Filmic Machines and Animated Monsters:
Retelling Frankenstein in the Digital Age

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Declaration

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

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Abstract

Frankensteinian monsters have appeared on our screens since the early days of cinema. Indeed, across the history of film we see Mary Shelley’s “hideous progeny” rewritten as alchemical creations, animated corpses, lumbering fiends, robots, cyborgs, replicants, dinosaurs, artificial intelligences and digital constructions. In particular, Shelley’s text shares its speculative depiction of a posthuman future with fantastic and science-fictional cinema of the digital age. At the same time, posthuman bodies are being created by filmmakers. New possibilities in the digital imaging of human presence – from the replacement of actors with computer-generated imagery to the quest for photorealism in digital animation – themselves evoke the Frankenstein tale and consequently make interesting contributions to the evolving Frankenstein myth.

This thesis investigates the retelling of Frankenstein in popular cinema of the digital age. Through close analysis of a series of chosen texts, I examine the figure of the Frankensteinian monster and his/her/its equivalents in today’s popular culture: posthuman figures who negotiate uneasily with the organic world, boundary creatures who both define and unsettle our understandings of human being. I consider the way the tale, its themes and characters have both endured and evolved over time. I also examine the way these new filmic “machines” and animated “monsters” embody crucial problems associated with the technologies that screen them and the media that contain them.
My concern in this project is twofold. Firstly, I seek to map the (changing) relationship between Frankenstein and film. Since the early 1900s, cinema has provided a fertile ground for the retelling of Shelley’s tale. At the same time, cinema itself has always been a sort of Frankensteinian experiment: a means of breathing life into stillness, of constructing and re-constructing human presence, of stitching together fragmented moments to create a semblance of wholeness. In the digital age, this experiment grows and changes: new modes of production are continually being trialled, allowing us to re-create and re-present human presence in new and often bizarre ways. The figure of the Frankensteinian monster confronts and responds to these concerns, embodying and performing the uncanny, spectacular, mechanical, or organic-mechanical nature of screen presence.

Secondly, this thesis reads the Frankensteinian monster as a mythic figure for the digital age. I move towards the assertion that Frankenstein is a tale about the artificial body and its negotiation with a lost or disrupted origin in the organic world, and that this particular problem reverberates strongly in an age of digital representation. The analyses that constitute this thesis contribute to the argument that each time the Frankenstein tale is retold, re-technologised, and re-imagined using new filmic techniques, the problem of the screen body and its troubled origin stories is revisited and complicated.
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I would like to thank all my friends and family who have put up with me during the creation of this “monster”. Deep and special gratitude must go to my husband Luke, for his support (both emotional and financial) and patience; thank you for sharing this journey with me, for introducing me to *Ghost in the Shell* all those years ago and for never getting sick of watching science fiction films with me. Thanks also to my mum, Sharon, for bestowing upon me a love of literature and for putting up with my love of all things cinematic.

Finally, this thesis has its roots in a lifelong enthusiasm for the fantastic in popular culture, and owes a debt of gratitude to all the writers, theorists, academics, filmmakers, authors, colleagues and friends who share and perpetuate this enthusiasm.
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INTRODUCTION

Preface: Frankenstein in the digital age

Nearly two hundred years after Mary Shelley’s novel *Frankenstein* was first published, I am watching *Frankenstein*, the 1910 Edison Studios film, on YouTube. I have seen the film many times before, but never quite like this: the monster’s body, creepily emerging from its alchemical cauldron, flickers like all images from old films but is framed by my computer screen. Attached to my laptop, I feel particularly “plugged in” to this media experience: in this moment I am a PhD student more than a cinema spectator, my fingers on the keyboard ready to pause, think, write; I am the figure envisioned by N. Katherine Hayles when she observes that “an experienced computer user feels proprioceptive coherence with the keyboard, experiencing the screen surface as a space into which her subjectivity can flow”.

Like Frankenstein’s monster – who is rewritten in the twentieth and twenty-first centuries as the cyborg, the organic/technological hybrid – I am, in this moment, mechanically enhanced.

Frankenstein’s monster, it seems, is alive and well in cyberspace; and when we encounter him/her/it on YouTube we might be tempted to ponder the applicability of Shelley’s tale to media culture at the beginning of the twenty-first century. Mark Poster makes evident such applicability when he uses the term “High-tech Frankenstein” to describe the construction of posthuman identities in cyberspace: this High-tech Frankenstein, he tells us, is “a figure for

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the relation of humans online to machines” and “functions as an opening to
globalized, machinic post-humanity”. We can also suggest that there is a
wonderful correlation between the monster’s fragmented body and cyberspace
itself as a fragmented medium, a space defined by its non-linearity and also by its
“monstrous” otherness to film and literature. In this sense, the Edison film is
imbued with new meaning when screened online. Some would counter that
watching such a text in this form strips away the magic, wonder, and sense of
inventiveness that surrounded this early venture into filmmaking. Yet we can
also argue that the Frankenstein tale has here been re-technologised for a digital
era – a significant claim given that re-technologising the tale for a new era (and a
new medium) is exactly what the Edison film itself achieved in 1910, bringing
cinematic “life” to Shelley’s narrative in an act of techno-production as
spectacular as Victor Frankenstein’s own.

