PATHOLOGIES OF VISION: REPRESENTATIONS OF DEVIANT WOMEN AND THE CYBORG BODY

By

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Submitted in the fulfilment of the requirements for the degree of
Master of Arts at Rhodes University

February 2015

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ABSTRACT

This thesis investigates the figure of the cyborg as conceptualised by Donna Haraway in *The Cyborg Manifesto* (1991). The figure of the cyborg, as a transgressive figure in the late twentieth century within socialist feminist discourse, is problematized with regard to its efficacy as a creature that challenges the constructed nature of gender and contests the boundary between human and machine through its ambiguous nature. Haraway's notions of the cyborg, which she bases partly on cyborg characters from Science Fiction literature, deny the ocularcentric traditions that have structured gender and the body. Similarly, Haraway does not engage adequately with the figure of the cyborg with regard to situating it historically. This thesis unpacks both the visual and the historical aspects that have structured the cyborg body. By engaging with these concepts, the cyborg emerges as a figure that is identified through visual signifiers of female deviance and pathology. By reading female deviance and pathology on the body of the nineteenth-century hysteric, similarities can be drawn between the hysteric and the cyborg. Through a reading of *Alien* (1979); *Blade Runner* (1982); and *Star Trek: First Contact* (1996) key cyborg texts of the late twentieth century, the figure of the cyborg, and its relation to the deviant pathologised female can be understood when read against the body of the hysteric and how it was visually coded and communicated.

DECLARATION OF ORIGINALITY

I declare that this thesis is my own work and that all the sources I have used have been acknowledged by complete references. This thesis is being submitted in fulfilment of the requirements for the degree of Master of Arts at Rhodes University. I declare that it has not been submitted before for any degree or examination at another university.

Signed on this 27th day of February 2015.

Elle-Sandrah Rheeder

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Acknowledgements

I would like to express my gratitude to my supervisor, Brent Meistre and my co-supervisor, Dr. Deborah Seddon, without whose guidance, patience and assistance with my research, this dissertation would not have been possible.

I would also like to thank my family and friends for their encouragement, especially my Dad (thank you for cheering me on!); this would have been terrible without you.

Lastly, I would like to thank my mother – Mommy thank you for editing my thesis, reassuring me, motivating me, and keeping me going. I cannot express how grateful I am. You inspired me when nobody else could. This would have been impossible without you.

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Introduction

The figure of the late twentieth-century cyborg emerged in Science Fiction films as a figure representative of hybridity; ambivalence; oppositional discourses; the coupling of machine and organism; and the multiplicitous nature of late twentieth-century life. In films such as *Alien* (1979); *Blade Runner* (1982); *The Terminator* (1984); and *Cherry 2000* (1987), the incarnations of the cyborg differ greatly, from 'Ash' (the villainous on-board doctor in *Alien*) to 'Cherry' (the docile, eroticised housewife in *Cherry 2000*). The many variations in the image of the cyborg reflect the numerous *ways of being* in late twentieth-century life and depict the differing views of society and how these views are coupled with the technological.

The cyborg however is not a recent addition to popular culture or literature. Historically, the cyborg has appeared in a variety of ways that mirror the cultural and technological context of that particular time. From machine slaves proposed by Aristotle; the female golem of the 1500s; the automata of the eighteenth century; to the cyborg of the twentieth century – each stage in the history of the development of this figure can be used as an ethnography of the society that gave rise to it. These early cyborgs also reflect the way in which human beings have responded to technological change.

The figure of the late twentieth-century cyborg is constructed by popular myth and imagination; fact; and the scientism that inflects Postmodern ways of being. The cyborg comes to act as a repository for the anxieties that result from technological and cultural change, and has fulfilled this function historically from the time of the female golem. Changing socio-cultural landscapes are reflected in the visualisation of the cyborg, and as Glenda Shaw-Garlock (2008:2) in *Abject Cyborg Woman* states, the cyborg body has historically been the "embodied site of struggle upon which cultural anxieties are projected and worked through".

According to David Mitchell (2003:5) in *What is it like to be a Robot?* "a cyborg, a contraction of Cybernetic Organism, is a hybrid of man (or woman) and machine" and Haraway (1991:141) states that the cyborg is "a cybernetic organism, a hybrid of machine and organism". Donna Haraway in *A Cyborg Manifesto* (1991) suggests the use of the figure of the cyborg as a way for feminists to re-imagine gender and the dualisms that have structured it. Haraway's *A Cyborg Manifesto* has been regarded as a seminal text which outlines the figure of the cyborg as a political tool.

Haraway (1991:157) states that "the cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity". Because of the cyborg's hybrid nature, it is able to sever the constitutive links to patriarchal ideology that construct the *difference* that forms the basis of gender binaries.

As Michelle Chilcoat states in *Brain Sex, Cyberpunk Cinema, Feminism, and the Dis/Location of Heterosexuality* (2004)*,* the cyborg allows us to "imagine a world without gender, an alternative, or escape from the dualisms that persist in how we think of our bodies and the construction of gender" (Chilcoat 2004:157).

The dislocation of normative frameworks that structure gender, the body, and identity and problematize the constructed nature of these is enabled by the hybrid body of the cyborg. Judith Butler in *Bodies That Matter* (1993) states that

> The constructed character of sexuality has been invoked to counter the claim that sexuality has a natural and normative shape and movement, that is, one which approximates the normative phantasm of a compulsory heterosexuality. The efforts to denaturalize sexuality and gender have taken as their main enemy those normative frameworks of compulsory heterosexuality that operate through the naturalization and reification of heterosexist norms (Butler 1993:93).

As Haraway (1991:181) states, "cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves". The cyborg's hybrid nature that questions the boundaries between human and machine, simultaneously questions what it means to be human. Gender, as a key characteristic of the notion of 'human' is then brought into question, and gender binaries are weakened. Haraway re-imagines the late twentieth century as an era that embraces its technological coupling and rejects totalising constructions of the world. She states that

> Cyborg imagery can help express two crucial arguments… first, the production of the universal, totalizing theory is a major mistake that misses most of reality… second, taking responsibility for the social relations of science and technology means refusing an anti-science metaphysics, a demonology, and so means embracing the skilful task of reconstructing the boundaries of daily life, in partial connection with others, in communication with all of our parts (Haraway 1991:181).

The cyborg as a political tool for socialist feminist discourse in the late twentieth century then functions as a beacon for Post-Modern life as Haraway conceptualises it. By problematizing the boundary between human and machine, and thus male and female, the cyborg transgresses totalising narratives and weakens patriarchal ideology. If the post-gendered cyborg is a useful tool for making our way out of the dualisms with which we construct our bodies and thus what it means to be human, then this thesis seeks to closely examine the depictions of cyborgs that we are confronted with and the efficacy of such depictions.

As Adam Bostic notes, in *Automata: Seeing Cyborg through the Eyes of Popular Culture, Computer-Generated Imagery, and Contemporary Theory*, the main drive of Western civilisation is advancement, progress, and technology. Thus, he asks whether the image or metaphor of the cyborg is as redemptive or transformative, in a post-gendered sense as authors such as Donna Haraway, have claimed (Bostic 1998). Robert Fisher, in *AI and Cinema: Does Artificial Insanity Rule?* suggests that the image of the cyborg that the cinema-going public is handed is that of the insane or hysterical machine which is very much gendered (Fisher 2001).

When critically examining representations of the cyborg in Science Fiction films of the last three decades, the discrepancy between the cyborg as conceptualised by Haraway, and the representation of the cyborg in popular culture, becomes evident. The visualisation of the onscreen cyborg is persistently structured through narratives of the Other and the feminine. Paradoxically, the gendered onscreen cyborg simultaneously functions to allay fears of the loss of the gendered human body in the Electronic Age.

The validity of the cyborg as a creature in a post-gender world is called into question when comparing Haraway's notion of the cyborg and the depiction of the cyborg in Science Fiction film. The onscreen cyborg emerges, as Glenda Shaw-Garlock (2006:2) states, as a "composite of otherness that gives expression to such anxieties as the unruliness of nature, the dehumanization of industrial development, transgressive female sexuality, and shifting gender relations". This thesis questions the validity of the cyborg as an icon of Socialist Feminist discourse and problematizes the visual representations of cyborgs in Science Fiction films. By situating the cyborg within a larger discourse of patriarchal ideologies of the machine, science, and the feminine, and questioning how the image of the cyborg has depicted these discourses of control, this thesis aims to assess the validity of this figure.

An analysis of visual representations of female deviance in the nineteenth century is important in order to understand not only the cultural context of the time, but also the role that technology played in containing, pathologising, and subsequently neutralising female deviance. Visual renderings of female deviance are unpacked in order to ascertain specific visual markers related to this deviance. These are then used as a starting point from which to critique representations of the cyborg.

This schema of visual signifiers of female deviance will then be compared to images of the twentieth-century cyborg in popular film in order to facilitate a dual reading of both female and technological deviance, and how the understanding of both technology and the feminine converge in the depiction of the cyborg. To adequately track the progression of female deviance as depicted through the body of the cyborg, I will provide a brief analysis of a selection of key Science Fiction films from the twentieth century in order to elucidate on the cultural and ideological contexts that produced the cyborg characters in these films.

In addition, I will then offer a close reading of three key Science Fiction films of the 1980s and 1990s: *Alien* (1979); *Blade Runner* (1982); and *Star Trek: First Contact* (1996), in order to further expand on the use of visual signifiers of deviance to structure the image of the cyborg.

Amongst others, the work of Anne Balsamo, Claudia Springer, Michelle Chilcoat, Georges Didi-Huberman, Glenda Shaw-Garlock, and Marj Kibby will inform my reading of these images of deviance, and I will draw on their work in order to further expand on the historical and cultural contexts that gave rise to the image of female deviance that structures the image of the cyborg.

In chapter one, I discuss Donna Haraway's conceptualisation of the cyborg and present the two main concerns that I have with her notion of the cyborg as a figure in a socialist feminist discourse. I argue that Haraway's notion of the cyborg does not make reference to its contentious and long history. Furthermore, I argue that Haraway's cyborg is constructed from Science Fiction literature which, in industrial societies of the West, is not the dominant mode of communication. The cyborg that is depicted in Science Fiction film of the twentieth century is a depiction that more accurately attests to the view of the cyborg, technology, and the deviant female, in the twentieth century. Drawing on Guy Debord's discussion in *The Society of the Spectacle* (1998), I argue that the visual depiction of the cyborg communicates ideology more profoundly in industrial societies that according to Debord, are an "immense accumulation of spectacle" (Debord 1998:142).

I then discuss the history of the cyborg as it has developed from Greek myth, the female golem, and automata of the seventeenth and eighteen centuries in order to frame a thorough investigation of the history of the cyborg. By investigating these proto-cyborgs, their connections to the deviant feminine, techno-scientism, and gendered modes of scientific looking, are highlighted. By contextualising the cyborg within the discourses that produced it, the history of the cyborg aids in a thorough reading of the image of the twentieth-century cyborg body, and its connection to technology, scientism, and female deviance are shown.

Furthermore, I argue that the conflation of vision and the eye with knowledge production act to reify depictions of the twentieth century onscreen cyborg. Following this, I expand on the shift from organicism to a mechanistic world-view in the eighteenth century and the practices of scientific looking that emerge from this period. The seventeenth and eighteenth centuries produced a scientific vision that acted to visualise Enlightenment ideals that privileged vision, individualism, and the sciences, in this new mechanistic world-view. The ideologies inherent in this shift to a mechanistic world-view contextualise cultural and social practices that inform, structure, and act to 'contain' scientific practice of the late eighteenth and nineteenth centuries. Concomitant in this shift from organicism to mechanism is the shift in the view of nature as caring and nurturing to viewing nature as

deviant and unruly. Similarly, the feminine is often invoked in discussions of nature and technology. By unpacking visual practices of the seventeenth and eighteenth centuries, the socio-cultural factors that produced the deviant female body of the nineteenth century, and later, the cyborg body can be adequately recognised.

In chapter two, I discuss Hysteria and the associations between the feminine, deviance, and mental illness. I trace the treatment, symptomology, and diagnosis of hysteria and female mental illness as these appeared and evolved in Ancient Egypt, Ancient Greece, and later on, in Europe in the nineteenth century. My focus in this chapter is the alignment of the female body, reproduction, female deviance, and mental illness. I provide examples of female revolutionaries in the late eighteenth century and the nineteenth century in France, and explain how these women were pathologised by being visually depicted as mentally ill.

Famous medical practitioners who constructed and developed these alliances are discussed, such as Etienne Esquirol and Jean-Martin Charcot, in order to unpack the different incarnations of the disease known as 'Hysteria' from the seventeenth century up until the late nineteenth century. By expanding on the cultural, philosophical, societal, and technological changes and ideologies present in the time of Esquirol and Charcot, as well as others, an understanding of the production of the visual signification of mental illness and female deviance emerges.

By expanding on the visual treatment of hysteria and female deviance, a schema of mental illness and female deviance, as constructed by medical practitioners such as Charcot, emerges. The cyborg is intimately linked with notions of the feminine, nature, technology, and the visual. Similarly, its onscreen depiction is constituted by its link to pathology, violence, and deviance. By expanding on the visual treatment of the hysteric, pathology; the feminine; deviance; techno-scientism; and phallocularcentrism emerge against which the twentieth-century cyborg can be read.

In chapter three, I discuss Science Fiction as a literary and filmic genre, the role of Science Fiction within society and culture, and how it has historically functioned as a reflection of technological, social, cultural, and ideological change (from folklore to Science Fiction film). A variety of authors writing on Science Fiction film and literature are introduced in order to explain the construction of a Science Fiction narrative; stock figures and themes; mise-en-scene; and visual imagery and signifiers that are frequently used. I also discuss how Science Fiction film functions and its relation to the uncanny, the fantastic, and the abject.

Three themes that have historically been associated with Science Fiction film, namely: the threat of technology; the human double or cyborg; and the monstrous feminine are unpacked in this chapter in order to ascertain how these lead to the appearance and development of the cyborg in 1980s Science Fiction, and the notion of 'the cyborg' as we

have come to understand it theoretically. I discuss various characters from the Cyborg cinema sub-cycle that relate to this, for example, Cherry from *Cherry 2000* (1987); Maria from *Metropolis* (1927); Jobe from *The Lawnmower Man* (1992), to illustrate how the cyborg body has been represented in the twentieth century.

In chapter four, I argue that Enlightenment principles, evident in nineteenth-century medico-scientific treatments of female mental illness and deviance, still function in contemporary depictions of the deviant female – the cyborg. I contend that 1980s Feminist discourse on the cyborg conceptualised this figure as ahistorical. The figure of the cyborg, although manifested differently in different cultural epochs, cannot be severed from its historical and cultural context (the female-automan-machine). These historical and cultural contexts, for example medico-scientific discourse of the nineteenth century as well as prevailing ideologies about the feminine, inform the treatment of character, narrative, and spectacle in Science Fiction film. The figure of the cyborg partakes in a similar visual language as that of the nineteenth-century hysteric. The 'objective evidence' in the photographic images of hysteria stand as scientifically objective renderings of internal emotional states. Similarly, the visual treatment of the cyborg also presents itself as objective and functions in the same way as the camera – to uncover the secrets hidden within the deviant female body.

I suggest that the circulation of visual signifiers of female mental illness (deviance) operate in the same way in the representation of the twentieth- and twenty-first-century cyborg – to eroticise, neutralise, and expel presumed female pathology and anxiety related to technological development. Fear and anxiety are resolved through the pathologised/neutralised image of the cyborg, and through this action, the transgressive capabilities of the cyborg are undermined. In this process, heteronormative modes of being and gender binaries are re-inscribed on the body of the cyborg. By re-locating the gendered body in the figure of the twentieth-century cyborg, patriarchal ideologies are re-inscribed and re-enforced in the Electronic Age.

Chapter One

The Evolution of the Automan: Cyborgs, Science Fiction, and the Nineteenth Century

1.1 Donna Haraway and the Cyborg

Donna Haraway's *A Cyborg Manifesto*, written in 1985, appeared at a time in Feminist discourse that was largely focused on ascertaining the foundations of gender oppression. Haraway's paper critiques the essentialism that emanated from some feminist theorists in their attempt to determine the origins of patriarchal ideology; she also examines the 'return to nature' advocated by many feminist writers and activists of the time. Theresa Senft, a cultural theorist writing on Haraway's *A Cyborg Manifesto* states, "Haraway worried [that] radical feminism… seemed to promise for women an Edenic 'starting point' of gender and identity, prior to other mitigating cultural factors" (Senft 2001:2). In essence, advocating a return to 'true womanhood', prior to its construction by culture and the symbolic.

Haraway was specifically concerned with the anti-technological sentiment present in much of this writing (Senft 2001:2). The 'return to nature' advocated by many feminists of the time, such as Adrienne Rich and Audre Lorde, was seen by Haraway as problematic. The 'return to nature' is a complex and difficult domain from which to create a unified Feminist discourse that seeks to challenge the constructed nature of gender. By advocating a 'return to nature', an a priori idea of 'nature' is presupposed, and similarly, a unified concept of what constitutes 'woman' is assumed.

Haraway's critique is focused on problematizing these established notions of 'nature' and 'gender', as well as patriarchal ideology. By advocating this starting point, feminist scholars were in effect assuming the same treatment of 'woman' and 'nature' as essential, definable categories, which had empowered patriarchal discourse for centuries. Assuming an established nature of women mirrors the construction of 'gender' by patriarchal discourse and weakens the attempt to dismantle notions regarding 'gender', 'nature', and 'woman'. Haraway argues that "one of my main premises…is that most American socialists and feminists see deepened dualisms of mind and body, animal and machine" (Haraway cited in Senft 2001:4). Similarly, the 'return to nature' also contrasts 'technology' with 'nature', which further reifies the dualisms present in twentieth-century, and previous, ideologies of gender that espoused the view that technology was the domain of man, and nature was the domain of woman.

Haraway advocates the figure of the cyborg as a way to re-imagine the body in the twentieth century, as well as weaken the constructedness of gender. The cyborg not only

signals woman's inclusion in the realm of technology and science, but also constitutes a thorough re-imagining of 'gender' and 'the body', which are not dependent on pre-supposed, pre-cultural, and constructed ideas of gender, the body, or what it means to be human.

The cyborg, as a hybrid re-imagining of the coupling between human and machine is representative of life in the Post-Modern twentieth century. The prolific impact of technology on lived human experience by the late twentieth century was undeniable, and the cyborg represented the reality of this coupling with the machine in the everyday lives of human beings. Haraway positions the cyborg as a truthful representation of woman's experience in the twentieth century which is structured on partiality, and as she states, "the cyborg is our ontology; it gives us our politics. The cyborg is a condensed image of both imagination and material reality" (Haraway 1991:149-150).

The cyborg, although still fictional to some in the 1980s, was to Haraway, a figure already in existence, and she states that "the boundary between science fiction and social reality is an optical illusion" (1991:149). The coupling of human and machine was already self-evident in the late twentieth century because of the integration of technology with the lives and bodies of human beings. The developments in medical science (prosthesis; pace makers; implants and so forth) and various computer and information technologies (in Virtual Reality; email; television) attest to this. Haraway also makes mention of this boundary between human and machine as an 'optical illusion' to explain the way in which the truth of the science fictional, the cyborg, is denied existence in reality; the unimaginable, the uncanny, the revolutionary, the abject, the disastrous, the imminent threat posed by technology – the stuff of science fiction, is already reality.

Although Haraway notes that the cyborg is linked to patriarchal, oppressive, militaristic regimes of the past, specifically referring to the exclusion of women from the realm of science and technology, she argues that this is no longer the case. Senft (2001:3-4) summarises Haraway's argument as: "cyborg politics have been linked to oppressive mythologies: scientific progress; racist; male-dominated capitalism; the exploitation of nature to serve the needs of culture. This doesn't have to remain the case".

Haraway reassures her reader that although the cyborg is the "illegitimate offspring of militarism and patriarchal capitalism… illegitimate offspring are often exceedingly unfaithful to their origins" (1991:151). Haraway comments on the history of the cyborg by saying that, "to some degree, the cyborg serves as the end-point in the West's story of escalating domination of its environment" (Senft 2001:4). Although Haraway does make mention of the influence that the Western patriarchal obsession with the domination of its environment has played in the construction of the cyborg, she does not adequately engage with the influence that this techno-scientific 'cyborg origin story' has had.

Because the cyborg has no origin story in the Western sense, in that it is not formed from biological reproduction and the dualisms of nature/culture and male/female inherent in biological reproduction, the cyborg is uncoupled from biological reproduction as it is created from the marriage between human and machine, and because off this, the narrative of "original unity" is weakened. In the psychoanalytic sense, the formation of 'gender' and the 'subject' are dependent on the myth of original unity "out of which difference must be produced and enlisted in a drama of escalating domination of woman/nature" (Haraway 1991:151).

However, as I discuss further on in this chapter, early automata[1], or proto-cyborgs, are some of the earliest attempts by man to reproduce without the female body and without nature. This dislocation of the female body from reproduction was not enacted to dislocate gender from sex – but as an attempt to finally remove the feminine and nature, from reproduction – as a final stumbling block in the pursuit of immortality that these early automata represent. By removing the female body and nature from reproduction, the female body could finally be excluded from the realm of science and technology, as well as be divorced from its status as 'life giver'.

According to Haraway, without the constraints of biological reproduction informing the cultural body of the cyborg, it can destabilise traditional notions linking women to reproduction/the womb. The weakening of this construction of woman as womb/nature/nurturer, effects a change in the social relations of the household (Haraway 1991:151). The performance of heterosexual coupling and gender dualism are weakened in the household, a stronghold enabling gender dualisms and patriarchal ideology. Similarly, the polarity of the public and the private, and the performances of normative sexuality and gender dualisms that this sectioning of the private/public sphere had previously demanded, are challenged and transgressed by the body of the cyborg. According to Haraway, "no longer structured by the polarity of public and private, the cyborg defines a technological polis based partly on a revolution of social relations in the *oikos*, the household" (Haraway 1991:151).

As Haraway (1991:150) states "the cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity". This statement is specifically poignant in that it highlights Haraway's denial of psychoanalysis, gender binaries, the act of dissecting/cataloguing/classifying, inherent in scientific discourse, and the references to 'robotic' assembly-line workers in early twentieth-century industrial Britain. These have all informed the structure of the cyborg and will be discussed in detail further on in this chapter, as well as in chapters three and four. The twentieth-century cyborg for Haraway is instead constructed from "partiality, irony,

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[1] Examples of different automata from a variety of periods are discussed in the next section of this chapter.

intimacy, and perversity. It is oppositional, utopian, and completely without innocence", and is fully capable of employing this partiality and perversity in the act of distancing itself from its 'origins' (Haraway 1991:151).

The cyborg transgresses the boundaries that constitute 'gender', 'nature', 'human', and 'self' by "subverting myriad organic wholes" and in doing so, "the certainty of what counts as nature… is undermined, probably fatally" (Haraway 1991:153). The hybrid nature of the cyborg, as representative of lived social relations and women's experience in the twentieth century, destabilises "the ontology grounding 'Western' epistemology" (Haraway 1991:153). By weakening the claims of patriarchal discourses regarding the body, lived social relations, 'gender', 'self', and 'being', the cyborg transgresses these dualisms and comes to stand as a more truthful depiction of women's experience.

Haraway furthers her argument by referring to the new economics of the twentieth century, which see the inclusion of women in the workplace, as well as the technology industry. Haraway states that "the New Industrial Revolution is producing a new world-wide working class" of which women from the Third World make up the preferred "labour force for science-based multinationals" (1991:166). Although this marks the inclusion of women within the realm of science and technology, they are still exploited. Haraway here refers to not only women, and states that in the New Industrial Revolution, other groups are "feminized" as well. To be feminized for Haraway, is "to be exploited as a reserve labour force; seen less as workers than as servants… leading an existence that always borders on being obscene, out of place, and reducible to sex" (Senft 2001:9).

For Haraway, "some of the rearrangements of race, sex, and class rooted in high-tech-facilitated social relations can make socialist-feminism more relevant to effective progressive politics" (Haraway 1991:165). The cyborg for Haraway is then an iconic figure that represents these new arrangements, and can be used to structure a progressive politics not based on previous dualisms, but these new fractured identities that are mediated by and constructed through technology. For Haraway, the cyborg is an icon which can guide our understanding of twentieth-century lived social relations, and a way for feminist discourse to incorporate not only technology in a constructive way, but to move away from 'true womanhood' to more authentic ways of being in the twentieth century. As Haraway states, "I would rather be a cyborg than a goddess"[2] (Haraway 1991:181).

Strikingly, the cyborg of twentieth-century Science Fiction and reality is feminised in much the same way as its human counterparts are. With links to nature, the feminine, the hysteric, forced labour, obscenity, abjection – the cyborg of the twentieth century is not the protagonist in Haraway's dream of "a powerful infidel heteroglossia", but rather part of the feminized chorus still mediated and constructed by patriarchal techni-scientism (Haraway 1991:181).

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[2] Hereby referring to feminists who argue for a return to 'true womanhood'.

1.2 From the Automaton to the Cyborg

Donna Haraway's claims that the cyborg is a figure representative of modes of existence in the twentieth century, a "creature in a post-gender world" (1991:150), as well as a figure that weakens gender dualisms, need to be adequately unpacked in order to ascertain the viability of the cyborg as a transgressive figure in feminist discourse. The first point of contention that I find in Haraway's discussion of the cyborg is the short reference to the 'origin' of the cyborg that she makes. Although she does state that the cyborg was born from Western, militaristic, patriarchal, and capitalist intentions, she only states that the cyborg is, or has the potential to be, unfaithful to these origins. In order to ascertain the value of the cyborg in Post-Modern feminist discourse, the 'origins' of the cyborg need to be fleshed out and situated historically within the various epochs of cultural and technological change in which it has developed. The cyborg of the twentieth and twenty-first centuries has a long history of development and has been in mutable modes of existence: as Aristotle's answer to human slavery, the female lute player of the sixteenth century, the moving, defecating duck of the eighteenth century and so forth. The varying incarnations of the cyborg need to be unpacked in order to understand the historical and cultural significance that this figure holds in popular belief and within popular culture.

Aristotle was the first to advocate the invention of the robot in order to resolve the problem of slavery; the machine in service of humankind. The word 'robot', which was first used in Karel Čapek's play, *R.U.R or Rossum's Universal Robots*, is derived from an old Czech word meaning 'servitude' or 'slave' (*Etymology Dictionary*, sv 'robot'). The history of the robot, automan, cyborg, whichever name is best suited to its technological moment in history, was marked from the beginning with its intimate connection to slavery, serving human needs, and as remaining subordinate to human beings.

The Golem of Prague and Talos are some of the earliest examples of the human desire to produce life and were often imbued with a variety of capabilities, ranging from the physically powerful to the supernatural. From these early examples of the human desire to create, the automaton of the seventeenth and eighteenth centuries emerges as incarnation of this same desire. Automata were also invented partly in response to, and indicative of, a specific technological or cultural epoch. The automan/the double/the cyborg has been portrayed in equal measure, either positively or negatively, and it remains in the popular imagination to this day as a figure that showcases the advancement of science and technology, the changing relationships between human beings and technology, and in more positive light has been representative of the varying qualities that human beings have aspired to throughout various points in history – immortality and power, to name but a few.

Some examples of early attempts to create life include the Ancient Greek myth of Talos, a bronze giant protecting Crete from pirates and invaders; the story of the Golem of Prague, protector of a sixteenth-century Jewish community; the story in the *Iliad* of Hephaestus making mechanical handmaidens from gold that acted as servants; and Chinese accounts from 4 B.C.E in the Lie Zi that tell of Yan Shi creating automata that resembled the human form (Atsma 2000:[sp]) (Ganssle 2011:[sp]) (Bedini 1999:[sp]) (Turnbull 2013:[sp]).

Myths and stories relating to the human obsession with technological advancement and progress have been part of the human narrative for millennia. Some of the earliest accounts of the human fascination with automata, and the powers of science and technology, according to Silvio Bedini in *The Role of Automata in the History of Technology* (1999:[sp]), represented man's attempt to "simulate nature and domesticate natural forces". The Renaissance era saw a massive rise in the creation of automata of many kinds, including human and animal forms, due to a focus on the mechanical and the revitalisation of Greek culture and philosophy which significantly influenced scientific thought of the time (Bedini 1991:[sp]). Robert Plank (cited in Glenda Shaw-Garlock 2006:25) suggests that "the motivation to create artificial life represents a symbolic desire of the male artificer to reproduce without female participation in the process". The dislocation of the female from the reproductive process would circumvent biological processes and perceived constraints in an attempt, by the 'male artificer', to preserve and further the human race; the ultimate goal being legacy, immortality, and an ode to male scientific ingenuity.

Early examples of automata were informed by dualisms present in human gender relations, and this was communicated as the juxtaposition between inanimate matter (the blank substance from which the artificial could be created and shaped) and the animate of the male artificer. As Ksenija Bilbija (cited in Shaw-Garlock 2006:26) expands, "Earth as a feminine element is juxtaposed with the spirit, identified as a masculine element and actual life giver". The identification of the earth/nature/body aspect as female, structures not only the view of the male artificer as the 'key' to artificial life, but also informs later divisions that exclude women from science and technology all together. Glenda Shaw-Garlock in *Descartes' Daughters: Monstrous Machine-Women Through Time* describes the 'active' male element and the 'passive' female element of the body, rooted in patriarchal discourses of the body, as elements where "the part endowed with the capacity to think and reason (associated with man) is the mind and the part located in the sphere of biology and nature (associated with women) is the body" (Shaw-Garlock 2006:26).

The nature/culture debate, and the notion of the female as always already associated with nature, earth, the passive and the anti-intellectual emerge in these early attempts to re-create life. They also signal the coding of the artificer as male, and the artificial being as

female. Plank (cited in Glenda Shaw-Garlock 2006:25) states that "the project to create life through artifice was inflected from the start with a distinction between inanimate matter (associated with the female element) and animate spirit (associated with the male element), a 'dichotomy' of body and soul that implies contempt for the body". The body/nature/inanimate/anti-intellectual matter that make up the (female) body of the artificial is contrasted against the mind/culture/animate/intellectual of the male artificer.

Early automata, such as the female golem, represented these two themes in the pre-mechanical age. As Bilbija (cited in Shaw-Garlock 2006:26) states:

> The female golem represents an early example of an artificial woman created as a projection of her designer's erotic desire. Created without agency, the female golem is an objectified sexual surrogate, a replacement for a real woman, and without any social status beyond that of a private sexual-machine.

The early female golem highlights the direct control of nature and the (female) body through the harnessing of science, and the resultant beings come to stand as private eroticised objects purposed for the fulfilment of their male creator. Later automata of the sixteenth century, such as the hydraulic singing birds of Agostino Ramelli, and the mechanical figures of men and women that played instruments and moved around, which were invented by Hans Nuremberg, like many of the automata of the following two hundred years, were whimsical, and purposed for entertainment (Bedini 1999:[sp]).

The eighteenth century signalled the start of the first stage of the Industrial Revolution in 1750; the steady mechanisation of society, and the inception of the factory and the assembly line altered the workplace and society irrevocably. In the seventeenth and eighteenth centuries automata, as Michel Foucault (cited in in Shaw-Garlock 2006:25) suggests, "represented 'small-scale models of power'". This echoed the emerging anxiety about the role the machine would occupy in society, and the need to re-assert control over the mechanical.

At the same time, technological and scientific progress was lauded because it further enabled the human race and improved society as a whole. Modes of mechanical production were mirrored in exceeding control of the body within society and socio-cultural practices. Architectural; spatial; visual; and socio-cultural practices merged to control and structure this new mechanical age.

As Shaw-Garlock (2006:76) states, with reference to Michel Foucault's *Discipline and Punish*:

> Institutions such as schools, prisons, hospitals, and military institutions structured, moulded, and contributed to the docility of the body. Subjecting the docile body to the controlling forces of prescriptive technologies and the factory system helped to create 'a culture of compliance'.

The female body in particular became extremely vulnerable to these new systems of control, established by new technologies of vision (that acted to discipline and punish);[3] the relegation to the private sphere for women (the home); and new scientific study that 'proved' the link between women and the so-called 'lower races'.[4] As the steady infiltration of the mechanical penetrated the lives of people in the late eighteenth and nineteenth centuries more and more, so the anxiety over the resultant negative impact grew. The control of the female body, through technologies of vision and the modes of practice inherent in mechanisation, increased steadily.

The visual depictions of technology in the nineteenth century were ambiguous. On the one hand, they were lauded for the ability of science and technology to positively advance society, and on the other hand, as negative, dangerous, and threatening to the social status quo. As Shaw-Garlock (2006:68) states, "steam engines, represented in exaggerated and enormous scale and juxtaposed with tiny human workers were a reoccurring motif among nineteenth century artists, evidence in paintings, engravings, lithographs, and weeklies from this period". Although the creators of automata in this era were not particular about the gender of their creations, Science Fiction (SF) literature of the time took this theme of automata and the mechanical and transformed it into a direct threat to human life (Shaw-Garlock 2006:85). This re-imagined threat was communicated through the conflation of uncontrolled female sexuality and the violence of nature (intimately aligned with the feminine) which was re-presented as the inherent threat emanating from this new mechanised world.

Wosk (cited in Shaw-Garlock 2006:69) explains this ambiguity toward the machine, and the fertile ground that the mechanisation of society created for the conflation of the deviant female and technological threat, as follows:

> The disparity in size between machine and human is suggestive of an ambiguous attitude towards the machine. On one hand, sweeping scale seems to reflect tremendous pride and wonder in technological innovation. On the other, such representations also signal a sense of despair about the potentially deadly dominance of machine technologies over human beings… the heightened possibility of dominating and controlling the forces of Mother Nature… an implicit feeling of childlike helplessness.

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[3] For example, Jeremy Bentham's Panopticon, designed in 1791. For a detailed discussion of this, please refer to Foucault, M. 1975. *Discipline and Punish*.

[4] This will be discussed in detail in chapter two.

The separation of the mind and body, established in a variety of spheres,[5] the past narratives of the female golem (as nature/earth), and automata of the fifteenth and sixteenth centuries, also enabled the conflation of the deviant female with the threat of technology. The loss of the sexed body through the image of the 'docile' human body of the nineteenth century, and the mechanical body of the automan, affected the control of dominant gender discourses that espoused gender dualisms. The body, crucial to patriarchal domination, needed to be 're-discovered' and 're-inscribed'. This act of locating the body in the confusion of the mechanical found its focus on the body of the deviant female, and the android/cyborg body of the next century. The emergence of the 'New Woman'[6] proved a perfect starting point for patriarchal ideology to assert its fears of changing socio-cultural practice on, and simultaneously, practices of vision from antiquity to industrialisation were critical in establishing the deviant female, and later, conflating her with the technological. Practices of science and medicine that changed drastically during the eighteenth and nineteenth centuries due to technological advancements (such as the camera) and scientific discovery, also altered the way in which body, and specifically the female body were seen.[7] The resulting figure of the interplay and conflation of female deviance and the threat of the technological rests on the figure of the twentieth-century cyborg. Its story is told in many Science Fiction films of the twentieth century.[8]

Haraway's discussion of the transformative cyborg is sourced mainly from SF literature, and this denies the power of the visual in structuring the image of the cyborg. Haraway's focus on literature and the literary cyborg is problematic. Her focus is in constituting an enabling myth for feminists in the 1980s but ignores the dominance of spectacle in societies marked by technology and industrialisations. As I discussed in the introduction, Guy Debord has drawn attention to the fact that societies in which modern conditions of production dominate are inflected with a focus on spectacle. Western society of the modern era, from the nineteenth century onward, is influenced in greater measure by image rather than by the written word.

Images function to structure and reflect lived social relations far more accurately than literature. The nineteenth century in particular is marked by ramifications of the industrial complex that resulted in the rise of consumerism, spectacle, and technologies of vision,

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[5] From philosophy (Plato and Descartes); folklore; automata of the nineteenth century (for a thorough and more detailed discussion of these, please refer to Shaw-Garlock, G. *Descartes' Daughters: Monstrous Machine-Women Through Time* [2006]; SF literature (such as Gibson's *Neuromancer* (1984)); cyberpunk cinema (*Johnny Mnemonic*); to recent SF films (such as *RoboCop* and *The Stepford Wives*).

[6] This will be discussed in further detail in chapter two.

[7] The body is viewed as a complex machine that is made up of parts. The body, particularly the female body, hides and holds secrets, and through careful analysis and dissembling the body, these secrets or hidden truths would be uncovered. The body, theorised as the machine, is also then viewed as profitable and usable (this aligns with the view of the robotic body of Aristotle as created to serve).

[8] For example, *Cherry 2000*, *Westworld*; *Blade Runner*; and *The Stepford Wives*.

such as the camera, that informed and (re)presented social life. This habit continues to this day. Debord (1998:143) expands on the implications of this as follows:

> The spectacle epitomizes the prevailing model of social life. It is the omnipresent celebration of a choice *already made* in the sphere of production, and the consummate result of that choice. In form as in content the spectacle serves as total justification for the conditions and aims of the existing system. It further ensures the *permanent presence* of that justification, for it governs almost all time spent outside the production process itself.

Modes and processes of vision and spectacle, as they have been conflated with knowledge production in philosophy and the sciences, are specifically important when analysing the impact and history of the twentieth-century cyborg, and its conflation with the signifiers of the deviant female.

1.3 The Conflation of Vision and Knowledge: The Implications of Scientific 'Vision'

The conflation of vision and the eye with objectivity, pure truth, and knowledge, as it is incarnated in Western epistemology and simultaneously observable phenomena of the post-Enlightenment period, are informed by Ancient Greek philosophical treatise, where the valorisation of the eye and the visual were prominent in a variety of spheres, ranging from art and theatre, to philosophy and politics. Understanding the conflation of vision and knowledge, informs a reading of the implications of what I have termed 'scientific vision' on the female body, as well as the emphasis on the visual that arises in industrialised society and informs the construction of the cyborg body.

