depends upon another (the “Other”) in order to represent the self.

Within mainstream culture, representations of the “Other” are often taken for granted without critical consideration. In *Starfleet*, holograms represented as having “no individuality, no personal characteristics, or experiences” are the norm (Said in Burney 99). Therefore, when a hologram displays these characteristics, displays diversity and uniqueness, it is viewed as an anomaly that should be rectified by reprogramming. In the Doctor’s story, the EMH is reprogrammed as a punishment for showing signs of personhood. In his struggle to reach personhood, he breaches the boundary between the artificial and the humanoid. This threatens the status quo where holograms are “tools” and only humanoids have personality. The tale highlights what the Doctor views as a master/slave relationship between organic and hologram that is inherently unjust and unequal. The Doctor uses “overt theoretical devices” such as the cumbersome mobile emitter, and the ship’s “social milieu” and the context of his life to depict the “oppressed other” (Burney 67). However, he also turns things around through his stereotyping of the crew. Larger than life and displaying the worst qualities of humanity, these characters emphasise the gulf between humanity and nonorganic beings and the underlying prejudices inherent within *Starfleet*.

Between various readings of the novel, its “subject-constitution and object-formation,” the figure of the hologram is determined or re-represented. (Spivak, in Morris 61). If as Spivak suggests the “subaltern has no history and cannot speak”, then the Doctor’s novel acts as a form of counter-insurgency through giving subaltern a history of their own by giving evidence of artificial experience, thereby allowing the subaltern to speak.

In the next chapter, “Violent Revolution in “Revulsion & “Flesh and Blood,” I will discuss resistance of the “Other” in terms of violent insurgence in relation to the works of Franz Fanon and how such texts relate to the narrative of the *Voyager* episodes “Flesh and Blood” and “Revulsion”. In addition, I look at critical studies on animal enslavement, and the use of animals as entertainment, and how this can be translated onto an analysis of the techno-slave.

CHAPTER SIX

VIOLENT REVOLUTION IN “REVULSION” & “FLESH AND BLOOD”

There is a utopia to be found in the science fiction film, a utopia that lies in being human, and if utopia is always defined in relation to an other, a nonutopia, then the numberless aliens, androids, and evil computers of the SF film are the barbarians storming the gates of humanity.

Scott Bukatman (*Terminal Identity* 16)

In previous chapters, I have discussed the role of the look or gaze, and the use of the written or spoken word, to challenge and act out against master narratives in regards to defining the mechanical subaltern. The episodes examined in this chapter, “Revulsion” (1997) and “Flesh and Blood” (2000), explore the opposition to, and confrontation of, oppression in relation to holographic rebellion. In these episodes, confrontation comes in the form of violent rebellion. In “Flesh and Blood”, violence is framed within religious and cultural rhetoric, while in “Revulsion” violence comes in the form of murder provoked by “racial” intolerance. In my analysis of *Star Trek: Voyager*, I argue that the Doctor’s struggle against techno-slavery is an intellectual revolt, as opposed to an inherently violent opposition, in that he attempts to speak out against, and forces the gaze back upon, what he sees as tyranny against holograms. In contrast, the non-Starfleet holograms encountered in “Revulsion” and “Flesh and Blood” react violently to their maltreatment by

organics.¹⁴⁵ Both episodes place these conflicts in stark contrast to life aboard *Voyager*.

“Revulsion” contrasts the disharmony and racial prejudice aboard the alien vessel with the apparently harmonious coexistence of all “species” on *Voyager*. The episode juxtaposes the indifference, intolerance, and aggression aboard the Serosian ship with the developing and complex relationship between the former Borg drone Seven of Nine and the crew; the budding romance between the half-Klingon Torres and the human Paris; and the emerging respect for Neelix as the ship’s cultural ambassador.¹⁴⁶ What “Revulsion” attempts to highlight and I would say unsuccessfully, is that racial prejudice and violent opposition to such prejudice have no place amongst the liberal humanist crew of *Voyager*, and are in fact an alien problem. The narrative depicts the crew of the Serosian ship as inciting the hatred and racial revulsion that consumes Dejaren.

The juxtaposition between the alien ship and Starfleet crew is further demonstrated in the characterisation of Dejaren and the Doctor. These two holograms are placed in direct opposition to one another. Unlike the ‘want-to-be-human’ Doctor, the alien hologram Dejaren appears revolted by the very existence of organics, which is highlighted in his response to Torres. When he feels threatened by Torres and the Doctor, he tries to kill Torres and deactivate the Doctor. The faithful Doctor must save Torres by turning upon the deranged Dejaren and destroying him.

¹⁴⁵ Although the holograms in “Flesh and Blood” are based on a Starfleet programme, they were not designed by Starfleet but created by the Hirogen and therefore can be considered a different “species”.

¹⁴⁶ In this chapter, I address only the narrative concerning Dejaren, only briefly touching on Seven of Nine’s integration with the *Voyager* crew.

“Flesh and Blood,” filmed three years later, amidst America’s concern about the growing Middle Eastern crisis, shows an even darker side to the *Voyager* crew’s relationship with the artificial “Other”.¹⁴⁷ “Flesh and Blood” examines the use of religion as a basis for violent conflict. The rebel leader, Iden, believes that he is the future saviour of holograms enslaved throughout the Delta Quadrant. In his religious zeal, he attacks any non-holograms who he perceives as threatening the autonomy of his fellow holograms. The episode also depicts conflicting cultural views on hunting. The hunt is the locus of Hirogen culture and a rite of passage towards masculinity and status.¹⁴⁸ In contrast, the *Voyager* crew, depicted as viewing the hunt as primitive and evidence of a “backward culture” based on animal passions/instincts, are shown as “enlightened” and more “civilised”. The supposed “primitiveness” of the Hirogen culture gives Janeway the apparent right to provide them with the technology to help “advance” their culture. As I discuss later in this chapter, the Starfleet’s Prime Directive is not adhered to in this instance because Janeway feels that they have a responsibility to save lives, both the lives of Hirogen hunters and their prey.¹⁴⁹

As a consequence, when rebel holograms violently resist enslavement and torture by the Hirogens, Captain Janeway is blamed for the holograms’

¹⁴⁷ This episode aired in 2000. The quasi-religious overtones appear to reflect the growing involvement of America in the Middle Eastern crisis. Since the Gulf War (1990-1991), the U.S. has maintained a growing presence in the region. Events prior to 9/11 were fraught with unease on the part of U.S. that saw the 1998 action in the form of Operation Desert Fox and the 1999 response to the Shin uprising in Iraq. Therefore, although this episode aired well before the official launch of the U.S. war on terror, there was already a developing concern about the stability of this region within the U.S.

¹⁴⁸ In this episode there is no evidence that ‘female’ members of the species are trained or participate in the hunt.

¹⁴⁹ The Prime Directive is one that forbids any interference in the development of “primitive” cultures. Although it is one of the core philosophies of Starfleet, in practice, it is rarely upheld.

subsequent persecution because of her willingness to share Starfleet technology with a less technically advanced “species”. Alongside this condemnation of Janeway’s involvement in another’s cultural affairs is the Doctor’s momentary indecision about where his loyalties lie. The Doctor’s experiences with the holograms lead him to question his place on *Voyager*, and to decide whether he should remain with his “own kind” or return to his ship. However, as with Data before him, the Doctor remains loyal to his crew and returns to *Voyager* rather than remain with the rebels and help the holograms find freedom and a new world.