The appearance in cyberspace of this earliest filmic adaptation of Shelley’s novel
also attests to the *longevity* of the Frankenstein tale – to its current cultural
relevance and to its continuing ability to incite cultural interest. As many
theorists have recognised, Shelley’s writing had a certain preemptive quality: her
novel demonstrates both an awareness of the future (she writes of scientific
endeavours and possibilities, of fantastic shifts in the meaning and experience of
human being and human embodiment) and a sense of science-fictionality that has
allowed her work to resonate into her own future (the twentieth and twenty-first
centuries). Adopting an archaic term used by Shelley herself, Jay Clayton offers

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a discussion of Frankenstein’s “futurity”, which he opens with the following question:

In an age of reproductive technology, cloning, artificial intelligence, and robots, has *Frankenstein*’s futurity come to pass? Are we living in the time Mary Shelley foreshadowed?3

To Clayton’s question we can add another: would the “futurity” that Shelley envisioned have included either the filming of her tale or the reproduction of such a text in cyberspace? Probably not, although here are two striking acts of techno-production that mirror the processes at the heart of the Frankenstein tale. I am reminded of this as I watch the Edison film on YouTube; I am also reminded of the related notion that the tale’s longevity is linked to the reproductive powers of visual media – to its constant screening and re-screening, framing and re-framing in popular culture.

This thesis is concerned with the *filmic* reworking of Frankenstein rather than with the tale’s applicability to the study of new media or its re-screening on video sharing websites like YouTube. Nevertheless, this viewing of the Frankenstein tale – not only in its earliest filmic form, but also as part of a new media experience – offers a suitable starting point for a study that frames itself with the phrase “Frankenstein in the digital age”. Viewers of the Edison film on YouTube might be quietly reminded that Mary Shelley’s monster is a figure well suited to the digital age: for he/she/it is posthuman, postorganic, constructed, fragmented, a technological other, a body removed from nature. As this thesis

will suggest, these aspects of Shelley’s monster have allowed him/her/it, over the years, to embody the strangeness of cinematic presence; but framed here by the mechanisms of cyberspace, this posthuman figure also seems startlingly emblematic of the postcinematic aspects of today’s media culture – of the threat to cinema posed not only by new modes of media viewing but also by digital effects and the overall digitising of film.

Shelley’s monster is also a figure constantly re-imag(in)ed in media culture, a figure taken apart and rewritten (“pieced together”, we might say) to confront new cultural worlds and new cultural problems. In this particular instance – the re-screening of the Edison film on YouTube – there is less a “rewriting” of the monster than a transference of an earlier image of him/it; the tale is “retold” in a new medium but in an old form. Other recent texts more actively rework the tale. Let us turn from this media experience to another. Some time before beginning this research project, I was watching the anime *Ghost in the Shell* on DVD: a spectacular film created by Mamoru Oshii in 1995, and also a text that interweaves Shelley’s tale with a cyberpunk ethos and blends both with a characteristically “anime” attitude towards technology, subjectivity, and (post)embodiment. I was entranced by this film’s dark depiction of a postorganic world; by its appropriation, re-membering, and remembering of the Frankenstein tale; by its new vision of a constructed body and also by its evocation of questions that were explored two hundred years ago by Shelley. Where does the soul reside? What does it mean to “be” a body? What is the artificial body’s relation to the organic world? I was also fascinated by the way these questions seemed to resonate with the processes of digital animation that created the film.
Edison’s *Frankenstein* and Oshii’s *Ghost in the Shell* speak strangely to one another. They are nearly a century apart in context: the former appearing at the beginning of the 1900s when cinema was in its infancy, and the latter at the close of the century in a period (and a medium) that can be described as postcinematic. If I were to assess these two texts with the hindsight offered by the process of researching and writing this thesis, I would suggest that what they share is an oscillation between visibility and invisibility, presence and absence. Both films make visible Shelley’s monster: they project him/her/it onto a screen, they offer enduring images of a textual body, a literary creation. Significantly, they both feature spectacular creation scenes that “give birth” to the “monster” before our eyes. Yet both films also allow their monsters to vanish. In Edison’s *Frankenstein*, the monster loses first his body and then his image, becoming a reflection in a mirror that dissolves into the reflection of his creator, Victor Frankenstein; in *Ghost in the Shell*, digital “monster” Kusanagi falls backwards and vanishes from the screen, a moment of vulnerability, of elusive and illusive embodiment, that becomes in this iconic film a fantastic addition to the scene of creation. This thesis attempts to explain what such making visible – and then making invisible – of the monster might mean.