Martin Jay in *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*, examines the role of vision in knowledge production from Ancient Greek philosophical treatise on 'vision' and the 'eye', to later French philosophers, such as Jean-Paul Sartre and Maurice Merleau-Ponty, who praise or contest the role of vision in twentieth-century philosophical thought. Jay states that "the perfection of idealized visible form in the Greeks' art accorded well with their love of theatrical performance. The word theatre…shares the same root as the word theory, *theoria*, which meant to look at attentively, to behold" (Jay 1993:23).

This valorisation of sight is emphasized in Greek philosophy with the word *eidenai*, the Greek word for 'knowledge' meaning "a state of having seen" (Jay 1993:24); the meaning of the word *eidetikos* (a different form of *eidenai*) is "pertaining to images" (*Etymology Dictionary*, sv 'eidetikos'). These further clarify the role that vision played in producing knowledge and truth. Hans Jonas, in his essay *The Nobility of Sight*, explains that the

implications of this ocularcentric tradition in almost every sphere of Greek life are also dominant in current Western philosophical thought (Jay 1993:24).

The constitutive link between *theoria* and *eidenai* in Greek thought is the role of the eye and vision in knowledge production and spectacle. 'Seeing truth', which was a cornerstone of Greek philosophical thought, effectively associates the role that vision played in knowledge production with the specular practices of the theatre. *Eidenai* or knowledge was constituted or enabled by the visual apprehension of a subject or object of inquiry. After the visual assessment, the 'facts' or character of the object could be uncovered. Ocularcentric apprehension of the internal and external world was fundamental in constituting or framing knowledge about a given subject as factual and truthful.

Greek thought furthermore accorded sight the power of simultaneity in that it was capable of surveying a large area or visual field at once; it was less temporal than other senses such as hearing and could ascertain or ascribe fixed essences over ephemeral appearances of objects caught in its gaze (Jay 1993:24). Vision and the eye emerge as all-seeing and omnipresent, able to ascertain all aspects of a given subject of inquiry and, as a result of this, were singularly suitable in determining the 'true' nature of the subject. The authorative and all-powerful nature that was accorded to vision in Greek thought is evidenced by the fixation on vision as an almost God-like figure, able to survey, uncover, and transcend mere human assumptions about the internal and external world that were not based in visual observation.

The fixed gaze of the omnipresent eye of the mind, and the externality of sight, further afforded the viewer the objectivity of impartial and distanced observation. Jay (1993:25) states, "the very distinction between subject and object and the belief in the neutral apprehension of the later by the former, a distinction so crucial for much later thought, was abetted by the ocularcentrism of Greek thought".

Jonas states that this distance created between subject and object gave rise to the whole idea of theoria and theoretical truth in that "the thing as it is in itself as distinct from the thing as it affects me" (Jonas cited in Jay 1993:25). This is the break in the constitutive link between subject and object (Jonas cited in Jay 1993:25). Theory and knowledge production were established on the separation of subject and object, in order for 'truth' or 'fact' to be established. This is mirrored in later Western medical and scientific thought and practice of the eighteenth and nineteenth centuries. The separation of subject and object was posited as crucial for knowledge production, and this separation was conceptualised in the sciences in the studied observation of the object to ascertain its true 'essence', define its structure, and to categorise it. The valorisation of the distanced scientific observer further attests to the role that Positivism would have in structuring discourses of science and technology. The omnipresence afforded to vision further abetted its role in

later Western philosophical, cultural, and scientific discourses, as all powerful, all seeing, and almost solely constitutive of truth.

Although the eye and the visual were valorised throughout Greek life and philosophy, we also see the uncertainty of some, such as Plato, in the reliability of the act of seeing by the two physical eyes. Plato held this physical act up against the nobility of the intellectual eye, and the almost transcendental notion of sight or seeing by the eye of the mind (Jay 1993:26-29). In Plato's *Timaeus*, for example, he separates the creation of the senses into two distinct categories. Sight he places in the category of human intelligence and the soul, and the other senses he places in the category of man's material being (Jay 1993:26-29).

The linkage inferred in situating sight and vision within the category of human intelligence and the mind, also posited sight as the key element in the creation of a rational, intellectual mind. It simultaneously relegated the other senses to the material body, and by inference, anti-intellectual ability. This presages later developments in Western philosophical thought that contrast the rational mind (constituted by visual acumen) with the natural material body. The mind/body dichotomy, expanded by Rene Descartes in the seventeenth century, is further aligned with later nature (body) and culture (mind) dualisms that act to inform much eighteenth- and nineteenth-century thought on the sciences, as well as socio-cultural practices and ideology.

Plato's reservations about the two physical eyes, the eyes of the body, are amplified by his statements that posit the intellectual eye of the mind as not merely omnipresent and all-knowing, but God-like.

> The human eye, he [Plato] contended is able to perceive light because it shares a like quality with the source of light, the sun. Here a similar analogy holds between the intellect, which he called 'the eye of the mind, and the highest form, the God (Jay 1993:26).

Plato's conceptualisation of the intellectual eye of the mind as similar to the sun aligns well with later heliocentric and theocentric models of the world that structured thinking and knowledge production. The interchangeable nature of the terms – vision, light, the sun, and God, become apparent in the work of Plato and other Greek philosophers, and are re-constituted, perhaps not so literally, in later technological and scientific developments during and after the Enlightenment.

Plato's myth of the cave is an example of his reservations regarding perception, and most notably vision.[9] Ironically, Martin Jay states that the ambiguities that we find in Plato's

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[9] In *The Republic* [380 B.C.E], Plato uses a parable to explain his Theory of Forms. In the story, people imprisoned in a cave are chained in such a way that they can only look ahead of them, and not turn their heads

work on vision, and other Greek myths, in fact elevated the status of the visual in Greek thought and Western Culture (Jay 1993:28). Similarly, Plato's questioning of the reliability of the physical eyes, elevated the role of the 'eye of the mind' that was able to intellectually and rationally interpret the world, while the physical eyes of the body were unable to adequately compete in this strata of knowledge production.

The varying notions and theories regarding vision in Greek thought later gave rise to the variations in the ocular tradition that are evident in Western philosophy and culture. Jay (1993:29) makes specific reference to Cartesian philosophy and the way in which ambiguities regarding vision, whether conceptualised at different points in history, as the eye of the mind or the physical eyes, act to circumvent any challenge to the centrality of vision in Western philosophy. At either point, one form of sight was privileged, while the other was berated, and vice versa.

These ambiguities present in the way that the eye and vision were constructed, mirror the way that Light was conceptualised. This dual-nature of Light would influence painting and optics in the centuries to come. Jay (1993:29) expands on the Greek conceptualisation of light, as follows:

> Perfect linear form was seen as the essence of illumination, and it existed whether perceived by the human eye or not. Light in this sense became known as lumen. An alternative version of light, known as lux, emphasized instead the actual experience of human sight. Here colour, shadow, and movement was accounted as important as form and outline (Jay 1992:29).

This conceptualisation of light accorded well with the dual perception of vision, although not always congruent, these two forms of light and vision informed each other, and could be used abstractly or materially, in different philosophical epochs to reinforce the centrality of vision in knowledge production and ascertaining truth. Jay (1993:29) continues by stating that "what might be called the alternating traditions of speculation with the eye of the mind and observation with the two eyes of the body provided fertile ground for the varieties of ocularcentrism that have so deeply penetrated Western culture". These oscillating aspects of vision and light, and their constant re-inscription throughout the history of Western philosophy and culture "created opportunities for ocularcentrism to take root, so too did the complicated relationship between the eye and its object implicit in the idea of theoria" (Jay 1993:29-30).

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to see what is behind them. Behind them, puppeteers hold up puppets that cast shadows onto the wall in front of the prisoners. However, the prisoners do not know this and so assume that shadows are reality; if they see an apple (or any other material thing or concept), for example, on the wall in front of them, they would call it an 'apple'. However, the shadow of the apple is not a real apple. Plato's message here is that what we would call an 'apple' is not a physical apple, but a word relating to something we can only imagine in our minds. In the same way, we cannot always 'see' reality, but mistake the metaphorical 'shadow' for reality (Cohen 2006:[sp]).

The delineation of various conceptions of vision in Greek philosophical thought and myth foregrounds and informs later development in the Enlightenment, the development of the sciences as we understand the term today, as well as visual practices of the nineteenth century. Greek thought formed the basis for many Enlightenment principles surrounding 'truth', knowledge production, individualism, and the centrality of man in conceptualizing and understanding the universe, these similarly formed the foundations for scientific and medical practice of the nineteenth century. The observation of the external world was particularly relevant to the careful and detailed study of the natural world in the 1600s, and similarly, the schism between nature and culture that informs scientific thought of the eighteenth and nineteenth centuries is rooted in practices of the visual classification of the world, particularly nature, of the 1600s.

In order to inform a thorough reading of the nineteenth century's medical and scientific practices, a key turning point in how the body, and specifically the female body was seen, categorised, and subsequently treated, an examination of the visual practices and discoveries of the seventeenth and eighteenth centuries is vital. Discoveries in science and the natural world, as well as great technological advancement, would act as the backdrop for nineteenth century medico-scientific practice, as well its focus on the visual.

1.4 Natural History, Science and Medicine: Seventeenth and Eighteenth Centuries

As Jane Kromm (2010:73) in, *To Collect is to Quantify and Describe: Visual Practices in the Development of Modern Science* states, "the widespread interest in natural history grounded in the visual strategies of collecting and describing specimens increased steadily over the course of the 1600s". Whereas before, collecting specimens and simply admiring them was a noble leisure time activity, this era was marked by the change in this practice to include a concentrated investigation of every object in a collection; handling every item, inspecting it carefully, observing it with intent – were what Kromm (2010:73) calls "preambles to ascertaining the order and organizing principles of the natural world".

The botanist Carolus Linnaeus described an analytic gaze as one that could identify all the aspects of an object; and to ensure that the identification process would be accessible to users at different levels, he propagated the use of visual similarities or dissimilarities (Kromm 2010:74). This system connected properties between individual objects or groups of objects and aided in the classification of the natural world (Kromm 2010:74). The fundamental difference in this method, to previous approaches in discovery and classification, was characterised by an experimental approach which advocated that

known information on the topic of inquiry be set aside, in order for the naturalist or scientist to develop his own theories on the subject (Kromm 2010:74).[10]

The fallibility of the physical eye, as suggested by Plato, is circumvented by the invention of technologies of vision in the 1600s. These new devices, borne from the centrality of vision in scientific inquiry and the production of knowledge, emerge as extensions of the human eye. The invention of the telescope by Johannes Kepler in 1611 and later improvements to it by Isaac Newton, added to the furore of using visual methods in naturalism and scientific inquiry. These inventions enabled man to see what he had never before been able to with his physical eyes.

The use of illustration similarly emerges at this time in medicine, and became widespread by the sixteenth century; this method developed into coloured illustrations in the seventeenth and eighteenth centuries (Engel 1961:680). This visual method employed to construct a visual schema of disease, or rather the natural world of the human body, foregrounds later treatment and usage of the camera in medical practice. The use of the camera in medical science became commonplace almost immediately after the development of the camera (Engel 1961:680). The use of technologies of vision in medical practice as well as in plumbing the secrets of the natural world aligned sharply with the focus on progress; advancement; and a shift to a mechanistic/scientific world-view that emerged in the early nineteenth century. The move to the mechanistic/scientific world-view was concomitant with the emergent view of the body as machine. With the start of industrialisation, the rise of the factory, the invention of the assembly line, the human body came to be seen as a tool that could be formed to meet the demands of rising mechanisation. This view of the body as machine is further developed by medical and scientific practice and technology of the time that revealed, for the first time, the interior mechanisms of the body.

As Michel Foucault (1973:124-126) states in *The Birth of The Clinic*, autopsy as a method of inquiry in the field of pathology emerges during the early eighteenth century as a mode of investigation; congruent with scientific trends of the time that advocated vision and classification as pertinent to thorough investigation. The development of the X-ray in 1895 by Wilhelm Röntgen acted as yet another technological extension of the eye that aided the techno-scientism of the nineteenth century in its quest to uncover the secrets of the human body. Seeing the interior of the human body, uncovering its hidden secrets, as well as identifying its 'inherent' structure or nature, align with scientific practice of this time. Furthermore, this reified the notion of the body as a machine. By discovering the interior

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[10] This approach highlights the ambiguous nature of scientific inquiry, as well as Enlightenment principles that will be discussed further on. Although experimentation, observation of phenomena in order to discover the natural world, setting aside 'inherent fact', were stressed at this time, simultaneously, this discovery and observation would lead to the 'inherent' structure in all things; a pre-established order which would reveal itself to the keen eye of the scientist or naturalist. The theoretical 'truth' of the object of inquiry would in essence be revealed.

functioning and structure of the body through technologies of vision, scientists and medical practitioners were able to control it; alter it; and classify it.

This method of classification and visual discovery had special appeal for Enlightenment thinkers (Kromm 2010:74). The Royal Society of London, a society for the study and discovery in science, was particularly interested in the new sciences of the time, made possible by technological invention and the shift toward a focus on visual classification and empirical evidence. The motto of the society, which remains the same to this day, is "Take nobody's word for it", but rather 'see' or 'discover' for yourself.

European Enlightenment[11] interest in scientific study, technological development and exploration, created the backdrop for the rise of specular practices in many spheres of life in the nineteenth century.

1.5 The Deviant Female

The discovery of the interior mechanisms of the body, enabled by a focus on male dominated scientism and technologies of vision, remodelled the view of the body to one that was aligned with a mechanistic world-view. Female bodies and deviant bodies of the nineteenth century are particularly relevant in this discussion, as they were left with the visual markers of the shift from organicism to mechanism. They also bear the insignia of science and technology, and the central role that these held in structuring this new world view. Furthermore, their treatment also attest to the view of body-as-machine that can be altered and moulded to fit the dominant order; the role of technology in constructing and inscribing gender, deviance, and pathology; and the role of science and technology in halting social degeneration and controlling deviance.

Haraway's cyborg as a myth to enable a re-imagining of the body and lived bodily experience in socialist feminist discourse is problematized when read against the body of the female hysteric in the nineteenth century. The cyborg myth is embedded with

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[11] The Enlightenment, extending from around the mid-seventeenth century to the eighteenth century is a period defined by dramatic upheavals, new discoveries, and revolutions in society, philosophy, science, and politics, as well as a rejection of traditionalist medieval world-views (Bristow 2011:1). Enlightenment thinking developed in tandem with the scientific discoveries and inventions of the sixteenth and seventeenth centuries. Enlightenment thinking culminates in the French Revolution, and its legacy can be seen in the modern Western tenets of freedom and equality for all, founded upon the valorisation of human reason and individualism (Bristow 2011:1). "D'Alembert, a leading figure of the French Enlightenment, characterizes his eighteenth century… as 'the century of philosophy par excellence', because of the tremendous intellectual progress of the age, the advance of the sciences, and the enthusiasm for that progress" (Bristow 2011:2). The notion of 'Aesthetics', developed by German philosopher Alexander Baumgarten, emerges during the Enlightenment, with its focus on the awakening of the subjects' senses and mental capacities (Bristow 2011:3). 'Aesthetics' which is derived from the Greek word for 'senses' is just that for Baumgarten, "…a science of the beautiful would be a science of the sensible, a science of sensible cognition" (Bristow 2011:3). The focus on discovery, vision, and classification of this time can be seen in Enlightenment aesthetics, in that by discerning taste, or beauty one can establish a distinctive harmony and reveal the order of things through a science of sensible cognition (Bristow 2011:4). As Immanuel Kant understands taste (the faculty with which to discern beauty) it is "founded on a distinctive sort of feeling, a disinterested pleasure" (Bristow 2011:4). The coupling of science and aesthetics provided the milieu in which specular practices of the nineteenth century could thrive.

associations to the deviant female, and similarly displays marks of control by 'scientific vision' and technologies of vision.

The body of the hysteric is vital to a thorough reading of the cyborg in that it materially and symbolically displays the intersection between scientific vision; technology; art; fact and fiction; the conflation of vision and knowledge; constructed pathology; and patriarchy. The image of the hysteric reads as an ethnography of the nineteenth century and its practices. I argue that similar practices, although re-modelled for the Electronic Age, are enacted in the twentieth century, and produce the body of the cyborg – just as the nineteenth century produced the body of the hysteric.

By unpacking the 'disease' Hysteria, its treatment, and its visual treatment, in the following chapter, a clear distinction can be drawn between the body of the hysteric and the body of the cyborg.

Chapter 2

Hysteria: Science, Vision, Technology, and the Visual Construction of the Deviant Female Malady

2.1 Introduction

In this chapter I introduce and discuss Hysteria and its origins, focusing on the treatment, reasons for, and diagnosis of the disease until the nineteenth century. I also explore this malady and its relation to the female body and deviance. I then examine the representation of female revolutionaries in the late eighteenth and nineteenth centuries in France, and explain how these women were pathologised by being visually depicted as mentally ill. Similarly, their deviance was neutralised through visually depicting them as hysterical. I discuss the role of photography in medical science and society, as well as 'scientific practices of looking' in the nineteenth century. A major focus of this chapter is the influential role of the French physician Jean-Martin Charcot and how he constructed and presented the disease within nineteenth-century scientific discourse. I go on to discuss the process of visually signifying these women and show how these signifiers are aligned with the visual signifiers of French female revolutionaries and the cyborg of the twentieth century. I discuss how these women were pathologised and their transgressive abilities neutralised through this act by focusing on visual signifiers, deviant sexuality, analogy, and the role that technology played in the act of pathologising and neutralising the female body.

The key focus of this thesis is to examine the gendering of technology, specifically the cyborg, in SF film in the twentieth century. By investigating the visual handling of Hysteria, and the socio-cultural practices that gave rise to this disease, a similar ethnographic image of the Mechanistic Age and the Electronic Age of the twentieth century emerge. Through this, I then argue that the visual signifiers and socio-cultural practices inscribed on the body of the hysteric, mirror those inscribed on the body of the cyborg. In addition, I shall discuss the ways in which the cyborg is frequently represented as hysterical or insane. This is worth examining if we consider the history of how insanity or Hysteria has itself been gendered and especially when the image of the cyborg has been read as transformative with regard to notions of the body, and the body's relation to technology and gender.

In order to garner a better understanding of why and how these images of the cyborg are depicted in mainstream cinema, I will use the image of the hysteric in

nineteenth-century prints; engravings, and photographs to map an 'aesthetics of the Other'. As I will argue, the treatment of hysterics, as well as the roots of this 'disease', have followed the same trajectory as that of the depiction of the cyborg. Just as onscreen cyborgs are 'diagnosed' as insane and hysterical in film, the body's relation to technology and the Western obsession with vision played a major role in the 'diagnosis' of women as hysterical, as these notions do in the 'diagnosis' of the cyborg. As Luce Irigaray states (in du Preez 2004:48) "investment in the look is not as privileged in women as in men. More than any other sense, the eye objectifies and it masters". Just as the cyborg is subjected to a scopophilic gaze (Mulvey:1975)[12] by the all-knowing eye that objectifies and sets at a distance whilst ordering the image into the Symbolic Order, so too were hysterics subjected to this gaze, this scopophilic ordering. Du Preez notes, in *Putting on appearances: Mimetic representations of hysteria*, that the history of the treatment and representation of the hysteric in the nineteenth century, particularly those treated by Charcot and studied by Freud, reveals the primacy of the ocular. The hysteric was not diagnosed through talking to the individual patient, but through observation of certain external manifestations of the inner state.

The emotional or inward states of these patients were never assessed; just as the emotional states of the cyborg, or the reasons for their 'insane' or 'hysterical' behaviour are never assessed on any other level except the visual. In both instances, this visual assessment by the all-knowing eye, and the ordering of both into the Symbolic Order, is linked with the gendering of both. The medico-scientific trend was related to the primacy of vision, and thus in diagnosing this disease the task of the doctor was "to bring the condition, which lies outside the boundaries of understanding and language, into the light – the symbolic order" (du Preez 2004:49).

The hysterics were photographed (a technological extension of vision) for the purpose of 'medical documentation', but mostly it was an extension of Charcot's love of the visual arts. Du Preez (2004:57) states that "Charcot compared the study of hysterical symptoms to the study of an artwork [and]…Foucault [explains] the relation between the clinical analytical gaze and aesthetics: 'the whole dimension of analysis is deployed only at the level of an aesthetic'…this indicates that the process of clinical analysis became an aesthetic even in itself". The hysterics in turn were affected by this process, not only in their emotional or mental symptoms (which were in reaction to this trend of phallocularcentrism), but their bodies were also literally affected in how they reacted to being photographed. The history of the hysteric reveals the domination of sight and the ocular in the use of photography to represent this figure, and thus mediate this figure. Epileptic fits and 'performance' of their condition ensued. A mediated and patriarchally

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[12] Du Preez accessed the 1975 version of Mulvey's article, *Visual Pleasure and Narrative Cinema*.

constructed view of this 'disease' was represented. The image of the cyborg is similarly mediated by the technological that valorises phallocular practices of looking.

2.2 Hysteria through the Ages

Hysteria, as a malady rooted in discourses expounding on female 'nature' and intimately connected to the feminine, has had an extensive, specular and fantastical treatment in the annals of medical history. From Ancient Greek treatise on female gynaecology, where Hysteria and other female gynaecological ailments took pride of place, right through to modern day somatic disorders – Hysteria has seen as many cures and causes as it has physical symptoms. However, one aspect has always remained constant; namely, that it was a disease related to the female body, and later, the female mind. Here I briefly sketch a timeline of the disease and give a brief overview of how it was diagnosed, its symptomology and treatment, as well as an exposition of the cultural context that gave rise to these symptoms and diagnosis. In order to contextualise and understand later developments in the treatment and diagnosis of female mental illness, it is important to identify developments that lead to, and structured the specular treatment and diagnostic practices related to female mental illness in the late eighteenth and early nineteenth centuries.

The first known description of the disease known as Hysteria dates back to 1900 B.C.E. The cause of the disease was described on papyrus by Ancient Egyptians as a spontaneous movement of the uterus. Symptoms included seizures; depression; a sense of suffocation; and a sense of imminent death and so forth, and treatment ranged from placing foul smelling substances near the mouth or vagina (or perfumed substances near the mouth or vagina – depending on where the uterus had moved to) (Tasca, Rapetti Carta, Fadda, 2012:[sp]).[13] For a variety of reasons that will be expanded on further in this chapter, it was believed that the movement or displacement of the womb was the cause of these symptoms.

In Ancient Greece in the fifth century B.C.E, medical science, and more specifically gynaecology, was not practiced on the grounds of empirical evidence, but instead was based on observable phenomena, deductions made from analogy, and information regarding the human body and female traits that were rooted in existing social norms, prevailing ideologies, and myth.[14] Women were seen as physically and mentally inferior (Lefkowitz 1981:12-13). The Hippocratic Corpus, in its exposition on gynaecology, is mainly focused on Hysteria and, as Lefkowitz (1981:12-13) states, "although this might

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[13] Tasca, et al (2012:[sp]) also note that the symptoms mentioned by the Ancient Egyptians are those described in Freud's *globus histericus*, a lump in the throat; difficulty swallowing; fear.
[14] Presumably much the same as with Ancient Egyptian medical science and gynaecology.

seem strange, it indicates that doctors of this time wanted to raise the treatment of women's disease to a medical art". The overriding view of the female body expressed at the time was that the minds of women could be, and most often were, affected by their reproductive organs. This body of medical work would also provide the dominant attitude toward the female body; it also informed diagnostic practice and the treatment of female gynaecological and mental disorder. It would continue to inform and structure medical practice relating to female illness throughout antiquity (Lefkowitz 1981:12-13).[15]

During this time the disease was diagnosed through the observation of the patient and symptoms supposedly related to the movement of the womb, and almost entirely mirror the symptoms displayed by patients suffering from Hysteria under the treatment of Jean-Martin Charcot, as we will see later. The Ancient Greek medical fraternity advocated that Hysteria was caused by the womb becoming dislodged and travelling around the body, or becoming discontented, thus causing a variety of ailments. Plato believed that the womb was an animal and states (Dusenbery 2012:[sp]) "[it goes] wandering in every direction through the body, closes up the passages of the breath, and, by obstructing respiration, drives them to extremity, causing all varieties of disease". Hippocrates distinguished the disease from Epilepsy, which was caused by a disorder in the brain, as opposed to Hysteria which causes were rooted in the movement of the uterus in the body (Tasca et al 2012:[sp]).[16]

Symptoms of the disease include, for example, seizures; a loss of consciousness; terrors or visions; paralysis; and suffocation. These symptoms were believed to have a physical cause. Treatment in Ancient Greece would typically involve foul fumigations placed beneath the nose; sweet scented fumigations near the vagina; inserting wool pessaries into the vagina; eating garlic; inserting into the vagina a pessary made of twigs or opium poppies; marriage; bearing children, and so forth (Lefkowitz 1981:12-16). Treatment was usually dispensed to women who had observable signs of the disease, young women who had not taken a husband and childless women (Lefkowitz 1981:12-16). Hippocrates believed that the cure for this "bad" uterus, especially in virgins; single women; widowed women; and sterile women was to marry and "live a satisfactory sexual life within the bounds of marriage" (Tasca et al 2012:[sp]).

The link between the misogynistic societal norms regarding women, the disregard of these ideologies[17] – and the subsequent diagnosis of Hysteria cannot be ignored. As Lefkowitz (1981:13) emphasizes, these "fantastical doctrines; cures that could only be effective because of their symbolic associations, and diagnosis that could be based on

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[15] Although great discoveries were made in medical science in Ancient Greece as well as throughout history, we see that these attitudes and 'facts' regarding female anatomy and the 'characteristic traits' of women, although re-presented, are never fully abandoned by the medico-scientific fraternity.
[16] We see the continued assumption in a physical cause some two thousand years later by Jean-Martin Charcot.
[17] By choosing to disregard socially approved appropriate forms of female behaviour, for example, choosing not to marry, choosing not to have children and being sexually promiscuous.

analogy rather than observation… [and] in maintaining that the womb could become dislodged and travel around the body doctors were not concerned so much with physical healing as with upholding the established values of society…". This use of analogy by doctors, which we also see later on in the work of medical practitioners of the nineteenth and twentieth centuries, indicates a practice of medicine not based on actual medical investigation or empirical evidence drawn from the patient, but instead one that used social and cultural perceptions of the body and specifically gender, as well as societal and cultural norms regarding women, to validate and reify the diagnosis and treatment of Hysteria. Specifically delineating women as inferior or feeble minded and Hysteria as a traditionally female disease. Analogy, based on entrenched ideologies and the comparison of supposed symptoms of mental illness as garnered by observation, forms the basis of much diagnostic practice in Ancient Greece, and throughout the next two thousand years.

Lefkowitz (1981:13-16) goes on to urge that the disease be regarded as any other Greek myth and states that the Hippocratic corpus is merely a consolidation of myth and popular belief; citing *Prometheus Bound* and the *Bacchae* as examples to indicate that "since both myth and medicine describe a similar pattern of behaviour, the sexual definition of women's health would seem to predate the founding of Hippocratic science. Thus the doctor's prose only record's and sets forth what had been for centuries accepted as truth by all members of society" Lefkowitz 1981:17).

In the second century AD, through to the Middle Ages we see similar attitudes regarding the symptoms of both Hysteria and female mental illness. Although symptoms relating to the mental health of women varied from anxiety attacks to stupors, Hysteria still remained associated with the idea of the wondering womb. Hippocratic concepts relating to Hysteria and melancholia spread throughout medieval Europe and as Tasca et al (2012:[sp]) states, "these diseases were treated according to what we shall call the "scientific' vision" that which was purported by the Hippocratic method.[18]

In the thirteenth century, with the inferiority of women firmly entrenched in mainstream thinking, the work of Thomas Aquinas played an important role in the way Hysteria and female mental illness was viewed. Aquinas maintained that "woman is a failed man", and equates women and Hysteria with witches and sorcery (Tasca et al 2012:[sp]). The many maifestations of Hysteria and mental illness are at this time seen as unholy bonds between the feminine and the devil, and the idea of woman as witch disseminates fear into the collective imagination of the public. In early Christianity, hysterical women were subjected to exorcism as a cure for the supposed demonic possesion that caused their symptoms, but by the late Middle Ages exorcism becomes a punishment and Hysteria and sorcery

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[18] The Hippocratic method was revived in Europe at this time. It coincided with the revival of other Greek philosophical and scientific treatise that spoke of automata. This revitalised interest in the mechanical and resulted in the focus of creating/producing automata of this time (as discussed in chapter one).

become interchangeable. Elderly and single women were most at risk and sorcery became the scapegoat for every unexplained ailment (Tasca et al 2012:[sp]).

Throughout the following three hundred years, many women were put to death as punishment for displaying symptoms of Hysteria; unexplained ailments; or supposed sorcery. The uterus remained at the centre of this particular manifestation of not only Hysteria, but all manner of mental disorders. The idea that women were inferior to men remained firmly entrenched. In the seventeenth century, Thomas Sydenham (1624-1689) proposed that Hysteria resulted from somatic and psychological origins and posited the notion for the first time that it was not related to the movement of the uterus. However it would take several decades for Sydenham's theory to prevail and for the theory of the wandering womb to be exorcized (Tasca et al 2012:[sp]). Paradoxically, Sydenham also stated that among women, there was rarely one who was wholly free from some form of Hysteria (Dusenbery 2012:[sp]).

In the eighteenth century, Hysteria began to be associated with the brain, and not the uterus (Tasca et al 2012:[sp]); there now existed the possibilty that Hysteria could be seen as not only a female disease; however, this shift in thinking would not fully materialise until the early twentieth century with Freud's work on war neurosis. German physician Franz Anton Mesmer (1734-1815) would, in the eighteenth century, find 'suggestion' as a possible treatment for his patients suffering from Hysteria.[19] The influence of Mesmer's work could also be seen in the suggestive hypnosis used by Jean-Martin Charcot in the treatment of his patients. Mesmer identified what he called 'animal magnetism', an invisible force of sorts; and that by placing hands on affected parts of the body, he could treat the patient (Tasca et al 2012:[sp]).

The French physician Phillippe Pinel (1745-1826), a revolutionary for his time, believed that treating the mentally ill in a more humane way would greatly benefit them; this was a turning point in the treatment of diseases such as Hysteria. However, Pinel too saw Hysteria as a female disease (Tasca et al 2012:[sp]). Jean-Martin Charcot (1825-1893), whose work and method will be discussed in detail further on, saw Hysteria as a hereditary disease that resulted in a degeneration of the nervous system (Tasca et al 2012:[sp]). Charcot claimed that the disease affected both men and women, however, the sheer volume of female patients undergoing treatment in his facility for Hysteria points to a different conclusion.

In the Victorian Age (1837-1901) many women carried smelling salts with them at all times. These would be used when emotions were high and it was believed that making use of smelling salts would return the womb to its rightful place in the body (Tasca et al 2012:[sp]). This established a link yet again between rampant emotion, women, the womb,

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[19] 'Suggestion', referring to hypnotism.

and the Hippocratic Corpus.[20] Medicinal baths were prescribed as a treatment for Hysteria as well as pelvic massage (Dusenbery 2012:[sp]). Pelvic massage which resulted in "hysterical paroxysm" was widely used as a treatment for the disease from as early as the second century up until the twentieth century (Dusenbery 2012:[sp]).[21] The belief was that as Hysteria was caused by the underutilised uterus, or the movement of it, pelvic massage could be used to help the uterus back to its rightful place as well as to stimulate it.[22] This further aided in the womb being identified as animal-like and untamed. The trained hand of the medical practioner was needed to guide this uncontrolled organ back to its rightful place. In doing so, the afflicted woman would simililarly be guided back to her rightful place (the home), and back to her proper role (as wife and mother).

2.3 Mental Illness in the Eighteenth and Nineteenth Centuries

Showalter (1987:3) explains that the image of madness as essentially feminine, accorded to us by male dominated science and male dominated medical practice, is constructed out of two theories surrounding madness that have resulted in the notions that, madness is one of the essential bad character traits of women and that madness is "the essential feminine nature unveiling itself before scientific male rationality" Showalter (1987:4). The first notion being that madness is female because it has been depicted as experienced mostly by women, and the second being that the feminine has been characterised as nature.

If we examine the first notion that mental illness is experienced more by women than by men, Showalter argues that it is merely because female madness is represented more than male madness. Showalter (1987:4) states that "as early as the seventeenth century, the files of the doctor Richard Napier showed nearly twice as many cases of mental disorder among his women patients as among men"; as well as over representation, mental illness in women, especially Hysteria was thought to be directly linked to the uterus, and although these theories were dismissed by the eighteenth century, women were still associated with Hysteria and mental disorders as they were thought to be the most susceptible to these due to their feeble mindedness.

If we examine the second notion, we see a divide that is still present and still constructs this in contemporary culture, namely that of woman as nature and man as culture. Woman as associated with the irrational, nature, the body, and silence, and we see these 'essential characteristics' of women establishing themselves in medico-scientific discourse most pointedly after the move to a more Darwinian way of

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[20] In the Hippocratic Corpus, similar suggestions were offered as a remedy for hysterical symptoms. These would coax the womb to return to its rightful place in the body.
[21] 'Hysterical paroxysm', referring to an orgasm.
[22] Referring to the 'underutilised uterus' of the unmarried or widowed woman.

thinking (Showalter 1987:4). That being a move to scientific classification, 'knowing' and 'seeing' being conflated, the focus on technological progress, and the move to a mechanistic world-view. This move was precipitated by a need to know the unknown, to control nature and harness the disorder that it brought (we can also see this urge further back in history), with the added benefit of technology to aid in this control and visual classification, namely, the 'knowing' eye of nineteenth century patriarchy. [23]

The move from an organic worldview to a mechanistic one occurred during the seventeenth century with the onset of the Enlightenment and the inception of new sciences. Shaw-Garlock (2006:29) states that "these changes are associated with the subordination and domination of nature (and woman). The image of a benevolent nature and an unruly nature provided rationale for the control and enclosure of nature via the technologies of new science". Various discoveries in the sixteenth and seventeenth centuries (as outlined in chapter one), led to the demystification and control of nature through technologies of vision and new sciences.[24] Merchant (cited in Shaw-Garlock 2006:30) states that

> The replacement of an organic world-view by a mechanistic one contributed to and legitimated the subordination of both nature and women. This transitional period coincided with broad cultural shifts taking place in response to Enlightenment ideas, associated with the rationalisation and control of nature and individuals and the turning away from faith and superstition; belief in human reason as the mode for transforming society and freeing the individual from arbitrary authority; and increasing faith in the authority of science rather than religion and tradition.

However, the fear of nature, previously elicited by its unknown factors and seemingly uncontrollable powers, explained through mysticism and magic, was now being unravelled, sectioned, and controlled through new technologies, as well as new ways of thinking. Nature, as traditionally associated with the feminine, was now too under the control of patriarchal Enlightenment ideals of science and technology.

Previously, nature was understood through the anthropomorphized vision of mother-nature; the dual-character of this figure, one caring, fertile, and kind-hearted, the other, disruptive, chaotic, and deadly. The caring 'mother' was the central image before the change to a mechanistic world-view (Shaw-Garlock 2006:31). However, with the move away from organicism, "the image of nature, as gentle and nurturing woman, was cast aside during the period of scientific revolution and replaced with a new metaphoric worldview based on the principles of mechanism. The unruly and uncontained view of

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[23] The folkloric tales of the past; the move from organiscm to a mechanistic world-view brought on by the Industrial revolution.

[24] Shaw-Garlock (2006:29) also states that "at the same time, the automaton, a mechanical contrivance that seemed to animate of its own accord and therefore seemed endowed with spirit also introduced new fears"; the fear of these automated beings, products of new scientific and technological discoveries, was founded on the fear of the threatening unknown of the power of technology.

nature provided the rationale for domination and control over nature" (Shaw-Garlock 2006:31). New discoveries lead to the mystical caring view of nature to be re-examined, and re-imagined as disorderly and dangerous (Shaw-Garlock 2006:30-31).

Undoubtedly, the move away from the benevolent figure of mother-nature influenced the status of women culturally and ideologically. Similarly, it reignited old fears about the chaotic and disruptive sexuality of women which had been mirrored in the anthropomorphic mother-nature, and nature as female. This uncontrolled and deviant character of nature was mirrored in witch-hunts of the time in Europe and America; as Shaw-Garlock (2006:33) explains:

> The connection between women and witchcraft was developed in the witch-hunting manual entitled *Malleus Maleficarum* (*The Hammer of Witchcraft*) written by Heinrich Kramer Institoris [1487].… Above all, he linked witchcraft to supposedly uncontrolled female sexuality… The dual faces of nature (benevolent mother/unruly witch) reflect a deep cultural ambivalence towards women and the tendency to characterize her as one of two extremes: either as virtuous or witch.

The relationship between women, nature, and witchcraft was further complicated with the implied relationship between chaotic deviance, evil, and rampant sexuality. As Bovenschen, Blackwell, Moore and Weckmueller (cited in Shaw-Garlock 2006:32) state "the image of the early modern witch links violent and unruly nature to the wild and uncontrollable woman. In popular myth, witches stand side by side with the ancient mother goddesses".[25] The image of the witch, aligned with evil and forceful sexuality and empowered by the forces of nature, corresponded well with this new vision of women that started to take hold in the early seventeenth century. Images from this period attest to the approval of the chaotic-sexualised-witch in popular thought.

This tradition of observation and classification uses images of women's bodies to create a visual schema of mental illness and as Showalter (1987:4) states "while the name of the symbolic female disorder may change from one historical period to the next, the gender asymmetry of the representational tradition remains constant". Therefore, even when a man has experienced or been diagnosed with madness (there were a number of male hysterics in the charge of Jean-martin Charcot) we can see that symbolically, what was being experienced was essentially a female disease. Furthermore, men then "appear not only as the possessors, but also as the dispensers, of reason" (Showalter 1987:4). Even when they acted irrationally, it was classed as symbolically female and a separate anomalous event, distinct from their true masculine rational selves.