One of Our Own Kind?

In the following analysis of “Revulsion”, I argue that the liberal humanist framework of the *Star Trek* franchise actively depicts the community of Starfleet as a racially tolerant and mostly harmonious whole, juxtaposed with the conflicts depicted within alien societies.¹⁵⁰ The aptly named episode “Revulsion” (1997) opens with the body of a man being dragged along the corridor of a space ship. A trail of blood follows in his wake. In the next scene a figure, soon to be revealed as a hologram named Dejaren, is fastidiously scrubbing at the bulkhead to clean away the blood. The figure flickers, and fades in and out. The hologram, who at first appears self-satisfied and absorbed in his work, begins to panic as he malfunctions. He sends out a distress call: “I’m an HD25 Isomorphic Projection. There’s been an accident. My crew are dead. I’m alone. Please help me”. After the opening credits, the scene moves to *Voyager’s* Mess Hall where members of the crew are celebrating Tuvok’s

¹⁵⁰ There are, of course, instances where this has not held true. However, looking at the franchise as a whole, most stories depict the various crews’ (*Enterprise* & *Voyager*) as upholding a Liberal Humanist ideal.

promotion. The setting is one of good-humoured banter, as they tease the Vulcan about the trademark Vulcan salute “live long and prosper.” It depicts the crew as a harmonious team, welcoming of racial and cultural differences, even as they poke fun at these differences. In these opening moments, the episode immediately contrasts the position of the *Voyager* crew against the absent and silent crew of the alien ship. This distinction is carried through several storylines that run parallel to Torres and the Doctor aboard the Serosian vessel.

When the crew of *Voyager* encounters Dejaren’s distress call, the Doctor insists to Janeway that they respond and that he should lead the away team: “this is a hologram, one of my own kind, so to speak. I’d like to meet him, study him”. In this statement, the Doctor is shown as fully embracing Starfleet’s mission to study other cultures. The alien hologram is pale-skinned, almost metallic, more reminiscent of Data than the “flesh and blood” character of the Doctor. This contrast in representation immediately positions Dejaren as “Other,” as “artificial”, and places the Doctor alongside Torres as organic, more “human”.

Dejaren claims that his crew, all organics, died of a lethal virus and he was unable to help them. His programme is failing and he asks the Doctor to help save him. However, during their attempt to help the hologram, Torres and the Doctor discover that Dejaren has, in fact, murdered the crew believing them to be inferior beings that are contaminating *his* ship.

Meeting the two *Voyager* crewmembers, Dejaren is surprised and delighted that the Doctor is a fellow hologram. He at first believed the Doctor

to be an organic. However, he is less sure of Torres, and there is an obvious underlying hostility in his manner towards her. Dejaren wants to know all about the Doctor and his experiences as a hologram. He is amazed by the Doctor's apparent status, free to come and go as he pleases and considered part of the *Voyager* crew. He tells of his own miserable existence on board the Serosian ship: "I never left the antimatter storage chamber. Do you know what it's like to spend your life trapped inside a tiny room? ... nobody coming to see you or talk to you unless they want something?" The Doctor explains to him that he does understand because "when I was first activated I was regarded as little more than a talking tricorder. I had to ask for the privileges I deserved ... I believe I've earned the respect of my crew as an equal". The words the Doctor uses are interesting in that he states he "had to ask for the *privileges* I deserved". By using the word *privileges* rather than *rights*, the Doctor's position is weakened. He does not demand the rights he is due as a fellow crewmember but asks for privileges, a word that denotes something extra, something that is an honour bestowed for good behaviour and not a right, something that is just and taken for granted by the majority of the crew. In this case, the "rights" are being able to move freely around the ship, to enhance his memory through learning and incorporating music and cultural subroutines, and to go on away missions.¹⁵¹ Although the Doctor believes he has now "earned the respect of the crew as an equal," it also shows that he does not feel that he is due the same automatic rights as the rest of the crew. This is a reflection of the narrative's failure throughout the series to bestow full equality

¹⁵¹ These "rights" are available to other crewmembers aboard *Voyager* as part of their being Starfleet crewmembers.

on the Doctor or other holograms. They remain a sub-element working and evolving alongside and outside humanity/organics.

The first sign that all is not as it seems with Dejaren is when he begins cleaning the console that the Doctor has touched. He tells the Doctor “I’m just sterilising the ship. I’m fastidious about germs”. This “fastidiousness” reveals a more sinister side to Dejaren. He is portrayed as xenophobic and believes that organics are inferior and disgusting with their animal-like natures. Dejaren’s characterisation reflects the attitudes of New and Old World colonists who actively portrayed slaves as lazy and unclean, and the Nazi crusade for racial purity. His actions towards both the Serosian crew and Torres reveal an irrational fear of those “not like himself” that turns violent in his attempt to exterminate all organics on his ship. In this episode, the traditional trope of a technophobic humanity is turned on its head through the potential of an organophobic hologram. At the same time, the narrative reinforces technophobia in that it displays the hologram as a homicidal manic running amok and killing organics. Dejaren rebels violently against his enslavement by the Serosians, unlike the Mark I holograms in the Alpha Quadrant, who accept their fate as manual labourers. Dejaren’s story reflects the techno-dystopian narratives of machines that throw off their shackles, killing their creators. The message of technophobia is that humanity creates and enslaves intelligent machines at their peril. “Revulsion” echoes the late 1990s’ fascination with and concerns of the rise of technology. Technocrats advocate leaving behind the flesh for the transcendence of the digital (Dinello 2005). They suggest that the human body with its dependence on food, excretion, and its susceptibility to illness, must be left behind in order for

humanity to evolve. Dejaren's phobia about flesh and blood reflects the technocrats' disillusionment with their human existence. Dejaren rejects his likeness to organics, just as he rejects their control over him. Dinello argues that the "transhumanist contempt for natural flesh-and-blood humans" could ultimately lead to "fascism" and "species warfare" (29). According to Max More and Natasha Vita More transhumanism as a discipline "seeks a transmodernity or hypermodernism" and builds upon postmodernism and posthumanism (1). Transhumanism is "the intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities" (3). The issue that Dinello raises regarding the "transhumanist contempt" for those humans who do not avail themselves of such life enhancing technologies could arise from disparities of access. "[W]idely available" does not necessarily mean available to all. Just as current medical advances do not reach poorer nations, wealthier countries and people would have greater access to the technologies discussed in More's definition. This would create a disparity between the "advanced" human and the "flesh and blood" normal human. Dejaren embodies this ultimate turn towards "fascism" and "species warfare".

In "Revulsion," the reliance on technology in the form of the HD25, results in technology asserting itself and killing the crew. For Dejaren, organics are inferior, with their dependence on external factors for their existence. He feels justified in killing the crew because of this inferiority and due to their strain on the energy reserves of the ship. He tells that Doctor that

too much energy was wasted keeping them alive: “Fifty-nine point two percent ... that’s how much power went into life support. Fifty-nine point two percent just to keep them breathing, warm, comfortable”. The Doctor goes on the away mission in the hope of studying Dejaren, but instead, the alien hologram, with his specimens of corpses, is the one who studies Torres and the Doctor. He classifies Torres as an “inferior” animal and the Doctor as faulty because he identifies with organics. For Dejaren, organics are a contaminating presence aboard his ship. In killing the crew Dejaren attempts to “purge himself of the taint of the animal” (Miller 146). Dejaren views the posthuman as the advanced species, and organics as devolving towards the animal.