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4 As I will discuss in my analysis of this film in Chapter Two, it is convenient to refer to this text as “Edison’s Frankenstein” because of the link between the film and Edison as a historical figure; however, the film was written and directed by J. Searle Dawley, and received no creative input from the inventor himself.
Project aims

The aim of this project is to track the retelling of Frankenstein in popular cinema of the digital age. I consider both the evolution and the endurance of the tale: I address the reshaping of this tale to confront new contextual circumstances, but I also identify those aspects of the tale that have remained constant and that seem well-suited to the cultural and technological climate of the late twentieth and early twenty-first centuries. In this sense, the object of analysis for this thesis is the “monstrous body” of Frankenstein popular culture itself. In his analysis of the ongoing adaptation of another great Gothic text – Bram Stoker’s Dracula – James Holte refers to the “shape shifting” power of Dracula, which matches the continual transformation of the text as it is reworked in popular culture. In a similar manner, we might speak of the “fragmented” body of the Frankensteinian monster and its link to the fragmentation involved in the cultural reworking of the tale: each adaptation in popular culture involves a process of “sewing together” disjointed images, characters, and concepts from the novel itself, so that in the early twenty-first century we can describe “Frankenstein” as a mega-text, a monstrous fragmented body. While Frankenstein has of course been adapted and retold in numerous popular texts –

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5 Throughout this thesis, the name “Frankenstein” will be used to refer not to any specific text but to the tale in its mythic form. I will use the italicised Frankenstein when referring either to Shelley’s novel or to specific filmic adaptations of this text.
6 James Craig Holte, Dracula in the Dark: the Dracula Film Adaptations (Westport: Greenwood Publishing Group, 1997), xiii.
7 In a slightly different manner, Damien Broderick uses this term to describe the science fiction genre, which consists of an “extensive generic mega-text built up over fifty years, even a century, of mutually imbricated sf texts”. See Damien Broderick, Reading By Starlight: Postmodern Science Fiction (London and New York: Routledge, 1995), 59.
from comics to television shows, novels to fan fiction – I limit my discussion to cinematic texts, for reasons that will become apparent below.

The term “digital age” is used in this project to suggest a set of intertwined cultural concerns, theoretical understandings, and technological developments, rather than to indicate a definite time period. I use the term in a similar manner to Elaine Graham, who, in her discussion of popular representations of the posthuman, refers to a “biotechnological and digital age”. In the twenty-first century, Graham argues, “the implications of digital, genetic, cybernetic and biomedical technologies is precisely what (and who) will define authoritative notions of normative, exemplary, desirable humanity”. This is a period defined by its own set of critical understandings about embodiment, technology, subjectivity, organicism, and “life”. Informed by developments in biotechnology, science, and medicine as well as in digital media, the digital age emerges as a period in which life can be artificial, embodiment can be virtual, the organic and the technological permeate and penetrate one another. This is a period, furthermore, in which the Frankenstein myth is more relevant than ever; but it is also a period in which this myth is vigorously reworked.

These developments in biotechnology, medicine, science, and media – and the shifting understandings of body, technology, and “life” that they initiate – are paralleled and contributed to by developments in the digital imaging of human presence on screen. Most importantly for this study, then, the “digital age” is a

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9 Ibid., 11.
period defined by advances in filmmaking – by the rise of digital effects and the emergence of digital animation. Throughout the course of my research, I have found that the problems confronted by the figure of the Frankensteinian monster – problems relating to mechanical reproduction, the suspension of mortality, the presence of a “soul”, the negotiation with organic origins, and the irresolvable tension between “nature” and “technology” – resonate with the processes involved in both digital animation and live-action filmmaking in the digital age. Digitally animated bodies in particular are theoretically and culturally received as posthuman, as postorganic, as monstrous and/or mechanical; and when these bodies appear in fantastic and/or science fiction films (from effects-driven Hollywood blockbusters to dark and confronting anime like *Ghost in the Shell*) this link to the Frankenstein myth is often played upon through strategies of metaphor, intertextuality, and self-reflexivity. In this project, I will therefore consider the figure of the Frankensteinian monster not just as a fantastic being imagined by Shelley in the 1800s or as a cinematic figure brought to life by early filmmakers, but as a mythic figure for the digital age.

Underpinning this investigation will be a broader exploration of the strength and strangeness of the relationship between Frankenstein and film. Here is a tale that has been cinematically adapted many times, a process that contributes to the astounding cultural resonance of Shelley’s now two-hundred-year-old text. These intertwined concerns – the tale’s *durability* and its *screenability* – are described in varying terms by analysts of both the novel and its filmic adaptations. George Levine and U.C. Knoepflmacher, for instance, write of the “durability and power of the novel”, adding that “Frankenstein continues to be
read, the book’s sales periodically increased by its latest popular manifestation in film or television”. Yet the screening of the tale does not merely increase the popularity of the novel – in the sense that, perhaps, filmic adaptations of J.K. Rowling’s *Harry Potter* series have done in recent years – but *eclipses* it. As Albert Lavalley points out:

Most of us first became acquainted with Frankenstein and his terrifying creation not through the pages of Mary Shelley’s 1818 novel but through our childhood Saturday afternoons at the movies or leisurely sessions before the family television set. By the time we read the novel the images from various films are so firmly imprinted on our minds that it is almost impossible not to filter the events and images of the book through the more familiar ones of the films.