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[25] Haraway's move away from the return to true womanhood/the goddess is evident when the associations of the mother goddess are unpacked. However, as I will argue in chapter four, these classifications still structure the cyborg.

Approaching the Golden Age of Hysteria in the mid-nineteenth century, we see that the numbers of women admitted to asylums and seeking care at private institutions increased dramatically.[26] The fact that this increase could have been due to over-representation or social factors, is a moot point, because essentially 'woman' was Hysteria, and this notion is cemented in the etymology of the term; Hysteria literally meaning 'womb'. Women were thought to be impressionable, emotional, sensitive, and susceptible in their nature, and thus, Hysteria being a disease of impressionability, sensitivity and high emotion, it is accepted that Hysteria *is* the feminine (du Preez 2004:47-48).

A precursor to the way mental illness was depicted in the nineteenth century, and particularly relevant to the French tradition that culminates with Jean-Martin Charcot's treatment and construction of Hysteria, was the depiction of revolutionaries during the French Revolution of the late eighteenth century. One figure in particular, Théroigne de Méricourt, is emblematic of pictorial practices of the time that linked women, madness, and revolt in the pages of popular media at the time.

Images of de Méricourt and others developed out of the demand for eyewitness accounts of the revolution and its key participants (Kromm 2002:208); drawn by artists such as Georges F. M Gabriel, these images were keenly consumed by the public. The visualisation of popular claims of "enraged, maniacal madness" that were willingly associated with the most militant of female revolutionaries further reified the accepted notion that only the most "insubordinate, rebellious, disorderly, and mentally unstable" of women became involved with politics (Kromm 2002:209).

The focus on de Méricourt is of importance as she was not only a key figure in the revolution, but a key figure in the media due to her involvement in the revolution. De Méricourt was diagnosed as mentally ill later on and was to spend the remainder of her life interned at the Salpêtrière, further establishing the link between mental illness, women and revolutionary tendencies. As Kromm (2002:906) states "this convergence in her case was particularly significant, because here the conventional wisdom about mania in its contemporary construction as a politically sensitive ailment was validated by the emerging specialisation of psychiatry". This emerging field of study acted as a device to validate popular or traditional notions surrounding women, madness, and acts of defiance by situating these within a scientific discourse that would not only provide empirical 'proof' of these ideas, but also visually represent them within a medical context, which added scientific gravitas to these 'truthful' claims. The images of de Méricourt circulated in the popular press would be mirrored by later images of her during her internment at the

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[26] The 'Golden Age' of Hysteria is typically identified as the period between 1870 and World War I (Bondevik 2010:183).

Salpêtrière, establishing these well-known 'facts' about female deviance visually and scientifically.

Figure 2.1: Charles Devritz. 1845. *Théroigne de Méricourt*.

As Kromm (2002:210) explains, some depictions of de Méricourt make use of allegories of pride or vanity, or show her in amazon dress, depicting liberty. In Figure 2.1 the exposed breast conveys clarity and nurturing, however it also conveys the sexual availability associated with female revolutionaries, as well as other allegories relating to civic disorder (Kromm 2002:210). These visual cues were well known in print culture throughout Europe and visually resembled images of madwomen – the resultant commentary intimating that mental disorder could be deduced from her demeanour and features (Kromm 2002:210).

Commenting on the image in the 1860s, Jules Michelet was under the impression that the image was one of de Méricourt when she was a patient at the Salpêtrière (Kromm 2002:210). He stated that this image spoke of heroic beauty, but that it also indicated the "violent passion for revolutionary ideas that had overwhelmed her reason" which could be assumed by her exposed breast and unkempt appearance (Kromm 2002:210).

During de Méricourt's time at the Salpêtrière, the "enraged madwoman" and her mental state were documented; however, the records are incomplete (Kromm 2002:211-212). Yet, what does speak clearly from these is the "maniacal condition associated with revolutionary ideology" (Kromm 2002:212). In 1816, Georges F.M Gabriel was

commissioned by Etienne Esquirol to do a portrait of de Méricourt for the purposes of medical study.[27]

Figure 2.2: Georges F.M. Gabriel. 1816. *Théroigne de Méricourt á la Salpêtrière*.

Esquirol was a student of the famed Phillipe Pinel, and was a pioneer in the field of visual case histories. In Figure 2.2, we see de Méricourt depicted exhibiting some of the key 'traditional' visual markers of the female asylum inmate. Kromm (2002:214) explains:

> [This image shows] de Méricourt in a bust-length profile view, wearing a loose, open-necked dress or robe, and with her hair shorn. These features attest to the severity of her condition: cropping the hair was commonly done in the asylum for agitated, maniacal women patients, and the casual aspect of dress is a mark of her penchant for disrobing, another traditional symptom of mania.

This image of de Méricourt succinctly orders previously dissimilar elements of madness, revolution, and allegory seen earlier in a variety of disparate images. As well as linking these disparate elements the image transformed the figure of de Méricourt into a disempowered revolutionary, sunken into madness and disorder (Kromm 2002:215). This was encouraged by the professional and political climate of nineteenth-century Paris in which state sponsored appointments in the medical fraternity were influenced by the ability of the doctors to minimise the political and revolutionary ideals surrounding mania (Kromm 2002:215). Many ambitious doctors working in this field, such as Esquirol and Pinel, and later Charcot, would benefit greatly from their ability to neutralize mania, especially in female patients, by simply describing it as pertaining to the female mind and its vulnerable

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[27] Gabriel was well known in the popular press for his on-the-spot renderings of revolutionaries during the French Revolution of the eighteenth century.

nature.[28] The transgressive abilities of the female revolutionary were neutralised in the act of assigning pathology to her, through visual (re)presentation.

Other variations of the image of the madwoman also permeated nineteenth-century popular culture; with reforms in England and Europe regarding the treatment of the mentally ill, as well as the move away from the maniacal brute who was mostly represented as male, the image of the victimised madwoman, as embraced by artists and writers of the time, gained popularity. The shift away from viewing lunatics and the mentally ill as brutish and incurable occurred around the end of the eighteenth century when this image of the violent maniac was transposed by the image of the youthful, beautiful romantic female madwoman. This transpired at the same time that the notions of 'reason' and 'unreason' took on gendered meanings, reason being male and unreason being female (Showalter 1987:8-10). Although, as I have discussed previously, these gendered notions of rationality and irrationality have structured gendered discourses from the time of Plato.

The victimised madwoman of the eighteenth century became almost a cult figure and the images and depictions that resulted from this visualisation of madness were numerous. As this image took hold in the popular imagination of the time, three key figures appeared, namely, the sentimental Crazy Jane, the suicidal Ophelia, and the violent Lucia (Showalter 1987:10). We see these images in the popular imagination as a way of controlling and directing female difference (Showalter 1987:17). As with the images of de Méricourt, the neutralisation of female rebellion or disobedience through the policing of visual representation was tantamount to the continuity of patriarchal notions regarding presumed female characteristics, behaviour, and sexuality.

As Showalter (1987:10) explains "all three established female sexuality and feminine nature as the source of the female malady, but each also stood for a different interpretation of woman's madness and man's relation to it". Whichever form the depiction of female madness took, it spoke to every nuanced and differing theorisation of female mental illness and reasoned away any plausible explanation for this behaviour, all of which returned to a male discussion on presumed female insanity, which revolved around the supposed vulnerable and sexualised nature of women which gave rise to it.

The proliferation of these images from popular culture to scientific discourse can again be seen with the image of 'Crazy Jane' and various incarnations of her in depictions by artists such as George Sheppard and Thomas Barker, entering psychiatric textbooks of the time (Showalter 1987:14). The theme of women escaping bondage that inevitably lead to violent madness, was also popular on stage in nineteenth-century Romantic opera

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[28] This mirrors the role that filmmakers have in minimising the threatening nature of the cyborg. By pathologising and neutralising the image of the cyborg, the fear and anxiety related to this figure of transgression, are allayed.

(Showalter 1987:14). With the mass proliferation of visual representations of female madness, an almost frenzied aura surrounded the vast amount of images available and the variety of mediums they were depicted in in popular culture.

Situating these images of female mental illness within scientific discourse affirmed popularised notions of femininity and mental illness by adding the gravitas of reason and logic afforded by scientific inquiry. It also thoroughly neutralised any heroic acts of deviance against tradition that these representations might hold (and that might be appealing to the revolutionary mind) by contextualising it within the solemn and serious domain of male dominated scientific discourse. The burgeoning field of psychiatry swiftly appropriated these images of female mental disorder and along with reforms in the treatment of the mentally ill, they emerged as scientific and cultural snapshots that captured not only the view of mental illness at the time, but also how women, technology, and spectacle, became interrelated and formed the basis for the golden era of Hysteria. A painting of Phillipe Pinel freeing the mentally ill at Bicêtre highlights this conflation as early as the eighteenth century.[29]

Figure 2.3: Tony Robert-Fleury. *Phillipe Pinel freeing the insane*. 1795. 24,4 cm x 30,5 cm.

In Figure 2.3, we see Phillipe Pinel freeing the mentally ill. This act came at a time of psychiatric revolution, with the humane treatment of the mentally ill becoming a metaphor for the measure of culture that a society had. It is said that Pinel obtained permission to unchain the mad at Bicêtre and La Salpêtrière, and proceeded to unchain many of the

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[29] Some authors have argued that the setting of this painting was at Bicêtre while others have argued it was La Salpêtrière.

male inmates, attending to the female patients only a few weeks later (Showalter 1987:2). Kromm (2002:216) however, argues that Pinel was incorrectly credited with this action.

In this depiction, Robert-Fleury has represented 'madness' as mentally ill women in varying states. The male figures in this image all represent rationality and the bringing to light of the female irrational into the realm of vision, reason, and rationality. This boundary between female irrationality and male rationality and sanity is further emphasized by "the three figures at the centre. In the foreground is a lovely, passive, and dishevelled young woman, her eyes modestly cast down, upon whose exposed bosom an erect and dignified Pinel gazes with ambiguous interest. The keeper who holds up her arm while he unlocks her chains seems less to be releasing her than winding her up, like some huge doll; her nominal freedom, the composition suggests, exists in a complex tension with male control" (Showalter 1987:3). Some of the women are in a state of melancholia on the ground, others seemingly in the midst of a hysterical attack, while one kisses Pinel's hand in gratitude (Showalter 1987:2).

The description that Showalter proffers of this image of insanity in the eighteenth century is an apt description for how mental illness was viewed at the time as well as at the height of Hysteria in the late nineteenth century. The conflation of madness and the feminine was a long entrenched concept, just so in the disease Hysteria where women were seen to be more susceptible than men to mental illness. Although changes in the cause of Hysteria as a disease related to the brain and not the uterus may have been developed, women were still seen as most susceptible to mental illness.

These notions regarding the susceptibility of women to mental illness were further perpetuated and reinforced by the representations of female madness in popular culture as well as the long standing tradition within the medical fraternity that regarded exterior visual appearance as a truthful depiction of an interior ailment. One of the first medical texts to combine a visual representation concerned with the physiognomical aspect of a case with the traditionally used neuroanatomical illustrations was Pinel's *Traite medico-philosophique sur l'aliénation mental ou la manie* in 1801 (Kromm 2002:216). Pinel was appointed head of the Bicêtre asylum and later the Salpêtrière, and although he was politically liberal, he later on came to see revolution and revolutionary acts as forces which created social upheaval and caused mental imbalance (Kromm 2002:216).

Pinel was also greatly influenced by the prevailing French medical-philosophical thinking that focused on reasoning and diagnosis that was based on observation, with the outcome being various illustrated medical treatises' (Kromm 2002:216). This focus on observation led to a delineation of symptoms that were often mistaken as the disease itself (Kromm 2002:216). Pinel's illustrated plates, negatively comparing the physical appearance of an 'idiot' to that of a 'maniac', with their relevant skull sizes and shapes, effectively made the case for his use of illustrations for visual comparison (Kromm

2002:216); as Kromm (2002:216) states "[the] maniac, who… exhibits the classical proportions of an Apollo. The plate gives pre-eminence to mania, and corroborates the point of visible difference between the two conditions".
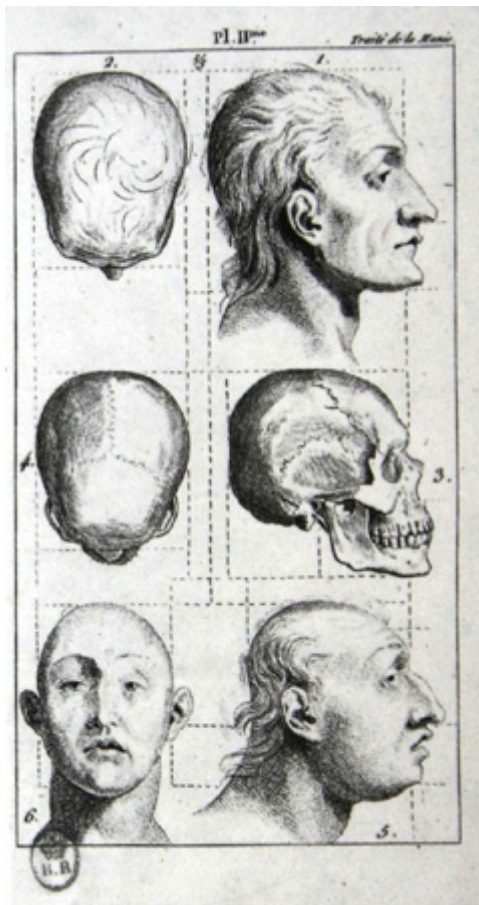
Figure 2.4: Anon., Phillipe Pinel. 1801. *Traite medico-philosophique sur l'aliénation mental ou la manie*.

This plate (Figure 2.4) depicts Pinel's observations regarding different forms of mental illness. In the image at the top, a 'maniac' is depicted. Pinel argued against previous assumptions that mania entailed the impairment of not only the 'passions', but of mental function as well (Kromm 2002:217-218). However, in this depiction of mania, as juxtaposed with the image of an 'idiot' below, Pinel aims to visually depict an obvious difference. Pinel urges the viewer to note the difference in visual signifiers of the 'maniac' and the 'idiot'. The 'maniac', with his intellectual capabilities still fully intact, retains visual markers of the 'Apollo' as Kromm (2002) states, with his angular features, prominent and fashionable nineteenth-century nose and small lips. Seemingly arbitrary visual signifiers of intellectual capability, yet visually and academically aligned with images emerging from ethnographies on race and gender at the time.

The 'idiot' on the other hand, with his large lips, prominent forehead, protruding ears, and large, bent nose, visually aligns with these same ethnographies, and culminates in

communicating the same message of supposed intellectual inferiority through well-known visual signifiers. The visual 'markers' of intellectual impairment as depicted in Figure 2.4 were no doubt easily recognisable during the nineteenth century, at least in medical and scientific circles. Diagnosis was based on observation and deciphering these visual signifiers; with these signifiers of inferiority borrowed from scientific ethnographies and applied to the study of the mentally ill. The inter-disciplinary nature of visual signifiers being traded throughout the scientific community and applied to different disciplines resulted in a diagnosis not only based on observation and visual signifiers, but on analogy too.

The scientific community's penchant for analogy during the eighteenth and nineteenth centuries has been well documented, and this fondness for creating narratives that could be applied to many different groups of people via well-worn visual signifiers continues within the realm of culture up until the twenty-first century. This in turn mirrors the act of the production of these visual signifiers; the medical illustration and later the camera, in their use of analogy to communicate meaning. As in painting, the camera itself draws on analogy through similar acts of framing, staging, and selecting subject matter. Similarly, in subjects of medical illustration and in images produced from the camera, cues flowed from the illustrator or photographer. The camera emulates the vision of the painter. The rampant pictorialism of the nineteenth century ensured that the images produced, especially those situated within scientific and technological discourses, were not seen as imagined, untruthful, constructed, or ideologically driven.

Along with this passion for the visual, Pinel also ceaselessly campaigned for the moral treatment of the mentally insane and maniacal (Kromm 2002:216). The celebratory image of Pinel freeing the interned at Bicêtre pays homage to this, as well as offering the viewer key visual markers of mental illness, gender bias, and hierarchies that prevailed within this system of institutionalism as well as societally. Pinel's student Etienne Esquirol rejected Pinel's claim that mania could exist without mental inferiority, but continued his mentor's tradition of visual observation and documentation (Kromm 2002:218).

As Kromm (2002:220) states "the interest in obtaining images of asylum inhabitants can be documented to around 1800, and appears to have been the particular concern of medical professionals in the Paris hospital system". Pinel was first to promote the collecting of a variety of illustrations and portraits of patients during their illness and treatment and Esquirol keenly followed in Pinel's footsteps by using visual appearance as a tool of comparison during diagnosis and treatment (Kromm 2002:220). As Esquirol (Kromm 2002:220) stated "the study of the physiognomy of the insane is not an object of futile curiosity, but one that allows us to unravel the character of ideas and affections through which delirium is maintained".

With this statement Esquirol takes the previous theatrical depictions of revolutionaries, the majority of which are strikingly similar to depictions of the mentally ill in his work and

Pinel's, and adds the mark and seriousness of scientific discourse. By positioning these images within a scientific discourse, Esquirol neutralizes any attempt at questioning the image and its validity by removing it from its previous context within the popular imagination, yet keeping the visual element of theatricality so essential to the popularity and perception of the image.

He further aligns the study of these images with a thorough and necessary scientific practice that would result in an accurate and in-depth diagnosis of the cause and symptoms of mania. The link between the depictions of revolutionaries and the scientific depictions of the mentally ill in his work is further strengthened by using Georges F. M. Gabriel, the well-known artist responsible for on-the-spot renderings of revolutionaries, to produce the images Esquirol used in his diagnostic practice.

Gabriel's drawings for Esquirol, dating from about 1813 were also exhibited in the salon of the following year, and as Kromm (2002:224) states "[this was] an event that established the subject's claim for fine art status, and made the new genre of case history portraiture known beyond the medical community". This transition from illustrations of revolutionaries, to scientific practice, and eventually to a new genre worthy of artistic inquiry maintained the initial theatrical and spectacular qualities of these renderings. However Esquirol, keenly aware of the post-revolution political atmosphere in France at the time felt that Gabriel's intimate attachment to the visual culture of revolutionary France could overshadow his work and hamper his advancement in this new medical field (Kromm 2002:229). As well as this Kromm (2002:229) points out that at the time "the visual expertise of artists might be seen as competing with the scientific status of medical observation".

Although portraits of the mentally ill were assumed to be objective simulacra, Esquirol wished to align himself with more modern techniques of depiction as well as allay any suspicions of pro-revolutionary tendencies by parting ways with Gabriel, and employing the reproductive engraver Ambrose Tardieu instead (Kromm 2002:229). This move benefitted Esquirol by not only aligning him with anti-revolutionary ideals of the time and affirming his position as a practitioner abreast of technological innovation, which in turn benefitted his career, it also added to the image of Esquirol as a scientist at the pinnacle of his field.

Esquirol's new association with Tardieu also spelt a change from a portrait style depiction to full-length studies that included not only bodily movement and gesture, but also integrated features of the asylum (Kromm 2002:231). This not only marked the renewal of a former pictorial practice that depicted the mentally ill as physically dangerous, but also gave reason for, and validity to, the conditions for their internment, whilst simultaneously adding a sense of objectivity through the addition of the mise-en-scene of the asylum in the picture plane (Kromm 2002:231). The pictorial practices in these images is evidenced in the crude way that they are rendered, highlighting their construction; the way that mental illness as inscribed by the hand of Tardieu is theatrical and performative; and how Esquirol's description of mental illness is prescriptive in the construction of these

images. In this way, these illustrations accentuate mental illness and are prescriptive of its reading. The camera would later function in the same way, with staging, lighting, and framing, accentuating and constructing the reading of the photographs. (See Figure 2.5 and Figure 2.6.)
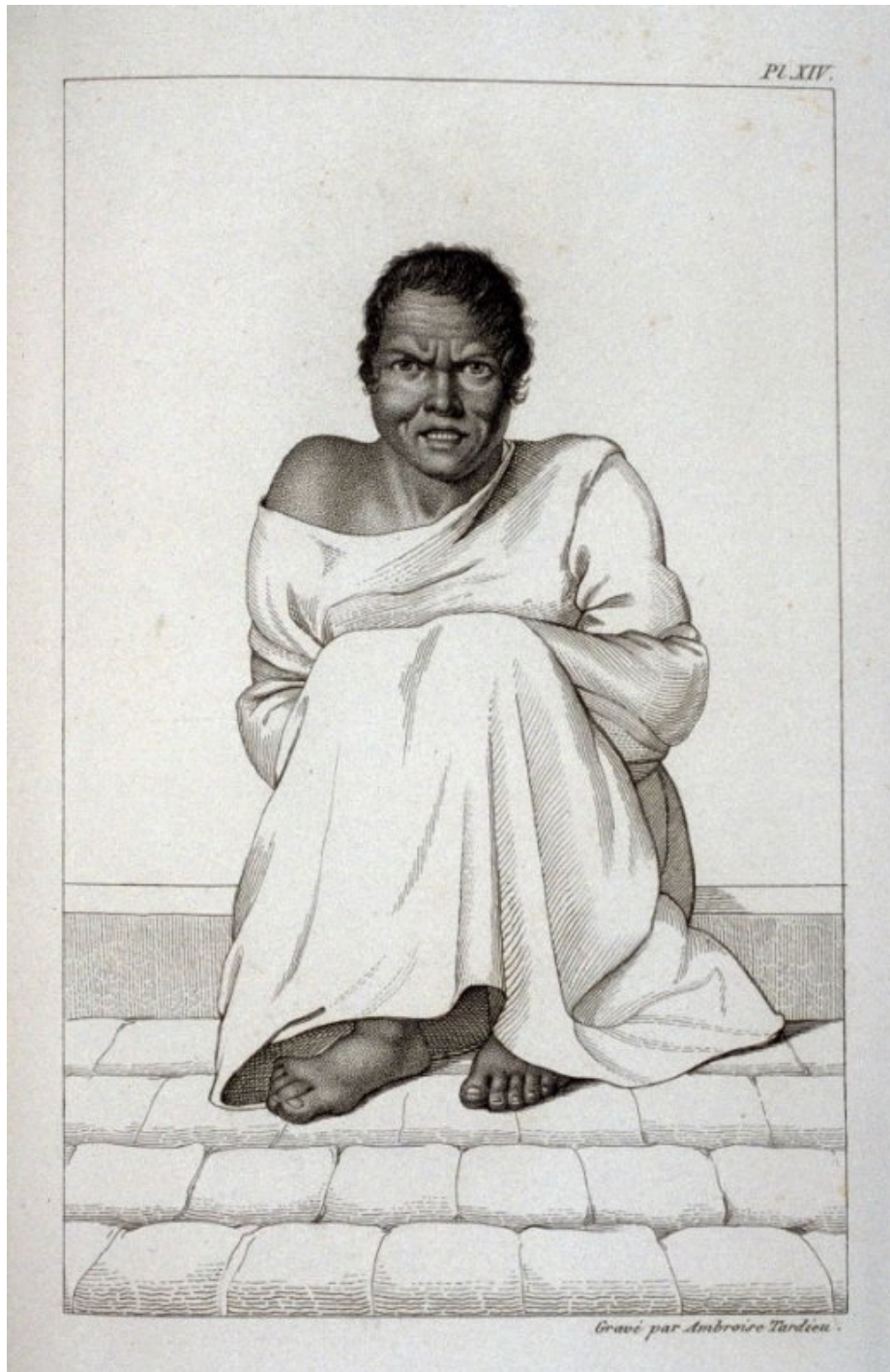
Figure 2.5: Ambrose Tardieu. 1838. *Dementia.* Des maladies mentales.
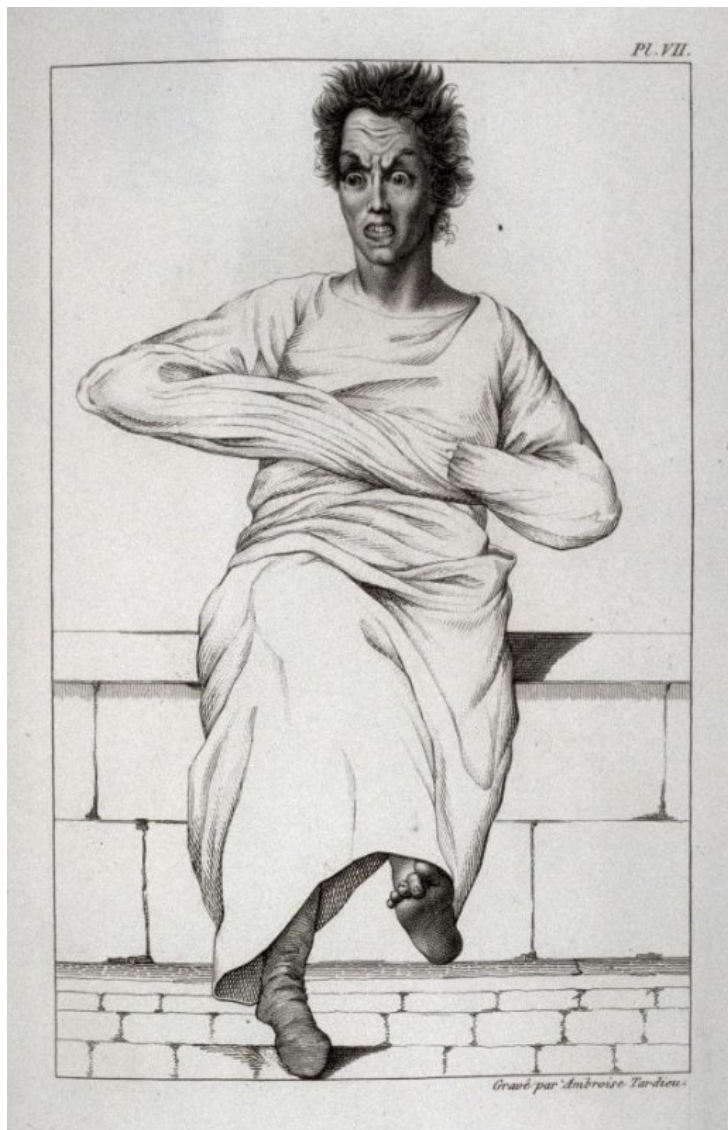
Figure 2.6: Ambrose Tardieu. 1838. *Manie.* Des maladies mentales.

As Kromm (2002:231) aptly states, "the *combination* of these visual features in a medical treatise established a novel, so-called 'display culture' for mental disorder that incorporated previous iconographies but made them seem the invention of a modern psychiatric mentality". This 'display culture' of mental disorder further reaffirmed theories about women and their susceptibility to mental illness. Esquirol's treatise featured mainly women, who are the majority amongst those patients with mania, intellectual inferiority, as well as dementia (Kromm 200:231).

Within the highly sexualised representations of these women are prominent features that communicate deviance and the uncontrolled nature of the deviant female. Esquirol placed particular emphasis on representing the untidy and scantily clothed visual signifiers that had previously identified mania (Kromm 2002:231). As Kromm (2002:231) states, "the sexual display and uncivilized demeanour, along with the maniac's combative agitation,

validated – by their very presence in such an authoritative treatise – those full-bodied visual factors familiar from past iconographies of possession and mania".

Esquirol's student Etienne Georget followed, as Esquirol had, his mentor's predilection for the visual aspects of scientific inquiry. Georget commissioned the artist Théodore Gericault and although the professional climate in France at that time disapproved of collaboration between doctors and artists, Gericault's famous portrayals of the mentally ill offered what Kromm (2002:233) calls a "major shift in representations of the insane by substituting a more reticent and sympathetic portrait style for their subject that what was usually regarded as the overt sensationalism of all previous work in this area".

However, when interrogating the work of Gericault the sensationalism associated with the depiction of the mentally ill in past iconographies is still present. In Figure 2.7, although the woman is indeed represented in a more sympathetic light, she is still wholly aligned with Esquirol's continuum of visual signifiers related to mental illness. The portrayal of this woman presents traditional signifiers of mental illness, namely, agitation, an unkempt appearance, and the grimace on her face. These traditional signifiers of mania were also represented in Esquirol's depictions (Kromm 2002:236). This more sympathetic visual representation by Gericault was however regarded with suspicion. Gericault's treatment of mental illness, specifically of female mental illness, did not align with popular thinking of the female as deviant, uncontrolled, violent, and hyper sexual.

Similarly, these pictorial works that were deemed sympathetic towards the mentally ill were also conversely regarded as aligning themselves with liberal tendencies, and as Kromm (2002:241) states, "Esquirol's writings make numerous references to the revolution as a precipitating cause of disorder…such remarks demonstrate that emphasizing negative correlations between mental disorder and revolutionary political change were a regular feature in Esquirol's work and in that of his circle".

Figure 2.7: Théodore Gericault. 1819-20. *Monomanie de l'envie*.

By negatively aligning mental illness with the politics of revolution, medico-scientific discourses regarding women neutralized any acts against those in power by situating political upheaval and defiance within the context of mental illness. Secondly, the act of claiming the depiction of mental illness and situating it within a medico-scientific discourse afforded the medical practitioners commissioning these works the power to remove any linkages with pro-revolutionary visual signifiers by purely stating that these images were now being produced within a scientific discourse.

However fruitful the depictions of the mentally ill by artists might have proven to the medical practitioners such as Pinel and Esquirol, the link to liberal politics would prove dangerous with regard to career advancement and within the general medico-scientific

community. By limiting the role these artists played within the production of these images, either by not citing them at all in the publication of these images or by making use of engravers such as Tardieu, medical practitioners were once again in control.

Even though images produced after this shift in the medico-scientific politics of representation occurred, images produced of the mentally ill still maintained the same well-worn visual signifiers of mental illness as before. The creation of a 'display culture' of the mentally ill proceeded from this point, uninterrupted by the previous politics of defiant revolutionary politics that had been associated with these depictions.

2.4 From Mania to Hysteria: Social and Cultural Degeneration

Showalter (1987:17) divides the evolution of the 'madwoman' from the nineteenth century onwards into three phases, namely: Victorianism (1830-1870); Darwinism (1870-1920); and psychiatric modernism (1920-1980). In the period between 1830 and 1870, a more humane and sympathetic approach to mental illness was deemed most socially acceptable. This altered approach was influenced by an increase in prosperity and an unyielding belief in progress of Victorian society (Showalter 1987:33) .The expansion of the colonies, the boom in technological invention, as well as scientific discovery, led to a more 'cultured' treatment of the mentally ill. In Victorian times, the texture of daily life was to change, society, law, economics, the technological and physical surroundings of daily life, how people were educated, how they worked, and their beliefs were transformed (Mitchell 1996:xiii).

New social and moral concerns led to new laws that would improve the lives of citizens as well as align with the newfound patriotism and pride present in English society and other European countries in the nineteenth century (Mitchell 1996:3).[30] The construction of large public asylums was mandated by parliament and the care of the insane was to be legally supervised by appointed government officials. The Board of Commissioners in Lunacy undertook the care and inspection of these new public asylums and would inspect the care provided in them, care that was being provided by trained male professionals (Showalter 1987:26). Public interest in the health and well-being of citizens rose dramatically; this concern was reflected in new laws and physiognomic discourse that detected and policed public and cultural 'well-being'.

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[30] Three key events took place that shaped the tone of nineteenth-century England and held as the basis for the social, political and economic changes that occurred. The victory at the battle of Waterloo in 1815, this instilled in the nation a new sense of pride and patriotism and led the development of a national mythos based on pride, self-discipline, and entitlement; the Industrial Revolution, which led to an altered daily existence due to the technological and scientific boom and resulted in the urbanisation of England; and the Reform Bill of 1832, one of many Reform Bills during this time, that aimed to increase the number of eligible voters (Mitchell 1996:1-2). Tellingly, the word 'male' was also added to the description of the voters, a sign that change for woman was starting to take root in societal thinking (Mitchell 1996:3).

"In the late nineteenth century, far-reaching changes engendered by technological progress and industrial expansion intensified anxieties about social and medical pathologies and cultural decline". Within the sociological discourse, this was linked to theories related to social degeneration (McPherson 2010:105).

Industrialisation and technological expansion threatened established, traditionally male dominated areas of public life and work spaces; and the locus of the nineteenth century, technological and cultural progress, became the biggest threat, and simultaneously the answer to socio-cultural progress and degeneration. Traditional ideologies about the feminine and traditional female roles were also being interrogated during the nineteenth century.

The figure of the 'New Woman' emerges during this time in England, America, and Europe, where technological advancement and progress in various spheres impacted lived social relations in numerous ways. In the second half of the nineteenth century, the idea of the New Woman, single, educated, and economically independent posed a serious threat to patriarchal conceptions of womanhood (Smith-Rosenberg 1985:245).

The New Woman embodied the new opportunities available to women, as well as being "demonized as a primary force threatening the nation's social, moral, physical, and economic stability" (Biro 2009:204). The New Woman had more political freedom, rejected marriage, and fought for professional acceptance and visibility, and in so doing destabilised patriarchal and traditionalist structures in the workplace and politically (Biro 2009:204).

In 1920s America, the New Woman was used politically as a "sexually freighted metaphor for social disorder and protest" (Smith-Rosenberg 1985:246). In Europe however, this political metaphor emerged earlier on and resulted in a pathological policing of the female body through medicine, technology, vision, and scientific discourse during the course of the late eighteenth and early nineteenth centuries.

This shift in gender relations in numerous spheres, which were traditionally afforded to men only, also led to the New Woman emerging as a very real threat to Victorian ideals of public and private space. To counteract the metaphoric and material New Woman, the debate surrounding the 'place' of women was assigned to scientific analysis to define, and subsequently control (Lord 1994:137). The challenge of the metaphoric and material New Woman appeared to cause most disruption not only in the workplace but also in the home. Subsequently, a reassertion of the 'natural' biological delineation between women and men in the late nineteenth century was called upon by scientific discourse to re-establish these previously unchallenged ideologies of place. As Lord (1994:137) states:

> The biological delineation of sex difference as incommensurable provided the social delineation between the private and public realms with greater clarity. The bodily inscriptions of this incommensurability were then to ensure the subjugation of women in the private world to the laws of the 'fraternal' state; ensuring as well that 'women's politics must be the politics of morality'.

By firmly, and 'biologically' placing the New Woman back in the home, as dictated by the laws of nature, and inscribed historically by a discourse of scientism, any defiance of this 'natural' law ensured that the New Woman would be inscribed as deviant. In destabilising the "order of things", the New Woman situated herself historically within the public sphere, and in so doing, defied the "naturally ensured division between private and public life" (Lord 1994:137).

As previously discussed, any deviance from 'natural' and accepted forms of *being* woman, from Théroigne de Méricourt, to eagerly single women, resulted in pathologising this aberration through technologies of vision and processes of signification that invoked mental illness. At the core of this policing of female being was the notion that the New Woman was evidence "of the Enlightenment gone awry [and] she also embodied the disintegration of idealized love and beauty" (Lord 1994:137).

Lord (1994:137) adds that "the 'impropriety' of the public woman both revealed and reflected the contradictions underpinning the modern polis". The 'modern polis', constructed from Enlightenment ideals of subjectivity and progress, was still singularly hampered by bourgeoisie values and Victorian ideals relating to public spaces; private spaces; and the role of women in society. The visibility of the New Woman was seen as a threat to patriarchal public spaces and male autonomy and also as a destabilizing agent economically and politically.

Lord cites the prostitute and hysteric as examples of the 'public' woman and argues that these figures were placed "under the sign of pathology and criminality" (Lord 1994:139). This act aligns with previous discourse surrounding 'deviant' women, as well as the obsession in the nineteenth century with the visual trace and its ability to uncover pathological; criminal; intellectual; and moral deficiencies and aberrations. With technological improvements of the camera running concurrently with and because of, discourses of science and medicine that focused on visual signification as evidence of pathology and difference, the nineteenth century abounded with visual proof of this Otherness. As Lord (1994:139) states:

> The optical technologies of the period were crucial in the production and evaluation of the 'evidence'. As photography was now institutionalized in the form of taxonomic 'portraits' for legal, anthropological, and medical purposes, documentation was compiled and edited so as to prove the theory that such women were inherently and radically 'different'. Hence, the female body was entering the public sphere as image, its suffering erased and its secrets deciphered, by way of technology.

This emerging female difference in the minds of the public became a pivotal factor in social and cultural degeneration and policing of this difference became a vitally important

process to keep social and cultural regression at bay; as McPherson (2010:105) states, "from a narrowly defined medical concept, degeneration mutated into a self-reproducing, empirically demonstrable pathological spectre that seemed to threaten the very fabric of society and the future of civilization". Private and public asylums across England, Europe, and America, were essential in policing this deviance that had the potential to undo the very fabric of nineteenth-century life.

2.5 The Function of Photography

The contribution of the camera and the photographic image to the construction of culture and knowledge production are immense and pervasive and, as Srivatsan (1991:771) states, "photographic vision has a way of penetrating any discourse and powerfully reconstituting its logic and practice". Photography emerged in the mid-1820s with the first documented photograph having been developed by Nicéphore Niépce. Louis Daguerre, however, can be credited with developing the first practical photographic process with the invention of the Daguerreotype process, which was introduced commercially in 1839. Art photography emerged shortly thereafter in the late nineteenth century and was similar to oil painting with regard to perspective; this perspective remained analogous with the perspective theorised by da Vinci (Srivatsan 1991:772). The aesthetics of art photography and documentary style photography of this time retained many painterly practices relating to the use of perspective, staging, and framing.