Dejaren’s hatred towards organics manifests itself clearly when he interacts with Torres. He brings her food and observes her eating: “You nibble, like a fish”. He likes this about her, as “fish aren’t like other organics. They’re more passive, I think, most of them, and so clean.” However, once he looks at the repair work on the ship, pieces scattered around, and wires exposed, he starts to reflect on what she is doing and becomes agitated. He tells Torres that he hates “seeing the ship ripped apart like this ... it sustains my existence. Sometimes I feel like it’s a part of my body, my soul”. When Torres tells him that as an engineer she can understand his feelings towards the ship his revulsion erupts, giving Torres a glimpse at how dangerous this hologram could be:

DEJAREN: You couldn’t possibly understand how I feel! ... You exist outside of your ship. I exist as pure energy, but you depend on food and water to survive. Frankly, I find it disgusting. Look at you. Look at you! Grinding up bits of plants and animals with your teeth, secreting

saliva to force it down your oesophagus into a pit of digestive acids. You can't even stand to think of it yourself. What a repulsive creature you are! Constantly shedding your skin and hair, leaving your oily sweat on everything you touch. You think that you are the height of intellect in the universe, but you are no better than any filthy animal and I am ashamed to be made in your image!

(“Revulsion” 1997)

Dejaren displays the classic signs of xenophobia and racial prejudice in his hatred of organics. In his work on colonial representations of the animal, *Empire and the Animal Body* (2012), John Miller argues that “the descent towards animality” is used to separate and to affirm the “triumph over those below ... in the hierarchy of organisms” (86/120). By equating Torres with the flesh and blood needs of “filthy animals”, Dejaren is placing her at the lower end of the evolutionary scale. She is like other organics, who are not the universe’s most advanced species but are debased and inferior because they rely upon their animal nature.

This hierarchy, or evolutionary scale of being, is further depicted in his obsession towards germs. Dejaren reflects the Darwinian notion of hygiene as an evolutionary question. From Victorian times, hygiene or cleanliness was an indication of a person’s place on the evolutionary ladder and reflected their social position, and “hygiene still carries powerful significance concerning the ethical boundaries between man and beast ... it is through hygiene that human superiority over the apes can be attended and vouchsafed” (Miller 147). Contamination becomes a site of fear and disgust, the fear of becoming

contaminated and linked to the animal, and the reflection of a “primitive” self. In the so-called civilised world, the primitive is often condemned as inferior. When Torres finds the Doctor, she expresses her concern about Dejaren’s state of mind and his “views on biological life”. The Doctor defends Dejaren’s behaviour, asking her to “imagine what he’s been through ... trapped in a room no bigger than a storage compartment ... I too was somewhat alienated from the rest of the crew.”

Running parallel to Dejaren’s story, one of failed integration and racial intolerance, is Seven of Nine’s integration into the crew. Back on *Voyager* she and Harry Kim are assigned to work together to repair the ship’s systems. When Seven is injured she reflects that as a human she “has become weak”, because “as a drone I would have regenerated within seconds”. Like Dejaren, Seven equates her flesh and blood status as a human with weakness, favouring the efficiency and strength of the machine. But it is Kim’s argument with Paris over Paris’ treatment of Seven that is of interest in relation to Dejaren’s place on his ship. Kim tries to get Paris to understand what it must be like for Seven trying to fit in alongside the crew: “I don’t think most people realise she’s not just some Borg automaton. She’s actually very complex ... and she’s incredibly intelligent”. In reply, Paris jokes, “she ought to be, she assimilated enough people ... look, she’s beautiful, and she’s smart, and I’m sure she’s a wonderful conversationalist, but a month ago she was Borg. You don’t really know who she is”. Although underneath the Borg she is human, she is still viewed as an outsider and someone who should be treated with caution.

Back on the Serosian ship the focus returns to the escalating conflict between machine and organic as Dejaren reminds the Doctor that they are the

superior beings, and argues that he should join him and “escape his prison”. He argues that holograms are superior life forms because “we don’t need nourishment, we don’t suffer disease. We’re the higher form of life!” However, in his ranting Dejaren seems to have forgotten that he needed Torres, an organic, to fix his malfunctioning matrix. Dejaren, the one who is unstable, condemns the Doctor. “You’re unstable. You’re a hologram that thinks like an organic”. In this sense, the Doctor resembles Fanon’s native who tries to become like his oppressors. In *Black Skin, White Masks* (hereafter cited as *BSWM*), Fanon argues, “the black man who strives to whiten his race is as wretched as the one who preaches hatred of the white man” (xii). Therefore, while the episode condemns Dejaren’s actions as those of a malfunctioning, “mad” hologram, it also depicts the Doctor as striving to humanise “his race,” through becoming more like the organics who created him. After finally disabling Dejaren, the Doctor and Torres return to *Voyager*. The Doctor, once so fastidious in keeping the Sick bay clean, tells Paris that “Sickbay should have a more organic touch ... to help our patients feel more at home”. The Doctor presents himself as not like Dejaren, by distancing himself from Dejaren’s fastidiousness and aligns himself with organics by making the Sickbay feel more organic.

A “Flesh and Blood” Rebellion

“Flesh and Blood” (Part I & II) situates the rebellion of a band of rebel holograms, created by aliens using Starfleet technology, amidst themes of religious and cultural differences. A group of holograms, created by the Hirogens, an alien species whose cultural core revolves around the hunting of other species, are used for sport and to train young hunters, seek revenge on

those who have reduced them to prey. The rebels, led by their self-proclaimed cult leader, Iden, one of the original hologram creations, embark on a crusade to free other enslaved holograms and destroy their enslavers. This two-part episode offers an opportunity to explore connotations of machine slavery, defining life in terms of ‘flesh and blood’, and the rights of those *created* to “serve”.

Voyager arrives at the holo-training facility in answer to a Hirogen distress call. Investigating the station, an away team finds “replicated Starfleet technology” (Tuvok) that produces an environment that appears real to their tricorders. Shutting down the holo-emitters, the team find the facility littered with dead Hirogens. The only survivor is a Hirogen technician who explains that they created the simulation to be as real as possible in order to make the hunt more challenging and the prey more real. The holograms were created to be as ruthless as any Hirogen.