At the same time, cinema itself has always been a sort of Frankensteinian experiment: a means of breathing life into stillness, of constructing and re-constructing human presence, of stitching together fragmented moments to create a semblance of wholeness. In the digital age, this experiment grows and changes: new modes of production are continually being trialled, allowing us to re-create and re-present human presence in new and often bizarre ways. In its filmic form, the figure of the Frankensteinian monster has always confronted the uncanny, spectacular, mechanical or organic-mechanical nature of filmic presence; and across the history of cinema this figure has been remoulded, a transformation that responds not only to changes in the social/political/cultural world around us but also to technological developments that alter the way we, as

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audiences, receive and engage with media texts. This thesis will map such a transformation, bringing the various filmic “machines” and animated “monsters” that function as reworkings of the Frankensteinian “Creature” into dialogue with the shifts in filmic technology they fantastically represent.

This thesis recognises that much has already been written about the relationship between Frankenstein and film. It is early cinema, however, and particularly the films of James Whale, that figure most prominently in these investigations. Scholarship in this area is somewhat limited, to the extent that there is a sort of “canon” of Frankenstein films (which includes the 1910 Edison Studios film and the James Whale films *Frankenstein* and *Bride of Frankenstein*). While acknowledging the existent academic work on these texts, I will contribute to this area of study by moving beyond early cinema and journeying into a world of digital and animated monsters. In this sense, the thesis offers a re-examination of the relationship between Frankenstein and film.

Alongside its interest in Frankenstein, this thesis also recognises the importance of the “techno-body” as a mythic figure, a metaphor, and an object of both fantasy and theory. We find such a figure at work in the writing of cultural theorists such as Donna Haraway and N. Katherine Hayles; we also find glimmers of Frankenstein in the work of these theorists, who map a posthuman condition and who mobilise the allegorical power of science fiction and fantasy in a theoretical space. This thesis has been written at a time when theoretical interest in the posthuman is high – and also at a time when we witness the collapse of the posthuman and the *postcinematic*. Today, posthuman bodies are
often represented in popular culture using postcinematic technologies; these bodies are the monsters, the aliens, the fantastic others of our popular texts, and they express anxieties not only over changing definitions of human presence but also over changes and threats to cinematic modes of representation. This territory has been explored by many theorists, particularly those who write about science fiction cinema, including Vivian Sobchack, Garrett Stewart, Scott Bukatman, Charles Tryon, and J.P. Telotte. This thesis is located in dialogue with the writing of such theorists, and acknowledges the importance of the techno-body as a figure who might confront the cinematic – and the postcinematic – technologising of organic presence.

**Locating Frankenstein: on genre and choice of texts**

This thesis acknowledges and mobilises the mythic quality of the Frankenstein tale, recognising that this tale originates in a novel written in 1818 by Mary Shelley but, today, is not confined (or even, some would argue, clearly linked) to Shelley’s narrative. Other theorists, particularly those who discuss filmic adaptations of Shelley’s novel, refer to this “mythic” quality of the tale. Lavalley reminds us that Frankenstein:

> has always been viewed by the playwright or the screenwriter as a mythic text, an occasion for the writer to let loose his own fantasies or to stage what he feels is dramatically effective, to remain true to the central core of the myth, and often to let it interact with fears and tensions of the current time.\(^{12}\)

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\(^{12}\) Lavalley, 245.
William Nestrick writes in a similar manner about various avant garde adaptations of Frankenstein in the 1960s and 1970s, films that “reanimate the myth of Frankenstein” for a new context.\textsuperscript{13} He writes:

The importance of *Frankenstein* to film has always been more than the history of the film versions of the novel. Since the sixties, the most avant garde filmmakers have returned to the myth as homage, as illusion, as model for their own relationship to film.\textsuperscript{14}

Levine and Knoepflmacher also address the mythic quality of the tale and its images, which occupy a deep position in the cultural mindstream:

If popular culture has adapted [the tale], no part of culture can ignore it. Its key images and the central structure of the narrative itself enter both our private and culturally shared store of dream, fantasy, and myth.\textsuperscript{15}

Following in the footsteps of these theorists, we can consider “Frankenstein” as a loose tale separated from the original novel: it is a story about techno-genesis, about artificiality, about postorganic presence, a story about the monstrous and/or mechanical body, and it is constituted not only of Shelley’s writing but of images from various films that place themselves in dialogue with the novel. We might also remind ourselves that, in writing *Frankenstein*, Shelley herself was retelling an older tale. As its full title suggests, *Frankenstein* (or, “*The Modern Prometheus*”) draws its inspiration from the ancient Greek myth of the rebellious Titan, Prometheus, who stole the spark of life from the Gods and created

\textsuperscript{14} Ibid., 308.
\textsuperscript{15} Levine and Knoepflmacher, xiii.
humankind out of clay; a myth that would have been known to Shelley particularly in the form of its retelling by the Roman poet Ovid. Here, then, is a tale already buried under many retellings, one that articulates a cultural fascination with the act of techno-production in its oldest sense.