The development of photography and a specularised society coincided with, and was concomitant with, the rise of capitalism and modernisation in Europe at the time. These cultural and political shifts developed alongside new forms of leisure that were either visual in nature or required a visual aid of some sort, for example window-shopping, the circus, photography, the café-concert, strolling through the city, and so forth (Balducci 2010:136); as Jean-Louis Comolli noted, the "second half of the nineteenth lives in a sort of frenzy of the visible" (Jean-Louis Comolli cited in Balducci 2010:136).[31]

Balducci describes a pertinent aspect of photographic practice, whether for scientific or leisure purposes, in that the photograph and the camera mediated nineteenth century life, yet also constructed it simultaneously. The development of the camera and photography during 1800s emerged as a result of previous practices of knowledge production that centred on the visual, from the Ancient Greeks to the Enlightenment. In the early stages of photography, the image was sought after due to the novelty associated with the production of the image (Srivatsan 1991:772). "The esoteric, unpredictable and

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[31] The concept of the flâneur, the male city stroller, observing as he walked the streets of the urban city centre emerges during this time as an icon of modern Europe. The flâneur is indicative of the changing social and cultural matrices of the nineteenth century. Borne from ascending Capitalist ideologies and a shift in cultural practices inflected by Industrialisation, the flâneur also marks the boundary breakdown between public and private spaces. However, primarily, the flâneur is symbolic of the nineteenth century's fixation with the visual.

manually skilled nature of the early photographic chemical developing process…contributed to an air of curiosity around an original" (Srivatsan 1991:772).

As Srivatsan (1991:772) notes, "this worship of performance, to the exclusion of all other considerations is often…closely associated with a technical discourse". We can see this in the skill associated with the act of photographing; the composition of the subject material, the influence of the light, the aperture size and shutter speed as well as the process of development, all influenced the final presentation of the image and thus its effect on the viewer. The image in later photography is framed with details about the light, aperture and so forth, as Srivatsan (1991:772) states, "the discussion is coded in the (performative) language of efficiency". The camera in this way functions as an example of human ingenuity in the production of this technology. The photograph, in its reproduction of 'reality' however, is plagued by numerous philosophical and technological concepts that influence this 're-creation' of reality.

Susan Sontag in *On Photography* states that in the photograph "reality is summed up in an array of casual fragments –an endlessly alluring, poignantly reductive way of dealing with the world" (Sontag 1977:80). She explains the way in which image production selects, frames and produces an image to be consumed, and in this way, the photographer reduces reality and his subject to a single moment in time. The photograph, indicative of only the moment of time of its production and framing, can be viewed as indicative of that subject and that time in general.

In this way, the photograph acts as a "cultural artefact that not only presents as reality, but structures that (re)presented reality as well" (Sontag 1977:69). Sontag expands on this by stating that "their appeal is that they also seem, in a world littered with photographic relics, to have the status of found objects- unpremeditated slices of the world. Thus, they trade simultaneously on the prestige of art and the magic of the real. They are clouds of fantasy and pellets of information" (Sontag 1977:69). The status of the subject, specifically in nineteenth-century medical photography, was taken as exactly this – an unpremeditated slice of the world. Framing, staging, posing, background and so forth were not taken into consideration when viewing the photograph; and questioning the objectivity of the camera, the photographer, or the doctor, were not probable within nineteenth-century socio-cultural contexts fashioned around the marvels of science and technology, the objective nature of the eye; and the ocularcentrism that pervaded this period.

Detail in the photograph plays an important role in the process of discrediting the human eye in the quest to uncover truth. This exaggerated fragment of 'reality' that the photographer isolated and captured, however trivial, was imbued with special significance in the mere act of photographing it (Szarkowski 2003:100). By recording even the most seemingly inconsequential detail, the photograph implies that the subject has never truly been seen before and that the photograph was the only way to uncover these hidden

truths (Szarkowski 2003:100). The selection of this detail was a crucial aspect in discovering the 'hidden truths' inherent in the subject of the photographic gaze.

Szarkowski points out that "since the photographer's picture was not wholly conceived but selected, his subject was never truly discrete, never wholly self-contained, the edges of his film demarcated what he thought was most important" (Szarkowski 2003:100). In selecting the specific elements to include inside the frame, the photographer highlighted specific details and discarded others. Additionally, whatever elements had been selected, were forced into a relationship with each other (Szarkowski 2003:100). Whether this relationship was realistic or even probable, was a moot point. Furthermore, this relationship, especially within medical photography, juxtaposed, highlighted, and constructed meaning between the details in-frame.

In the act of isolating and highlighting specific elements of the subject, the photograph presents the viewer with an atomized-narrative. In the act of singling out specific elements, or just one element, the photograph is unable to be read as narrative, but instead can be read as symbol (Szarkowski 2003:100). A sequence of image symbols, truncated as each image may be, could however act as an interrupted narrative of hyper exaggerated detail. Each picture, for example, in a medical iconography, presenting a narrative of symbols deemed important.

This narrative, because it is interrupted and erratic, highlights the role of the mechanical in the construction of these images. However, as opposed to inducing reflexivity and questioning of the truth value of the image, the sequenced picture-book produced within nineteenth-century medico-scientific contexts, instead values the role that technology played in uncovering and verifying the 'truth' of the image. The creator of these images, the photographer, is equally afforded this so-called inherent objectivity.

Sontag describes the photographer as one who "both loots and preserves, denounces and consecrates" (Sontag 1977:64). The objectivity afforded to the medical practitioner of the nineteenth century, due to the camera's positioning within scientific discourse, was analogous with that of the camera itself, which was seen as a product of technological progress; this association with science and technological progress kept the problematization of the images that were produced at bay.

Yet this 'objectivity' is called into question when Sontag notes that "like the collector, the photographer is animated by a passion that, even when it appears to be for the present, is linked to a sense of the past" (Sontag 1977:77). Similarly, as I expand on further in the chapter, Charcot and Esquirol, both at the forefront of dynamic psychiatry, still structured their interpretations around ancient visual signs of female mental illness; in a sense, almost honouring the work of those that had come before them.

John Szarkowski in *Introduction to the Photographer's Eye* speaks of the impact that learning that photography deals with the actual, has on the photographer. The

photographer learns that the factuality of the image, and reality, however similar, are in fact not alike. And although the photographed subject and the image were different, they would seem like the same thing afterwards. With this in mind, careful consideration of how the camera highlights some aspects of the subject and disregards others needs to be taken into account. Szarkowski (2003:99) points out that

> It was the photographer's problem to see not simply the reality before him but the still invisible picture, and to make his choices in terms of the latter. This was an artistic problem, not a scientific one, but the public believed that the photograph could not lie, and it was easier for the photographer if he believed it too.

This is evidenced in the photographic output of nineteenth-century medical practitioners. The visualisation of what the image should look like was constructed by pre-existing ideological structures and these were further communicated and strengthened by using established visual signifiers of mental illness. The structure of the medical photograph was therefore pre-determined by an a priori belief system and various visual cues that indicated and structured mental illness.

Sontag speaks to this 'a priori belief system' when she notes that "photography executes the Surrealist mandate to adopt an uncompromisingly egalitarian attitude toward subject matter (Everything is 'real')" (Sontag 1977:78). We see this particularly in the prolific use of the camera and varied subject matter, in the nineteenth century. Anything could become the subject of the photographic eye, and every exposed detail could lead to a new discovery.

Sontag goes on to interrogate this 'everything-is-real' view afforded to the camera when she says, "the view of reality as an exotic prize to be tracked down and captured by the diligent hunter-with-a-camera has informed photography from the beginning (Sontag 1977:55). The 'objectivity' of the photographer is called into question when, as Sontag notes, "the photographer's ardour for a subject has no essential relationship to its content or value…it is… an affirmation of the subject's thereness" (Sontag 1977:77).

The act of photographing the subject justifies it as a valued source of scientific interest and in addition justifies its need to be investigated. The subject is uncovered by the photographer, and his technological extension, the camera. Sontag expands the 'role' of the camera as social interpreter when she notes that "for more than a century, photographers have been hovering about the oppressed, in attendance at scenes of violence – with a spectacularly good conscience. Social misery has inspired the comfortably-off with the urge to take pictures. The gentlest of predations, in order to document a hidden reality, that is, a reality hidden from them" (Sontag 1977:55).

William M. Ivins (cited in Szarkowski 2003:99) explains, "at any given moment the accepted report of an event is of greater importance than the event, for what we think about and act upon is the symbolic report and not the concrete event itself". Despite the supposed 'objectivity' of the camera and photographer, the act of photographing any subject is informed by the ideologies present in the culture of the photographer; the photographic image is a bearer of these ideological messages, messages with which the viewer of the photographic image is consistently interacting.

The display culture of revolution, and consequently social and cultural deviance, was well established by the nineteenth century. The public's fascination with regard to new 'medical' ways of ordering the human race, seen in the study of facial expressions, craniology and visual signifiers, was concomitant with the virulent need to visually ascertain markers of degeneration, madness, illness and so forth. As McPherson (2010:105) states:

> In the late nineteenth century, far-reaching changes engendered by technological progress and industrial expansion intensified anxieties about social and medical pathologies and cultural decline. Within the sociological discourse, which was documented by the binary opposition between progress and decline and the social and the individual, the concept of degeneration became a corollary of social evolution.

The anxiety produced by these cultural and political shifts resulted in Hysteria as malady emerging as a metaphor, both medically and culturally, as the embodiment of degeneration and a symptom of these changes and anxiety (McPherson 2010:108). By combining the obsession with the visual and the need for the ordering of humanity, inherent in this era, the image of the hysteric imbues these images of female deviance with icon-building ability. The well-worn visual signifiers of female deviance used in these images created a display culture of the anxieties of nineteenth-century patriarchal society.

Just as Sontag interrogates the notion that the "magic box insures veracity" (Sontag 1977:53), Sturken and Cartwright (2001:280) also question the supposition of the camera as 'objective', and state:

> The notion of photographic truth hinges on the idea that the camera is an objective device for the capturing of reality, and that it renders this objectivity despite the subjective vision of the person using the camera. Hence, the photographic image has often been seen as an entity stripped of intentionality, through which the truth can be told without mediation or subjective distortion.

The use of the camera in nineteenth-century medicine furthered the aims of patriarchal positivist science in 'uncovering' the secrets of nature (conceptualised as the

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feminine) as well as coinciding with the focus on technological development in modernity, and the notion of spectacle. Seeing further and better than the human eye characterised nineteenth-century medical practice and informed its use of the camera and other technologies of vision in capturing the hidden truths not only on the surface of the skin, but within the body as well. The mechanical nature of the camera and the pursuit of surpassing the human eye and its abilities, combined within a nineteenth-century discourse of positivist science, ensured that photography became "the quintessential modern medium" (Sturken & Cartwright 2001:281).

With the invention of the X-ray in 1895, new visions of the body 'came to light' and the photographing of the human body, both inside and out, further solidified the aim of improving on the 'technology' of the human eye and its ability to expose hidden truths and uncover knowledge. Embracing technologies of vision in the pursuit of truth in scientific discourse continues to this day (Sturken & Cartwright 2001:281).

Images produced within a scientific discourse are understood to be objective. These images are also seen to have surpassed the ability of the human eye in uncovering the inherent structure of a subject, depicted in these images (Sturken & Cartwright 2001:281); coupled with this notion of objective truth that is so intimately connected to photography and the camera, is the notion that the camera is simultaneously magical and objective. As Sturken and Cartwright (2001:280) state, "much of the meaning of camera generated images is derived from the combination of the camera's role in capturing the real and its capacity to evoke emotion and present a sense of the unattainable- in other words, to appear to both magical and truthful at once". Similarly, Sontag's evocation of the "magic box" attests to the dual nature of the photograph and the camera, as both veracious and mystical.

This belief in the capacity of the photograph to see beyond the human eye and to create a sense of new frontiers of vision was coupled with its increased use for institutional regulation and categorization or archiving of people according to types. Hospitals, mental institutions, and government agencies all employed (and many still employ) photography to catalogue subjects, diseases, and citizens in the late nineteenth century (Sturken & Cartwright 2001:281).

Various practices of visual diagnosis that developed into fully formed 'sciences' within the medical fraternity further established the apparent need for technologies of vision to aid in diagnostic practices. Physiognomy, branching out into pseudo-sciences such as craniology, and phrenology, used the visual signifiers of the human body to classify types and sought to establish concrete characteristics of these types, as well as outwardly expressing interior moral, social, and intellectual capacity or deviance (Sturken & Cartwright 2001:281-282).

Various visual signifiers, from eyelashes; facial expression; skull shape or size; jaw shape or size; to the size and angle of the nose, were used to uncover and define the hidden truths of the body. By the latter half of the nineteenth century, the photograph was used as a means of refining these physical markers and aiding in measurement and classification (Sturken & Cartwright 2001:281-282). A number of pseudo-sciences dealing with visual markers appeared in the nineteenth century and produced numerous volumes of work dealing with various classification methods and their resultant 'truths'.

The Races of Man written by John Beddoe in 1862 argued that variations in jaw size and how far the jaw protruded pointed to not only physical, but also intellectual differences in various races. The racist ideologies that structured and produced this text suggested that the Irish, Welsh, and other supposed lower classes were akin to Cro-Magnon man, and therefore also linked to African races (Sturken & Cartwright 2001:281-282).

Sir Francis Galton advocated the use of eugenics as a way of controlling and improving the human race through specific breeding practices. In his book *Hereditary Genius* (1869) Galton expands on his assumption that not all races are created equal, and therefore not all races are deemed worthy of reproducing (Sturken & Cartwright 2001:282). Galton, just like Beddoe, used statistical methods to 'read' various pathologies that were in his opinion, evident in visual markers on the surface of the body (Sturken & Cartwright 2001:282). Galton, as with Esquirol and Charcot, was interested in creating a visual schema of pathology, ranging across a wide range of social and medical ailments;[32] a schema of pathology, ranging across a wide range of social and medical 'abnormalities'. These included composites of people with tuberculosis, prostitutes, and criminals, which were produced in order to garner an understanding of the general 'type' (Cartwright & Sturken 2001:282). In another mid-century practice, anthropometry was used to measure different races in order to make distinctions between them and subsequently draw conclusions about the characteristics of these races (Sturken & Cartwright 2001:284).

As discussed before, the practice of illustration and later on, the photographing of the body in order to visually decode it, has existed in medical discourse since Hippocrates. The use of vision and technologies of vision to aid in diagnostic practices, as well as the conflation of the eye with pure and objective knowledge, resulted in nineteenth-century medical discourse valuing modern technologies of vision above all else in uncovering the hidden truths of the human body.

Martin Jay (cited in Jenks 1995:2) states that modern culture elected the visual as "both the primary medium for communication and also the sole ingress to our accumulated symbolic treasury". This resulted in the emergence of a cyclical and non-reflexive model of seeing-as-knowledge and knowledge-as-seeing. This also established the dichotomy of

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[32] Charcot's work will be discussed in detail further on in this chapter.

self as receptacle and other as spectacle (Jenks 1995:3). Metaphysical questions that address notions of being and knowing for example, have also been taken for granted and subsumed into the systemic nature of vision-as-knowledge and knowledge-as-vision cycle that has been established over the last two hundred years.

Jenks (1995:4) also notes that the social theorist has progressed knowledge on human communities informed by the premise that science is based on three principles, namely, "a mechanistic view of the universe as a whole interrelated totality; a principled acceptance that an intrinsic order resides within phenomena as external forms, and the necessary contingency being that understanding proceeds through the 'independence' of an observers sight".

Jenks reiterates that this pure reason was equated with the pure eye and understanding through sight and this notion of observation reduced social experience and vision to pure perception (Jenks 1995:4). This act forgoes phenomenological and ontological study or experience. Instead experience is 'arrested' by technologies of vision and displayed for study. Furthermore, this new 'clear' sight was ingrained even more so in the popular imagination and theory; as well as the conflation of reality with sight, aided by technological inventions such as the lens, the telescope, and the microscope (Jenks 1995:6).

This new realism of sight further distances itself from actual social interactions and bodily interactions, when it is based within scientific discourse and its practices. Any other value judgement is dismissed, except those made by the eye; "we now have a vision that regards itself as pure and which also parades both its a-morality and its anti-aesthetic" (Jenks 1995:7). Paradoxically however, this clear vision has its roots in Enlightenment philosophy, which in fact coupled science and aesthetics through observation. As Jenks (1995:7) states:

> This visual fixity is one that is dominant and consistent within our Modern, Western cultural cognitions, upheld largely through the agency of scientific practice. Such a 'plain view' of reality must surely rest upon and also project a consensus 'world-view'. The programme set within modern culture for the supposed unification of seeing obviates the disruptive abrasion of conflict and the necessity of difference. Any alternative 'visions' or 'perspectives' can be rendered intelligible in the form of deviance.

This world-view is structured upon imaging the most 'truthful perception' of the world through scientism and is a part in the whole project of scientism that manufactures 'truth' throughout any era associating itself with modernity (Jenks 1995:7). The partial vision of 'truth' attained by this sight is manifested through the selection, abstraction and transformation of specific signs and actions present in society (Jenks 1995:8). Not all

signs, experience or possibilities are taken into account in the formation of this 'perception' of the truth presented to us by scientism, and worryingly there are few sciences, theory or technologies that are not in some way, partial or totally predicated upon the power of pictorial symbolization (Jenks 1995:7).

What is structured then is a world-view not just totalising in its apparent unified depiction of truth and absolute in its power, but one that is structured by and structures signs, symbols, and experience that further the doctrines of Western society; science; technology; capitalism and patriarchy. No possibility is available for a disruption of this view, and if one is indeed taken, the resulting action is condemned as deviant and pathological.

This scientific vision extracts, separates and decontextualizes the image, and as Jenks (1995:9) states it is "an extracting of essences, or elements, or generalities from one original plane to another". These new and changed images, become malleable because of their removal from an original context, and yet, they still retain significations and links to their original context (Jenks 1995:9). The resultant image then can be changed and moulded to best suit the needs of dominant ideologies found in the context of this scientific-world view, which enables a manipulation of the original image in its original context. This separation and manipulation of the image leaves us with a very powerful (re)presentation that has been structured by, and for, dominant ideologies. These (re)presented images then work to form the governing principles or discourse of the natural world which the dominant order have conjured into existence, and from which all meaning subsequently flows.

This (re)presented image is then contextualised in its own original plane and avenues for questioning are removed. To problematize this (re)presentation would be to problematize the discourse that structured it and allowed for its creation. As we have read in Jenks, this foregrounding of the problems related to the process of selection, abstraction and transformation that images undergo is made impossible by the labelling of such problematizing as deviant. There is no available discourse or even alternative to discourse with which to attack this dominant structuring of the image as discourse and culture are underwritten by the dominant ideologies that support and reify the scientific visual culture that orders and manipulates our modes of imaging, perception, and representation.

Instances of institutional photography and image structured by dominant patriarchal discourses during the nineteenth century are many and varied. Ranging from medical photography to ethnographic studies, as discussed by Kromm, many authors have written on the role of visual surveillance in the policing and reification of dominant ideologies, with specific reference to the work of Michel Foucault and his notion of the panopticon. Emily Godbey in *Picture Me Sane: Photography and the Magic Lantern in a Nineteenth-Century Asylum* states that "at the nexus of work combining photography and mental

illness, patients usually become subjects of the doctor's penetrating gaze. These patients assume their places in photography's numbered and ordered filing cabinets, while the 'machinery' [of power] that is both immense and minute courses through the system with a deafening whisper" (Godbey 2000:31-32).

In Charcot's *Iconographie de la photographique* purposed for the documentation of Hysteria, we see a unnerving resemblance to Paul Richter's line illustrations for *Les Démoniaques dans l'art* in which he and Charcot effectively "mined past art, compiling a sort of '*musée imaginaire*' that historicized Hysteria and conflated the clinical with the aesthetic" (McPherson 2010:109). This illustration of madness was a perfect fit for the cultural imagination and cultural process of the time.

The image of the hysteric in the late nineteenth century (taking into account that photography was still seen as a skilled practice, as well as esoteric), was spectacularised by the Tuesday lectures of Charcot. The images produced were viewed by many in these lectures and were disseminated in books, journals and newspapers. They were produced in a discourse of scientism in that they were commissioned by a medical professional and were captured by the fairly new invention of the camera; they were deemed truthful representations of reality because they were produced within medico-scientific discourse and by the ultimate tool of modernity — the camera. As Srivatsan (1991:773) states:

> Science's use of photography or verification and falsification of its theories' imparts to the photograph the respectability and power of modern science as a legitimate (and legitimating) seeker of knowledge…the aura of respectability spreads throughout the photographic field by connotation, infecting the photographic images we perceive with the attributes of truth and authority.

These attributes of 'truth and authority' go a long way in reifying the plausibility and believability of the aesthetics and desires that are formed in scientific photography, 'everyday' photography and the art image. If we consider the so-called objective scientific documentation of the hysterical body by Charcot, it is evident to the viewer that these images were not created for 'truth telling' purposes, but for the purpose of displaying a deviant aesthetic of the time. Images of the cyborg body in the media and in the cinema, although cloaked in the discourse of scientism, are images that similarly represent their cultural moment. The aesthetics of the deviant cyborg body, empowered by the gravitas of a pseudo-scientific discourse, lays claim to a truthful representation of the world, and a truthful depiction of the physical markers and attributes of deviance or degeneration. Similarly, the hysterical body and the cyborg body both reflect the deviant aesthetic, or the marks of defiance against the dominant patriarchal order. They create an aesthetic of pathology that act as visual ethnographies of the socio-cultural conditions that gave rise to

them; specifically that of the Othered, deviant female body, as seen in the Hysteric, and the cyborg.

These images act to reify heteronormative ideologies through the dominant visual mode of scientism while aesthetisizing the object of the gaze. They operate in the realm of scientific 'truth' and normalise the marginalisation, aesthetisization, and punishment of these deviant bodies. The scientific photograph of Charcot's time, although not widely distributed, was nevertheless disseminated through Charcot's weekly Tuesday lectures. In addition, the actual object of the photographers gaze was on show simultaneously, re-creating the aesthetics and action taking place in the image. A continuous reinforcement of the messages of the image, through varying modes of visuality provided the basis for the construction of the image which was paraded as transparent and truthful. In chapter four, I discuss how the depictions of cyborgs in my chosen films similarly act as truthful depictions, or as truthful as depictions of the future could be, of the hysterical cyborg body as a threat to humanity.

The looking at "attentively" as described by Martin Jay (1993:23) is an intrinsic part of the event of displaying the hysteric in the lecture theatre – staged, taking place in the theatre constructed in La Salpêtrière by Charcot. The 'truth' of these images was further corroborated by the fact that Charcot was a respected practitioner in the medical profession. Not only were they being created by a medical practitioner, but in an establishment of medical science, the asylum. As Amirault (1993:51) states:

> The rapid proliferation of photographic technology corresponded with the establishment of medicine as a science and a profession. This correspondence, grounded in similar constructions of vision, the body, and representation of the real, allowed photography and medicine to reinforce each other.

As Barthes noted about the photograph (cited in Bowen 1999:1), "in it nothing can be refused or transformed". Not only were they being created by a medical practitioner, but in an establishment of medical science, the asylum. As Barthes (1999:1) states: "In as much as photography is an ellipse of language and a condensation of an 'ineffable social whole' it constitutes an anti-intellectual weapon and tends to spirit away politics". The conditions of production of these images as previously stated, all aided in placing these images above the realm in which representation could be adequately problematized.[33] The subject matter was pathologised and neutralised and therefore "spirited away politics". The politics of these images, or rather their modes of communication, the messages they deliver and the trust placed in them as being truthful representations, are sealed off from

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[33] Referring to conditions within a discourse of scientism.

interpretation. The patronage of a scientific discourse and the dominant visual mode of scientism that created them, lead the viewer into accepting the image at face value.

Furthermore, as Bazin (cited in Bowen 1999:3) states in *The Ontology of the Photographic Image*, "photography…embalms time" and he goes on to say that in fact photography does not have a code per se, but that it images a moment of contact, captures a cultural time. This is evidenced in the image of the hysteric and the lack of problematization during that period, due to the inability to question, in the realm of patriarchal discourse, the claims that these images make to truthfulness and realistic representation. Politics is indeed "spirited away" and an unpacking of these images seems impossible. Added to this, the degree of support and construction by the discourse of science attached to these images creates a wholly unwelcoming atmosphere within which questioning of these images might be possible.

2.6 Charcot and the Salpêtrière

The Salpêtrière, one of the most notorious asylums in Europe, has had a long and arduous history with female mental illness and the objectification of women. The most notorious physician to work at this institution was the French doctor, Jean Martin Charcot. A leader at that time in the field of mental illness and more specifically Hysteria, Charcot was head physician at the Salpêtrière from 1862 until 1893 (Bogousslavsky, Walusinski & Veyrunes 2009:193). Principally a neurologist, but an artist at heart, Charcot successfully constructed a 'hold-all' disease for the wayward women of France in the nineteenth century and his aim to classify, catalogue a thorough schema of Hysteria; and develop an archetype of the disease was undertaken at the Salpêtrière during his time there.

La Salpêtrière, as an asylum, was established by Louis XIV as a hospital for amongst other ailments: beggars; prostitutes; the criminally insane; female adulterers; epileptics; and hysterical women. After the French Revolution, it became one of the largest brothels in Europe. Later on, in the words of Georges Didi-Huberman (2003:13) "it was the general hospital for women, or rather for the feminine dregs of society". Historically, this site has centred on the objectification and eroticisation of the human body, but most notably and in the greatest majority, that of the female body. The hospital at the time of Charcot mirrored and re-presented the social, political and economic climate of Paris at the time (Justice-Malloy 1995:133).

Charcot's work and that of his colleagues at the hospital, displayed a new and experimental modernity that was underfoot in Paris, and the world at large. As Rhona Justice-Malloy (1995:133) states "the acceptance of a bourgeoisie value system of patriarchy and sexual asceticism in a Paris on the brink of modernity was coincident and

perhaps related to the appearance of hysteria". The threatening spectre of the New Women in nineteenth-century Europe and fears about socio-cultural degeneration, aided in, and reinforced institutional involvement in the policing of deviance.

In early nineteenth-century statistics on Hysteria, approximately 1 % of the female inmates at La Salpêtrière were diagnosed with Hysteria. Most of these women were working-class individuals who some critics say lived 'outside' of the bourgeoisies parameters of the modern world and therefore would have no reason to revolt against this value system, as later hysterics did (Justice-Malloy 1995:133).

By the time Charcot arrived at La Salpêtrière, the incidence of woman diagnosed as hysterical rose dramatically; 20,5 % of women admitted to the hospital were diagnosed with the malady of Hysteria, and the majority of these were housewives and upper middle class citizens of Paris (Justice-Malloy 1995:133). It was seen by physicians, especially Charcot, as some sort of flamboyant revolt of women rejecting their 'natural' roles (Justice-Malloy 1995:133).

Max Nordau, a physician who had studied under Charcot, saw socio-cultural degeneration and Hysteria as a result of changes to the landscape of the nineteenth century. As McPherson (2010:104) states "he attributed the rise of Hysteria and degeneration to far-reaching technological changes, urbanization, the wear and tear of modern living, and nervous fatigue". Among these changes was the rise of the New Woman and changes in the structures of gendered daily life.

Charcot served his medical internship at the Salpêtrière in the 1850s and while the hospital was of little interest to other medical interns, Charcot was fascinated by the very large and diverse patient population. At the Salpêtrière Charcot found a veritable warehouse of mentally ill women, and with the approximately five thousand patients, he had found the ideal situation in which to conduct a comparative study of mental disorders (de Marneffe 1991:73). Charcot would later go on to refer to the hospital as "a museum of living pathology" (de Marneffe 1991:73).

Between 1862 (the year he began working at the Salpêtrière) and 1870, Charcot made numerous contributions to the field of neurology and aided in its establishment as a respected field of scientific inquiry. In addition, his position as principal neurologist of the time was solidified by his work there (de Marneffe 1991:73-74). In 1870 the Salpêtrière was restructured and women diagnosed with Hysteria and Epilepsy placed in the same ward. During this time, Charcot was put in charge of this ward and it was here that he began his quest to distinguish Epilepsy from Hysteria (de Marneffe 1991:74). Here Charcot was able to establish his taxonomy of Hysteria and develop the archetype of the disease.

After Charcot began working with hysterics in 1870, he was made professor of pathological anatomy in 1872 and began his infamous 'Tuesday Lectures', with nearly one-third of these detailing his work and findings on Hysteria (de Marneffe 1991:74). Charcot

made use of the clinicoanatomic method, developed in France during this period, and it was through this that he developed the archetype of the disease Hysteria (de Marneffe 1991:74).[34]

Charcot pioneered research in the neurological sciences and as he continued to expand his research, technological improvements in the hospital followed (de Marneffe 1991:74). More sophisticated and modern technological innovation, such as the construction of a photographic studio in the hospital aided Charcot in his quest to create a taxonomy of mental disorder. Charcot's clinical description of Hysteria relied heavily on visual signs; and the addition of a photographic studio and photographers that were available permanently, continually assisted in structuring and forming the basis for his clinical description and construction of the archetype of Hysteria. Charcot's use of observation is well documented and this formed the basis of his clinical findings on Hysteria. Photography as it was utilised in the Salpêtrière functioned as a technological extension of Charcot's scientific method of observation. His clinicoanatomic method; scientific discourse; the construction of the disease Hysteria; and class and gender relations were reified through technological innovation and specifically the use of photography in medical science.

2.7 Charcot's Method

> Susceptible to 'invisible' forces such as hypnotism, easily and unknowingly swayed, emotionally labile, often young and pretty, Charcot's hysteric sums up the period's fears and aspirations. She is – in her hypnotized, sleeping, paralysed or mute state – a parody, an excessive, caricatural version of that Victorian vision of the feminine which would have woman passive, angelic, malleable, and utterly desirable while undesiring, her skin anaesthetic. Yet the hysteric also embodies the time's often secret desires for a certain sexual freedom… both for herself and for the fascinated men who watch and help to invent her (Appignanesi 2008:126).

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[34] The central thesis surrounding the clinicoanatomic method was that disease developed from an anatomical lesion. This method was therefore best suited to diseases with a clear biological base, for example Tabes, which Charcot had researched previously (de Marneffe 1991:75-76). However, with diseases of a psychological nature, this method proved problematic. Whereas before, an observation of symptoms was favoured for each specific case, this new method focused on and favoured the identification of these anatomical lesions and their localisations (de Marneffe 1991:75-76). By the time Charcot was put in charge of the newly restructured ward housing hysterics and epileptics, he was well practiced in the clinicoanatomic method and set forth to identify the anatomical lesions that he was convinced were at the root of Hysteria. Through this method he endeavoured to create an archetype of the disease that would be distinct from variations and could be ordered according to the scientific tradition of modernity. Interestingly, this method also aligns itself with another nineteenth- and twentieth-century tradition in scientific discourse creation, that of analogy. In aiming to construct an archetype of Hysteria, Charcot was mirroring traditions in scientific enquiry at the time which aimed to draw generalised conclusions about specific groups of people; disease; or behaviour; for example, the study of phrenology; race and gender studies; the study of criminal behaviour or tendencies; and the study of hereditary diseases.

For his students whom he fascinated and who dedicated themselves to helping him construct his theoretical edifice he was both a professor and a magician. For the patients who made up his clinical tableaux vivants, serving as the objects of investigation and models for the iconography of hysteria he sought to fabricate in this pathological museum, he was both a miracle worker and a zoologist (Bronfen 1998:175).

Charcot as Bogousslavsky et al state (2009:194), "considered hysteria a 'neurosis' with an organic base, but with no demonstrable cerebral damage and where a "dynamic lesion" of the brain was responsible for the "stigmata" (sensory dysfunction, hyper-excitability, visual filed narrowing), i.e. permanent clinical features in patients who were also prone to paroxysmal fits (grandes crises d'hystérie). This 'dynamic lesion' was emphasized by Charcot in order to explain the organicity of hysteria in the absence of a morphological lesion". In other words, Charcot's explanation of Hysteria as a neurological disease, in the absence of any neurological reason for it, was based on an 'organic lesion' that could have been caused by a traumatic event; a disease with physical symptoms but no physical cause.

Through the use of the camera in the diagnosis of Hysteria, Charcot and his students recorded the hysterical symptoms and supposed "erotic misbehaviour" of the female hysterical patients interned at the Salpêtrière in alarming detail (Justice-Malloy 1995:134). Although some images of male Hysteria can be found in the publications that resulted from Charcot's work at the Salpêtrière, the majority of the images of hysterical patients were female. These female patients, as Charcot stated, were more susceptible to mental illness "due to their vulnerable natures and inability to control their feelings" (Justice-Malloy 1995:134).

Charcot developed a strata of definable and observable stages of a hysterical attack, as well as clearly defined visual symptoms that accompanied each phase. In the hysterical attack, the following four phases presented:

(1) Tonic rigidity; (2) "grands movements" also called "clownisme" because of the circus-like acrobatics produced; (3) "attitudes passionnelles" or vivid physical representations of one or more emotional states, such as terror, hatred, love; the patient endowed with an acrobat's agility in the second period, now displays the talents of a mime or dramatic actress; (4) a final delirium marked by sobs, tears, and laughter, heralding a return to the real world (Justice-Malloy 1995:134).

As well as this, hysterics copied and mimed many of the symptoms and 'attacks' of epileptics, prompting Charcot to 'discover' a new disease, Hysterio-Epilepsy. The convenience of these shared symptoms arguably prompted Charcot to assume the same cause or organic neurological issue for both, based on similar visual symptoms. Charcot's

style of medical procedure and use of technological aides in structuring his archetype of Hysteria was aligned with medico-scientific discourse and practice of the late nineteenth century. Charcot's focus in the case of Hysteria was that of individual cases that would assist him in structuring an archetype of the disease and a specimen type (Appignanesi 2008:130). These clinical observations of specific cases no doubt lead to an over-recognition and an over-diagnosis of the condition. Hysteria was also diagnosed if any one of the four phases of the hysterical attack was observed (Appignanesi 2008:130).

As an artist Charcot's description of the four phases of the hysterical attack focus on the visual and the kinetic, rather than the unseen reasons behind the attack or even a psychological focus, and it was this talent for observation and the significance that he placed on detail that his contemporaries would call 'the method of Charcot' (Justice-Malloy 1995:134). Henry Meige, a student of Charcot remarked that "at the first glance he was able to recognize some oddity or other of the human habitude. Now to be able to discern a comic anomaly and to project it in relief, that is the very essence of the art of caricature… this talent served him well in his profession as a clinician" (Justice-Malloy 1995:134).

Although seemingly strange praise for a physician, this comment by Meige foregrounds the visual and artistic nature of Charcot's practice as well as his personality which so heavily influenced his work. In 1881, the artist and writer Emile Zola challenged fellow artists to imitate the practice of the scientist "in both method and aim, the method being the careful study of objective phenomena, the aim an exact analysis of man" (Justice-Malloy 1995:134). Charcot as artist and medical practitioner adopted this sentiment in his practice as a physician. He used his artistic perception to not only enhance, but also to structure his diagnosis of Hysteria, and the use of the camera in this artistic-medical perception is mirrored in the comments of one admirer of Charcot who stated that "the camera was as crucial to the study of hysteria as the microscope was to histology" (Justice-Malloy 1995:134). And as Amirault (1993:73) states:

> By posing the subject, medical photography constructs and thereby asserts the pathology of the patient; by revealing the "truth" of the illness of and to the patient, medical photography claims to reveal the true subject to be the patient, constructed only in relation to that illness.

Visual observation as integral to Charcot's practice, often replaced actual interaction with his patients (de Marneffe 1991:78). Charcot completely stopped ward visits by 1862, and instead had patients brought to his office one at a time. De Marneffe (1991:78) quotes two of Charcot's students, as follows, in order to expand on Charcot's method:

> He would seat himself near a table and immediately call for the patient who would be studied. The patient then was completely undressed. The intern would read a clinical summary of the case, while the master listened attentively. Then there was a long silence, during which Charcot looked, kept looking at the patient while tapping his hand on the table. His assistants, standing close together, waited anxiously for a word of enlightenment. Charcot continued to remain silent. After a while he would request the

patient to make a movement, he would induce him to speak; he would ask that his reflexes be examined and that his sensory responses be tested. And then again silence, the mysterious silence of Charcot. Finally he would call for a second patient, examine him like the first one, call for a third patient, and always without a word, silently making comparisons between them.

The focus on the visual aspects of Hysteria can also be seen as a rational continuation of medical practice that had come before him. Prior to the invention of the camera and its use in medical photography, the medical illustration of a case would be the task of a professional medical illustrator. Trained in both anatomy and illustration, the medical artist was dually skilled to meet the needs of both the aesthetic elements of the illustration, as well as the medical (Amirault 1993:55). With the implementation of the camera in medical diagnosis and research, the physician took the place of the medical illustrator. Robert Ollerenshaw writing in *The Journal of the Biological Photographic Association* (Amirault 1993:55) writes that "[the] pose, made possible by the simplicity of snapping a photograph, exhibits the doctor/photographers' lack of aesthetic understanding".

The minimal regard for aesthetic practices in these images by the doctor/photographer, encouraged by the simplicity and ease with which the camera 'illustrated' for them, resulted in revealing too much in the image (Amirault 1993:55). The illustrator, educated in aesthetic practice, was highly skilled at removing or adding various elements or focus to the image that assisted in the illustration's proper clinical function: to diagnose (Amirault 1993:55). The resultant 'illustration' in nineteenth-century medical photography was an image with excessive detail and little concern for how that detail impacted on the supposed proper clinical function of that image (Amirault 1993:55).

No limitations existed for the doctor/photographer/artist of the nineteenth century in his photographic studio. As Amirault (1993:56) states "since early photographic technology did not seem to provide any way to limit this flood of detail, photographers sought to control it through pose. Early medical photographers relied on existing artistic conventions for their poses", and in doing so, aligned these images with an aesthetic tradition that also simultaneously undermined their clinical function (Amirault 1993:57).

The popular belief about the role that the camera played in medical objectivity was that, unlike the medical artist/illustrator, the camera in fact disposed of any and all subjectivity in its production of the image (Amirault 1993:57). Whereas the illustrator could include or exclude any detail, the popular view of the nineteenth century was that the camera was capable of no such thing, and Amirault (1993:57) goes on to say that the supposed "objective, indexical truth-value of the photograph" was lauded and celebrated in the nineteenth century, whether the image was produced for medical purposes or not.