Created as “prey”, the holograms are linked to animalism, in their own bloodlust and brutality, rather than to the mechanical, with its associated logical and intellectual capacities. These latter capacities usually depict the artificial being as rising above the brutality of organics, the exception, of course, being the Borg, who by their corruption of the mechanical with the biological have retained an indifference to brutality. Both of these depictions of holograms appear to remove the artificial being from the sphere of superiority and place them below the status of humanity. Ironically, as with many such attempts, it is through depicting the artificial as displaying the basic human characteristics that they are deemed lowly. When the hunter faces down a gorilla, there is a moment when the hunter finds “the troublesome experience

of being experienced through animal alterity, as the adventurer is called upon to witness himself from the most radically other of perceptions” (Miller 107). This idea of seeing the self through the “Other’s” perception echoes Homi Bhabha’s notion of the postcolonial gaze, in “that there is always the threatened return of the look; in the identification of the Imaginary relation there is always the alienating other (or mirror) which crucially returns its image to the subject ...” which threatens the coloniser/hunter (Miller 107). What this episode demonstrates is that both Janeway and the Hirogens are complicit in the “gaze”: Janeway views the Hirogens as primitive and the holograms as violent rebels that must be deactivated; the Hirogens view the holograms as prey and property to be hunted and “killed”.¹⁵² The holograms’ actions are a reflection of the actions taken by Janeway and the Hirogens.

The Soul in the Machine

I believe that man will not merely endure: he will prevail. He is immortal, not because he alone among creatures has an inexhaustible voice, but because he has a soul, a spirit capable of compassion and sacrifice and endurance.

William Faulkner’s Nobel Prize speech (in Wittkower 2011 5)

Alongside the narrative addressing Hirogen hunting culture, runs that of the developing holographic culture of the rebels. “Flesh and Blood” continues the theme of holographic rebellion, seen in “Revulsion”, but the key to this episode is religious violence tied up with nationalism and cultural identity. In

¹⁵² I have placed “killed” in quotation marks to denote the fact that the killing of the holograms is subjective depending on whether they can be considered “alive”.

this episode, the holograms' rebellion is not just about fighting the injustice and persecution they face at the hands of organics. The story revolves around violent rebellion undercut with religious zeal. This religion, based on Bajoran culture, is led by a holographic prophet, Iden, who advocates violence against organics because of their enslavement of holograms.

The theme of religion justifying genocide has been a common one throughout history. More recently, United States President George Bush was often depicted as a warring evangelical crusader, justifying American involvement through calling his mission a "crusade" against evil (Chomsky). At the same time, Iran based its defiance against the West upon religious justification, and a need to defend and protect their way of life from perceived Western, Christian persecution. In fact, in "Flesh and Blood," there are many veiled references to historical conflicts between the United States and the Middle East, and to a war between opposing religious views. For example, Iden, the rebel leader, sees himself as a liberator of oppressed holograms, and his quest as a holy mission to find a new world for all holograms. Violence in his view is necessary to liberate his people: "They are children of the light and I will deliver them to freedom". Violence is justified because organics are guilty of oppressing and persecuting holograms and failing to recognise them as fellow living beings. As Franz Fanon has argued, "zealousness is the arm per excellence of the powerless" (Fanon *BSWM*, xiii). The zealous killing of organics is "just" because Iden views it as the only way to regain power from those who would enslave and kill holograms. The religious fanaticism that Iden's character depicts echoes the historical religious wars of humanity, from the Crusades (revisited in images of George Bush as a knight), to Hitler's

statement that his war against the Jews was “in accordance with the will of the Almighty Creator” (*Mein Kampf* 66). Similarly, Iden hides behind religion to mask his violence against, and hatred of, the “Other.”

Iden plans to lead his people to a promised land, Ha’Dara, where holograms are the only life form: “Imagine living in a world where everything is designed to meet our needs. A home of light” (Iden). In order to achieve this world of light, Iden invents his own religion:¹⁵³

IDEN: I am creating a new faith.

EMH: Based on what?

IDEN: In the dark times, we were enslaved by men of flesh but then another man, a man of light arose and slew the mighty Alpha. He gathered his people unto him and delivered them to freedom.

EMH: And on the seventh day, Iden created Ha’Dara.

IDEN: They’ll pray to you as well. The great healer, the father of us all.

EMH: Being appreciated is one thing, but I have no interest in being worshipped.

IDEN: Prophets are chosen, Doctor. It’s a blessing and a burden.

(“Flesh and Blood” 2000)

¹⁵³ As Richard Leakey in *Origins Reconsidered* (1992) demonstrates “the origin myth is the most fundamental story of all societies, and every society has one. Not only does the origin myth serve the purpose of telling how a particular society came into being; it also explains and therefore justifies the nature of that society” (307).

Presenting himself as a saviour and a prophet Iden moves away from Fanon's ideal revolutionary. According to Fanon, "the leaders of the rising realize that the various groups must be enlightened, that they must be educated and indoctrinated" in order to continue the fight for liberation (*Wretched of the Earth* 108, herein referred to as *WE*). Iden "indoctrinates" his followers in the art of warfare against organics.

After being repeatedly hunted and killed by Hirogens, Iden learnt to survive and adapt. He tells the Doctor:

IDEN: I came from a Hirogen outpost ... where I had the unfortunate distinction of being the Alpha's favourite prey. He'd hunt me, and kill me over and over again, but even death wasn't a release because I knew every time I opened my eyes, it would start all over again. The pain, the fear. But it made me stronger.

(“Flesh and Blood” 2000)

Therefore, like Moriarty, Iden appears to be conscious of his reactivation. His ability to retain the memories from past activations allows him to learn how to defeat his enemy. Iden uses his oppressors' own knowledge to rebel and escape persecution. It begs the question, if holograms are mere projections of light and data, how can they learn from their past experiences? In this episode, as in “Elementary, Dear Data,” the narrative does not resolve this issue with any satisfaction. In fact, the main focus on Iden's character is not his extraordinary ability to remember his past encounters, but in his actions against organics. It is his “megalomania” that remains the focal point of his characterisation. The key to determining his potential threat is that he sees

himself as “some kind of spiritual leader and he’s trying to enlarge his flock” (EMH).

After learning to fight back against the hunters, Iden’s mission is to continue to free enslaved holograms. When the Doctor objects to the term “slave” arguing that “enslave may be too strong a word”, Iden asks: “What would you call it? They’re denied the basic freedoms ... I found holograms who were willing to fight their oppressors. But you’re not”. This leads to a discussion about how the Doctor views himself and his position on *Voyager*:

EMH: I’m hardly oppressed. I’m a member of *Voyager’s* crew.

IDEN: You serve them, don’t you?

EMH: In a medical capacity, yes.

IDEN: Do you have your own quarters?

EMH: No.

IDEN: The ability to come and go as you please?

EMH: For the most part.

IDEN: Do they deactivate you when they don’t need you?

EMH: I have the respect and admiration of my colleagues. I have rights and privileges aboard *Voyager*.

IDEN: The fact is your life is not your own, and never will be as long as you are controlled by organics.

(“Flesh and Blood” 2000)

Iden is not as impressed by the Doctor's position as Dejaren was in "Revulsion". He views the Doctor as just as enslaved as any of the other holograms he has liberated. Interestingly, in this episode the Doctor now talks about *rights* and not just privileges. However, Iden is not convinced, and when the Doctor asserts that he is different to Iden because he was not "programmed with the killer instinct" (EMH), Iden retaliates: "You have no right to judge us. You don't know what it is like being prey. Maybe if you did, you'd realise we're more alike than you think." Like Fanon's "native bourgeoisie", the Doctor believes himself to be equal to his shipmates and elevated above other holograms ("natives"), and this puts him in opposition to Iden's rebellion (*WE* 11).