Nearly two hundred years later, this mythic tale is told and retold with renewed fervour in both fantastic and theoretical spaces. Thus, as already noted in this introduction, we can be aware of “Frankenstein” without having ever encountered Shelley’s novel. I am reminded here of a conversation I had with a student I was tutoring, many years before I began this project. She arrived at my house one day for her weekly session and glumly informed me that she “had to read some old novel called *Frankenstein*”. I was surprised that she had never heard of the novel. Mary Shelley? The monster, the mad scientist? Only when I described a scene from cinema – the monster coming to life in a shower of electricity, the scientist cackling “it’s alive!” – did a glimmer of recognition come into her eyes. Carl Freedman offers a similar anecdote:

I have taught *Frankenstein* more frequently than any other work of prose fiction, and I have encountered many students who were surprised to learn that the whole Frankenstein story is derived from a single literary text – not to mention a novel written in a florid style by a young Englishwoman in the early nineteenth century. They seemed to have vaguely assumed that ‘Frankenstein’ referred just to a vast collective or anonymous saga, expressed in films, television programs, comic books, and other such forums.¹⁶

For Freedman, this did not necessarily suggest an ignorance on the part of the students but was indicative of the mythic, extra-textual nature of the story itself:

the notion, in other words, that “Shelley’s work has entered our cultural bloodstream in a way that is true of the work of very few, if any, other canonical English authors”.17

In choosing texts for analysis in this project, I have been governed by an awareness of this mythic quality of the tale. In the spirit of Nestrick, I consider a number of films that “reanimate the myth” of Frankenstein for a new context. I refer to these films as “retellings” rather than “adaptations” of the tale, a choice that indicates my desire to move beyond the aforementioned “canon” of Frankenstein films. Caroline Joan Picart touches on the difference between “adaptations” and “retellings” in her analysis of filmic versions of Frankenstein, which she divides into two groups: those “that re-envisage the original (such as the Universal and Hammer series) within a horror genre” and those that “reimagine that narrative within a different genre, such as comedy or science fiction”.18 This thesis is generally concerned with the latter group of films, and particularly with science-fictional reworkings of the tale. I agree with Picart that discussions of Frankenstein in film need to address texts other than literal (horror) adaptations of Shelley’s novel. Consequently, this thesis will refer to films that play with the novel’s tropes, scenes, images, and themes but do not necessarily claim the status of “adaptation” – films that, in Frank Smooth’s words, “extend the myth outward a considerable distance”.19

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17 Freedman, 254.
In concurrence with Picart, I also propose that such texts are often more “active” than literal adaptations: that their engagement with Shelley’s tale is frequently more fruitful. Picart argues that literal adaptations of Frankenstein are “preset”\(^{20}\) by the structure of the original narrative, but that looser retellings outside the horror genre allow Shelley’s tale to be challenged and subverted. Citing the seminal science fiction films Blade Runner and the Alien saga as examples, Picart writes that in such texts:

Despite the persistence of traditional themes (the parthenogenetic birth; the scientist as father-mother), various transgressions, which had not been possible in traditional iterations of the Frankenstein myth, now become crucial to the unfolding of the narrative.\(^{21}\)

These science-fictional retellings show us how the Frankenstein “myth” might (like all good myths) be subverted and reworked to address concerns that were silenced in earlier versions of the tale. Films that play with the strict gender roles assigned to Shelley’s characters provide the simplest example of such subversion: and indeed, many of the texts analysed in this project are similar to the Alien films because they undertake a re-gendering of the Frankenstein tale, giving voice to female monsters and/or stripping the monstrous/mechanical body of its gender inscriptions.

Given the science-fictional nature of many of the films under scrutiny in this project, a deeper assessment of the relationship between Frankenstein and the science fiction genre is warranted at this stage. There are some assertions that

\(^{20}\) Picart, xii.
\(^{21}\) Ibid., xiii.
Shelley’s *Frankenstein* was the “first” science fiction novel; most famously, these come from Brian Aldiss in his book *Billion Year Spree: the History of Science Fiction*. Building on Aldiss, other theorists have taken up this claim. Carl Freedman, for instance, refers to Mary Shelley as the “founder of science fiction”, noting that Shelley had “never heard the term [science fiction], and she may well have had no conscious notion that she was inventing a new genre. But that is precisely what she did”. Other theorists recognise the influence that Shelley’s text has had on the development of the science fiction genre, and/or the science-fictional aspects of Shelley’s writing: Darko Suvin, for instance, reads *Frankenstein* as a “hybrid of horror tale and philosophical SF” and analyses the novel in detail for its contribution to the science fiction genre. This thesis acknowledges the debt owed to Shelley’s text by today’s science fiction writers and filmmakers; it also acknowledges, however, that such generic placement of Shelley’s text is problematic. Elaine Graham identifies a common argument that Shelley’s *Frankenstein* “must be read more as a work of occult or Gothic literature than as an early example of science fiction shaped with any degree of credibility by the scientific practices of its day”. Other theorists, however, contend that the novel disrupts the general rules of Gothic literature with its depiction of an act *inspired* by science (if not literally scientific in nature). In this vein, Brian Stableford argues that:

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23 Freedman, 253.
24 Ibid., 254.
26 Graham, 74.
Victor Frankenstein might be regarded as a distant literary cousin of the diabolically-inspired (or seemingly diabolical) villains of the Classic Gothic novels, but his personality and his ambitions are very different. Although he takes some early inspiration from occult writings of a kind which the inquisitorially-minded might regard as the devil’s work, he undertakes a decisive change of direction when he decides that it is modern science, not ancient magic, that will open the portals of wisdom for scholars of his and future generations.  