One of the earliest and most ardent supporters of medical photography was Doctor Hugh Diamond, chief physician at the Surrey County Lunatic Asylums' Female Department, who lauded medical photography for its ability to act objectively, and its usefulness in classification and research (Amirault 1993:57). Diamond focuses on the ability of medical photography to construct a "true world" and compares it to other leading discourses of the nineteenth century. He states:

> The metaphysician and moralist, the physician and physiologist, will approach such an inquiry with their peculiar views, definitions, and classifications. The photographer, on the other hand, needs, in many cases, no aide from any language but his own, preferring rather to listen with the picture before him, to the silent but telling language of nature (Hugh Diamond cited in Amirault 1993:58).

This sentiment about the marvels of photography anticipates the use of medical photography in the diagnosis of the female hysteric at the Salpêtrière. The photographer/doctor/artist, in his quest to expose the hidden truths of nature, here read 'female', uses the camera to research, classify and plough the silent depths of the deviant hysteric; her feminine nature unveiling itself before the knowing eyes of the photographer/doctor/artist. Now the photographer was able to "transcend the limits of language and discursivity" through a technology that "could erase itself from the representation of "nature" (Amirault 1993:58). And unlike the illustrator, could present a truthful and objective reproduction of the real.

Diamond's statements regarding the role that photography was to play in the field of medicine, mirror other contemporary nineteenth-century writing on medical photography. In addition, the support of this new medium by the majority of the medical fraternity also played a vital role in the development of photographic technology (Amirault 1993:57-59). As Amirault (1993:60) states, "as these and other texts [on photography] reveal, the discourse of medical photography intersected with a more general epistemological drive linking structures of vision with knowledge and truth". The use of the camera and photograph within medical discourse further posited the physicians that made use of the camera, as those practitioners of medicine who were at the forefront of their field. As Diamond and Charcot, and Esquirol and Pinel before them, with their engravings and illustrations of the mentally ill, medical practitioners of the eighteenth and nineteenth centuries were as obsessed with progress and technological advancement and vision.

As Amirault (1993:60) states, "photography was constructed as the perfect technology at a moment in which medicine was staking its claim as a discourse of scientific, objective truth through visual knowledge".

Hugh Diamond, stated in 1856 that "the photographer secures with unerring accuracy the external phenomenon of each passion, as the really certain indication of internal derangement" (de Marneffe 1991:78). Charcot's use of the camera assisted in his practise of distilling the symptoms and characteristics of observing many patients. Using a photographic record as a means of diagnosis, he was able to create a schema of observable and clearly defined stages, traits, symptoms and so forth, of Hysteria. As de Marneffe (1991:79) states, "by capturing various hysterical poses on film and then superimposing negatives from different cases, a general picture of the syndrome was created that expunged individual difference".

Diana Hulick in *The Transcendental Machine?* Speaks to the marriage of science and imagination in photography, and how this union allows us to create a reality based on both 'fact' and fiction (Hulick 1990:419). The scientific and technological base of photography is well known, but the structuring of the image through the subjective imagination, at least during the nineteenth century, was not (Hulick 1990:419).

The camera and photograph during the nineteenth century stood as reliable, truthful depictions of reality, and although the photographic pictorial practices of this time still aligned photography with painting, the objective realism that was thought to emanate from this technology of vision, surpassed painting in its complete objectivity and ability to accurately reproduce reality.

Hulick (1990:419) explains that "the reproduction of the external world via…photography places mimesis at the service of the imaginative experience". This imitation of the real, and the camera's propensity for detail, strengthened the claim that proponents of the camera had made of its ability to realistically render reality. In Realism, Symbolism, and Pre-Raphaelitism, artists would "convince the viewer of the reality of their particular vision through detail" (Hulick 1990:420). Similar conventions in photographic practice of the nineteenth century attest to this in images produced during this time. Detailed and foreshortened images of deviance, with focus on visual markers of pathology in specific facial characteristics abound in the second half of the nineteenth century. Similarly, Charcot's alignment of images of his patients, such as Augustine, with representational practices was "effected through both the application of paint and pose" (de Marneffe 1991:84).[35]

The Victorian obsession with realism and detail, evident in the works of Ibsen, Darwin, and Ruskin, to name but a few, were evidenced in the understanding of the camera as a tool able to truthfully 'capture' reality. The ability of the camera to capture and imitate reality, and the innate objectivity afforded to the camera and photographic process (as it was borne from a union of technology, science, and the mechanic age), ensured that the

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[35] Augustine is discussed further on in this chapter.

camera came to be seen as the *only* way to adequately serve these Victorian preoccupations with realism and detail.

With a shift in the subject matter of painting, daily life and events became topics of interest; since no distinction was made between important events or people, and daily life, and with no one of them taking precedence over the other, Hulick states that "every aspect of every subject acquired potential importance" (Hulick 1990:420). Every detail needed to be 'exposed' in order to render the depiction adequately 'real'. Simultaneously, every detail could lead to exposing the inherent 'truth' in the image.

As Hulick (1990:420) states "with the scientific origins of photography, objectivity was to a great degree conflated with the mechanical rendering of space and of detail". The mechanism of the camera, in and of itself, rendered reality. This reproduction of reality was additionally valued as objective because it was created by a product of scientism and technology: the camera. The discourse of scientism and technology, which dominated the landscape of the nineteenth century, was also aligned with anxieties about social and moral degeneration, and photography, as the offspring of techno-scientism, was the perfect modern tool with which to recognise, capture, and arrest this degeneration.

As Ulrich Baer (2002:26) notes in *Spectral Evidence: The Photography of Trauma*:

> Instead of constituting visual evidence of a malady, several of the photographs in Charcot's collection make readable- in the effects of the flash- the link between the camera's mechanism and scientific faith in the possibility of incontestable knowledge. They also reveal a structural similarity between hysteria and photography, for it is the flash that links pathology and technology and teaches us something about the origins of photography.

The scientific and technological origin of photography, its objectivity, and its ability to record detail, were particularly emphasized when comparing photography to other visual arts in the nineteenth century (Hulick 1990:420). This set photography, specifically photography situated within medico-scientific discourse, at a distance from other visual arts of the century, legitimised the use of the camera as a tool in medical practice, and not just as an extension of the artist's eye. The belief in the camera's ability for precise renderings of reality defines the use of photography within medico-scientific practice of the nineteenth century, and as Hulick (1990:420) states "this love of the literal reflects both the scientific bent of the age and the continuing human need for mimesis. In fact, mimesis stands at the juncture of art and science of this period". The reproduction of 'reality' rendered in the manner of past pictorial practices, allows the camera to occupy both a space in artistic and scientific practice.

The photographer, in creating his mimetic, subjective, imaginative rendering of reality, legitimizes his personal belief system through the use of the camera. Whether artist or doctor, the camera enabled this subjective view to construct the image. As Hulick (1990:420) states, "this superimposition of fact on a belief system shows that Victorian notions of truth were generated not only by observation but also by an a priori opinion about the moral structure of the world, as manifested by the telling detail". By exposing never before seen detailed reproductions of reality, the photograph aligned with nineteenth-century ideas about observation and the rampant scientism that would purport to halt socio-cultural backslide. By exposing the 'essence' of photographed subjects, the inherent nature of the subject would reveal itself to the all-knowing eye of scientism, and in doing so, the subject would emerge into the symbolic realm of language, ready to be captured and controlled.

Hulick cites Darwin and Marx as two examples of this practice. As discussed before, Darwin's minute and detailed categorization of the natural world and his detailed description of its evolution, aligned with the fascination of the nineteenth century with realism, collecting, cataloguing, defining, and societal progress through science and technology. Hulick (1990:420) refers to this as a "focus on the facts of a particular time and place in order to generate encompassing explanations that link moral evolution to a series of physical states".

Reductionist thinking, emblematic of this time, further aided in the construction of a subjective version of reality, produced by the photographer, through the image. By categorising and cataloguing the natural world hierarchies, for example, could be established, and conclusions could be made about a whole network or group. Similarly, in medical photography, specific cases were painstakingly scrutinized, and a composite could be drawn up from this that indicated what the characteristics of this specific area of study were. Hulick (1990:419) states, "[photography] has changed our ability to create our own microcosm and understand the macrocosm". This is no more evident than in the work of Charcot, who used numerous case studies to create a tableau of Hysteria, and female mental illness in general.

As William Irwin Thompson (cited in Hulick 1990:421) declares, "when scientists generalize to tell us what we are, where we come from and where we are going, they ineluctably move from science to myth". Hulick (1990:421) expands on this by adding "in a like manner, social philosophers and artists of the nineteenth century did not use facts or photography as a method for gathering information about the world but rather as a way of constructing theories or communicating visions of what they believed to be true". Charcot's use of, and application of, the camera in his medical practice only furthered a priori 'knowledge' about women and female mental illness. His own deductions about his female patients, who he eventually did not consult with at all, further strengthened the cyclical process of subjective view or a priori knowledge- ideology- photographic evidence.

By creating a visual schema of Hysteria, he was able to make use of analogy in his diagnosis by drawing on centuries-old visual signifiers of female mental illness. This use of analogy also coincided with the many pseudo-scientific applications of physiognomic practices such as craniology and phrenology. These similarly made use of analogy in order to 'diagnose' and 'conclude' on supposed pathology that was evident in various visual signifiers.

As Ulrich Baer (2002:26) states, "photographs taken in the early 1880s at the Salpêtrière hospital… seem to mark uncannily a particular kind of social 'disturbance'". This "social disturbance", so ingrained in nineteenth century fears of social and moral degeneration, was a subject of study that was vitally important to the maintenance of socio-cultural ideologies, hierarchies, and daily life in the nineteenth century.

By making use of the camera to capture the variety of symptoms displayed by hysterics, "Charcot's assistants snapped their shutters to arrest this oscillation and resolve this difference. The resulting images promised to render Hysteria graspable to the doctor… Charcot… hoped to master the hysteric's astounding propensity to simulate symptoms" (Baer 2002:30).

Charcot's use of the camera in uncovering the 'truth' inherent in Hysteria aligned with nineteenth-century medico-scientific discourses, as well as various cultural discourses about women, mental illness, technology, and the camera. The variety of symptoms that accompanied Hysteria, from fits and seizures; to melancholy; paralysis; numbness; blindness; and visions, to name but a few, needed to be 'captured' by the camera, as the variety of symptoms not only evaded physicians, but also threatened to undermine them.

2.8 'Augustine'

Louis Aragon and Andre Breton, in *La Révolution Surréaliste*, state that "Hysteria is not a pathological phenomenon, and can, in all respects, be considered as a supreme means of expression" (cited in Hunter 1983:465).

Arguably the most infamous and well-documented case of Hysteria, namely that of Augustine, whose body was used to theatricalise and spectacularise the disease through the photograph and Charcot's many Tuesday lectures, and remains central to any discussion of the spectacle of female mental illness. Augustine was admitted to the Salpêtrière in 1875, aged fifteen, and exhibited an abundance of 'hysterical' symptoms (de Marneffe 1991:79). In the *Iconographie photographique de la Salpêtrière*, images of Augustine representing various phases of a full hysterical attack dominate the volume (de Marneffe 1991:79). Justice-Malloy (1995:135) states:

> The "iconography" of hysteria as defined by Charcot, with all its evocations of the circus and theatre, seems to have been so widely publicised at the end of the century, in both pictorial and verbal form, as to constitute for that historical moment a cultural preconception of how to act when insane.

The *Iconographie* which depicted Charcot's photographic studies of his patients focused on the emotions displayed by his hysterical patients. Emotions such as ecstasy, passion, pleasure, fear, surprise, and religious enthusiasm garnered the most documentation (Justice-Malloy 1995:134). Gestures and physical movement were also displayed against the background of the asylum setting. This added to the tension of the juxtaposition of a hysterical attack with all its violence and movement versus the calm and clinical setting of the asylum; this not only added to the theatricality and spectacle of the attack, but also justified the internment of the patient.

De Marneffe (1991:76) states that "Charcot... insisted that 'hysteria is governed, in the same as other morbid conditions, by rules and laws, which attentive and sufficiently numerous observations always permit us to establish'". Through the use of the camera in his diagnostic practice, Charcot established a conduit through which the inherent 'nature' of hysteria could be exposed. Its fundamental structure, hierarchy, and every detail, unavailable to the human eye, could be established through the lens.

> Though some critics consider photography a medium of non-intervention, Charcot employed it actively, to arrest hysterics' antics. Catching the hysteric in the act, the camera produced a 'motionless image' he hoped would stall the patient's efforts to manipulate those around her (Baer 2002:27).

By 'capturing' the disease, and arresting the symptoms through careful photographic study, Charcot was able to categorize and catalogue hysterical symptoms into a readable visual sequence. Although Augustine experiences many incomplete attacks, with a different variety and combination of symptoms displayed in these, the sequencing of this chaotic display renders it as organized and readable from an omniscient view (de Marneffe 1991:79-80).

The photographs of Augustine, sequenced in such a way as to confirm Charcot's explanation of the different episodes and order of the hysterical attack, betray the frenzied and vocal nature of the attack. As de Marneffe (1991:80-81) explains, "the photographs... validate Charcot's model of hysteria by giving fixed physiognomic, psychological, and medical content to the variable emotional states of the *attitudes passionnelles*". The subjective meaning of these various symptoms and attacks are also simultaneously silenced, as they are not included in the description of particular plates. Furthermore, captions below each plate affix meaning and the imaging of the hysterical attack "renders primarily visual a subjectively meaningful state" (de Marneffe 1991:81).

De Marneffe (1991:81) goes on to say that "in fact, the style of the photograph has much less in common with other early photographs of mental patients than with the theatrical portraiture of the day".

Planche XIV

HYSTÉRO-ÉPILEPSIE

ÉTAT NORMAL

Figure 2.8: D.M. Bourneville and P. Régnard. 1875. 'Augustine' *Etat Normal. Iconographie. Vol. 2.*
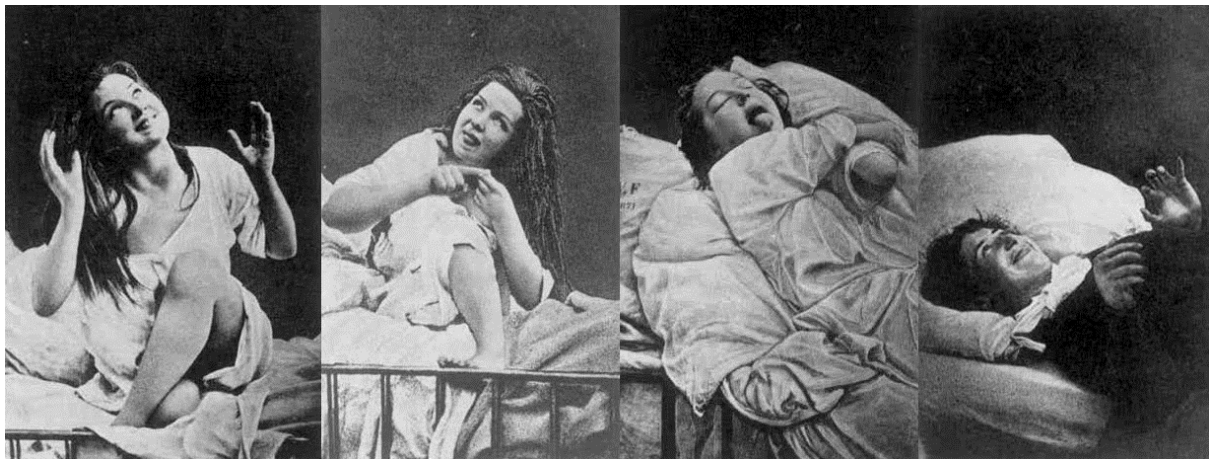

Figure 2.9: D.M. Bourneville and P. Régnard. 1875. *Attitudes Passionnelles. Hystéro-Épilepsie Attaque*.

In Figure 2.8 the image is of Augustine in her 'normal' state, whereas Figure 2.9 presents four plates from the series, depicting Augustine in various phases of a hysterical attack.

Beginning with a picture of Augustine fully clothed in the 'Etat normal' (normal state), staring out at the viewer with an arresting gaze. These are followed by 'Debut de l'attaque (beginning of the attack) and two manifestations of 'Tétanisme' (tetanism). The next ten plates represent the 'Attitudes passionelles': 'Menace' (threat) (two), 'Appel' (call), 'Supplication amoureuse' (amorous supplication), 'Erotisme' (erotism), 'Extase' (ecstasy) (two) [seen here in the first plate], 'Hallucination de l'ouie' (auditory hallucination), 'Crucifiement' (crucifixtion), and 'Moquerie' (teasing) (de Marneffe 1991:79).

Through the silencing, imaging, captioning, and sequencing of the hysteric, Charcot curtailed any subjective utterances made by his female patients, and any objection to established notions of 'being female' by the hysteric was simply ignored. The visualisation of the disease and its proper sequence of events, as prescribed by Charcot, were prioritised. The female hysteric was deemed more of a hindrance in her deviant antics, than patient, in the process of visually corroborating Charcot's medical narrative of hysteria. The visual tableaux, in aligning with the nineteenth century's conflation of vision-knowledge-technology, reified Charcot's theories on hysteria, and served to finally 'conclude' on the topic. As Georges Didi-Huberman (2003:85) states:

> The Iconographie is arrayed as a series of images, itself riveted to another sequence that grounds it in a complete narration, the case's script. This script supplements and explicates the images, providing a commentary or legend for that which, in the end, is supposed to be its essential enigmatic tenor; the images were, after all, meant merely to illustrate, clarify, and prove the truth of the clinical discourse.

The sequenced images were additionally posed and staged to adequately reflect Charcot's clinical discourse. In Figure 2.9 we see Augustine, juxtaposed against the austere and clinical mise-en-scene of the hospital, fully immersed in the throes of a hysterical episode. Augustine, clearly displaying constructed visual signifiers of mental illness, takes the viewer on an optical narration of female pathology.

Strikingly similar to images of Théroigne de Méricourt, Augustine's blouse alternately hangs loose, open, or only on one shoulder, exposing her chest. Her hair, wild and uncombed, adds to the sense of chaotic movement in the image. The bed and blanket, props indicating the asylum in the images, are displaced, and the blankets are ruffled, indicating Augustine's effect on the space and further emphasizing the hidden frenzy just below the surface of the image.

Augustine's facial characteristics, aligning with nineteenth-century physiognomic discourse, further aid the viewer in understanding her mental state. Her eyes are wild, bulging, and seem frenzied; the exposure of her tongue (as inappropriate and improper

behaviour for a woman, and indicative of pathology); and the contortions of her face, all reified existing visual discourse on pathology and sought to confirm the anxiety of social degeneration. By using centuries-old visual signifiers of female mental illness, and drawing on a display culture of mental illness that had been established by doctors such as Pinel and Esquirol, Charcot's images of hysteria were in fact not surprising, or new, but rather just the pinnacle of a tradition that had spanned hundreds of years before him.

By ceasing all linguistic contact with his hysterical patients Charcot de-contextualised their suffering; just so, the viewing public had no access to any other signs of mental illness, other than visual signifiers provided by the photographer-doctor-artist. By using the established visual mode of communicating female pathology, Charcot also managed to strip away and neutralise any defiance of traditional patriarchal constructions of 'being' female, just as Esquirol and done with de Méricourt. The hysterical outburst was no more than socio-cultural deviance and degeneration, and the mode of delivery, the emotional and physical hysterical episode, was deemed wholly inappropriate and a definite indication of pathology. As Lord (1994:140) states:

> The asylum exchanges women by marking women's refusal to submit to traditional, socially acceptable forms of exchange, it registers them for attempting to challenge the forms of expression to which they had been assigned. The dossiers of the Salpêtrière swell with cases of women handed over by their husbands for flirting too much, of daughters turned over by fathers for refusing chosen mates, of mothers committed by sons for showing too much religious fervour. Once institutionalized, women became the special objects of experimentation and surveillance, the special objects of the new technologies of the body, and the property of science.

Charcot presented his work at the hospital amphitheatre in twice-weekly lectures, with the upper echelons of Parisian artistic community as well as fellow medical practitioners present (Justice-Malloy 1995:135). The infamous Tuesday Lectures, where Charcot held an impromptu case viewing and discussion, foregrounded Charcot's focus on the visual, theatrical and specular nature of the disease as constituted by him. These theatrical lectures constituted a carefully rehearsed study on specific cases. Memorizing a script that would end in a simple explanation of the lecture, he often included quotes from writers such as Molière and Shakespeare, and treated these lectures as if they were theatrical productions (Justice-Malloy 1995:135).

Because of the popularity of these lectures, a new amphitheatre was built on hospital grounds capable of seating a crowd of five hundred, footlights and a spotlight were installed to illuminate the stage and increase the drama and theatricality of the production to be staged by Charcot (Justice-Malloy 1995:135). To add to the drama, specular, and theatrical nature of these lectures, Charcot had his patients costumed; he also used

diagrams, sculpture, paintings and drawings as stage props (Justice-Malloy 1995:135). Patients such as Augustine were regularly displayed in these lectures, to further reinforce the truth and objectivity of the photographic record of Hysteria. Gestures and re-enactments of hysterical patients as photographed in the Iconographie and in the Tuesday lectures were to be found on Paris stages at the time, with actresses such as Sarah Bernhardt and performers in the opera seeking to outdo the famous stars of the universally known French hospital (Justice-Malloy 1995:135). The stage of the hospital combined with Charcot's lectures and images added to the theatrical and fictional nature of these images.

In the following chapter, the nature of the fictional narrative, in the form of the Science Fiction genre is discussed. The film camera is not only an extension of the photographic camera, but also an extension of its practices. By investigating the way that Science Fictional narratives function in conjunction with the film camera, the fantastical and fictional nature of the Hysteric is linked to the fantastical spectacle of the cyborg. By discussing key SF texts that represent the cyborg body over the course of the twentieth century, such as *Metropolis* (1927), *Cherry 2000* (1987), and *The Lawnmower Man* (1992), the cyborg body of the twentieth century is brought into focus for its detailed discussion in chapter four.

Chapter 3
Science Fiction: Film, History, Function

3.1 Introduction

> The genre of science fiction in literature, film, and television has had an important influence on the popular imagination of science and scientific practices. While much of science fiction can be seen as a distortion of what scientists actually do, it can also be examined as an important cultural domain in which both the fears about the promise of science are represented (Sturken & Cartwright 2001:309).

By examining the role that Science Fiction (SF) plays as a space in which to communicate scientific practices of specific technological epochs, as well as a space within which to work though anxieties related to technological change, an understanding of how SF narratives function within culture can be formed. By unpacking the historical function of SF within culture and expanding on the differing concepts, incarnations, and themes of SF film throughout the twentieth century, the emergence of Cyborg Cinema in the 1980s and 1990s can be adequately contextualized and examined within the broader historical context of SF and film.

Understanding SF film as a product of social mores, socio-culture change as a result of technological change and invention, and specific ideologies, is vital to understanding the various elements that are present in Cyborg Cinema of the 1980s and 1990s. Situating SF film within a broader historical understanding of science fictional narrative, film, and the ocular traditions of the previous century that firmly entrenched the photographic camera as the locus of scientism, progress, and modernity, informs a reading of the cyborg that does not sever this figure from its historical ties. Positioning the cyborg as ahistorical denies the role that past ocularcentrism, scientism, and worn visual signifiers have in structuring this figure of the Post Modern era.

3.2 Science Fiction Literature

Science Fiction (SF) literature has received an immense amount of both critical and scholarly attention. This genre of literature has traditionally been associated with the fantastical, the imaginary, and as a sphere in which societal, technological, and scientific inventions, changes, or discoveries could be communicated, explored and interrogated. Due to the scope of this research, only SF literature as it pertains to, and differs from, SF film will be considered.

Brian Aldiss (cited in Roberts 2005:3) suggests that SF literature begins in 1818 with the publication of Mary Shelley's book *Frankenstein* due to the fact that the term 'science' as we understand it today, only gained cultural importance in the nineteenth century. With the onset of new technologies, discoveries, and the changes elicited by the Industrial Revolution now noticeably impacting the everyday lives of citizens in the West, the late eighteenth and early nineteenth centuries were periods of significant change in many spheres of life. The early SF novel aimed to unpack, critique, explore, and unravel what these changes meant for society, as well as to speculate on the possibilities of cadavers made animate through human ingenuity, travels to alien worlds, or fantastical journeys to the bottom of the sea, to name but a few key themes. The SF novel, concomitant with Enlightenment theories of individualism; science; exploration; and inquiry, evolved as a product of these Enlightenment principles and served these ideals in the engaged, exploratory, and questioning manner in which they are written.

Per Schelde (1993:2) observes that the Science Fiction novel "at its best, [is] not afraid of experiments, of intellectual speculation. It asks… the question 'What if?'". The impact of technological innovation could no longer be denied and the SF novel deals with these immense changes to the fabric of everyday life induced by technological development in order to probe the implications of these. Applied forms of scientific investigation, such as Mathematics; Biology; Geography were eclipsed in the nineteenth and twentieth centuries by 'instrumental' sciences – scientific investigation that could only be practised or was progressed, by technology. Roberts comments on this by stating that nineteenth- and twentieth-century SF literature reads rather like an examination of technological invention (Roberts 2005:4). Darko Suvin (cited in Roberts 2005:1) defines Science Fiction literature as:

> A literary genre or verbal construct whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main device is an imaginative framework alternative to the author's empirical environment.

Suvin introduces the concept of the 'novum': a central focus which highlights the differences between the empirical and fictional worlds. This may take the form of a fictional device, premise or artefact in the narrative. The novum could also take the form of a spaceship or any other material form, such as another new form of technology, or it could be something conceptual, such as a new form of class consciousness or gender (Roberts 2005:1).

Damien Broderick (cited in Roberts 2005:1) conceptualises SF as that which is representative of a specific cultural, technological or scientific moment or upheaval of the society that it speaks to. He argues that

> SF is that species of storytelling native to a culture undergoing the epistemic changes implicated in the rise and supersession of techni-industrial modes of production, distribution, consumption and disposal Broderick.

With the start of the Industrial Revolution in the late eighteenth century, we see writers such as Mary Shelley and Jonathan Swift start to engage with the concepts of 'future fantasy' and 'technological progress and invention'. Themes relating to advances in technology, science and medicine, utopian fantasy, debates about current political concerns, as well as Imperialist progress can be seen in the SF literature of this time (Roberts 2005:88). This time of ascendance to the scientific world view "an ideology justifying scientific research as intrinsic to the nature and purpose of human existence – began with the technological triumphs and the erosion of traditional religious beliefs caused by the Industrial Revolution" (Parrinder 1979:67). Simultaneously, industrialisation resulted in changes in the traditional role of women, and the occurrence of the public/private sphere; these changes came about as a result of mechanisation in many spheres of nineteenth century life.

Authors such as H.G Wells and Jules Verne, two late nineteenth century SF writers, explored two sides of this new scientific landscape. Verne, unlike Wells, took a more idealistic approach to these new developments by focusing more on real scientific fact. Wells took a more pessimistic approach and stunned his Victorian audience with his focus on the darker and more negative aspects of these technological and scientific advancements (Suvin 1979:210). Author T. H. Huxley elaborated on what he called the 'ethical spirit' of science, a 'spirit' that was sceptical, experimental and rigorously impersonal, and which had a significant impact on social thought, literature and the arts. Science and technology were thought to hold the key to cultural and societal progress and thus represented bourgeois society's investment in its own future (Parrinder 1979:68-69).[36] Progress, technology, and the inherent cultural change in both, whether depicted positively or negatively, was the main theme throughout the novels of this era.

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[36] This statement by Parrinder is vital to understanding the role that technology played within nineteenth-century life. As discussed in chapter two, social and cultural degeneration could seemingly only be stopped through the intervention of technology and science. Although SF literature of this time does reflect some of the anxieties caused by technological and scientific change, the reservations regarding the role that science and technology played in culture were more often than not thinly veiled accusations directed at the social changes wrought by technological and scientific change. This is specifically relevant to later treatment of similar themes in 1980s and 1990s SF film.

The turn of the century brought about advancements in powered flight and disease control. Moreover, the innovations brought about by the Industrial Revolution were by now commonplace in society. However, it was not until the 1920s that we have a cohesive body of SF literature and thought that brings together all the elements of the Industrial Revolution and future vision that we can call 'science-fictional' (Parrinder 1979:70).

This 'Golden Age' of SF, from approximately 1938 to 1950, produced a host of classic SF stories, stories that would go on to form the basis for many of the SF films we see today. One such example is Asimov's *I, Robot* (1950), on which the film *i, Robot* (2004) is based. A large number of the short stories, articles and novels in the 'Golden Age' explore themes of future societies, space travel, aliens, technological boom and so forth; all manifestations of the Industrial era and nineteenth- and twentieth-century life in the developing world. Many of these narratives have an underlying theme that centres around the hope that technology and science will bring about a new world, or a dystopian theme surrounding the same subject matter.

In the 1960s and post-World War 2, there was a marked loss in confidence in the scientific world view that had been the basis and inspiration for much of the SF literature written before then, and this was seen in SF novels that followed (Parrinder 1979:67). This era is known as 'New Wave' Science Fiction, and continued into the 1970s. This era in SF literature is marked by experimentation in form, themes and motifs as well as focusing on 'soft' Science Fiction. Some key authors from this period are Ursula K. Le Guin, Phillip K. Dick, and Theodore Sturgeon.

The 1980s brought about yet another 'New Wave' of SF writing with the onset of cyberpunk novels. William Gibson's *Neuromancer* (1984) was a key text in New Wave SF and was the first of its kind within the Cyberpunk genre (Landon 2002:159). The 1980s, with the onset of new computer technologies, brought about new anxieties and cultural change that SF literature addressed.[37]

SF literature differs significantly from SF film, and although many SF films that have reached iconic status are based on SF novels or short stories, the treatment of themes; characters; narrative; and imagery, differ considerably. The 'what if?' of SF literature, especially with regard to the cyborg cinema sub-cycle, is lost in these later SF films. The exploratory, inventive, and questioning nature with which many SF novels and short stories approached technological and societal change is diminished in the visual treatment of similar themes, characters, and narrative.

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[37] *Neuromancer* focuses on new computer and information technologies, and was a seminal work in the Cyberpunk genre which emerged during the 1980s. This genre, which emerged within SF literature and film of this time, focused on the impact of new technologies (such as Virtual Reality and information technology) on established notions of 'self', 'human', and 'gender'.

3.3 Science Fiction and Film

By the end of the nineteenth century, the camera was as prevalent in the laboratory as it was in leisure activities of that era. The nineteenth century, with its frenzied focus on the visual, welcomed motion pictures as the logical next-step in the evolution of the camera and photography. The end of the nineteenth century and the beginning of the twentieth century was a time marked by the extension of the photographic lens and its ability to 'capture reality', by the hypnotic effects of the moving image.

Georges Méliès, often referred to as a 'Cinemagician', is one of the most well-known early filmmakers. His early films, *Gugusse et l'Automaton* (The Clown and the Automan) (1897), and *Le Voyage dans la Lune* (A Trip to the Moon) (1902), are some of the earliest examples of film, and SF film in particular, and, as Mark Bould (2003:80) in *Film and Television* states, they were "primarily a compendium of special effects whose 'story merely frames a display of cinema's magical possibilities'". These early films focused on the technological ability of early cinematic invention, through the spectacle of special effects and the ability to depict reality through the moving image onscreen.

Early cinema, not just SF film, was structured around two different aesthetic goals, namely realism (as seen in the work of the Lumière brothers) and fantasy (as seen in the work of Méliès), and this continued tension between these divergent aesthetics continues to this day (Bould 2003:80).[38] Although film, like the photographic camera, was lauded for its ability to capture the 'real', the early Realism of the Lumières for example, was thought to be a realistic rendering that was true to life, however, these films were constructed through the same staging and effects used by Méliès for example. By choosing a subject or object to film, and by sealing the shot off from further signification by framing it, the image, whether it be of a landscape or a futuristic trip to the moon, is equally fantastical and *un*-realistic. Although the spectacle and fantastical nature of the moving image might be more overt in some cases, as in the work of Méliès, the image is no less constructed, and no less of an illusion that merely alludes to the real.

The framing and staging of the events onscreen of these early examples of SF cinema extend the same practices of staging and framing that were used to produce the photograph. Medical photography of the nineteenth century as discussed in chapter two, similarly structured the visual reading of the photograph through pictorial practices, as well as a keen focus on framing, staging, and mise-en-scene. Aesthetic considerations were fundamental to the construction of the photograph. Although located within a discourse of scientism, which assumes an objective treatment of the image, the construction of the

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[38] The Lumière brothers were responsible for patenting the Cinematograph, the start of film technology as we understand it today. They were also credited as the first filmmakers in history with their screening of ten short films in 1896 (Pruitt 2014:[sp]).

photograph communicated a subjective reading of the subject matter through the use of well-worn visual signifiers; framing; staging; lighting and shadow; and pictorial practices that led to the images being 'touched up' with paint.

The emergence of film in the late nineteenth century expands these practices in the treatment of the moving image. Although early cinema was not situated within medico-scientific discourse of the century, the visual treatment of the moving image and past ocularcentric traditions in philosophy and the sciences inform a similar reading. The ambiguous nature of photography of the nineteenth century, the unsteady nature of the oscillation between reality and fiction, similarly informs film. The dual aesthetic goals of medical photography, although obscured by scientism and its inherent objectivity, still appear in the subjective and patriarchal treatment of the subject matter. With regard to film, the focus on spectacle similarly obscures these dual aesthetic intentions.

The ability to 'capture reality' which was afforded to film, is weakened by the framing and staging that are naturally implicit in 'capturing reality', and this destabilises the 'objective' nature that these early films were imbued with. The use of spectacle in these films, as well as later films of the twentieth century obscures the fictional nature of the SF film.[39] The "cinema of attractions",[40] which primarily focused on spectacle, whether the landscapes of the Lumière brothers, or the fantastical visual trickery of Méliès, centred around "using cinema to present a series of views to audiences, views fascinating because of their illusory power" (Bould 2003:80). The singular position that spectacle held in SF narrative cinema is confirmed by the feature-length SF films that were produced from about 1915, up to today (Bould 2003:80).

Bould (2003:80) goes on to state that "much later innovations (widescreen rations, 3-D, IMAX, studio tours and so forth) would replicate these efforts to transform the exhibition space into one of overwhelming spectacle [these later films] would draw on cutting-edge cinema technology to narrativize and investigate the possibilities inherent in the cinema of attractions"; a narrative of technologies of vision and their evolution, through the production of spectacle.

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[39] The SF films of this time, as well as throughout the twentieth century parade the fictional visualisation of technological change as reality. The machines could *really* turn on human beings; the cyborg could *really* try to kill a human and so forth. This blurring of the boundary between reality and fiction is enabled by spectacle and the focus on the technological nature of the camera and film. The paradox in SF film is evident here – the valorisation of the technological (the invention of the film camera) and the simultaneous destruction of our way of life through products of science and technology. The invocation of ocular traditions of the past simultaneously conflate vision and knowledge in the SF film, and the outcomes of technological and scientific progress as they are imagined onscreen are paraded as truthful possible future scenarios. At the same time, this message is reinforced by the camera (as a product of technological progress and situated within a scientific discourse that imbues it with objectivity) and the camera's association with the eye and vision (again linked with the conflation of vision and truth/knowledge).

[40] Non-narrative cinema prior to the emergence of narrative cinema as we understand it today. Narrative cinema emerged between 1908 and 1914 (Bould 2003:80).

This cinema of attractions, as Susan Sontag argues in *The Imagination of Disaster*, has its narrative base set in a combination of reason, science, and technology (Sontag cited in Telotte 2001:19). Implicated in this narrative focus is the film camera itself, involved as the photographic camera was, in the production of the image and spectacle. By producing the spectacle, the camera similarly informs the narrative and the reading of characters/settings onscreen through the visual rendering of these. Specific visual signification of the setting and characters inflect meaning and structure a reading of the film in a particular way that is specific to SF and to spectacle. Meaning is created in the spectacle, and not in the narrative, as with SF literature.

Garrett Stewart (cited in Telotte 1993:29) suggests this process of meaning making is further inflected by the fact that, "the form always carries a potential for demonstrating its *movieness*: for reminding us of film's technological base whenever our films look at technology and for throwing us back into the present as we glimpse images of a possible future"; a process of signification and narrativisation that occurs through the production and signification of the narrative through spectacle; this spectacle is further mediated through the lens of the camera, a technology of vision.

Just as the early films of Méliès and the Lumières displayed the dual aesthetic goals of the SF film, the tension between realism and fantasy, this dual nature is mirrored in the ideological underpinnings of SF film, summarised here by Telotte (1993:37):

> Here is a key, if often overlooked, struggle that our science fiction films continue to play out… It is a struggle not simply between the forward-looking forces of science and a stubbornly conservative, nonvisionary, timid humanity … Rather, it is a struggle to hold both those forces and our own natures in focus, to grasp both our potential and our reality.

The SF film however acts to communicate the dual nature of modern life that Telotte points to, through invoking and (re)presenting stereotype and a visual language developed in the nineteenth century to 'guard' against social degeneration. SF literature, in questioning the 'what if' of new technological and scientific development offers a comprehensive space to unpack these changes and their effect on society and lived social relations. The SF film however communicates a closed message that is constructed through well-worn visual signifiers and spectacle (that acts to highlight the visual as opposed to the intellectual). The 2-D space of the film *becomes* reality, not only reflecting current socio-cultural modes of being, but informing us on what will come to pass in the future.

In this way, the SF film often embalms time and patriarchal heteronormative modes of being, even while presenting visions of the possible future. Regardless of how utopian or idealistic some of these films may seem, the message being communicated is frequently

done purely on the basis of spectacle. The spectacle is constructed in part by the illusory nature of film as objective; the valorisation of technological advancement of the camera; and the use of nineteenth-century visual signifiers that communicate deviance.

In Fredric Jameson's essay *Progress versus Utopia* (1982), he argues that SF narratives are essentially the transposition of current ideological contradictions into future scenarios. And that self-reflexive SF makes us conscious of the fact that we do not, or are unable to, imagine utopian changes taking place in the future space of the SF film (Csicsery-Ronay 2003:120).