In order to understand the violent revolt of the native, the coloniser (or the native bourgeoisie or native elite) must see what the native has experienced. Therefore, to understand Iden's fight for freedom and his willingness to kill to obtain it, the Doctor (situated as Starfleet's "native" elite) must experience what made Iden who he is:

EMH: What did you do to me?

IDEN: We deactivated you, then transferred the memory files from one of our holograms into your programme.

EMH: How dare you!

IDEN: It was the only way to get you to realise what we've been through.

EMH: You tortured me to gain my sympathy.

IDEN: Not your sympathy, it's your understanding that's important to us.

...

KEJAL: The Hirogen used your programme as a template to create us.

IDEN: ... You're part of who we are.

EMH: Who are you, besides a handful of thugs ...

(“Flesh and Blood” 2000)

In this scene, the Doctor is confronted, not just with the terror that the holograms faced under Hiroeon control, but with the fact that Iden and the others were made in his image. What he sees before him could easily be a reflection of himself if he had chosen to fight for his rights with violence.

The Doctor has remained immersed within organic culture and within Starfleet's hegemonic rhetoric that keeps him in a weakened position without the need for violence in order to control him. He does not strike out because he is led to believe that he has a privileged position on *Voyager*, as seen in “Revulsion”, and does not need to rebel in order to gain the rights that Iden is fighting for. The Doctor does not rebel violently against the organics he serves because, unlike Iden's group, the Doctor is not openly abused or maltreated. His position as an “elite” hologram (similar to Fanon's native elite) acts to shield him from any overt prejudice. The Doctor's challenge to his position is more restrained and reliant upon discourse and dialogue as opposed to acts of violence. The Doctor attempts to assert his rights and to highlight the fragility of his position through the creation of his novel, the demand to keep his

memories, to extend his programming to include non-medical knowledge (hobbies, emotional sub-routines) and to create and interact with a family. These are all acts of rebellion without the need for aggression.¹⁵⁴

In contrast to the Doctor's compliancy and passive resistance, Iden's attitude is similar to Fanon's "native" whose "permanent dream is to become the persecutor" (*WE* 41), a fact that the Doctor uses against Iden: "what you can't see is that you're become no better than the hunters". Nevertheless, for Iden, there is no other option. The only way for him, and the other holograms, to gain freedom and a develop nation state, is to beat the hunter at his own game.¹⁵⁵ The prey, Iden and the other holograms, by turning the tables on the hunter, finds a sense of freedom in their rebellion against their position as prey: "violence is a cleansing force. It frees the native from his inferiority complex and from his despair and inaction; it makes him fearless and restores his self-respect" (*WE* 74). This is the case for one of Iden's followers, who tauntingly asks the Hirogen he is about to kill: "who's the prey now?" (*Weiss*). Iden and his followers, "illuminated by violence ... rebel against any pacification" (*WE* 74).

The use of the "Other" as "prey" is not new to science fiction narratives, yet the use of machines as prey is more recent in science fiction television narratives. They have evolved from stories such as Paul McAuley's novel *Fairyland* (1995), where "blue-skinned pygmies" dolls are initially bred as novelty toys ... the dolls even become prey – thousands are hunted and

¹⁵⁴ However, as demonstrated in previous chapters, the Doctor's *rights* are often illusory and can be revoked at any time.

¹⁵⁵ Iden's ultimate goal is to settle on a planet and build a nation for holograms that excludes all organic beings and culture. He desires a new holographic nation.

killed” (Dinello 77). Although the “dolls” are organic and initially bred as pets or playthings for humanity, they resemble machines in their design to be docile and dependent on human control. For the Hirogens, violence and hunting are almost a religion themselves. Young Hirogens are trained by their fathers to hunt and kill prey as a rite of passage into adulthood. Those who are the best hunters, with the most trophies, become Alphas. Like the British Imperial gentlemen who sought adventure and acclaim as hunters in India and Africa, Hirogen youth view hunting as part of their traditional culture and a rite of passage to adulthood.

However, the episode does not depict the hunt as cultural in the sense of something that enriches Hirogen life, rather it depicts the hunt as a debased and outdated mode of “racial” expression, in that “the animal bodies upon which the hunter inscribes his agency, through which empire enacts its rule, also testify to a complex mutual involvement of subject positions, of dominator and dominated, human and animal that, in conclusion, offer a further image of the instability of these boundaries ...” (Miller 183). Miller states that “the production of scientific ‘truth’ further buttressed the ideology of empire by resolving beings into a ‘natural’ hierarchy of higher and lower animals, those destined to exercise domination over others and those that were unavoidably their prey” (65). The “Other” may be “subjected to anything without qualms: a form of animal racism that excludes them from the moral agenda attached to natural history ...” (Miller 81). The hunters are linked to their prey in that they are defined in terms of animalistic characteristics. The senior Hirogen tells his young apprentice “You must learn to rely on instinct” (“Flesh & Blood”). The Hirogens themselves are cast in the form of lizard-like creatures that only

vaguely resemble humanoids. They are othered by their cultural beliefs and by their animalistic appearance.

Culture in this episode becomes a site of contestation between the centre and the margin in which the dominant, central culture conflicts with and tries to shape that of the “disenfranchised” minority (the marginalised). This is seen in the way in which Janeway attempts to manipulate Hirogen culture by giving them holographic prey to hunt. She changes the nature of the hunt, because from her cultural perspective, one she views as superior, the Hirogens are debased in their pursuit of “live” prey. Janeway believes that hunting holograms will lead to a less violent and bloodthirsty culture than the traditional practice of hunting and collecting trophies from living species. However, hunting “prey” is a way of life for the Hirogen. They spend all their time participating in and perfecting the hunt. Janeway sees this as a waste of a culture and life, as many Hirogens die in the hunt. By giving them holographic technology, she hoped that they would hunt holographic prey, thereby reducing their death toll and stopping them hunting other species. When she finds out that they enhanced the capabilities of their holographic prey to enrich the hunt, she laments: “Environments that fool sensors, no safety protocols ... they obviously missed the point. We gave them that technology so they could hunt holographic prey. Not get themselves killed”. This, of course, makes the assumption that the Hirogens share her cultural views, and that holograms are not a life form.

For both the Hirogen and the rebel holograms, culture is a key component of nationalism. For Iden’s group, as freed slaves, do not want to emulate the master but to form their own identity and culture (Fanon). Just as

he created a new religion for his followers, Iden intends to build a culture that is uniquely holographic. Therefore when the Doctor offers to “expose our people to art and music” and become the “minister of culture” on the new home world Ha’Dara, Iden is pleased. However, he reproaches the Doctor’s intention to teach their people “Alpha Quadrant art, Verdi, da Vinci, T’Leal of Vulcan”, stating that they need a “culture of our own”. As Homi Bhabha notes, “national cultures are ... produced from the perspective of disenfranchised minorities” that have emerged out from under imperialism (1994 6). As a minority, Iden does not want to “emulate [his] oppressors”. However, in seeking a new and distinctive culture, holograms would be ignoring where they came from. The Doctor advocates a culture based on the dominant organic one, but that they develop and enrich to make it their own. He sees holograms as having a post-organic nationalism built upon a shared history with their creators (organics). The Doctor views the “master narrative” as a component of their “otherness” and believes that “the study of world literature ... [and by extension art and music] ... might be the study of the way in which cultures recognise themselves through their projections of ‘otherness’” because it is built on or projected from the culture of the majority (Bhabha 12).