Freedman pinpoints a similar shift in Victor’s interests – from the alchemical and the occult to the scientific – and argues that from this moment “the text explicitly operates under the science-fictional protocols that are stubbornly alternative to both known reality and unknowable impossibility”. When Victor animates his monster, then, he employs technologies that are both scientific and imaginary, both possible and impossible, thus preemtping, engaging, or initiating (depending on one’s perspective) a science-fictional mode of storytelling.

It is not my intention in this project to constrain myself within the generic boundaries of science fiction, or to enter into any detailed discussion of “genre” itself. That the texts considered here are mostly science-fictional in nature shows my interest in the process of reworking Frankenstein outside the horror

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28 Freedman, 256.
29 It is important to acknowledge, however, that such “technologies” are notoriously hazy and are never specifically named by Shelley; instead, she shrouds Victor “scientific” act in a sense of secrecy and semi-religious mystique.  
30 For an outstanding discussion of whether we can or should refer to “science fiction” as a “genre” see Damien Broderick, “SF as a Mode”, Meridian 11, 2 (1992), 18-30. A summary of this ongoing theoretical debate is also provided by Annette Kuhn, “Introduction: Cultural Theory and Science Fiction Cinema”, in Alien Zone: Cultural Theory and Contemporary Science Fiction Cinema, ed. Annette Kuhn (London and New York: Verso, 1990), 1-12. For other discussions of genre see Barry Keith Grant, Film Genre Reader (Austin: University of Texas Press, 1990), and Stephen Neale, Genre and Hollywood (London: Routledge, 2000).
genre as well as my support for the argument that Shelley’s novel is *primarily* (if not exclusively) a science-fictional – rather than a horror or Gothic – text.

Neither is it my intention, however, to claim that Shelley’s novel was the “first” work of science fiction. Of all such discussions, I find Adam Roberts’ words on the subject to be most helpful. Roberts describes *Frankenstein* as “the originary scientific fable about the power of the scientist to create, matched with the unforeseeable nature of the consequences of that creation”; 31 thus, he tells us, Shelley’s novel contains “SF in nascent form”32 even if it was not the “first” science fiction text.

Furthermore – and as I will discuss in chapters ahead – popular culture of the twentieth and early twenty-first centuries has seen to a *science-fictionalising* of Shelley’s tale. From Fritz Lang’s early science fiction film *Metropolis* to the anime *Ghost in the Shell* and concurrent Hollywood sci-fi films like *AI: Artificial Intelligence* and *The Matrix*, we find that the Frankenstein tale has been rewritten as a science fiction story about mechanical and/or digitised bodies. This, as theorists such as Clayton33 and Roberts34 have pointed out, is due to the influence of seminal science fiction writers like E.T.A Hoffman and Isaac Asimov on the project of retelling Shelley’s *Frankenstein*. Thus, we can justifiably study Frankenstein’s filmic “futurity” by focusing upon robots, cyborgs, replicants, and

32 Ibid., 55.
33 Clayton (85) argues that Frankenstein’s legacy has been “crossed” with that of science fiction writer Asimov, giving rise to a series of mechanical monsters. This will be discussed further in Chapter Two.
34 Roberts draws a comparison between Shelley’s *Frankenstein* and E.T.A. Hoffman’s story about automata, “The Sandman”. Again, I will discuss this further in Chapter Two. See Adam Roberts, *The History of Science Fiction* (Hampshire and New York: Palgrave Macmillan, 2006), 93.
avatars, claiming that today’s Frankenstein films are less likely to be horror texts than science-fictional tales involving mechanical or otherwise artificial figures. At the same time, we can identify horror and Gothic tendencies in many of today’s science fiction texts. As Stableford notes, “[a] great deal of the fiction nowadays categorized as science fiction is horrific, and much of it is born of a fear or even a deep-seated hatred of the scientific world-view”,35 thus its resonance with Shelley’s Frankenstein. We can refer back to Aldiss here who states that “[s]cience fiction was born from the Gothic mode, is hardly free of it now. Nor is the distance between the two modes great”.36