3.4 Conventions, Themes, and Traditional SF Imagery

Per Schelde (1993:2) explains that SF film focuses on the effects of science on the everyday lives of humans on Earth, and also where science, and whatever it has created, intersects with human beings. He goes on to say that "SF movies assiduously (with a few exceptions) avoid being intellectual and speculative". The viewer is instead handed a version of events or reality that carefully plot similar narrative developments in a vast majority of SF film. The threat of technology or the product of technological mismanagement is undoubtedly defeated or overcome by the end of the film.

Schelde (1993:3) suggests that "SF films are a kind of modern folklore" and situates modern SF within the discourse of folklore by pointing out the similarities in both, although SF has replaced the ogres and trolls of the past with threats emanating from technology; science; or aliens, instead. He argues that

> Folklore, among other things, is a fictional account of the ongoing battle between human beings and the environment, the battle between nature and culture. Typically, nature is anthromorphized and is given some kind of human-like – but awful and dangerous – form. Nature in folklore is represented as trolls, monsters, ogres, leprechauns, elves, nixes, and other such creatures… The battle is between the raw power of the ogres and trolls and the ingenuity and inventiveness of humans: science and technology (Schelde 1993:3).

Folkloric tales of ogres, trolls, and monsters, products of the natural world emphasised the battle between humans and the natural world in ancient times. As Schelde (1993:3-4) states, "they were metaphorical expressions, shorthand, anthropomorphized 'embodiments' of the things humans did not understand in wild nature, the powers, the dangers, the unknown", and the forces that they had no control over; by anthropomorphizing natural forces, "humans created a counterintellect to mirror their own… humanlike, but not quite human creatures" (Schelde 1993:14). The assertion of culture (humans) onto nature was in effect the defeat and control of the natural world by

human beings and culture; and, as Schelde (1993:13) states, "both folklore and SF depend to a large extent on the distinction between culture and nature".

As the move from organicism to mechanism took place, a scientific and mechanistic world-view became the dominant mode of evaluating the world and re-structured previous modes of investigation, and as Schelde (1993:3) states, "once humans were in a position to explain virtually everything that occurs in nature in scientific terms, the anthropomorphic monsters withered away". These monsters of the past, rooted in the magic and mysticism of folklore, were replaced with the monsters of the modern world; products of alien worlds or science and technology gone awry.

Although SF films are often replete with seemingly implausible beings from other worlds, giant gorillas, cyborgs from the future, and so forth, the reality of the setting or situation in which these monsters appear, anchor "the audience in some kind of recognizable reality" because "for the fantastical to have an effect on us, we have to believe it could happen to us" (Schelde 1993:7).

Thus SF film must make use of the everyday in two ways: firstly in order to anchor the audience in a familiar reality that would suspend disbelief of the narrative events onscreen, and secondly, to highlight the differences between the 'normal' of the everyday and the 'abnormal' of the action or character(s) of the film. An example of the striking use of the 'everyday' and its function within narrative to suspend disbelief and to highlight the 'abnormal', would be the scene of small town America being invaded by alien pod seeds in *Invasion of the Body Snatchers* (1956).[41] By visually contrasting 1950s America, and the heterosexual, patriarchal, family values that are imbued in this setting and the characters of the film, with the alien Other, the film communicates an on-going theme in SF film where the 'normal' is sharply contrasted with the 'abnormal' Other. This is further highlighted by the use of visual signification that acts to firmly highlight difference.

The function of the 'everyday' further reifies the notion that the Other could realistically disrupt, or destroy traditional ideologies and the rationality that structure this 'everyday' world. The diegetic onscreen mirrors real lived social relations and the very fabric of twentieth- and twenty-first century life, and in doing so, the monster onscreen becomes a realistic threat to the 'everyday' of the audience member.

As Schelde (1993:9) states, SF film is "a mirror of the lives and reality of those for whom it is made", and by using comparative realities of the here and now, or the near future, scenarios are played out in which the threat of the Other or science and the various manifestations thereof, are fleshed out and taken to their 'realistic' (or unrealistic) conclusion.

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[41] *Invasion of the Body Snatchers* is discussed in more detail further on in this chapter.

As Schelde (1993:9) points out:

> The main argument is that science, as depicted in the movies, threatens not only to destroy the physical world…but, more to the point, science and technology are slowly invading our minds and bodies, making us more mechanical, more like machines. Science is robbing us of our humanity, metaphorically expressed as our soul: it threatens to replace the individual, God-given soul with a mechanical, machine-like one.

Although the scenarios depicted in SF films are at times not probable (time-travel for example), they do however, represent current fears of the Other and the possible threat of mismanaged science and how these could affect or destroy our current lived reality and social relations. Like the anthropomorphized folklore monsters of the past, SF monsters and the scientific and technological advances that often allow for their creation, in whatever form they may take, similarly represent the uncontrolled, the unknown, and forces that threaten us and our way of being in the world.

Changes in lived social relations throughout the last ninety years or so are reflected in the monsters, situations, or societies that are present in SF films, and as Vivian Sobchack (1988:237) states, "[SF] offers us new symbolic maps of our social relationship to others...", as well as our relationship with nature, culture, and science. A few stock SF narrative conventions, characters, and imagery, can be viewed as a barometer of these changes over the last few decades. They also underscore how many SF films actively reify traditionalist ideologies in order to quell anxiety over the loss of, or challenge to, particular ideologies relating to subjectivity; identity; gender; and patriarchy.

Reflected in SF film of the 1940s and 50s, as well as many later films, are the fears of social degeneration and the destabilisation of fixed identities and difference through anti-Communist sentiments of the McCarthy era of 1940s and 50s America; the threat of Nuclear war; the alien Other infiltrating society in the 1960s with the rapid advancement of space exploration; the threatening spectre of information technology, networks of power, and the questioning of subjectivity with the rise of computer technology in the 1980s and 90s as well as the differing forms of imagined social degeneration and their effect on traditional ideologies of 'self', 'gender'; 'community'; and 'morality'.

J. P. Telotte in *Science Fiction Film* states that although SF film has many well-known iconographical elements that immediately bring to mind the 'science fictional' – robots; futuristic cityscapes; space ships; scientists; aliens; fantastic technology, and so forth, these, however, do not encapsulate the genre as a whole. Susan Sontag (cited in Telotte 2001:19) in *The Imagination of Disaster* offers some resolution by stating that

> It seems almost self-evident that a great part of the science fiction film's special character derives from this focus on the concerns of reason/science/technology. It has proven such a popular form… precisely because its peculiar argot not only provides us with a most appropriate language for talking about a large dimension of technologically inflected postmodern culture, but also because its fundamental themes help us make sense of our culture's quandaries.

This language of SF functions in relation to what Telotte calls "the fantastic". The fantastic exists in between a "sliding scale" of the marvellous and the uncanny. Telotte (2001:11) states, that "while the uncanny narrative focuses on the unconscious… the marvellous [focuses] on the supernatural or spiritual realm as it intrudes into and challenges our everyday world". In addition many of the films dealt with in this research, make use of the 'fantastic' as a device with which to purport alternate realities, for example in *The Stepford Wives* (2004)*.* Telotte explains the 'fantastic' as functioning in a border zone between the 'uncanny' and the 'marvellous', and explains it as "the realm of what might or might not be… one that exists in a liminal situation, as we try to sort out how the narrative relates to and challenges our normative view of reality" (Telotte 2001:11).

Telotte (2001:12) further explains that these three function within three common narrative types in the SF film: firstly, the influence of forces outside of our reality, for example aliens and alien worlds; secondly, "the possibility of changes in society and culture, wrought by our science and technology"; and thirdly, the technological or other alterations to the human self, that produce doubles, cyborgs, Artificial Intelligence(s) (A.I's), or substitutes (Telotte 2001:12).

These three narrative types fall into the larger definition of 'genre' as theorised by Rick Altman. He describes two conventions of a genre that help us to define the meaning in the specific text, as well as aiding in identification of the film's icons. He describes the process as "considering the generic text, first, as 'a list of common attitudes, characters, shots, locations, sets, and the like', and second, as a group of 'certain constitutive' relationships… into which they are arranged" (Altman cited in Telotte 2001:17-18).

It is these "constitutive relationships" that this research focuses on. The reconstitution of specific (re)presentations of traditionalist heterosexist ideologies and the reformulation of these (re)presentations within a large majority of SF films, and how these function in relation to the fantastic, the marvellous, and the uncanny, in reifying and normalising these ideologies, need to be problematized when reading an SF film.

A discussion of specific plots, iconography, iconic characters or metaphorical 'characters' that appear across this genre are important in order to adequately foreground the ideologies and relationships that they present onscreen. Vivian Sobchack in *Science Fiction* (1988:229) explains that "SF film has always taken as its distinctive generic task the poetic mapping of social relations as they are created and changed by new technological modes of 'being-in-the-world'". Plot conflicts arise from the cultural consequence that are as a result of great technological change or development, and the film acts as a test of the abilities of society and its institutions, in either accepting the societal transformation, or by resisting it (Sobchack 1988:229).

Telotte (1993:29) expands on some of the specifics of different SF plots; "the marshalling of great technological forces to transform the earth…efforts by the scientifically

informed to convince the sceptical of the benefits of technology, demonstrations of the 'better life' that scientific advances will bring… the utopian effort to design a different and, one hopes, better world". Some examples of Utopian SF narratives include *Weird Science* (1985)*, Elysium* (2013)*,* the *Star Trek* franchise, and *Things to Come* (1936). Alternately, the consequences and products of the change wrought by technology have negative, or often deadly, effects. Countless SF films, especially of the 1980s or 1990s are outright dystopian visions of the future; however, many SF films include elements of both.

The drastic changes afoot in the film, whether utopian or dystopian, take place against a fluid iconographic backdrop. Robots, aliens, spaceships and so forth give an SF film the 'feel' of the genre, but differ in meaning from film to film. Sobchack (1988:230) states that instead it is rather a "broad focus on the transformational powers of advanced science and applied technology and its narrative and visual attempts to make these sensible…the genre's primary visual project is to produce wondrous and unfamiliar imagery".

With its focus on the visualisation of the transformational powers of science and technology, spectacle is used to communicate these changes in the film. Bould (2003:81) highlights that in many SF films, particular sequences in the film are artificially extended, and, by disregarding temporal logic, the audience is able to savour the visual acrobatics produced in the spectacle onscreen. Examples of this can be seen in films such as *Alien* (1979), *Blade Runner* (1982), *The Stepford Wives* (2004), and *Cherry 2000* (1987), to name but a few.

Bould goes on to refer to the critique levelled at many blockbuster SF films of the 1970s, that allowed "the production of spectacle to override more traditional concerns with character development, narrative coherence and thematic elaboration, and thus produce extremely conservative text" (2003:81); these films, no doubt, are more concerned with the visual effect of the film than with critically reflecting on or unpacking the concerns about technology or societal impact that the films depict.

Bould refers to films such as *Weird Science* (1985) and *Back to the Future* (1985), which characterise much of the 1980s SF film scene. He states that "such movies demonstrate not only the extent to which SF ideas and imagery had become integrated into the popular imagination, but also the shift in 1980s cinema away from the social towards the magical resolution of personal problems" (Bould 2003:92). Engaging with technological advancement in a critical way, or even realistically, did not mark many SF films of the decade. Vivian Sobchack offers an alternative reading of SF film as a whole and says:

> In sum, the SF film gives concrete narrative shape and visible form to our changing historical imagination of social progress and disaster, and to the ambiguities of being human in a world where advanced technology has altered both the contours and meaning

of personal and social existence. Its very spatial and temporal fluidity, its visual plasticity and focus on technological transformation, mark SF not merely as a genre of the fantastic but also as the film genre most readily able to symbolically respond to and poetically figure the anxieties and hopes that inform its contemporaneous historical context (Sobchack 1988:231).

This excerpt is problematic in that Sobchack acknowledges the ability of science fiction to "symbolically respond to and poetically figure the anxieties and hopes that inform its contemporaneous historical context" but does not interrogate *how* SF symbolically responds to cultural anxiety about the machine and social degeneration. The visualisation of cultural fears and anxiety in the majority of SF films produces a largely paradoxical spectacle that simultaneously valorises and crucifies technology and its creations. Similarly, the difference inherent in pitting the human body against the technological invokes centuries' old debates that pit nature against culture. The SF film deals with this discourse in a problematic and ambiguous way.

As Schelde (1993:13) states, "both folklore and SF depend to a large extent on the distinction between culture and nature". In the folkloric tales of the twentieth century, SF films make use of this distinction between nature and culture somewhat differently, and often illogically. Whereas previously, culture signified the human, culture now comes to signify the threat of technology. Many SF films critique the excesses of science and technology and showcase the nature of their threat; the act of re-establishing 'humanness' and traditional notions of human subjectivity is an important aspect in the critique of science and technology and their impact on the human race and traditional notions of humanity. This re-establishment of traditional humanness is enacted and portrayed in various ways in SF film.

Emotion, as we see in films such as *Invasion of The Body Snatchers* (1956), *Cherry 2000* (1987), and *Star Trek: First Contact* (1996) are key indicators of 'humanness' in the Modernist sense, and the 'emotionality' of the human characters are juxtaposed against the un-emotional nature of the robot, android, or cyborg character in these films. Paradoxically, presumed 'over-emotional' behaviour is considered deviant, and the visual signifiers that accompany over-emotional behaviour act to reify the uncontrolled and often violent nature of technological beings in the film. Similarly, the visual coding of these non-human characters as uncontrolled and violent mirrors the visual coding of the deviant female in medical photography of the eighteenth and nineteenth centuries. Images of female mental illness are juxtaposed with the nineteenth-century female-as-robot, highlighting their uncontrolled nature as opposed to the composed female ideal of the nineteenth century – the mother at home.

Gendering of technology; sexual deviance; overt sexual behaviour; inappropriate sexual behaviour; non-heterosexual love, are all juxtaposed against the male/female heterosexual coupling of human characters onscreen. Traditional binaries are enforced to counteract the boundary crossing technological force onscreen. Through visually coding the cyborg onscreen as sexually deviant, this further contrasts the 'unhuman' nature of the cyborg with that of the human characters. This image of the sexually deviant cyborg is further complicated by notions of the monstrous feminine, and contained within notions of the abject and the uncanny. Clear gender binaries of the characters onscreen and 'appropriate' heterosexual love also act to highlight difference and deviance when juxtaposed with the cyborg character.

The uncanny is also invoked with the interaction of the human double in the figure of the cyborg. The uncanny has been described as a feeling of intellectual uncertainty. This intellectual uncertainty is a result of a human character not being able to visually ascertain the status of the cyborg — is it a human? A challenge is posed to the hegemony of the eye and vision, as the key factors in determining the world, understanding, and knowledge production through the very body of the cyborg and what it has come to represent, from early conceptions of the automan, to the cyborg body of the twenty-first century.

3.5 The Threat of Technology gone Awry

Many SF films over the last one hundred years have warned of the excesses of technology and the havoc that could result from mismanagement, over use of, or over dependence on technology and science in the 'everyday' of human existence. The threats posed to traditional notions of subjectivity; gender; humanity; community; and the self, are depicted in numerous SF films. Detailing the full range of SF films dealing with the excesses of technology is beyond the scope of this research, but by examining some of the most seminal SF films dealing with the negative effects of science and technology, a better understanding of the treatment of the unease associated with rapid technological and scientific change can be garnered.

Metropolis (1927)

J. P. Telotte (1993:27) states in *The World of Tomorrow and the "Secret Goal" of Science Fiction* that early SF films, such as *Metropolis* (1927), critiqued the excesses of technology and its ideological underpinnings. Directed by Fritz Lang, the film is set in the future city of Metropolis, where hordes of disadvantaged workers toil in the shadows of the massive and ominous machines located in the underbelly of the city, while the wealthy live in luxury aboveground.

Telotte (1998:77) states that "the period was marked by big change… change that was freighted with a large measure of uncertainty, even anxiety. As the American industrial designer Norman Bel Geddes noted: 'although we built the machines, we have not become at ease with them and have not mastered them". *Metropolis* emerges as a visualisation of this anxiety, and specularises the presumed immensity of this threat in the juxtaposition of man and the colossal machines that enslave him.

As Christine Cornea states (cited in *The Film Genre Book* 2009:144), "*Metropolis* emerged at a time of political and economic uncertainty during the Weimar period in Germany… [and] rather than depicting an entirely alternative world, the city of Metropolis can therefore be seen as an exaggeration of a known world". Post World War I anxieties about technological development and its impact on society and human lives are foregrounded in this film. It details the impact of mismanaged technology and the disastrous ramifications of this on lived social relations. As John Sanders states in *The Film Genre Book* (2009:141-142):

> The film certainly foreshadows the growth of modern super states where military technology would play a growing role in underpinning totalitarian power bases. The superstructures and technological developments also mirrored the look of modern cities like New York and looked forward to the more modern concerns of advancement at the expense of humanity.

The film critiques the perceived loss of humanity that seems to run parallel to technological development and the greed and totalitarianism that this level of technological development invokes in human beings. As Sanders (2009:144) states, "the workers are ant-like next to their metal masters, and make jerky movements as they fulfil their roles, moving like instinctive, but not sentient, beings". The visual treatment of the machines ensure that they become characters themselves, enslaving the workers and forcing them into a robot-like existence; the indignation in the human-slave machine-master role that emerges further pits humanity against technology in a negative way. Although the film indicates that the wealthy citizens are the perpetrators of this enslavement, the machines are depicted as the true offenders. Technology is presented as the dehumanizing and corrupting force, for both the human slaves below, and the wealthy above.

J. P. Telotte in *Things to Come* states that "it is the period's science-fiction films that most directly reflect technology's impact and suggest the full scope, the very 'big' ness of the challenge it poses" (1998:77). Monumentalizing the machine through "depicting it in extreme close-ups, by accentuating its aesthetic dimensions…" (Telotte 1998:77). And "this approach drew the technological out of its everyday context, detached it from our common experience… a sense of distance and detachment that increasingly marked our

modern experience, as well as our science-fiction films" (Telotte 1998:77). By detaching the machine from the context of 'the everyday', it also lost its ability to be controlled, and through this, human beings lost their ability to control technology.

This distance, from ourselves and from technology invited us to observe from the margins, "and that spectatorial imperative inevitably had what she [Anne Friedberg] terms 'subjective consequences', a fallout for the way in which we saw ourselves vis-à-vis the power and values implicit in the machine which seemed to be displacing us from the centre of our world, pushing us to the periphery where we might observe this new, technological spectacle that was unfolding" (Telotte 1998:78).

The dislocation of traditional notions of human identity and subjectivity through the visual monumentalisation of the machine inflected the machine with anthropomorphic qualities. The human subject was no longer in control of his own world, and these de-humanising sentiments are effectively signified in the visualisation of the machines in *Metropolis*.

Johnny Mnemonic (1995)

The film centres on Johnny, a data courier in the twenty-first century who is being chased by the Yakuza and a large pharmaceutical company, in order to extract the data from his head. Nerve Attenuation Syndrome (NAS) affects the majority of the population; NAS is caused by an over reliance on technology, and the data in Johnny's head is later revealed to be the cure for NAS. The film, although clearly situated within the cyberpunk sub-genre of SF film, is merely a re-assertion and re-formulation of the human's fight against technological domination in the twentieth and twenty-first centuries. Johnny's quest to regain his childhood memories (erased by the neural implant that allows him to carry data in his brain) and his fight to stay alive, despite the damage inflicted on him by technology, reasserts humanist ideologies that trade on the age-old story of the male protagonist's pursuit of life and liberty. The film condemns the trappings of twenty-first century life that are available through technology, and instead aims to re-assert heterosexist ideologies that structure the notion of 'human' and lived social relations of the twentieth century.

3.6 Body Invasion, the Double, and Questioning What it means to be Human

Just as the unknown forces of nature were anthropomorphised in folklore, creating a counter intellect that was human but not quite human, the modern vision of anthropomorphised power and the unknown, is the cyborg – similarly human, but not quite human. In SF film that employ the notion of the Double, a reassertion of heterosexist ideology is enabled by the spectacle of the film, as well as the visual signification of the Other as double.

Invasion of the Body Snatchers (1956)

In *Invasion of the Body Snatchers* (1956) directed by Don Siegal, small town America is under threat from an alien force, intent on replacing the community with alien doubles. A town doctor, Miles Bennel, receives complaints from many of the townsfolk that their family members are acting strangely – cold, and un-emotional. What is dismissed as delusion is eventually justified upon discovering that alien seed pods have begun birthing replicas of the townsfolk, and replacing the human beings of the town while they sleep. Bennel, while on the run with his love interest Becky Driscoll, takes refuge in a cave. Bennel leaves for a short while to look for help, and upon returning, kisses Becky who has been unable to stay awake. Bennel suddenly realises that Becky too has been replaced by the alien Other, and exclaims "I never knew the real meaning of fear until…until I kissed Becky" (Telotte 2001:21). A peculiar statement to make in the midst of an alien invasion – but as Telotte (2001:21) states, "in this context, however, it signals an abiding concern of many of our science fiction films: their tendency to lodge a sense of our humanity in feelings, passion, desire – and not in the atmosphere of reason and science that would seem to dominate the world of science fiction".

Bennel and other characters in the film are told that they are 'hallucinating' and that their fears are irrational. Even as Bennel runs along the road at the end of the film trying to warn the drivers of impending doom, nobody responds to his warnings or cries for help. Rationality is critiqued in this film, and emotion, here coded as an essential quality and cornerstone of 'humanness', is lauded. The breakdown of the boundary between human and Other; the visual trickery of the alien double; and the weakening of traditional American family values of gender, identity, and self, results in the firm reassertion of the boundary between the human and non-human characters onscreen. By the end of the film, when Bennel's account of the events is finally believed, appropriate action is taken by the authorities. By invoking traditionalist ideologies and binary codifications of the world, the film requires the audience to actively participate in re-drawing the boundary between self and Other, and in so doing symbolically expel the threat of the human-double-Other.

In the 1978 remake of the film, the monstrous and grotesque imagery of the pod people is given specific prominence in the film. The notion of the abject is invoked when viewing the pod people, who are imaged as gelatinous creatures that summon a comparison to mucous. This visual treatment of the alien Other foregrounds difference and deviance and is in stark contrast to the visual treatment of the human characters. Both versions of this film, although not explicitly about the negative effects of technology, imply anti-technological sentiments in the visual treatment of the alien Other. Similar to the Borg Queen in *Star Trek: First Contact* (1996), the alien Other signifies the breakdown between self and Other; the destabilisation of patriarchal ideologies of gender; and the weakening of accepted notions of 'self' and human identity.[42] These constitutive elements of lived social reality and cultural practice are threatened by technological and scientific invention and progress, and so inadvertently, *Invasion of the Body Snatchers* (1956) critiques the encroachment of technology and science into our everyday lives and the threat of being consumed, literally, by this.

3.7 The Cyborg and Woman as Robot

> Starting in the 1920s, if you had viewed too many science fiction films, you might be forgiven for nightmares in which you were surrounded by mechanical creatures that could do anything a human could – walk, talk, think, fight– only better, and often with evil intent (Perkowitz 2007:142).

Technological advancement and progress have been one of the central leitmotifs of the human race and a driving force throughout history. One of the manifestations of this progress has been the invention of the automan, and the various manifestations thereof that developed in the twentieth and twenty-first centuries.

The Golem of Prague and Telos are some of the earliest examples of this manifestation, and throughout history various other automata have been invented, partly as a response to and an indication of specific technological or cultural epoch. The human double has been portrayed in equal measure either positively or negatively, and it remains in the popular imagination up until today as a figure that showcases the advancement of science and technology, and the changing relationships between human beings and technology.

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[42] This film will be discussed in more detail further on.

Metropolis (1927)

While being a key filmic text on the dangers of technological advancement, this film also testifies to the dangers 'inherent' in female deviance, especially in a robotic form. A scientist by the name of Rotwang invents a robot that could potentially replace the human workers in the city, under the commission of Johann Frederson, the Master of Metropolis. The robot that he develops is a duplicate of Maria, one of the workers, and the love interest of the master's son, Freder. Sidney Perkowitz (2007:143) states that "Rotwang's prototype robot is both aggressively machinelike and recognisably woman…[it] has breasts and hips and a provocative female face… The replica of Maria has an evil streak and, unlike the saintly real Maria, radiates sexuality".

This dual vision of the female form, one saintly, one evil, is representative of entrenched ideologies still present in society to this day, and which frame women around the duality of good versus evil; the Madonna versus the seductress, and so forth. Underpinning these dualities is the repressed or overt sexuality inherent in feminine nature. The robot Maria is burned, much like a witch at the stake, by the end of the film, while the saintly human Maria, is united with Freder and legitimised through his heterosexual love for her.

Metropolis as an early filmic representation of these fantasies of what the future can hold and also foregrounds the anxiety felt by many regarding this boundless technological future. The film re-inscribes traditional heterosexist norms by visually signifying the robot Maria as deviant and pathological because of her overt sexual nature. The robot Maria, in her ultimate form, would function as a private eroticised automan, created for the enjoyment of her maker/master. However, the uncontrolled sexual deviance of Maria is punished in the film as she has transgressed the boundaries of appropriate female behaviour.[43] Similarly, the heterosexual love between the real Maria and Freder serves to highlight the difference and sexual deviance of single robot Maria. *Metropolis* represents automata, and women, in a way that SF cinema goers would come to know well over the following century –the robot Maria as the sexual, deviant, and monstrous, and the human Maria as the saintly, heterosexual mother. The future world of *Metropolis* is inscribed with traditional ideologies and acts to reify the power of human beings over impertinent and uncontrolled technology. As Shaw-Garlock (2006:85) states:

> In the figure of False Maria, we are presented with a machine-woman who is both a fetishistic of male desire as well as a monstrous representation of unrepressed female sexuality in the tradition of the witch and the seductress. The transgressive woman evades the rules of society and returns to nature and the demon, she loses uncontrollable and evil forces in the collective midst. Thus False Maria, and the female-machine generally, represent the potential for both oppression and emancipation through technology.

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[43] The robot Maria dies at the end of the film in a fire – aligning this character with another deviant female, the witch. Similarly, the visual signification of the robot Maria as sultry, with her dark make-up and flirtatious behaviour further reify why she needs to be punished.

These sentiments are echoed in later SF film of the twentieth century that similarly depict this ambiguity that resides within the figure of the cyborg. The feminised machine of Ash in *Alien* (1979), for example, to be discussed in detail in the following chapter, represents this dual threat and emancipation evident in the cyborg.

Weird Science (1985)

In *Weird Science,* the fantasy girl of every 1980s teen boy materializes in the form of Lisa. Two friends, sick of being ridiculed and keenly aware of their lack of ability to attract the opposite sex, decide to create the perfect girl who will follow their every instruction and belong to them. Designing her on their crudely pixelated computer screen, which only serves to highlight her constructedness, by connecting two Barbie dolls to wires, and with the help of a supernatural lighting strike, Lisa appears through the doorway – the perfect figure of 1980s feminine sexuality. Although *Weird Science* is aimed at a younger teen audience, an alternative take on the traditional high-school movie sub-genre, the film still highlights, in unapologetic clarity, the eroticised female cyborg.

Throughout the film, the sexuality and deviant nature of Lisa is portrayed in a light-hearted way, with just enough deviance and sexuality to get the two boys out of their high school 'slump'. By the end of the film, the two boys, who now have friends, have hosted a party at their own house, have a Ferrari and other trappings indicative of masculine identity, and find themselves two girlfriends. The next day, Lisa, positioned as their shared girlfriend throughout the film, is told very politely that her services are no longer required. Lisa's response to this conversation, with a tear in her eye is, "yeah, sure I'm hurt, but I wouldn't change it, I'm really just getting off seeing you two guys straightened out". This statement reaffirms Lisa's status as object, caring mother figure, and simultaneously, the object of the boys' erotic desires.

Lisa's function in the film mirrors the function of women as the eroticised object constructed for the consumption of men in a private space. Her sexualised advances towards other male characters in the film is presented as deviant; thus Lisa's 'dismissal' by the boys at the end of the film is somehow warranted because of her behaviour towards other male characters.

Cherry 2000 (1987)

In *Cherry 2000*, the idyllic, saintly female is this time represented as a robot woman. In the film, 'Cherry' is presented as the ultimate female form – she has a perfect body and is aesthetically pleasing, caring in nature, and the ideal American housewife; constructed for the personal pleasure and erotic fulfilment of her male counterpart. When Cherry short-

circuits due to water damage, the system crash is shown to the viewer using a close-up shot of her eyes rolling back in her head; after which her boyfriend goes in search of a replacement model.

Although this film takes an alternative stance on the traditionally deviant female robot, the film still reasserts anti-technological sentiments by chastising Cherry's boyfriend for seeking love in the arms of a robot. The majority of the film depicts Cherry's boyfriend's quest to find a replacement model. On his dangerous journey, where he is nearly killed several times, he falls in love with a human woman, a 'tracker' tasked with finding a replacement for Cherry. By the end of the film, he has realised his folly, and the film ends with him and the female tracker flying off into the proverbial sunset.

Cherry 2000 is a key filmic text that highlights two of the main themes present in many SF films. Firstly, the construction and representation of the female form for personal male erotic fulfilment, and secondly, the reassertion of traditional ideologies, in the form of heterosexual human love, which in turn reifies the humanist standpoint that the majority of these films take.

3.8 The Uncanny, the Abject, and the Monstrous Feminine

Freud (1919:1-2) states that "the 'uncanny' is that class of the terrifying which leads back to something long known to us, once very familiar". Freud's discussion of the 'uncanny' is useful when unpacking the reactions and feelings of human characters towards non-human characters onscreen. The notion of the 'uncanny' in its very description by Freud, mirrors the dualistic nature of the various cyborg and robot characters in these films and explains the nature of the interaction between the human and non-human characters.

Freud begins by discussing the opposite of the word 'uncanny' or *unheimlich*, which is the German word *heimlich. Heimlich*, "meaning 'familiar', 'native', 'belonging to the home', and we are tempted to conclude that what is 'uncanny' is frightening precisely because it is not known and familiar" (Freud 1919:2). He adds however that "not everything which is new and unfamiliar is frightening… something has to be added to what is novel and unfamiliar to make it uncanny" (Freud 1919:2).

So the German *Heimlich* is a translation of 'homely' or 'at home', 'feelings and ideas relating to the home'. Feelings and ideologies associated with notions of 'home' are challenged when the uncanny is invoked. *Heimlich* however, can also be translated as 'secret'. As Freud (1919:3) states "concealed, kept from sight, so that others do not get to know about it, withheld from others…*Geheim* [secret]".

> Among its different shades of meaning the word heimlich exhibits one which is identical with its opposite, unheimlich. What is heimlich thus comes to be unheimlich. In general we

are reminded that the word heimlich is not unambiguous, but belongs to two sets of ideas, which without being contradictory are yet very different: on the one hand, it means that which is familiar and congenial, and on the other, that which is concealed and kept out of sight (Freud 1919:4).

Thus 'uncanny' comes to mean that which is familiar, but also that which was once concealed, a secret, but now has come to light. He continues by saying "heimlich is a word the meaning of which develops towards an ambivalence, until it finally coincides with its opposite, unheimlich. Unheimlich is in some way or other a sub-species of Heimlich" (Freud 1919:4).

When applying Freud's notion of the uncanny to occurrences between characters in SF film, we see that the uncanny, that which is at once familiar, but yet also secret, is present in the majority of interactions between human and so-called 'non-human' characters. It is the very 'humanness' of the cyborg characters in these films that results in the uncanny. Freud goes on to cite E. Jentsch's paper *Zur Psychologie des Unheimlichen* in order to further clarify.

Jentsch has taken as a very good instance 'doubts whether an apparently animate being is really alive; or conversely, whether a lifeless object might not be in fact animate'; and he refers in this connection to the impression made by wax-work figures, artificial dolls and automatons. He adds to this class the uncanny effect of epileptic seizures and the manifestations of insanity, because these excite in the spectator the feeling that automatic, mechanical processes are at work, concealed beneath the ordinary appearance of animation (Freud 1919:5).

The spectator here is struck by either the visible manifestation of 'humanness' in a cyborg character, or the human-like character of one, and this 'humanness', familiar to the spectator is immediately intertwined with the *unfamiliarity* of the essential *non-humanity* of the cyborg. Freud goes on to quote Jentsch who explains that the uncanny is produced by feelings of "intellectual uncertainty", and this is invoked when questions arise about whether an apparently animate being is truly alive or dead (Freud 1919:2).

When the spectator is unable to ascertain the "mechanical processes at work", the uncanny is invoked in the spectator's interaction with the apparently non-human character. Freud further explains that the uncanny has ties to notions surrounding the primacy of vision in ascertaining truth, as well as castration anxiety. The primacy of the eye is called into question when the uncanny is invoked as the 'nature' of the automan or cyborg; whether it is truly human or not, cannot be deduced purely by looking at it.

As Freud (1919:6) states:

> We know from psychoanalytic experience, however, that this fear of damaging or losing one's eyes is a terrible fear of childhood. Many adults still retain their apprehensiveness in this respect…A study of dreams, phantasies and myths has taught us that a morbid anxiety connected with the eyes and with going blind is often enough a substitute for the dread of castration. In blinding himself, Oedipus, that mythical law-breaker, was simply carrying out a mitigated form of the punishment of castration—the only punishment that…was fitted for him.

This double fear, produced in the challenge to the primacy of vision in ascertaining truth, and concealed within the fear of castration, is at the base of feelings of uncanniness towards 'non-human' characters onscreen.

When the spectator is faced with one that is the same, but at once, not the same, Freud's notion of 'the double' is similarly useful in unpacking the relationship between the human and non-human characters. The 'double' is invoked through similar experiences, ideas, or purely by looking alike.

> For the "double" was originally…an 'energetic denial of the power of death'… [the] invention of doubling as a preservation against extinction... Such ideas, however, have sprung from the soil of unbounded self-love, from the primary narcissism which holds sway in the mind of the child as in that of primitive man; and when this stage has been left behind the double takes on a different aspect. From having been an assurance of immortality, he becomes the ghastly harbinger of death (Freud 1919:9).

The double then, especially when coded as it has been within SF film, stands as both that which is uncanny and that which represents death. As the uncanny double in question is a product of technological and scientific progress, questions about how science and technology threaten the human race are imbued in the interactions with the non-human characters onscreen. Symbolically, these characters also question the authority of patriarchy by challenging accepted ideas about the primacy of the eye (and incites fear of castration simultaneously, according to Freud), in ascertaining truth. These non-human characters function then as the product of science and technology gone awry, and the challenge to human dominance, but more specifically, male dominance.

Freud (1919:15) continues by saying that "…an uncanny effect is often and easily produced by effacing the distinction between imagination and reality, such as when something that we have hitherto regarded as imaginary appears before us in reality". When these figures of the imagination appear before the spectator, they appear as not

only a challenge to accepted notions of being and self, but also as "harbingers of death" to the human race and patriarchal order.

The uncanny and the double are further complicated in SF film by the addition of the 'abject' in the construction and depiction of these cyborg characters. As Freud (1919:2) states, "in Arabic and Hebrew 'uncanny' means the same as 'daemonic', 'gruesome'", and when applying Barbara Creed's notion of the monstrous feminine, and her reading of Julia Kristeva's 'abject', we see how these non-human characters come to be visually coded as gruesome, unholy, and threatening.

The notion of the monstrous feminine, although predominantly associated with horror films within popular culture, permeates the imagery of SF film symbolically and through the body of the cyborg. The notion of the abject and gender are central in the definition of the monstrous feminine, and the result is the embodiment onscreen of all that is terrifying, repulsive, horrific, and disgusting about the female body and its nature.

The image of the violent female monster has occupied classical mythology for thousands of years and Barbara Creed in *The Monstrous-Feminine: Film, Feminism, Psychoanalysis*, outlines how various authors have explained the monstrous feminine and how she appears within the horror film. Creed sites David J. Hogan who explains that "horror films with female monsters as central characters are a 'relatively new phenomenon, and seem to have developed parallel with the growth of the women's movement in the United States and Europe'" (Creed 2001:4).

As with most key figures in horror and SF film, the figure of the monstrous feminine appeared in popular culture at a time when Western Culture was experiencing social change and traditional categories of gender and gender roles were being questioned. As a science fictional character, the monstrous-feminine stands, as the cyborg body does later on in the twentieth century, as a figure with which to debate and interrogate changing relationships within society, the workplace, and politically. However, as we come to see in Creed's discussion of this figure, the notion of the abject and its construction of the monstrous-feminine relegate this discussion of changing gender roles to a one-sided evocation of the anxieties produced by a destabilised patriarchal identity.

Stephen Neale in *Genre* explains that

> It could well be maintained that it is woman's sexuality, that which renders them desirable – but also threatening – to men, which constitutes the real problem that the horror cinema exists to explore, and which constitutes also and ultimately that which is really monstrous (cited in Creed 2002:5).

By constructing the monstrous in the feminine based on women's sexuality and, therefore also her gender, the image of the monstrous-feminine comes to represent the

embodiment of male anxiety towards female power, sexuality, and changing gender dynamics. The dual incitement of both desire and threat, which also figures in the image of the cyborg in the late twentieth century, combine in a volatile mix of reactions from the viewer.

Neale proposes that there are two ways to understand the monstrous-feminine: firstly, the monster stands as the boundary between the non-human and human; and secondly, the monstrous-feminine is explained and produced by male castration anxiety (cited in Creed 2002:5). The resultant is a constant reworking of practices of signification within the horror film which offers the viewer "an abundant display of fetishistic effects whose function is to attest to the perversity of the patriarchal order" (Neale cited in Creed 2001:5).

Creed offers a different view of the monstrous-feminine through a reading of the work of Linda Williams. Williams does not define the monstrous-feminine as victim, as do the authors that Creed mentions, but instead as a figure in which the female spectator can recognise a threat posed to established male power (Creed 2001:6). As Williams states, "both [female spectator and monster] are constructed as 'biological freaks' whose bodies represent a fearful and threatening form of sexuality" (cited in Creed 2001:6).