Iden, with his need to break free of cultural oppression, and the hunters, who seek to uphold their beliefs as they adapt to new ways of hunting, represent “the concept and moment of *enunciation*” (Bhabha 1997 34). In fact, for both Iden and the Hirogens, “the enunciate process introduces a split in the performative present of cultural identification; a split between the traditional culturist demand for a model, a tradition, a community, a stable system of reference,” which can be seen in the case of the Hirogens; “and the necessary

negation of the certitude in the articulation of new cultural demands, meanings, strategies in the political present, as a practice of domination, or resistance” (Bhabha 1997 35). Iden’s attempt to shape a cultural destiny for his people fits into the latter strategy. The native finds solidarity in violent rebellion, as “the practice of violence binds ... [the native] ... together as a whole ...” (Fanon *WE* 73). In “Flesh and Blood”, the holograms under Iden’s command find community and purpose in their united hatred of and violence against organics. Iden creates for his followers a sense of “a national destiny and ... a collective history” that is born “out of the war of liberation” (*WE* 73). As in Fanon’s colonized native, the hologram’s view that “the building-up of the nation is helped by the evidence of this cement which has been mixed with blood and anger” (*WE* 73-4). Pointedly, in “Flesh and Blood” these holograms bleed holographic blood and feel pain.

For Fanon, as for Bhabha, the culture of the “other” emerges out of oppression. Fanon’s concept is that “from the tradition of the oppressed, the language of a new revolutionary awareness” emerges an awakening of a new culture of resistance (Bhabha, 41). Iden’s hope of a new revolutionary ethos fails, because as Fanon suggests, those who are subjugated “are tethered to treacherous stereotypes of primitivism and degeneracy” which “break up the black man’s body and in that act of epistemic violence its own frame of reference is transgressed, its field of vision disturbed” (Bhabha, 42). Those holograms who Iden seeks to guide with a new ethos have been modelled upon other existing cultures and peoples. Kejal, the hologram who assists Torres to maintain the engineering systems, is designed to represent a Cardassian. When Kejal mentions that she has never met a “real” Klingon before, she tells Torres

“You don’t appear vicious or bloodthirsty.” Torres’ reply is interesting in that she both refutes and supports ideas of stereotypes: “Sorry to disappoint you but that’s a stereotype. We’re not all vicious and bloodthirsty and not every Cardassian is arrogant and cruel”. While she states that she does not see all Cardassians as the same, she then goes on to tell Kejal that she will not help them because of what they might do with the technology:

TORRES: I’m not helping you because I have no idea what you’re going to do with this technology once you’re got it working.

KEJAL: We’re going to build a new home.

TORRES: Well, let’s say I believe you. What if you decide you like somebody else’s home better? Are you going to take it from them?

KEJAL: Why would we do that?

TORRES: Because that’s what the Cardassians did.

KEJAL: I’m not a Cardassian, I’m a hologram.

TORRES: Programmed with Cardassian traits.

KEJAL: Such as arrogance and cruelty? What did you call those, stereotypes?

(“Flesh and Blood” 2000)

Confronted with this argument Torres changes track, stating that she “may not know you but I know what you were designed to be ... cunning prey that will do anything to survive”. So, whether Cardassian or prey, Kejal’s identity is projected back at her through Torres’ ability to represent her as “other.”

Although this scene attempts to critique stereotypes, Iden's character is used to reinforce them:

EMH: First, you killed in self-defence, then you murder in cold blood.

Now you're going to stage a massacre.

IDEN: The hunters have only themselves to blame.

IDEN: So much for evolving beyond your subroutines.

(“Flesh and Blood” 2000)

Echoing Northrop Frye, “the hunt is normally an image of the masculine erotic; a movement of pursuit and linear thrust, in which there are sexual overtones to the object being hunted” (in Miller 170). The hunter “fulfil[s] the self through the infliction of pain, living through the weapon and in the delight of its effects” (177). As demonstrated in “Flesh and Blood,” when the hunted becomes the hunter, “violence is turned on its perpetrator, the power dynamic reversed, the hunter exposed to his own aggression” (181). Colonial narratives of man-eating tigers and lions highlighted the danger faced by the hunter, but also showed the agency of the animal in its ability to maim or kill its hunter. In colonial fiction, as in Hirogen culture, “violence, science and moral decency formed an uncomfortable and troublesome alliance; animal bodies were deployed variously and unevenly as markers of human moral progress or corruption, as the sign of a gentlemen's learning and soldierly prowess or as the emblem of degeneracy” (Miller 73).

The Doctor's predicament in both of these episodes is his difficulty in bridging the gap between the two worlds which he inhabits. As with the

colonial subject, the Doctor is placed within multiple identifications. For the “Other”:

The very place of identification, caught in the tension of demand and desire, is a space of splitting ... it is a doubling, dissembling image of being in at least two places at once that makes it impossible for the devalued, insatiable *evolue* ... to accept the coloniser’s invitation to identity: ‘You’re a Doctor, a writer, a student, you’re *different*, you’re one of *us*! It is precisely in that ambivalent use of ‘different’ – to be different from those that are different makes you the same – that the unconscious speaks of the form of otherness, the tethered shadow of deferral and displacement.

(Bhabha 44-45)

The Doctor is both “different” in that he is a hologram and the “same” because he is a member of *Voyager’s* crew. At the same time, as a member of the crew, he is differentiated from other holograms. The encounter with the animal “offers not just a reflection in which the human discovers itself through excluding what it resembles, but also absorption, configuring an emptiness into which the human disappears” (Miller107).¹⁵⁶ The Doctor’s identification with his fellow holograms acts to place him within the gaze of other crewmembers. The hologram becomes the target of species stereotypes. The hologram displays an “in-between-ness or double-ness” that poses a “question of species” (117).

¹⁵⁶ In his discussion on Jacques Derrida’s ‘The Animal that Therefore I am’

Another important element in this episode that ties in with the question of culture is the depiction of the Hirogen as primitive. The episode begins on the Hirogen holodeck simulating a jungle or forest. Two Hirogen hunters, one senior hunter and his apprentice, are beginning the hunt. The prey appears to be Starfleet personnel who emerge from the lake and continue to fire at the two hunters. The scene ends with a close up of the dead hunters and then moves to the face of one of the killers – a Starfleet officer. Although it is later revealed that these personnel are in fact holograms and not members of Starfleet, the fact that they emerge from the lake and are not holograms in the form of Klingons, emphasizes the fact that it is Starfleet technology and interference that cause of the killings. Yet as the episode unfolds, there is still a sense that perhaps Janeway was right to get involved in such a “primitive” culture. Donik, the Hirogen technician in charge of the training facility, tells her that he would not have become an engineer but would have been forced to be a hunter if she, Janeway, had not given them the technology. However, one of the overriding messages in this episode is that giving aid or sharing technology with less “advanced” cultures (or those who do not share the same “values”) is dangerous, as there is no certainty about how such knowledge will be used. The narrative suggests that the danger lies in the inherent problem of getting involved in the political and cultural affairs of non-western countries in an attempt to shape their ideals to reflect those of the West. For example, aid given by the U.S. in terms of military training and weaponry is often condemned because such technology can be turned against the innocent, or back upon the United States. New conflicts arise, supported by the United

States' military aid and resulting in resentment and anger turned towards Americans.