Informed by this generic intersection between Frankenstein, the Gothic, and science fiction, this thesis frequently draws upon the work of those who write about science fiction film (as well as those who write about Frankenstein). I have found such theoretical work beneficial because it often brings the technologies of cinema into the analytical equation. Scholarship of science fiction cinema currently seems to revolve around the understanding that science fiction films participate in “the articulation of meta-cinematic reflections on the nature and limitations of the film medium”, as Charles Tryon puts it.37 Discussing such self-reflexivity, Roberts refers to the “metaphoric”38 aspect of depictions of technology in science fiction cinema; using the icon of the spaceship as an example, he argues:

35 Stableford, 48.
36 Aldiss, 18.
37 Charles Tryon, “Virtual Cities and Stolen Memories: Temporality and the Digital in Dark City”, Film Criticism 28, 2 (2004), 42.
38 Roberts, Science Fiction, 147.
The technology we fans admire so completely, the space-ships that we consider so cool and which are deployed on the screen before us in so exciting a fashion, are nothing more than the external trapping of the technology that we are really admiring, the technology of cinema itself.\textsuperscript{39}

In particular, of course, we are “admiring” the special effects technologies – these days often digital and thus other to the cinematic – that produce these fantastic images. This has led analysts such as Barry Keith Grant to state that “the genre’s reliance on special effects is itself an enactment of science fiction’s thematic concern with technology”.\textsuperscript{40}

Throughout this project, I will place my readings of various Frankenstein films within this analytical framework. Cinematic adaptations of Frankenstein in all genres contain depictions of technology that function as “metaphorically” as Roberts’ “space-ship”: when such films depict the “instruments of life”\textsuperscript{41} that animate the monster’s body, they cannot avoid an accompanying depiction of the cinematic apparatus itself. What we find in adaptations of Frankenstein, furthermore, is that the body is at the centre of this metaphoric play. Shelley’s tale is a tale about (techno-)embodiment in its most fantastic, monstrous, and problematic sense; and the various Frankensteinian monsters that have appeared on our screens across the history of cinema not only stand in for the filmic apparatus but confront cinema’s technologising, decorporealising, and

\textsuperscript{39} Roberts, Science Fiction, 153.
\textsuperscript{40} Barry Keith Grant, “‘Sensuous Elaboration’: Reason and the Visible in the Science-Fiction Film”, in Alien Zone 2: The Spaces of Science Fiction Cinema, ed. Annette Kuhn (London and New York: Verso, 1999), 21.
\textsuperscript{41} These are the words that Victor uses to describe the nebulous (and otherwise unnamed) life-giving technologies he has invented. Mary Shelley, Frankenstein, or, The Modern Prometheus (Hertfordshire: Wordsworth Editions, 1993), 45.
fragmenting of organic presence. These are the “filmic machines” and “animated monsters” that this thesis takes as its subject.

**An outline of the chapters and a trajectory (of sorts)**

This thesis consists of five chapters. My first chapter functions as an introductory investigation of Frankenstein and will lay the theoretical groundwork for the analyses that follow. Here, I introduce Mary Shelley’s novel as a text that has inspired much of the research involved in this project. I consider the metaphoric link between “text” and “body” that defines Shelley’s novel: a story about techno-genesis and creativity that can be read as a fantastic depiction of writing a novel. This text/body link has driven many recent retellings of Shelley’s *Frankenstein*, including two non-filmic works that are discussed here in conjunction with the original text: Victor Kelleher’s novel *Born of the Sea* and Shelley Jackson’s hypertext *Patchwork Girl*. This chapter also offers a theorising of the monster’s body: a fragmented body onto which are projected the tensions between nature and technology; a postorganic body forever in negotiation with its lost origins in the organic world. These aspects of Shelley’s Creature, I argue, allow him/her/it to operate in dialogue with the techno-bodies – both popular and theoretical – that inhabit our late twentieth/early twenty-first century world. This chapter thus maps the theoretical resonance of the Frankenstein tale; in particular, I compare Shelley’s monster to the theoretically delineated “cyborg” as imagined by Donna Haraway and others.
My second chapter assesses the relationship between Frankenstein and cinema. This relationship, as many theorists have recognised, is built on fantasy, metaphor, and an inside/outside play: filmic versions of the Frankenstein tale are defined by a wonderful self-reflexivity, because filmmaking itself is a “Frankensteinian exercise in artificial reproduction”, as James Heffernan reminds us.42 This chapter unpacks the notion of artificial reproduction as a bridge between cinema and the Frankenstein tale, drawing upon the work of Walter Benjamin and his discussion of cinema as “mechanical reproduction”. My analyses begin with the 1910 film Frankenstein. Depictions of the monster in this early film, especially in the moment of his/its alchemical creation, express all that is fantastic, supernatural, and strange about cinematic presence. Later adaptations would turn the creation scene into a moment of electric spectacle. That Shelley wrote of a certain technologising of the “life force” in Frankenstein makes her work preemptive of cinema and resonant with cinema’s own production of electric “life”; this brings a certain self-reflexivity to the creation scenes of James Whale’s Frankenstein and Fritz Lang’s Metropolis. We can also consider Kenneth Branagh’s 1994 adaptation, Mary Shelley’s Frankenstein, in this context, although Branagh’s obsession with both authenticity and organicism brings a new concern to the tale in its filmic form and is, we might suggest, symptomatic of an age dominated by digital spectacle.