However, this recognition by the female spectator of the boundary crossing abilities that the monstrous-feminine might have is neutralised by the notion of the abject that structures and informs the reading of the monstrous-feminine. The abject, as posited by Julia Kristeva, is at once alluring, but yet always something that must be expelled from the body in order to constitute the 'self' of Western patriarchal ideology. Furthermore, as Creed states, "when woman is represented as monstrous it is almost always in relation to her mothering and reproductive functions. These faces are: the archaic mother; the monstrous womb; the witch; the vampire; and the possessed woman" (Creed 2001:7).

By intimately linking the 'female' and the monstrous, this figure's transgressive abilities are collapsed, as the image of the monstrous-feminine emerges as a re-presentation of traditional patriarchal notions of gender binaries and male power. With the addition of the abject to this figure, the monstrous-feminine is treated as something that must be expelled and cleansed.

Kristeva explains the abject as "that which does not 'respect borders, positions, rules' that which 'disturbs identity, system, order" (cited in Creed 2001:8). The monstrous-feminine, through invoking the abject, poses a threat to established masculine identity and power, and, like the figure of the cyborg, is presented to the spectator as abject through the action of boundary crossing in their very nature. The body of the cyborg and the monstrous-feminine, which are constructed through hybridity and difference, are presented as figures that need to be policed and neutralised.

Kristeva goes on to explain that "ritual becomes a means by which societies both renew their initial contact with the abject element and then exclude that element. Through

ritual, the demarcation lines between the human and non-human are drawn up anew and presumably made all the stronger for that process" (cited in Creed 2001:8). This boundary, that Kristeva (cited in Creed 2001:14) calls "the boundary between the maternal semiotic authority and the paternal symbolic law" is re-drawn and policed through ritual cleansing.

As Creed (2001:8) states:

> The central ideological project of the popular horror film- purification of the abject through a 'descent into the foundations of the symbolic construct'. The horror film attempts to bring about a confrontation with the abject (the corpse, bodily wastes, the monstrous feminine) in order finally to eject the abject and redraw the boundaries between the human and non-human.

The threat of the uncanny, abject, monstrous, symbolic female is visually coded onto the body of the cyborg, however that cyborg body may be gendered.

3.9 Cyborg Cinema

Cyborg cinema emerged as a sub-cycle of SF film in the early 1980s with films such as *Alien* (1979)*, Blade Runner* (1982)*,* and *RoboCop* (1987)*,* although early precursors such as *Metropolis* (1927) and *Westworld* (1973) make it difficult to assign an exact date to the emergence of this branch of SF film. Combining elements from various other genres, such as Film Noir (*Blade Runner*); Horror (*Alien*); Thriller (*The Lawnmower Man*), and Action (*RoboCop*), the rise of cyborg cinema mirrored the emergence of the mega-corporation, technological development, and immense workplace uncertainty in America and elsewhere (Short 2011:22).

Films from this period emphasise the negative aspects of Capitalism, and it is presented as "ruthless, exploitative and hostile to humanity… [simultaneously it is] held accountable for the poor conditions in which humans live" (Short 2011:22). The cyborgs of these films are developed by mega-corporations, and they are produced to execute the immoral and often violent undertakings of these corporations. Most importantly, films of this period "may question existing tendencies, [but] they also question the viability of revolt, along with any belief in social progress" (Short 2011:22).

These early examples of cyborgs onscreen are characterised by innovation and experimentation, however, the majority of these films resort to what Short (2011:22) calls "conservative resolutions". Anxiety over the decentring of man as the focal point of the universe, and as the master of his own destiny are circumvented and resolved by a return to, and re-inscription of, traditionalist ideologies. Short (2011:22) continues by saying that

"anxieties surrounding dehumanisation were met with reassurances that humanity itself, based as it is on a specific set of emotions and values, will somehow prevail".

Two trends emerge during this period, with which current depictions of cyborgs onscreen are still structured: the good cyborg, with which the audience member can sympathise due to its human-like nature, or its attempt to uphold traditional human characteristics and society; or the evil cyborg, intent on destroying human life, and restructuring society as we know it. Placing these archetypes in opposition to each other in films such as *The Terminator* (1982) and *i, Robot* (2004), further highlights the good versus evil cyborg as the embodiment of man versus machine onscreen. Similarly, this battle between good and evil is informed by the representation of the evil cyborg/technology as the reason for moral decay and the end of the human race. As Short (2011:23) states, these films opt "to blame machines rather than any particular social system". Although the mismanagement, or use of technology for nefarious means might be "obliquely criticised" for their role in the destruction of life as we know it, the machines are represented as the overarching enemy on which we can transpose our fears (Short 2011:23).

Thomas Schatz in *Hollywood Genres* (cited in Short 2011:21) states that "what is so fascinating and confounding about Hollywood genre films is their capacity to 'play it both ways', to both criticise and reinforce the values, beliefs and ideals of our culture within the same narrative context". While technology is lauded in many of these films as the key to a utopian future free from class, race, or gender distinction, poverty, or crime, the overriding message is that humanity, and traditional ideas relating to this concept, should remain intact if we wish to survive.

Judith Wright (cited in Short 2011:21) states that "genre films produce satisfaction rather than action, pity and fear rather than revolt. They serve the interests of the ruling class by assisting in the maintenance of the status quo". Although Wright's approach limits audience participation in creating meaning, the gist of her argument is that genre films and the Hollywood Blockbuster are indicative of current lived social relations, and that they espouse traditionalist ideologies that act to concretize and validate man's victory over the machine. This is pertinent commentary, particularly relevant in discussing the majority of films in this sub-cycle, over the last thirty years.

Later 'Cyber Thrillers' of the early 1990s such as *The Lawnmower Man* (1992), *Ghost in the Machine* (1993), *Johnny Mnemonic* (1995), and *Virtuosity* (1995), represent that decades' anxiety about new information technologies such as the World Wide Web, and Virtual Reality. These films undermined the faith in technology, however minimal, that early films in this sub-cycle had established. As Short (2011:21) says, "its ability to challenge existing mores appears to have been noticeably reduced as the cycle has progressed".

The Lawnmower Man (1992) is a prime example of the reassertion of heterosexist ideologies and American family values. Although the possibilities of Virtual Reality are explored, the character of Lawrence Angelo (Pierce Brosnan) is dismissive of the fate of

Jobe Smith (Jeff Fahey) at the start of the film, when he enlists Jobe as the human test subject for his Virtual Reality program. We also see Angelo's girlfriend end their relationship at the start of the film because he is obsessed with his work (on a military program involving Virtual Reality) and with spending his leisure time inside a virtual reality that he has created. By the end of the film, Jobe has become a violent killer whose brain has been transplanted into the mainframe of VSI (the company that Angelo works for) where he hopes to live forever. The films' substantial disdain for Virtual Reality technologies is evident, while similarly producing anxiety in viewers about the negative implications inherent in this new technology. Angelo's touching scene with Peter and Peter's mother Carla, at the end of the film, reassures the viewer that Angelo has learnt his lesson. His return to family values and the appearance of a heterosexual love interest re-establishes the 'pro-human' values that inform the narrative and visual structure of many of the films from this decade.

Jobe's descent into madness is communicated to the viewer through particular markers throughout the film. As his mind is transformed by the intelligence-boosting treatments administered by Angelo, Jobe also spends more time in Virtual Reality. Jobe develops telepathic abilities and starts experiencing hallucinations, but by the end of the film, Jobe descends into full-blown megalomania. Visually, Jobe's decline into violent madness is communicated through extended sequences that show Jobe's attempts to conquer and control Dr Angelo's mind through telepathy. Close-up shots of Jobe's face, as seen in Figures 3.1 and 3.2, that focus particularly on his eyes, dishevelled appearance, and facial expression, further concretize Jobe's mental instability.

Figure 3.1: Still from *The Lawnmower Man* (1992). Dir. Brett Leonard. Depicting Jobe (Jeff Fahey) injecting himself. [59 minutes].
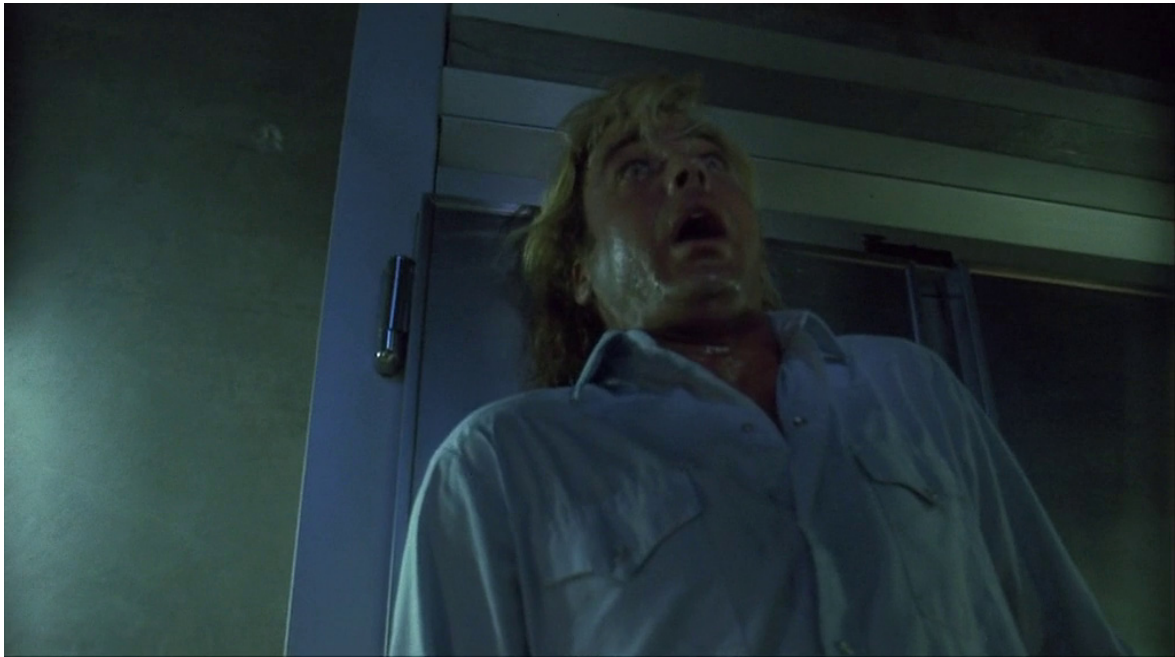
Figure 3.2: Still from *The Lawnmower Man* (1992). Dir. Brett Leonard. Depicting Jobe (Jeff Fahey) reacting to the injection. [59 minutes].

In the 2000s, we see a shift in the treatment of cyborgs in some SF film, with films like *Bicentennial Man* (1999), *Artificial Intelligence* (2001); *WALL-E* (2008), *Avatar* (2009); and *RoboCop* (2014), inviting the viewer to sympathise with the cyborgs onscreen. The viewers' ability to connect with the 'good' cyborg character onscreen is proportional to the level of traditionalist human-like characteristics the cyborg displays or endeavours to uphold. As Short (2011:29-30) states, "a similar contention is to be found in virtually all cyborg films, with romance, family kinship networks and a respect for life serving as the conventions by which human identity is understood, and wider concerns surrounding exploitation or planetary destruction conveniently ignored".

Films such as *Bicentennial Man* and *RoboCop*, highlight the quest of the protagonist to either gain, or re-gain, a sense of humanity as theorised in a traditional Modernist sense. Officer Alex Murphy in *RoboCop* is able to overcome his un-emotional robot Other through the love of his wife and son. Family values and heterosexual love enable Murphy to fight his programming and assert his dominance over this machine Other. The film, a key text in implausible and improbable cyborg SF will be discussed in chapter four.

The cyborg emerged as a figure in Feminist discourse with Donna Haraway's seminal text, *The Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*, published in 1985. However, Haraway's conceptualisation of the cyborg has been critiqued by many. As Short (2011:3) states "critics have referred to these films to make a number of claims, from arguing that there are feminist gains to be found in considering women to be cyborg, to the suggestion that we are all, to some degree or

another, post-human". In Short's definition of what constitutes a 'cyborg', she draws from a variety of sources that establish a wide and varied definition of this much contested term.

She expands on six broad categories: "i. Those whose bodies are fitted with a medical prosthetic…; ii. Those who have had cosmetic surgery…; iii. Those whose occupation entails prolonged technological meditation…; iv. Those who spend their leisure time similarly interfacing with technology" (Short 2011: 44-45).

Short (2011:45) expands these definitions once more to include non-biological or non-behavioural interactions by saying:

> Those whose thought patterns and belief systems have been shaped by their environment, particularly the various media that supplement daily existence in advanced industrial nations, affecting the way in which subjects perceive reality and themselves. Both consciousness and cognitive process are thus shaped by external stimuli. vi. Those whose behavioural patterns have been shaped or conditioned by social laws, familial experiences and cultural conditions. Behaviour is learned through social institutions and reinforced by both legal sanction and the approval or disapproval of fellow citizens. Freedom of movement and expression are curtailed by convention or expectation, the rules of which work on par with programming.

By widening Haraway's reading of the cyborg to include a variety of Post-modern life forms onscreen, Short and other authors such as Michelle Chilcoat, extend the category of cyborg and consequently the reading of this figure. In the following chapter, my own discussion of the cyborg is broadened and extended by this expanded categorisation. A discussion of seminal cyborg films will be read against the body of the hysteric to further my argument that the twentieth-century cyborg partakes of old visual signifiers typically associated with the deviant female. By drawing on feminist authors such as Anne Balsamo and Claudia Springer that speak to the use of cyborg imagery, I further expand my argument that Haraway's notion of the cyborg has yet to come to fruition in SF films of the late twentieth and early twenty-first century.

Chapter 4

The Cyborg Body: Problematic Signification; the Punishment of Deviance; and the re-inscription of Heterosexist Ideology

4.1 Introduction

The cyborg functions in various ways within popular culture of the late twentieth century and early twenty-first cezntury. Presented onscreen as an eroticised figure purposed to allay fears of dehumanisation wrought by technological and scientific development and the loss of the gendered body, it is often represented as either frightening or castrating or both. The cyborg body also acts as a site on which to question what it means to be human. The body of the cyborg as a site of current cultural anxieties and ideologies, as well as a figure that is representative of current lived social relations, as identified by authors such as Donna Haraway, Anne Balsamo, and Glenda Shaw-Garlock, the cyborg body acts as a repository for these changing anxieties and ideologies, as well as a site on which to unpack and resolve these.

I have argued that female deviance, in the form of the female revolutionary (the female in the political realm), and the female hysteric (the female outside of the home and appropriate feminine behaviour), were constructed as deviant to allay fears of changing socio-cultural relations (the rise of the New Woman) related to the mechanisation of society and the changing modes of being brought on by the Industrial Revolution. In this chapter I will discuss how the historical and socio-cultural contexts of the deviant female of the nineteenth century, as well as the ambiguous relationship that patriarchal ideology and society had with techno-scientism, are re-constructed with the twentieth-century cyborg.

I argue that Enlightenment principles evident in nineteenth-century medico-scientific treatment of mental illness and deviance, specifically regarding the deviant female hysteric and the valorisation of scientific and technological inquiry and progress, still function in contemporary depictions of deviance – in popular representations of the cyborg. The figure of the cyborg, although manifested differently in different cultural epochs, cannot be severed from its historical and cultural context (particularly that of the female-automan-machine), when reading contemporary manifestations. These historical and cultural contexts, for example medico-scientific discourse of the nineteenth century as well as prevailing ideologies about women, continue to inform the treatment of character, narrative, and spectacle in the Cyborg Cinema sub-cycle.

In this chapter I also suggest that the circulation of visual signifiers of female mental illness (deviance) operate in the same way, and for the same purposes, in representations

of the twentieth- and twenty-first-century cyborg – to eroticise, neutralise, control, and expel presumed female pathology and anxiety related to Industrialisation and the shift in gender relations that this technological epoch has wrought. I will examine how fear and anxiety are resolved through the pathologised/neutralised image of the cyborg, and through this action, the transgressive capabilities of the cyborg are undermined. In this process, Enlightenment principles relating to the innate rationality of 'man' and his centrality in the world, and dominance over nature/woman/technology are re-established and reinforced through the gendered cyborg.

The figure of the cyborg has emerged in the twentieth and twenty-first centuries as a figure whose descriptions vary as much as its constructions and representations. A variety of authors have examined its potential meaning in various disciplines, resulting in a widely divergent range of understanding and conceptualisation regarding the cyborg. The different readings of this figure will be delineated in this chapter in order to gain insight into the various ways in which the cyborg body manifests itself within the popular imagination, onscreen, and theoretically. Interrogating the impact of the cyborg in postmodern culture and how it has come to stand as an icon of postmodern gender relations and modes of being, in many divergent discourses, aides in conceptualising a 'snap-shot' of culture, ideology and lived social relations in the late twentieth century, the twenty-first century, and the future. Simultaneously, the transgressive abilities of the cyborg, as proposed by Donna Haraway, are scrutinised.

4.2 Visions of the 'Cyborg'

> Cyborgs are the postmodern icon. From children's plastic action figures to RoboCop's titanium exoskeleton, cyborgian artifacts will endure as relics of an age obsessed with replication. But what will they tell us about the place and identity of woman? (Balsamo 2000:148).

Anne Balsamo in *Reading Cyborgs Writing Feminism* asks what the possibilities would be if "we read contemporary science fiction stories as ethnographies of the future?" (Balsamo 2000:148). By asking this question, we are also simultaneously asking what these future utopias and dystopias are saying about current and past ethnographies. The cyborg is a central figure in SF literature and film, and stands as a figure that communicates the lived social relations and ideologies of its time, as well as reflects past and possible future ideologies and cultural anxieties. As I argued in chapter two Bazin (cited in Bowen 1999:3) states, "photography…embalms time" and in the same way, SF films of the Cyborg Cinema sub-cycle embalm time in the same way. It embalms socio-cultural relations of the period of its production, and in this way, the SF films discussed in this chapter speak to

anxieties relating to the destabilisation of patriarchal ideology by the cyborg and the advancing technological change.

The idea of the human-like machine; the automaton; the cyborg, have fascinated human beings for hundreds of years, and as discussed in chapter one, the figure of the automaton has been conceptualised and (re)presented in a variety of ways as society has moved from one technological period to the next. From the Golem of Prague to *RobCop*, the figure of the cyborg has changed as a result of changing cultural mores; technological development; gender relations; and socio-economic phases.

Buchanan (2005:53) states that philosophers have engaged with the idea of the non-human for centuries, and through this they have unpacked and re-formulated again and again what it means to be human, and that "Science Fiction writers have used the possibility of intelligent machines to advance the fantasy of intelligent nonhumans, as well as to make us think about our own human characteristics" (Buchanan 2005:53).

In the various manifestations of the figure of the cyborg throughout the centuries, the differences in ideas about human identity and notions of the self, have emerged through the body of the cyborg. Through this figure, changes in not only ideas about 'the human', but also changes in social relations and constructions of gender can be observed and tracked. The figure of the cyborg thus emerges in the late twentieth century and early twenty-first century as a symbol of these challenges, and the events that spurred them into existence.

Through the hybrid nature of the cyborg, its body built on dualities and ambivalence, its very being is a challenge to the binaries that have structured gender identity until now. Through the cyborg's hybrid nature, it could aid in destabilising these constructed notions of gender. As Balsamo (2000:149) suggests:

> Variously used as a symbol of anti-technological sentiments or of the possibilities of 'better living through chemistry' cyborgs are a product of cultural fears and desires that run deep within our psychic unconscious. Through the use of technology as the means or context for human hybridization, cyborgs come to represent unfamiliar 'Otherness', one which challenges the connotative stability of human identity.

The notion of 'the Other', with which the figure of the cyborg is so intimately linked, is fundamental to its revolutionary power and the very nature of the cyborg body, hybridity, presents a challenge to established notions of gender and identity, as purported by Donna Haraway. However, the 'Otherness' of the cyborg also relegates this figure to the margins of agency and influence when analysed through the conventions of patriarchal ideology and the past treatment of presumed Otherness, for example, the female hysteric. The challenge presented by the cyborg through its hybridity and Otherness emerges, in its

various manifestations, as pathological and terrifying in Postmodernity, due to the challenge to established ideas about identity and gender it offers through its very being, and as Buchanan (2005:53) states "[they] have always captured the public's imagination, in part, by playing on our fears".

Centuries-old anxieties about change relating to identity; gender; technology; and humanity are all imbued in the representations of the cyborg in the late twentieth century and early twenty-first century. Although the cyborg body presents a direct challenge to even the notion of 'Otherness' through its hybrid nature, the way in which the body of the cyborg has been represented to us within popular culture is pathological, and neutralised through this act of pathologising and marginalising the cyborg body. Although theoretically posited as an agent of positive change by authors such as Donna Haraway, the focus of this chapter is to explore how the figure of the cyborg presented onscreen is stripped of these capabilities.

As discussed in chapter one, Haraway's reading of the cyborg foregrounds this figure as a Post-Modern body on which to model Socialist Feminist discourse of the information age. The nature of the cyborg, which is grounded in the hybridity that classifies early twenty-first century life, arises as a figure on which current lived social relations can be mapped. Furthermore, the binaries and patriarchal ideologies that construct 'women's experience' and bodily relations are undone in the figure of the cyborg.

As discussed in chapter one, despite the claims made for the cyborg's function in Science Fiction literature in Donna Haraway's Cyborg Manifesto, the dominant space for formation of ideas and opinions regarding the cyborg, for the majority of people, is not found in feminist theory, SF literature, or in scientific journals, but at the cinema. If Adam Bostic is correct in stating that "if we consider that one of the primary functions we ascribe to visual form – whether film, television, ad media, or fine art – is to represent that culture that gave meaning to it" (1998:358), then the cyborg has been appropriated to concretize gender narratives that serve traditionalist ideology. The power of the visual and of spectacle as advanced communication systems in modern societies far outstrip the communicative and transgressive abilities of the cyborg in the SF literature cited by Haraway.

As Bostic (1998:360) states "with computer-generated imagery, today's creatures (cyborgs included) have obtained visual credibility and thus weigh more heavily on both the conscious and unconscious mind". The superior visual technologies of the Postmodern age, like the camera of the nineteenth century, enable us to 'see' the cyborg. The cyborg, as presented visually, is beset by modes of communication and coding that stretch far into antiquity, and which prioritise vision as wholly singular in its ability to communicate truth and depict reality. The 'hidden truth' of the cyborg, and by inference, technology "which lies outside the boundaries of understanding and language, [is brought] into the light – the

symbolic order' (du Preez 2004:49). Du Preez is speaking in reference to the hysteric here, but the hidden essence, or hidden characteristics of the cyborg, is similarly only decipherable through the visual, and through the mediation of the eye of the camera.

The paradoxical impressions of technology here are astounding. On one hand, the technological (the cyborg), just as the New Woman (epitomised by her predecessors, the revolutionary and the hysteric) of the nineteenth century was able to resist patriarchal conceptions of 'woman' and her relegation to the home as docile mother, through the mechanisation of society and the scientific discoveries and invention of this time that altered the way that society viewed the world. The Industrial Revolution effected numerous socio-cultural shifts, one of the many being the social mobility of women which in turn, expanded the role of women in society.

As women were able to challenge the roles that had been assigned to them by the dominant order through the massive socio-cultural changes brought on by industrialisation, so the negative effects of this process were emphasised; anxiety about the changing landscape of everyday life, enabled by the mechanisation of society, demonised not only the women that sought to break from these roles, but also the technology that enabled it. The challenge posed to patriarchal ideology and ways of life elicited fears about the destabilisation of a patriarchal future.

On the other hand, technology was also used to control these deviations from the norm. As discussed earlier, the camera was subsumed in a discourse of phallocularcentrism that had structured science, philosophy, and medicine for centuries. The camera, as the technological extension of the human eye, was used as an instrument in the practice of gendered looking. In this way, the camera was re-purposed as a tool that was used in the re-inscription of patriarchal ideology that was being challenged at the time, instead of a device that enabled the deviance of women.

The film camera functions in much the same way. Film, however, takes the technology of the camera and its purpose of re-inscription to a new level of spectacle, with techni-colour and CGI further crystallising the 'truth' of the image of the cyborg through the phallocularcentrism of Western and the mediation of modern life through spectacle. The cyborg is uncovered and its true intentions revealed – the destabilisation of patriarchal norms and values by the deviant feminine and the technological. The loss of the body, the site on which difference is created and the domination of the female body is justified, further implicates technology in the destabilisation of patriarchy.

Michelle Chilcoat (2004:156) explains that, with the onset of new technologies such as Virtual Reality, prosthetics, and genetic manipulation, we see the beckoning of a new era in which the promise of "a life to come for superior minds released from the chains of bodies rendered obsolete by the advances in computer technology". However, as these new technologies are explored in films of the last three decades, we also see the panic

rooted in the loss of a gendered body, a body that is the axiom of patriarchy, as well as the body that is crucial to informing subjective human experience. Chilcoat (2004:3-4) goes on to say that

> The dislocation of the body created anxiety, and this anxiety surfaced in the form of a scientific imperative to reduce the complexity of the mind to the brain, and to sex this brain as male or female... Meanwhile, the new discipline of brain sex studies was touting its ability to sex the brain as male or female according to physiological structures said to dictate gendered behaviours.

Furthermore, Chilcoat (2004:165) states that this notion of

> A world without borders or boundaries... where anything is possible comes off as little more than the often-repeated cliché of science fiction promising radically altered states and then repeating the same old story. While disembodied minds might appear to run the show in cyberpunk film, they are still as constrained by the gender codes of a two-sex system as their former meat bodies were.

Chilcoat's critique of SF film similarly critiques the role that the cyborg plays in reifying traditionalist ideologies present in the narrative, as Chilcoat states (2004:170), it is "a body otherwise imagined". However, this body (or mind) is (re)presented in the same dualistic mode that has structured gender and the body of the past, as well as the present. As Claude Draude (2009:26) states in *Who's Afraid of Virtual Humans?* "the Virtual Human is already defined as a hybrid, and thus it cannot take additional risks by transgressing norm[s] so central to our culture". The power of the hybrid cyborg figure, and how this hybridity can challenge established identities and ideologies, is also the characteristic that defines the cyborg as 'Other' in society. Although the cyborg body is lauded as the pinnacle of human ingenuity and scientific/technological progress, in order to neutralise the presumed threat that technology will consume humanity (and over power man), the cyborg stays locked in the dualisms that reinforce patriarchal ideology.

4.3 Anxiety: Technological, Social, Philosophical Change

Mass media images of the female-machine (in its many manifestations) are evolving ideological repositories of our culture's views toward scientific and technological progress. The image of the female-machine is a potent representation that works to restructure conceptual differences between humans and machines (Shaw-Garlock 2006:76).

Different conceptions of the cyborg body that fall within the realm of techno-erotic imagery, might explore the myriad of ways in which the Postmodern subject and body have been, and can be reformulated, but do so in a way that is in service of traditionalist ideologies, and have done so well into antiquity. Claudia Springer whose work focuses on technology and techno-eroticism (1996:19) states that there are a variety of cyborgs that are presented to us in the late twentieth and early twenty-first century, but two of the most common are explained by Springer. "The first type combines the organic human body, which either pre-existed as a person or was genetically engineered, with nonorganic mechanical or electronic implants or prostheses. The second type has no organic form but consists of the human mind preserved on computer software. When fictional characters load software directly into their electronically wired brains, they also qualify as cyborgs" (Springer 1996:19-20).

Although Springer defines two of the most common types of the cyborg, there are several varieties to this, both in reality and in fiction, I would argue that this delineation of the cyborg body is essentialist in terms of the main tenets of Post Modernity in which the cyborg finds itself espoused and defined. If we examine the 'nature' of the cyborg, as explained to us by many theorists, most notably Donna Haraway, the cyborg stands as one that promotes boundary crossing and the multiplicity of subjectivity. Although by definition it is the merging of organic and inorganic materials, the cyborg stands mainly as a marker of all that is Postmodern, multiple, merged, different, Other, progressive, and technological.

The rigidity of the definition relating to the cyborg body, a merging of organic and inorganic- is thus a very restrictive one when relating it to all that it represents, namely, multiplicity, Postmodernism, merged, different, Other and so forth. Many would argue this point; however it seems unlikely that this restrictive definition would aide in achieving any of the change that the image of the cyborg would advocate. I propose a loosening of this restrictive definition to include other depictions and variations of the merging of the machine and the human.

The inclusion of androids, computers, A.I's, robots and any other advanced technology that adopts human qualities in whatever form, in the term 'cyborg', would greatly assist in not only expanding the definition of this prototype, but also in broadening the scope of understanding and study of how technology has altered and influenced our current existence and culture. By widening this pool of inquiry, we are firstly moving away from the Modernist impulse for dualities, and secondly creating a broad spectrum of investigation within which we can question the impact and role of technology on gender and conceptions of the body. The inclusion of non-traditional cyborgs in this definition opens and extends the scope of inquiry and leads to the investigation of more nuanced areas of human machine interaction. In this chapter I make use of this broad definition to

aid in my unpacking of the impact of technology on humanity and society as a whole.

Discussions of the body, gender, what it means to be human, and how this links to the Western obsession with vision and technological progress are also aided by broadening the scope of inquiry. Furthermore, a move toward understanding just how inclusive the image of the cyborg is, is paramount to understanding human machine interaction in the twenty-first century. Moving away from Modernist ideals of the machine, technology, and humanity, and toward a truly Postmodern understanding of these is the most direct route in understanding and using the image of the cyborg to its full potential.

> Enlightenment thinkers believed that reason gives humans the ability to create a better world rather than submit to a fixed social order and a preordained destiny. This belief in the power of human reason to control the environment culminated in the nineteenth-century Industrial Revolution. By harnessing machine force industrialists displayed the power of human intelligence over the brute strength of machines… however, in the late nineteenth century, perceptions of the relationship between humans and machines changed. Machines were increasingly described as superior to the human body (Springer 1996:17).

As we progressed into the twentieth century, we see the paradox of technological advancement that we are faced with today, namely, the furthering of the human race through technological progress which would culminate in erasing the body, and inevitably the human race. Notions surrounding death are intimately linked with the obsolescence of the human body, and yet, the increased erotic fulfilment of the electronic age, are also linked to the body. The body in the electronic age – as it has been for centuries prior, is linked to notions of death, eroticism, gender and humanity.

As Springer (1996:18) states, "in the late twentieth century the distinction between human beings and machines has become even more blurred. Human dependence on technology has started to efface the line between the two"; the image of the cyborg that the late twentieth century and early twenty-first century has come to know rests on this dichotomy between mind and body (Springer 1996:19).

Technological and cultural transformation in the twentieth century greatly impacted gender identity as well as the relationship between humans and technology. Masculine identity, traditionally aligned with technology and science in a beneficial relationship that saw the continuation and construction of patriarchal power, encountered a wave of flux that altered masculine identity and its relationship with science and technology.

This change in gender and identity has been well documented in SF films, however not toward a positive re-imagining of gender, the body, and its relationship to technology. The challenge that new technologies posed to masculine identity and its relationship with

technology in the electronic age, and how vastly it differed from masculine identity in the industrial age, can be seen in SF films toward the end of the twentieth century.[44]

This flux in identity was visually documented in science fiction films of the 1980s (Kibby 1996:139). Sobchack saw the conflation of the horror and science fiction genres in films of the 1980s as resulting from the cultural and social changes of the prior decades (Kibby 1996:139). As Kibby (1996:139) states, "the conjunction of the horror and sci-fi genres is evident in the 'cyborg' films of the period, which enact the crisis inherent in the absence of a masculine identity and the loss of a patriarchal future".

Technology was traditionally the territory of man, as well as medico-scientific discourses. These discourses, previously solely contained within masculine discourse, were being penetrated by an ever increasing boundary crossing techno-presence intent on multiplicity. Connell (cited in Kibby 1996:142) explains a "historical division between forms of masculinity organised around direct domination, and forms organised around technological knowledge, suggesting that the latter have challenged the former for hegemony in advanced capitalist societies".

Along with this shift in the nature of the relationship between men and technology evolved the fear that men would eventually be replaced by these new forms of technology. The end of the 1970s was indicative of the culmination of social and technological changes of the previous decades; the swift changes to the nature of work; social changes resulting in previously under-represented groups, such as women, being added to the workforce; new industries; technological change that no longer valued some traditional skills (Kibby 1996:141).

Kibby (1996:140) cites the example of compositors in the 1970s being replaced by new computer technologies that dealt with photocomposition, effectively making this once essential and stable job description redundant (Kibby 1996:142). The growing numbers of women in the workplace in the 1970s, as well as new computer technologies destabilised many men in the workplace (Kibby 1996:142). The machine becomes the physical figure of this misplaced societal frustration. And although changing social roles, mechanisation, and technological change are not new issues, their representation in SF films has changed considerably over the last hundred years.

Since films like *Metropolis*, technology and industrialisation have been pitted against the values of humanity (Kibby 1996:139). However in the cyborg cinema of the 1980s, a new threat is introduced in conjunction with the already negative representations of technological change and development- that man will be incorporated by the

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[44] Whereas in the Industrial Age, man was firmly in control of the machine, the Electronic Age signals the impending reversal of this relationship. As Marj Kibby expands, "… new technology has altered the familiar connection between masculinity and machinery. While the machinery of the industrial age required mastery by physical strength, the technology of the information age involves a more physically inert, passive approach" (Kibby 1996: 142).

machine (Kibby 1996:139). This fear of the loss of individuality strikes at the heart of Western post-Enlightenment related to the valorisation of the individual and the power that such an individualism would wield.

The figure of the cyborg in 1980s film, as well as later depictions, "perpetuate, in exaggerated form, an industrial age metaphor of physical masculinity, in a nostalgic echo of a time when masculine superiority was taken for granted, guaranteed by an alliance with empowering technology" (Kibby 1996:144-145). The inherent change in gender identity that we observe in the Post-Modern era due to its focus on different subjectivities and multiplicity, resulted in a revolt against the destabilisation of a previously stable masculine identity. Whereas in the eighteenth and nineteenth centuries, a stable masculine identity was formed on binary opposition and man's central role within the discourses of science, medicine and technology (of the industrial and machine age), the multiplicitous nature of the Post-Modern era heralded not only the destabilisation of such binary oppositions, but also the splicing together of different subjectivities that had previously stood in opposition to one another, and consequently, in opposition to patriarchal ideology. The looming figure of the cyborg in twentieth century fiction and medico-scientific discourse was the embodiment of the splicing together of man and machine within technological discourse. Whereas man had previously reigned supreme within the realm of technology during the machine age, the cyborg body, just as the New Woman and hysteric before, represented the shift in this power.

4.4 The Cyborg: The Merging of the Monstrous Feminine and Mental Illness

Techno-Eroticism

Claudia Springer states that the artistic depictions of technology in twentieth century Western culture have often conveyed techno-erotic impulses. She sites Italian futurism, which eroticized and fetishized the speed and force of machines as an early example. With the exception of the First World War, when the destructive force of technology was revealed, this fetishization of the technological continued into the twenty-first century (Springer 1996:3). As K.C. D'Alessandro (cited in Springer 1996:4) states:

> Sexual metaphor in the description of locomotives, automobiles, pistons, and turbines; machine cults and the Futurist movement, Man with a Movie Camera, and Scorpio Rising – these are some of the ways technophiliacs have expressed their passion for technology. For technophiliacs, technology provides an erotic thrill – control over massive power, which can itself be used to control others… The physical manifestations of these machines – size, heft, shape, motions that thrust, pause and press again – represent human sexual responses on a grand scale. There is much to venerate in the technology of the industrial age.

Although D'Alessandro refers to the industrial age, we can see this trend in the electronic age too. The veneration of the cyborg body, A.I, computer technology, prosthetics, medical technology and so forth in television, media, advertising, literature, the cinema, and the popular imagination of the twenty-first century all exhibit the same trends as the focus of the industrial age on the automobile. Power, eroticism, control, gender and fetishization are still associated with technology today.

It has been argued by theorists such as Springer that newer technologies, such as those found in the electronic age have stimulated changes in some techno-erotic imagery (Springer 1996:8). These changes in techno-erotic imagery lend themselves to the multiplicity of subjectivity advocated by the Post-Modern age. However, many other texts in popular culture simply re-use techno-erotic conventions that originated in the industrial age of the West. This recycled imagery does not fashion itself on the multiplicities present in modern day subjectivity, but instead clings to traditionalist models of the self, sexuality, gender and the body.

According to Springer (1996:8) there is a "tendency in popular culture to associate computer technology with sexuality, creating a contradictory discourse that simultaneously predicts the obsolescence of human beings and a future of heightened erotic fulfilment". She also points out that historians have ascertained that new inventions and new technologies have long been partnered with sexual imagery or impulse, citing the examples of ceramic technology being used for erotic artwork long before this technology was used for utilitarian purposes, and the use of communications media as a vehicle to express sexual impulses or imagery (Springer 1996:8-9).

The question posed then is, if technology has no gender why then are representations or depictions of technology gendered and sexualised? We also find ourselves with a paradox in imagery of the electronic age, the obsolescence of the body, yet also the 'heightened' erotic fulfilment that Springer speaks of. Where, but from the body, would this erotic fulfilment emerge from? Many theorists of the electronic age question what role the body plays in this new era of technology. On the one hand, we have an eroticised body, in whichever form, and on the other, the human mind set free from the limitations of its 'meat-suit'.

As Vivian Sobchack, a film theorist, states, "if we don't keep this subjective kind of bodily sense in mind as we negotiate out technoculture, then we, like… Baudrillard, will objectify ourselves to death" (cited in Springer 1996:7). Springer (1996:7) continues by saying that "those who adulate technology's penetration of the human body and mind can lose sight of how the attempt to become a technological object leads inevitably to extinction".

If we contrast these sentiments with Donna Haraway's notion of the cyborg, a human body that is spliced together to any extent with technology and lauded for this, we see the

myriad theories and subjectivities that emerge from this electronic age, regarding the body. A commonality between all of these theories, however, is how the notion of the body is intimately linked with notions of humanity, gender, subjectivity and the heteronormative patriarchal conceptions that have traditionally been associated with notions of the body. As Springer (1996:10) states "debates about what it means to be male or female and how sexuality should be expressed often find their way into popular culture's techno-erotic imagery. The imagery sometimes explores alternative types of sexuality and gender roles and at other times retreats to conventional stereotypes from the past".