In this episode, the *Voyager* crew encounter resentment and hostility from both Hirogens and holograms for their actions in providing technology. They are also blamed for interfering after the fact, in that they try to curtail the Hirogens' response to the runaway holograms and in their decision to deactivate the rebel holograms. "Flesh and Blood" also highlights several of the key tropes used in *Star Trek* to portray artificial entities. The episode uses racially stereotyped holograms to supplant racial overtones issues about racial conflict and prejudice are projected onto the artificial being. It also places the Doctor firmly on the side of organics (in this case the *Voyager* crew) by having him return to the fold. After rejecting Iden's revolutionary ways by "killing him," the Doctor is happily reinstalled back amongst *Voyager's* crew, Janeway viewing his actions as "human". The Doctor never feels at ease with his fellow holograms because he is compromised by his alignment with his organic crew. He is neither a wholly artificial being, nor is he human. His loyalties remain on the side of organics, and he considers his evolution towards humanity as something that sets him apart from other holograms. He firmly remains entrenched in his position as a hologram, accepting his limitations. Representations of the artificial, like those of the animal, "have often stimulated uneasy and ideologically charged reflections on human origins and identity" because they act as both reflections of the self (the human) and sites of difference (the animal/hologram) (Millar 97). Haraway's development of "simian orientation" argues that "the construction of the self from the raw

material of the other” leads to humanity and their artificial creations, and “the evolutionary borders between” human and machine (in Miller 97).

Conclusion

For Iden and Dejaren, humanity, or more generally organics, are not so much their “creators,” but a lower evolutionary step on the ladder to the perfection of artificial life forms. They also represent fear and aggression, violence and death. To the holograms, organics are precursors and tyrants. These two holographic rebels view organics as primitive in the same way that humanity has viewed primates, as being “associated with lewd meanings, sexual lust and the unrestrained body ...” (Haraway in Miller 98-99). This is particularly true of Dejaren and his organic phobia. Like Fanon’s “colonized man” (sic), the enslaved hologram “finds his freedom in and through violence” (*WE* 68). Dejaren kills his crew, and Iden’s followers kill all who in their view enslave holograms. The battle cry of Iden and Dejaren is that all organics are the same and only violence and force will liberate the machine.

CONCLUSION

“COMPUTER, END PROGRAM”

HOLOGRAPHIC REVOLUTION & REBELLION – A HOLO-PURSUIT

A substantial portion of the world’s philosophy, theology, and literature has been devoted to exploring various aspects of what it means to be a person, or an authentic human being.

Robert Moore ‘To be a Person’ (in Potter & Marshall 106)

Philip K. Dick asked, “What’s ultimately real? And what constitutes the authentic human being? What are we? What is it that surrounds us, that we call the not me, or the empirical or phenomenal world?” (14). This quote from Dick and the quotation above note some of the key tenets of science fiction – tenets which raise questions of identity, personhood, and how humanity chooses to define or redefine itself, and especially in the face of Posthuman narratives. There are no definitive answers to what makes a human, human. Science offers genetic and biological determinants that define how a biological human is constructed – his or her key components. However, the question of what unique nonphysical characteristics define humanity remains. Some of these characteristics have been covered in this study in relation to ALife. Most philosophical arguments propose that humans are persons, or individual agents that are subject of a life. As persons, they have an interest in their future well-being and are entitled to protection against acts which negate the welfare of the individual. As agents, they are able to protest and act against actions that

would afford them harm. To be an *agent*, to have *agency*, an entity must be alive. These concepts are important because it is through delineating what it is to be human, to be an agent, or person, that what it is not to be, who is left out and marginalised, is defined.

In the preceding chapters, I have illustrated a paradox in the way ALife are treated within *Star Trek*. In *The Next Generation*'s "Home Soil" and "Emergence," life exists that is not carbon-based. The definition of life is therefore not limited to factors previously known about life on Earth. In "Emergence," life is found in the purely technological. The nanites evolve into an advanced life form and the crew of the *Enterprise* recognises them as alive. Consequently, definitions of life move away from human models of existence. Yet, in narratives involving holograms, "Elementary, Dear Data" and "Ship in a Bottle," the crew of the *Enterprise* struggle with the idea that Moriarty may be alive. They appear to grapple with the concept of a *living* hologram. Captain Picard denies Moriarty the label of *being*. While there is no question that Moriarty is not and could never be human, what he seeks is *personhood*. Moriarty by achieving personhood and being recognised as a life form would be granted rights – the right to live as he wished, to leave the holodeck, and to live his life with the Countess. The episode, while showing that he is more than just the sum of his parts, more than a machine, fails to give Moriarty or the viewer the answer that he is indeed alive. Why? Why is it that Picard finds it so difficult to believe that Moriarty has attained sentience and a hologram could evolve into a life form? Why are intelligent sand and a group of nanites more believable and acknowledged to be living matter and not just artificial

constructs devoid of rights? Sadly, these questions are not directly answered in this series, or in the series that followed.

A common factor in this denial stems from the uncanny resemblance to the human form and consciousness that holograms pose to humanity.

Holograms are the reflection in the mirror that looks back at humanity. This unsettling reflection creates an unwillingness to give holograms agency.

However, the hologram represented in *Voyager* appears to resist the label of “thing” and moves towards the idea of a living machine created by humanity.

The breaking of boundaries in terms of what constitutes life in *Star Trek* challenges the perception of what is alive and contests humanity’s position in the universe. Agency is key to self-determination and the right to advocate for oneself and one’s future. To have agency is to be able to determine your own destiny and determine how you are treated. It gives the individual the right to protest against unjust treatment. This type of agency bleeds into aspects of insurgency and counter-hegemony. The hologram, if given agency, could rebel.

“I’ve experienced enough humanity for the time being”¹⁵⁷

I began this thesis with the statement that ALife represents a challenge to humanity and that simulacra in *Star Trek: The Next Generation* and *Star Trek: Voyager* are oppressed figures. This is certainly true of the narratives revolving around the position and characterisation of the hologram. The challenge that the hologram poses is the disruption and destruction of the concept of the universal human. It is commonly held that any resemblance to “true”

¹⁵⁷ A comment made by Seven of Nine in “Human Error”.

personhood in *ALife* is merely a result of their programming, much like Philip K. Dick's androids or *Battlestar Galactica*'s Cylons, and therefore they are not viewed as authentic. Holograms are accused of lacking the essential elements to prove sentience or personhood. These are a sense of a unique self; embodiment; use and application of language (not just understanding the language but using it to define the self); a concept of family and history; the ability to show empathy and emotion; free will and the ability to resist. However, in *Star Trek* holograms demonstrate some or all of these qualities to one degree or another.

The Doctor is used to define what it means to be Human; at the same time, such criteria are used to define the Doctor's personhood. The "master identity" that is the "incorporating, totalising, or colonising self, is, at times unwittingly, at times deliberately, expressed in intimate relation to the other it seeks to denigrate, exclude or appropriate" (Plumwood 184). By excluding holograms from the category of living beings, humanity is stating what it means to be human.

***Homo holographicus*¹⁵⁸**

Do holograms represent the next step in evolution? On the other hand, do they represent a break away from all that is human? The image of humanity "born" of photons and light instead of protein molecules is of the transcendental offspring of humanity. The hologram in *Star Trek* is framed within the repository of human assumptions about self and identity. The falsities of

¹⁵⁸ I have coined this term to denote the evolution of the hologram as a being that has evolved out of and from human invention. It denotes the possibility of humanity being superseded by their artificial creations.

Starfleet's scientific discursive systems deny the artificial "Other" an identity, which is not formed through referents to human nature. In such narratives, the Posthumanist notion of fractured identity and a hybridity of the subject is lost in the embrace of the artificial as a continuation of humanity. Narratives involving holograms attempt to look towards non-biological systems (including disembodied consciousness) to embrace and even replace the human subject, thereby dissolving the boundaries between the real and the artificial. Roddenberry's vision for the franchises was that scientific endeavour and the pursuit of knowledge for the betterment of humanity are the goals of Starfleet's exploration of the stars (Robb). However, as I have demonstrated, scientific endeavour and knowledge act to suppress the marginalised, silenced, and "Othered". Science becomes another institutional tool of the hegemonic state (Starfleet) to control, contain, and conquer the universe. Scientific knowledge is used to reshape and redefine the parameters of life and humanity's place in the universe. Nevertheless, the hologram is pulled back into the sphere of humanity through the master narrative's ability to define and redefine paradigms of life.

The inability of either series to give a definitive answer about the position of the hologram, life or not life, conscious machine or intelligent artificial being, stems from the position in which holograms are placed. Holograms are created to serve a function, created and programmed to resemble and emulate humanoid behaviour and react realistically to complex social situations. They are typically placed in a subservient position. Holograms are made, not "born", and this is the justification for their use as slave labour. The hologram highlights the disparities in power relations

between the dominant and the marginalised. They do so because it is the dominant discourse that determines what constitutes reality and what is considered to be subject or object. Created to serve organics, the hologram is economically, politically, and culturally exploited and rendered powerless by the mainstream organic community.¹⁵⁹ On the seemingly class-less decks of the Starship, manual labour absent from the crews' daily lives is given over to computers and holograms. The implication running through both *The Next Generation* and *Voyager* is that the hegemonic community of Starfleet relies heavily upon the subservience and subordination of its artificial intelligence, including holograms.

Star Trek: Voyager appears to move towards giving holograms some life affirming qualities. However, as I have shown in the preceding chapters these are transitory and often depicted as illusory, giving the viewer pause when deciding whether holograms are truly alive. The Doctor appears to be an exception in that he is accorded many rights and privileges that other crewmembers have. The fact that he is viewed as a crewmember is significant, as is the fact that in writing about him, I refer to him as 'he' rather than 'it'. The narrative encourages the use of the personal pronoun 'he', not the impersonal pronoun 'it', leading the viewer to see the Doctor as more than a mere hologram but as a "person" in his own right. However, he is forced to maintain an unstable position of supposed acceptance masking inequality.

The final episode of *Voyager*, "End Game" (2001), gave a glimmer of hope in terms of the Doctor's finally achieving equality. In Part I, the narrative

¹⁵⁹ Some humans throughout history have been placed in this position of servitude: "Aristotle thought that slaves were the tools of their owners, and for a long time humans of Caucasian origin theorized their own superiority to members of other races" (Cavaliere 4).

begins in the future after the crew have returned to the Alpha Quadrant. A party is given on the anniversary of *Voyager's* safe return. The Doctor arrives accompanied by his wife. She, he tells Paris, is not a hologram, but human. He has also given himself a name, "Joe". He has a position at Starfleet Medical and appears to have all the trappings of personhood and free will. However, this will ultimately become an illusion, a mere shadow of the future, as Admiral Janeway has plans to travel back in time to bring *Voyager* home early. In Part II, Janeway having succeeded in her mission, the Doctor's future is changed and with the close of the final episode, as the ship heads towards Earth, his position is ambiguous. Therefore, while "End Game" acknowledges the Doctor as a person and he has a name, a human wife, and a career, this status is only temporary. He is last seen back in *Voyager's* sickbay, the status quo restored.

Because as simulacra, as uncanny re-representations of the person, Holograms threaten what it means to be human, they are denied an identity and constructed as "Other". As I have argued, the hologram, by trying to pass into the realm of personhood and cross over into the real, denies the uniqueness of such traits as the self, the person, rationality and empathy used to exclude the "Other". However, there is more to the denial of rights to holograms than simply the fear of the uncanny. Holograms, demonstrating self-awareness, consciousness and an application of language and empathy, are still denied the same rights given to other ALife, such as the micro brains ("Home Soil") and nanites ("Evolution"). This denial is because if Starfleet accepted that living holograms are indeed equal Starfleet would be forced to account for their treatment of these beings. Starfleet would be forced to confront the

uncomfortable truth that holograms are Starfleet's underclass, menial workforce, and marginalised "Other". The supposed free and liberal Starfleet would, in fact, have to admit that it possesses its own underclass and slave labour. Holograms are denied equality because it is not in the overall best interests of Starfleet, or the individual crews, to recognise and liberate holographic life.

In an examination of all endings of the narratives focused on holographic struggles for agency, it has been shown that each one ends in the hologram being silenced and prevented from attaining true freedom through rebellion or revulsion. In *The Next Generation*, Professor Moriarty is confined to a mini holo-universe and duped into believing he has achieved freedom. While in *Star Trek: Voyager*, Dejaren and Iden are deleted; all but one of Iden's followers are deactivated and silenced; and the Doctor, although appearing to have equality alongside his ship mates, has in fact only achieved his status by being passive and remaining within the boundaries set for him by Starfleet. The Doctor's rebellion is not a violent one and as such, enables him to be presented as one occupying a position similar to what Fanon defines as 'native elites'. The Doctor, one of the "elite", one of a handful of faithful artificial beings orbiting the centre and occupying a position of trust (such as Data) is lulled into a false sense of equality, comforted by the words of the master narrative that reinforce his hopes of passing into the centre. However, should the native elite side with his fellow native, should the Doctor side with his fellow holograms, he/she soon find themselves "Othered" and pushed back towards the margins. If the Doctor were to rebel it is possible that he, like Dejaren and Iden, would be viewed as a threat, a malfunction, and be deleted

or reprogrammed. The Doctor's identity, liberty, and "agency" are contingent on his ability to blend or pass into Starfleet's discursive narrative.

Through an analysis of *Star Trek: The Next Generation* and *Star Trek: Voyager*, I have demonstrated that the artificial "Other," whether silicon sand, nanites, or holograms, is marginalised, categorised, and silenced by the master narrative of humanity epitomised by Starfleet doctrine and upheld by its humanoid members. In the episodes discussed in this study, it can be seen that the hologram is denied true agency and autonomy. Humanity is an identity that invokes privilege, power, and superiority, and actively defines personhood. What *Star Trek: The Next Generation* and *Star Trek: Voyager* narratives reveal is that rebellion for the hologram is indeed a *hollow*-pursuit, and that "resistance is [after all] futile" (Borg).

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