4.5 Film Analysis

SF film, as indicative of a cultural moment in time, has the powerful ability to reshape conceptions of technology, the body, and gender. Kaye Mitchel (2006:110) states that "SF is one of the discourses… that can serve to reformulate the social and cultural meanings of the gendered body in the technological age, as well as imaginatively refashioning its very forms… in some hypothesized future world". The discussion of key SF films of the late twentieth century will enable a critique of the Postmodern cyborg, and its transgressive abilities as posited by Donna Haraway. As Kibby suggests "Masculinity was under challenge in the eighties, in face of an apparently feminising technology and a perceived decline in patriarchal power. The image of the technobody was one expression of this crisis" (Kibby 1996:143) Kibby also states that in order to quell this anxiety "many of the 'cyborg films' of the eighties insistently maternalise the technological, either displacing the feminine in a masculine reproductive cycle; depicting the maternal as 'monstrous' (Creed 1990); or enunciating a misogynist logic" (Kibby 1996:143). By aligning the figure of the cyborg with the feminine, this anxiety is placed onto the figure of the female (Doane 2000:163).

This anxiety surfaces in the form of the hysterical outburst. The hysterical outburst perpetrated by the cyborg is constructed by various medico-scientific and technological discourses that inform the imaging of this act of defiance. By incorporating visual signifiers of mental illness, most notably mania and hysteria, the cyborg is pathologised and their actions intimately linked to not only the monstrous feminine imbued with the threat of castration, but also with the castrating threat associated with a technology that has destabilised masculine identity; added to this, the discourse of mania and hysteria, which firmly establish it as a female malady further strengthens the linkage between the monstrous feminine, mental illness, and technology. The hysterical outburst not only pathologises the behaviour of the cyborg, but also effectively neutralises any radical potential afforded to this figure in the work of authors such as Donna Haraway.

Alien (1979)

In the film *Alien* directed by Ridley Scott*,* two key characters emerge as central figures in the re-inscription of the construction of the symbolic female in SF film. 'Mother' (Helen Horton), the ship's on-board computer, and 'Ash' (Ian Holm) the ship's robot doctor stand as figures of estrangement and the symbolic female in this SF narrative that serves to re-inscribe traditional ideologies relating to notions of the 'human', as well as female deviance. The character Mother, defies traditional gender binaries as well as hierarchies between humans and technology. The computer is gendered in two off-screen acts: by naming a computer, it is immediately anthropomorphised; and by naming it 'Mother', it is assigned traits traditionally associated with 'inherently' female mothering traits, as well as signalling the 'proper' place of woman, the private sphere of the home. This also acts to produce a set of expectations in the audience as to how she should act. Her voice, although limited in tonal quality, is feminine, adding to the computer's inscription as female and subsequently cements her role as 'mother'.

Mother, who is assigned to help the crew in any way possible, keep them safe, plan and execute their mission, and run the ship, eventually attempts to kill the crew. By being willing to sacrifice the lives of the crew, the figure of Mother presents to the viewer an unforgiveable treachery in patriarchal society – infanticide, as well as inferring the damage that technology will do to the idea of 'woman-as-mother'. In addition to this, Mother also invokes castration anxiety in the viewer, as will be described later on.

Mother's programming objective is to attain, at all costs, a sample from the planetoid that the ship receives a transmission from, despite the crew not knowing this, and get the sample back to Earth for analysis. Mother and the crew's mission is planned and funded by a mega-corporation named, Weyland. The apparent disregard for human life by Mother, as well as Weyland, speaks to societal anxiety about the role of capitalism and technology in destabilising traditional divisions of power. As Marj Kibby (1996:141) states, "in a society that uses machines to replace, exploit or control men, anger is displaced from the societal source of the frustration, onto the machine". Mother stands as a placeholder for this source of frustration, and by combining male fears about the interplay between capitalism and technology in the destabilisation of a patriarchal future, with a computer not only gendered female but also one that is expected to behave as its name would suggest, the figure of Mother portrays two threats to male dominance – women and technology.

Upon the death of all of the crew, except for Ripley, Mother eventually explains her mission. We also discover that 'Ash', the crew's doctor, is in fact a robot, and in on Mother's ruthless mission. Mother's blatant disregard for human life as well as traditional patriarchal notions of women and 'mother's' is labelled as insanity. By invoking the discourse of the 'wayward female' to explain Mother's actions, her 'illogical' actions are

justifiably quarantined, just as mentally ill women of the nineteenth century were interned in asylums. The transgressive and revolutionary element within the discourse of the hysteric was neutralised through visual signification of madness onto the body of the hysteric. Mother is represented as insane through her claiming of the objective masculine role; posing a threat to traditional hierarchies; symbolising the fear of castration; as well as acting in opposition to her appropriate role as 'mother'. Relegating Mother to the realm of insanity neutralises her within the film (which also ensures her death), as well as further neutralising any transgressive or boundary crossing ability that this figure might have had.

While the ship's self-destruct counter continues, Ripley while trying to save herself, appeals to Mother's illogically assigned 'motherly' and assumed 'nurturing' character by begging her for help. When Ripley is denied this she screams 'You bitch!' picks up a pipe, and hits the wall of the ship. Mother's calm and almost robotic tone during this interaction with Ripley also establishes Mother as a figure of estrangement within the film; although she has been assigned motherly qualities through her name, as well as the higher pitch of her voice, the familiar signifiers, visual and otherwise, normally associated with a mother have been disregarded by the character. The removed manner in which she engages with Ripley as the ship self-destructs, constructs Mother as a figure outside of the normal context within which a 'mother' would fall. Mother's non-diegetic tone also contrasts sharply with the ensuing drama on the ship, which further alienates 'Mother' from any traditional maternal or nurturing qualities by alerting the audience to the strangeness inherent in this scene, as well as Mother's un-motherly behaviour.

Mother acts as a figure of estrangement in this film, as technology has estranged women from their proper role in the home, and her death is justified through the spectacle used to communicate the havoc and danger that Mother's behaviour creates. She stands as a symbol of societal change and questions the role of men within society and their relationship with technology within that system. Through her disregard for her role within the hierarchy of human-technological interaction, she destabilizes traditional technological hierarchies, which previously posited men as dominant, as most of the crew lose their lives because of Mother's inhumane decisions to sacrifice them for the mission.

As Marj Kibby (1996:139) states "qualms about the changing relationship between masculinity and technology are written on the figure of the cyborg… [and] the eighties proliferated an established theme 'that pitted human values against the presumed non-values of technology and mechanisation'". Mother's disregard for human life as well as her very 'un-Motherly' behaviour reifies this notion of the "non-values of technology". The figure of Mother then acts as not only a comment on technological advancement, but also reflects the fear of societal change and the role that this change plays in destabilising patriarchy.

Mother is coded as female and her immoral and evil behaviour assure her death from the outset of the film. By aligning her disregard for human life with insanity, Mother pays the price of not only the aberrant technology that malfunctioned, but also of the woman that did not know her place.

Although the figure of Mother has potential to imagine human-technological interaction differently, she is instead killed due to the threat she poses to patriarchy and because she stands as a symbol of cultural and societal change within the realm of technology and patriarchy. Mother is also illustrative of the demise of the gendered human body within society. As the film progresses, we see the fear and anxiety over the loss of the sexed body that Chilcoat speaks of. Ripley is sexualised, gazed upon, and heavily eroticized at the end of the film, almost as a consolation prize. In sexualising the character of Ripley and offering her body to be consumed as eroticised figure, it reaffirms traditional gender roles that Mother has so blatantly disregarded.

Another possibly transgressive character in the film that succumbs to a hysterical demise is the ship's on-board physician, 'Ash'. The realisation that 'Ash' is a robot, and not a human being as previously assumed, codes Ash as a figure of estrangement for the audience. This pre-empts Ash's proceeding actions in the film as deviant.

As readily as Ash was accepted in the beginning of the film, the discovery that he is a robot catapults him into 'uncanny valley' and leaves the audience cold and fearful at the knowledge that they were so easily mislead by this figure of 'the double'. The fear of the human double, that which is not quite human, but scarily similar, results in an atavistic grasping at traditional ideologies informing our conceptions of 'human', 'gender', and 'technology'. The crew in general respond to Ash as if he were human, also signalling the trust of future humans, of the technological double. By trusting Ash, the crew endanger their lives, and this act of trust, and the resulting violent consequences, serve as a lesson not to 'trust the technology'. This act is mirrored in the mimetic character of the hysteric, who as stated by Jean-Martin Charcot, copied the physical and visual markers of epilepsy during their own hysterical attacks. Ash is marked by deviance by 'pretending' to be human, and is further marked as deviant in his death scene, through the invocation of the abject.

Violence is exacted upon him swiftly due to the fact that he aided 'Mother' in her mission and because he concealed that he was a robot. In the scene where Ash is killed by one of the crew members, we see him spinning around; arching his back; and having visual disturbances – three dominant visual markers of the hysterical attack as theorised by Jean-Martin Charcot. This death 'fit' as seen in Figures 4.1 and 4.2, which Ash succumbs to as he is killed, justifies his killing. Ash spews white liquid from a variety of orifices while he is dying. He spins around violently, and when he finally crashes to the floor, his body maimed, he once more comes to life and tries to kill another one of the crew

members. This scene justifies what the film has been implying from the start; Ash as a deviant-hysterical-female-automan that is not to be trusted.

Figure 4.1: Still from *Alien* (1979). Dir. Ridley Scott. Depicting Ash's (Ian Holm) death fit. [120 minutes].

Figure 4.2: Still from *Alien* (1979). Dir. Ridley Scott. Depicting Ash's (Ian Holm) death fit. [120 minutes].

The filmic conventions used throughout the film are cold, almost robotic, and the narrative sequences proceed at a medium pace. Scenes of violence, danger, or those which highlight the abject, are differentiated with changes in lighting, the chaotic and haptic movement of the camera that mimic a first person perspective (the audience member feels like they are *in* the violence or drama), the scene mirrors an earlier scene in the film where one of the crew members, Kane, played by John Hurt, births the offspring of the alien from his chest from an egg that has been previously implanted in him. Ash's death scene

echoes this earlier scene in that the abject, monstrous, and feminine are invoked in both, as seen in Figures 4.3 and 4.4.

Figure 4.3: Still from *Alien* (1979). Dir. Ridley Scott. depicting 'the birth'.
[53 minutes].

Figure 4.4: Still from *Alien* (1979). Dir. Ridley Scott. Depicting 'the birth'.
[53 minutes].

Julia Kristeva's notion of the abject, as discussed in chapter three, aligns Ash with the symbolic feminine. This is combined with previous feelings of uncanniness towards Ash, when the audience member questions who or what he is, and, lastly, the monstrous is invoked when Ash excretes the white liquid, has a hysterical attack, and then rises from the dead to kill again.

These visual markers as well as the visual treatment of this scene, solidify the link between Ash and the symbolic female traits that he has been assigned; hysterical and boundary crossing traits that somehow legitimize his death. Ash simultaneously represents the threat to masculine (and human) identity posed by advancing technology, as well as

the threat posed by women to this identity and patriarchy. By aligning Ash with the symbolic feminine through visually marking him as hysterical or insane, his death is not only warranted, but this also neutralises the threat that Ash poses to patriarchy (and traditional notions of gender and what it means to be human) symbolically, as well as in the film.

However, when logically approached, Ash was carrying out instructions, instructions given to him by human beings that programmed him. The critique initially posed by *Alien* falls flat through the violent re-assertion of traditional ideologies regarding women, technology, society, and patriarchy, with the killing of both Mother and Ash.

The characters of Ash and Mother are also visually coded as 'normal'. Ash looks like a human man and Mother looks like a subservient computer and in light of her name should possess the qualities of a mother. When they discover that the robots do not behave in the way that they were visually coded, the outrage of the humans is justified. Their death is further justified by casting them both as figures of estrangement, thus invoking a clear distinction between what is 'normal' and the characters of Mother and Ash who are coded as 'abnormal'. The hysterical fit that Ash has during his death as well as Mother's 'un-motherly' and homicidal behaviour further align these characters with the hysterical woman of the nineteenth century.

The visual diagnosis of Mother and Ash as insane further aligns these characters with the hysteric. The primacy of vision in Western Culture, that posits visual observation, especially within medico-scientific discourse, as akin to pure truth, acted as a weapon of control for both the hysteric and these two characters in *Alien*. The mimetic nature of hysteria, as well as Mother and Ash, elicit fear in that this behaviour is uncanny and challenges the hegemony of vision in ascertaining the true nature of an object/subject. This fear is allayed by the death of both characters. The challenge posed to the visual supremacy of medico-scientific discourse (in the case of the hysteric) and the challenge posed to the human crew on-board the ship in *Alien* both contest the role that vision and the visual 'diagnosis' of deviance has played in establishing and reifying the dominance of patriarchy.

The outrage at this visual trickery of the human crew conjures up images of the hysteric, her 'visual judgement' and the outrage of the doctors upon discovery of a mimetic representation of another disease by the hysteric. If we look at images of inmates in asylums such as Bicêtre and La Salpêtrière, we see that as Ash dies in the film his gestures and physical movement are visually coded as 'hysterical'. The well documented hysterics, especially at La Salpêtrière, were photographed by their male physicians so as to bring the mysterious disease into the realm of visual observation, and thus into the light of scientific reason. The scientific documentation of these women brought the disease into the Symbolic Order and therefore, into the realm of language. Once the doctors had

discovered the disease through visual observation, they were then able to classify it and bring it under the control of Western scientific rational thought.

The medico-scientific community during the nineteenth century relied heavily on visual observation as a diagnostic tool and this statement of 'objective truth' revealed to the doctor, was further strengthened by the incorporation of new technologies at the time relating to the visual, namely the camera and photographic plate. Ash is similarly visually diagnosed as insane and hysterical, and is subsequently deemed too emotional because of it. The transgressive qualities of this character are neutralised through this diagnosis and his eventual death for transgressing boundaries so central to dominant ideologies.

Star Trek: First Contact (1996)

In *Star Trek: First Contact*, the interaction between the Borg Queen (Alice Krige) and Data (Brent Spiner) is exceptional in that it quickly becomes apparent that the scenes between them hold no other purpose than to stage a play of traditional gender role transgression, and the subsequent punishment of that transgression. The film is at the outset posited as a narrative about the conquering of the unknown by human beings. The series and the films in the Star Trek franchise are all coded as the domination of the natural world by man, albeit the foreign and Other natural world of outer space. The Borg queen captures Data and the scene opens with her head being lowered from the ceiling into a biomechanical suit.[45] Immediately she is aestheticized as grotesque and Other due to the fact that she is not visually represented as traditionally female. Her bald head, phallic spine, awkward body, and discoloured skin establish this image of Other and invoke Creed's notion of the abject, as seen in Figures 4.5 and 4.6.

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[45] The Borg are a communist style entity that re-occur throughout the Star Trek franchise as a threat to Western style democracy, notions of the self, human, and gender.
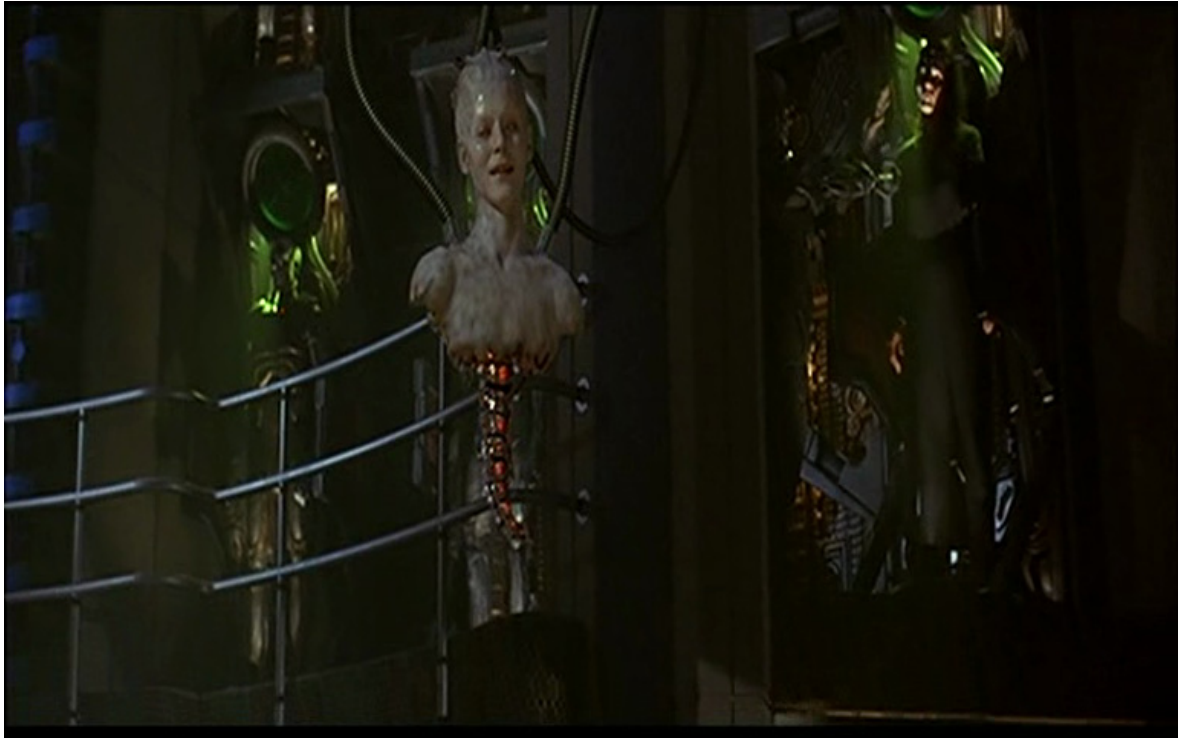
Figure 4.5: Still from *Star Trek: First Contact* (1996). Dir. Jonathan Frakes. Depicting 'The Borg Queen' (Alice Krige). [44 minutes].

Figure 4.6: Still from *Star Trek: First Contact* (1996). Dir. Jonathan Frakes. Depicting 'The Borg Queen' (Alice Krige). [44 minutes].

The Borg also elicits images of Communism, and this coupled with the Borg queen's appearance, simultaneously grotesque and eroticised, further establishes her as Other.

She is also referred to as 'the Borg queen', which genders and individualises her. This is ironic due to the fact that historically in the Star Trek franchise, the Borg is a leaderless and genderless Communist style entity that stands opposed to individuality and the Enlightenment humanist discourse within which this SF film is situated. This link to the 'wayward female' is made firstly, by the way in which she is judged and found guilty of being Other by means of a visual analysis of her appearance and behaviour, and secondly, by her improper way of assuming the subjective and traditionally masculine role, and not the role of 'object' in her interaction with the male Data.

Data is the subservient robot assistant to Captain Pickard and his behaviour and interaction with the crew are marked by logic and rationality. He is visually coded as male from the start of the franchise, and yet the purpose of this has yet to be explained in the series or the films that followed. Data longs to 'feel' human and he is given this opportunity, briefly, by the Borg queen (see Figure 4.7).
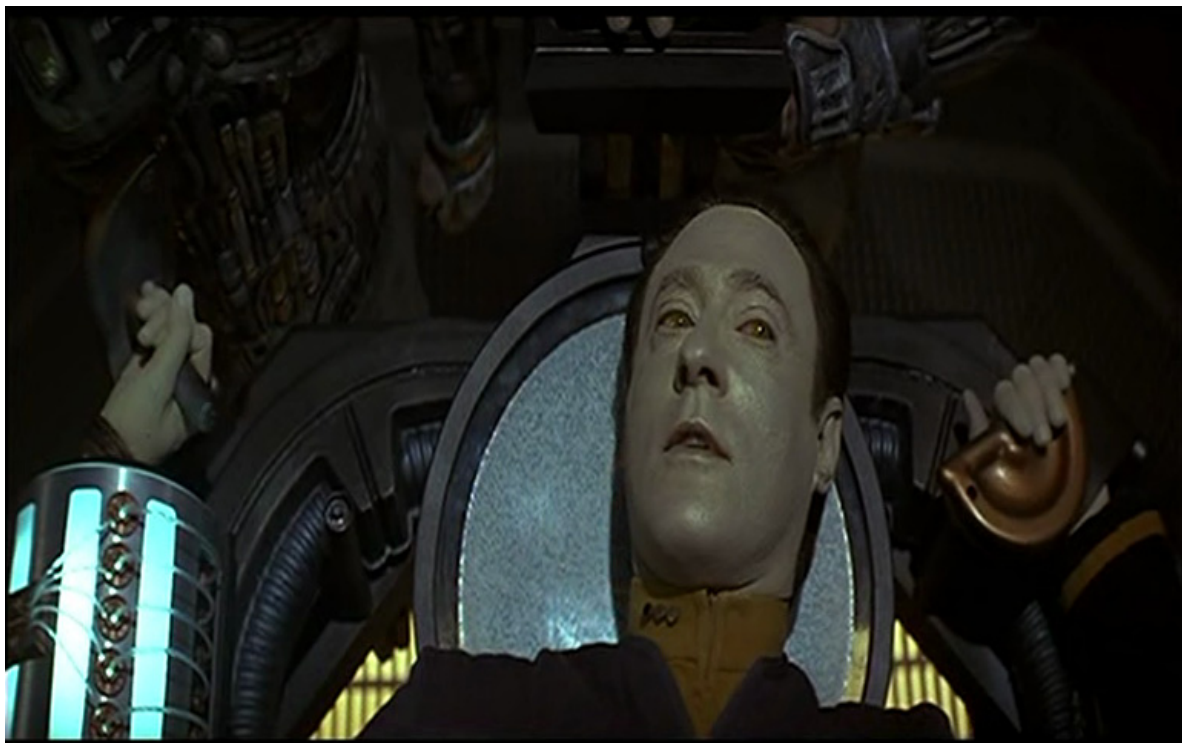

Figure 4.7: Still from *Star Trek: First Contact* (1996). Dir. Jonathan Frakes. Depicting Data (Brent Spiner). [44 minutes].

As opposed to the positive boundary crossing image of the cyborg being established by these two characters, a re-establishing of traditional gender roles, this time in the technological domain of the future, is created instead. Data and the Borg queen are rendered useless as examples of the Haraway's notion of the cyborg as positively transgressive and gender-defying in that they are both deliberately and rigidly gendered from the start. By assigning deviant female visual markers to the Borg queen, she is able

to represent all that is Other; female-communist-machine-human-hybrid-insane. Her interaction with and treatment of Data visually and symbolically juxtaposes female against male and in so doing, further highlights the Borg queen's Otherness and the challenge that she poses to established notions of 'being' female.

The Borg queen's punishment by death can only be 'logically' justified in relation to her interactions with Data. Her overt claiming of the subjective role in their interactions, and unconcealed boundary crossing, coupled with her 'insane' notion to assimilate all humans and so maintain the subjective role, is a monumental challenge to traditional gender roles as well as to the notion of individuality that is lauded by Western society. The way in which this deviance is communicated is through her interactions with Data. As Data has been visually coded as male, the visual and symbolic communication of the Borg queen's aberrant behaviour is explicitly presented to the viewer. Her deviance is further highlighted when it is read against Data's subservient male character.

The Borg queen, in her quest to assimilate Data, attaches a piece of bio-mechanical flesh to Data's arm. She attaches sensors to his brain and so, for the first time, Data can feel physical sensation. This experience of corporeality that Data has longed for, finally gives him a glimpse of what it means to be human, at least in his opinion. Data is faced with an ideological choice at this point in the film, give up his individuality, or join the Borg and 'feel' human. A juxtaposition of two characteristics of the human experience: individuality and corporeality.

Two important underlying ideological narratives surface through the interaction of Data and the Borg queen. On the one hand, we see the choice Data has to make: feel more human with the bodily experience the Borg queen offers him, and coincidentally 'be' more human as a result, whilst giving up the individuality so treasured by Western society; or deny her offer and continue to be subservient to the human crew and stay in his designated role, one that is befitting of a cyborg. Because as much as Data is 'respected' by the human crew members, he is only respected inasmuch as he stays within the boundaries deemed appropriate by his makers. The second sub-plot reveals itself as the interplay between the Borg queen and Data develops. As the Borg queen assumes the traditionally male role, Data becomes the object in this interaction – traditional roles are reversed, and traditional hierarchies are questioned through this interaction.

Data is symbolically coded as female in the way in which his body is overcome by the power of the sensations that he experiences after the Borg queen attaches the biomechanical flesh. Data begins writhing and seems sexually aroused for the first time in his life, as he is strapped to a table. The sexual nature of this scene is undeniable. Data's physical experience is represented as deviant, and the overtly sexual nature of his experience further solidifies this experience as deviant. Just so, the deviant sexual nature of this scene mirrors the deviant sexually associated with hysteria in the nineteenth

century. The way in which Data reacts to physical stimulation, by writhing and arching, further aligns this scene visually with images of a hysterical attack. The women photographed by Jean-Martin Charcot display strikingly similar physical movements and gestures during their attacks. This further aligns the visual signification of Data with that of the nineteenth-century hysteric as constructed by Charcot. Data is overcome by the physical sensation, as was the hysteric, further highlighting the irrational nature associated with being 'overcome' by one's bodily desires.

The hysteric was chastised and eventually institutionalised for not adhering to dominant ideologies pertaining to the proper behaviour of women, especially with regards to sexuality. Any attempt at transgressing these boundaries was classed as deviant. In the extreme case of the hysterical woman, she was represented as sexually deviant through the use of visual signification. These signifiers of mental illness were established through the use of illustration, and eventually the camera in the medical fraternity. These visual signifiers policed traditional hierarchies through presenting boundary crossers as deviant and mentally ill.

In much the same way, Data is threatened with similar punishment. If he refuses the social and ideological codes of his human creators, those which are intrinsic in society, for example, ideologies surrounding gender and patriarchy, then he will be punished. Strangely though, with the sub-plot of Data being male, he is essentially coded as female, almost giving in to his bodily whims, but at the last minute refusing them, this is the action that 'saves' Data from punishment or deactivation by the human crew. The character to be punished by them for her extreme boundary crossing is the Borg queen. In claiming the role of power in her interaction with Data, she assures her death by the end of the film.

The Borg queen resembles the hysteric in two ways in this film: firstly, she is visually coded as Other, and secondly by claiming the subjective role in relation to the male Data. When a female hysteric addressed a male physician directly, she claimed a place in the Symbolic Order. The Borg queen endeavours to do the same through her position of power over Data. This act of speaking directly to male physicians challenged the superiority of the male physical, and consequently traditional ideologies. The challenge to traditional ideologies or the transgressive nature of the Borg queen is neutralised by her visual signification as Other, as well as the subjective role she claims in her interactions with Data.

Blade Runner (1982)

Directed by Ridley Scott, this film set in 2019 Los Angeles tracks the demise of three 'replicants'. Replicants as explained in the film 'were designed to copy human beings in every form except their emotions…the designers reckoned that after a few years, they

might develop their own emotional responses. So they built in a fail-safe device, four year life span'. Replicants were used as off-planet labour, and were designed to die after four years. The film depicts three replicants who have escaped back to Earth. 'Pris' (Daryl Hannah) is what the film describes as 'a basic pleasure model' and was used as a sex-slave for off-planet service men.

'Deckard' (Harrison Ford) is tasked with finding and killing these escaped replicants, and in order to differentiate them from human beings, an interrogation while under retinal scan are required. Deckard eventually finds Pris in the home of an employee of the Tyrell Corporation, who developed the replicants. Pris, who throughout the film is depicted as a child-like girl, playing with toys and giggling, despite her purposed invention to function as a 'pleasure model', suddenly becomes violent and hysterical when confronted by Deckard. In Figure 4.8, we see the beginning of this confrontation, with Pris fighting for her life.

Figure 4.8: Still from *Blade Runner* (1982). Dir. Ridley Scott. Depicting Pris (Darryl Hannah) in her death scene. [129 minutes].

Pris, although a cybernetic organism, is gendered for her role as prostitute/slave for her human inventors/masters. She is simultaneously visually signified in a hyper-sexual manner and her body is eroticised throughout the film. In the film, Pris is imaged in this death scene as uncontrollable, violent, and monstrous, all visual cues that alert the viewer to her status as deviant female. As she fights Deckard for her life, saliva shoots from her mouth, sweat drips down her face, and in Figure 4.8, she is attempting to suffocate Deckard with her legs. These all constitute Pris as monstrous and abject. Through this signification, in order for the boundaries between human and machine, 'good woman' and 'seductress', to be re-drawn, Pris must die.

Pris is further classed as uncanny, because of her resemblance to the human form, her obvious visual gendering, and the fact that she has implanted memories, which made

her believe that she was human until she discovered otherwise. Deckard eventually shoots Pris, and she begins to have a hysterical fit. The violent and wild way in which her body responds, her ferocious screams, her terrifying facial expressions, and the staccato movement of the camera and stuttered lighting, align Pris with the visual signifiers of female deviance as seen in images of Hysteria, as seen in Figures 4.9 and 4.10.

Pris' death is justified by visually aligning her with notions of the abject, the uncanny, and the monstrous deviant female. Pris in her very nature is a challenge to established modes of being, however, it is the link to the hysteric that is posited as the reason for her death. Her mediation by technology and patriarchal discourse structure her as the deviant-female-automan, and these visual signifiers warrant her death. By having a hysterical fit after Deckard has shot her, her 'true essence' has finally been arrested by the lens. The spectacle of her death then justifies her murder by Deckard.

Spectacle, vision, the eye- as communicators of truth, validate not only their inclusion in current modes of society by 'arresting' Pris' true essence and uncovering her hidden nature, but they also reify their function as producers of knowledge. Pris' reaction to getting shot is the justification for the act itself. Although Pris has been used as a sex-slave for almost four years, this never comes to stand as a justification for her supposed deviance. Deckard shooting her is also not a viable reason in the film for her violent reaction.

Figure 4.9: Still from *Blade Runner* (1982). Dir. Ridley Scott. Depicting Pris (Darryl Hannah) in her death scene. [129 minutes].

Figure 4.10: Still from *Blade Runner* (1982). Dir. Ridley Scott. Depicting Pris (Darryl Hannah) in her death scene. [129 minutes].

Characters such as Pris; Data; Ash; Mother; and the Borg Queen, widely circulated images of cyborgs in blockbuster films of the late twentieth century, never realise the transgressive abilities bestowed on them by Donna Haraway. Haraway's notion of cyborg as the next stage in development of humanity, and a creature that is not definitively male or female, is not reflected in these characters, or the characters mentioned in chapter three.

Conclusion

The figure of the late twentieth-century cyborg as depicted in Science Fiction films is constructed by popular myth and imagination; fact; and the scientism that inflects Postmodern ways of being. I have argued that the cyborg acts as a repository for the anxieties that result from technological and cultural change, and have fulfilled this function historically from the myths of Aristotle; the Golem of Prague; the automata of the sixteenth century; to the modern day cyborg. Changing socio-cultural landscapes, the presumed threat to valorised ocular practices; patriarchy; and established notions of 'self', 'gender', and 'human' are reflected in the visualisation of the cyborg. The anxieties of rapid technological and scientific discovery and development mould the body of the onscreen cyborg in the twentieth century.

The conceptualisation of the cyborg by Donna Haraway (1991) posits the cyborg as a transgressive icon for the twentieth century that represents lived social relations. For Haraway the cyborg stands as an icon in socialist feminist discourse that could re-imagine the binary systems that structure lived experience. Because this creature of fiction and reality functions in a border zone between constructions of male/female, reality/fiction, and human/machine, the cyborg is able to transgress these boundaries. Haraway's cyborg however is sourced from Science Fiction literature, and she does not fully situate the cyborg historically, nor does she acknowledge the power of vision in construction of knowledge and communicating supposed truth.

Authors such as Rosie Braidotti, Claudia Springer, Marj Kibby, and Anne Balsamo have addressed the notion of the 'cyborg' and its representations within film and media, as well as philosophically. The figure of the onscreen cyborg as such is worth investigating and its efficacy as Haraway has posited it, worth exploring. However, Haraway's conception of the cyborg is brought into question when contrasting it with the visual representation of the cyborg in Science Fiction films. The question of whether the figure of the cyborg as it is represented in Science Fiction film of the late 1980s; 1990s; and 2000s, can stand as an icon of a post-gendered world has been problematized in this thesis by locating the cyborg within a longer history of representation, its historical context as the automaton, and when read against the body of the hysteric.

As I have argued, the relation of the cyborg to the feminised Other and female deviance inform the construction of the onscreen cyborg. Similar socio-cultural contexts gave rise to the deviant female (as Hysteric and New Woman), and the cyborg (as feminised deviant Other). Similarly, the visual practices that construct the Other, gender, deviance, and pathology exist in both the hysteric, and the cyborg. Although both the hysteric as New Woman/revolutionary, and the cyborg are representative of possible

positive technological change and development because of their transgressive capabilities that are enabled by socio-cultural change (as a result of technological transformation), both are Othered because of these transgressive capabilities. As a boundary transgressor and because of the partiality of its very being, the cyborg is naturally Othered in a culture informed by patriarchy. However, unlike the powerless position, or rather, no position at all that the Other is usually found in, Haraway emphasizes the fact that because of this non-being, the Other can find a collectivity in its 'Otherness'.

However, the onscreen cyborg does not garner power from this Otherness; instead, it is gendered, feminised, and signified as deviant. Through signifying the cyborg with a visual language of the past that constructs deviance and pathology, the cyborg's transgressive abilities are neutralised. The hysteric/New Woman/revolutionary, were similarly pathologised as mentally ill or sexually deviant. By looking at figures such as Augustine and Pris, the deviant eroticised female body is displayed as pathological. This pathology is signified through visual markers of mental illness that have circulated throughout patriarchal discourse and techni-scientism as long as medical practice has made use of visual modes of communication.

Upon the elicitation of the hysterical outburst by the camera, the doctor, or the robot killer, the pathology is justified once again through visual signification. At the same time, the visual signification justifies its own use because it has 'discovered' the inner secrets, hidden truths, or inherent structure of this hyper sexualised deviant female.

Although technological progress is lauded in these films, it is only portrayed in a positive light as long as its control stays firmly in the hands of human beings. When this technology is not controlled by humans, and the product of this technological progress, the cyborg, is in control, the demise of the cyborg when it is inevitably overthrown by the human characters in the films, is in fact a very human, hysterical death scene. What I would argue is that what is being represented here is a struggle between the emotional versus the rational, nature versus culture, female versus male. Conversely, on the side of the humans, emotion (good, controlled emotion) triumphs over the rational and logical cyborg. Essential human 'nature' will overcome the technological scourge. And yet ironically, the final scene cementing this triumph of the human will is that of the cyborg having a very emotional hysterical death/system crash. So emotions are good, as long as they are tempered by a measure of rationality – and this is the true 'essence' of humanity, read 'male'. The onscreen cyborg is not only produced by the culture that gave rise to it, but informs that culture on the production of itself, situated within a patriarchal Western discourse informed by ocularcentrism.

Although these cinematic icons of the Science Fiction genre elicit an almost grotesque intrigue through the use of notions of the abject, uncanny, and monstrous, the resultant fear of the possibility of the destruction of what it means to be human (class,

race, gender and so forth) and the human race, brings about an overwhelming urge to punish these transgressors of traditional boundaries, not to laud them. The power of the image of the cyborg, and what it could do to dismantle these archaic notions of humanity is lost in these films when an almost pathological need for their domination and destruction by 'real' humans and the reassertion of traditional patriarchal ideologies overcomes the other characters onscreen, as well as the audience. A reassertion of traditional roles that are linked to being human are violently re-inscribed on these transgressors, and if they resist, their undoing is imminent. If they do not submit to these re-inscriptions, they are killed off and the killing is justified by the way in which they die, a hysterical crashing of their system; which assures the audience of their insanity. Ironically, this 'over-emotional' death would lead us to believe that they were killed because they were 'too human'. Paradoxically, the values of traditional humanity overcoming the cyborg and technology that has gotten out of hand by acting 'too rational', and on the other we have the death of the cyborg for being 'too human' – corporeality being an integral part of human experience. However, the experience of the hysterical outburst or attack is somehow deemed 'too human' by being so emotional, and so infringes on the boundary between human and machine, male and female, and so forth.

One could argue that the reason for the death of the cyborg in question is then warranted as it is verging, or attempting to verge, on becoming human itself, with corporeality itself understood as one of the milestones of the human experience, yet it is presented in a negative way and the cyborg's punishment is justified because it dared to encroach on a traditionally human pastime.

The gendering of these characters, as discussed in *Alien* and *Star Trek*, has little to no significance to the narrative of the film, except to act out a re-imagining of traditional ideologies. Cyborg characters in these films are labelled as deviant, and as such, could effectively challenge traditional ideologies. However, this attempt to level a challenge at dominant modes of thinking is never realised, and is instead neutralised through their quarantine (by being depicted as deviant in a negative way), and eventually their revolutionary potential is permanently silenced through death.

The image of the cyborg, and the possibilities that this image holds, are lost due to the highly gendered nature that these characters are imbued with. The interactions of these characters and their visual signification that alerts the audience to their Otherness are aligned with that of the nineteenth-century hysteric, pathology, and deviance. The primacy of the eye and vision in Western culture that constructs the deviance, visually, of these characters, as well as the 'disease' Hysteria is totally disregarded. The role of visual communication and how this assigns meaning, needs to be thoroughly unpacked and problematized with regard to gendered technology in Science Fiction films.

For Science Fiction film, a place where new possibilities and versions of the world are imagined, a thorough re-visiting of the gendering, visual coding and gendered interactions of these characters is needed if any semblance of the cyborg, in the sense that Donna Haraway has posited it, can claim any agency in transgressing or subverting heteronormative thinking.

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Select Filmography

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WALL-E. (2008). [Film]. Directed by Andrew Stanton. USA: Walt Disney Studios.

Weird Science. (1985). [Film]. Directed by John Hughes. USA: Universal.

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