Chapter Three investigates the way Frankenstein has been reshaped in cinema of the 1990s and post-millennium. This chapter moves beyond both the literal

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adaptations discussed in the previous chapter and the “myth of animation”\textsuperscript{43} that links them to cinema: in the digital age, I contend, new concerns have eclipsed cinema’s powers to animate and/or galvanise the body. We find that the monster is rewritten in this period as a simulacrum, a replicant, a cyborg, an artificial being. The emphasis in these new retellings also frequently shifts from the constructed and fragmented \textit{body} to the construction and fragmentation of the \textit{subject} in a hyper-mediated world. We can read the science fiction films \textit{Blade Runner} and \textit{Strange Days} in this regard: they are loose retellings of Frankenstein that dwell upon new themes of mediation, spectatorship, and artificial memory. The period in question is also marked by developments in both biotechnology and digital media, which contribute to a crucial shift in the cultural conception of “life” itself. This shift informs the retelling of Frankenstein in such texts as \textit{Jurassic Park, The Fifth Element,} and \textit{The Matrix.} The chapter concludes with a discussion of the incorporation of digital effects into the Frankenstein myth and the related emergence of “digital monsters”: figures who embody the otherness of postcinematic technologies.

In Chapters Four and Five, I shift my attention from “filmic machines” to “animated monsters”. Chapter Four addresses new modes of digital animation and the related attempt to digitally reconstruct the organic body (and landscape). Drawing upon the theoretical work of N. Katherine Hayles, I use the condition known as “posthumanism” to forge a link between these new modes of digital animation (which frequently usurp human presence) and the Frankenstein tale (which revolves around a posthuman body). In today’s screen culture, I argue,

\textsuperscript{43} Nestrick, 292.
the posthuman and the postcinematic collapse, and both find (apocalyptic) expression in science-fictional and fantastic tales that engage the Frankenstein myth. At the same time, new possibilities in the digital imaging of human presence – from the replacement of actors with computer-generated imagery to the quest for photorealism in digital animation – themselves evoke the Frankenstein tale and consequently make interesting contributions to the evolving Frankenstein myth.

Chapter Five moves into the dark and fantastic world of Japanese animation or “anime”. As theorists such as Susan Napier have observed, the body in anime is transformative and magical, fragmented and broken, transcended and posthuman, monstrous and mechanical. These “strange bodies” are imprinted with the otherness of the medium that contains them: a medium that has always occupied the position of other to the cinematic and that is, increasingly, postcinematic. A space is opened up here for fantastic new retellings of Frankenstein that address animation as a mode of production (itself a means of “breathing life into dead matter”) while reworking the tale in response to notions of embodiment, technology, and subjectivity that are deeply embedded in Japanese culture. I offer the film Akira as an example of an apocalyptic rewriting of Shelley’s text (and of the monstrous/mechanical body it contains).

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Chapters Four and Five also present detailed analyses of two figures that I read as Frankensteinian monsters for the digital age: the motion-capture character/actress Aki Ross from the photorealistic digital feature *Final Fantasy: The Spirits Within*, and the animated cyborg Kusanagi from Mamoru Oshii’s *Ghost in the Shell*. As female characters defined by their beauty rather than their monstrosity, these figures might seem far removed from Shelley’s monster with his “watery eyes... his shriveled complexion and straight black lips”. Like their predecessor, however, Aki and Kusanagi are mechanical bodies defined by problems of (in)visibility, spectral presence, and an uneasy negotiation with “nature”. Imbued with artificial life, their posthuman bodies are also emblematic of a digital culture that reconstructs the organic and de-organicises the screen. My intention is that this thesis should culminate in a dialogue between these two bodies and the mythic figure that the Frankensteinian monster has become.

Each of these chapters focuses upon a selection of films that offer significant retellings of Frankenstein. It is not my intention that these analyses should constitute an exhaustive or encyclopaedic assessment of filmic adaptations of Shelley’s tale. Instead, I use the individual films as examples and have found it more beneficial to read their dialogue with Frankenstein in detail than to offer a superficial exploration of a larger number of texts. Certain omissions, however, should be acknowledged and explained. For the most part, my chosen texts are films of the 1980s or later. I use a handful of earlier texts to assess the

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46 As we shall see, Kusanagi is a rather androgynous and de-gendered character, not typically beautiful; nevertheless, her outward appearance suggests perfection rather than monstrosity.
47 Shelley, 45.
relationship between Frankenstein and cinema: these include the Edison film, James Whale’s *Frankenstein*, and Fritz Lang’s *Metropolis*. I do not refer to the Hammer films of the 1950s and 1960s – *The Curse of Frankenstein* and its sequels – which I feel are outside the scope of a project that focuses on Frankenstein in the *digital* age; for a similar reason, I have not examined the popular unpackings of the Frankenstein myth that appear in films of the 1970s such as *The Rocky Horror Picture Show* and *Young Frankenstein*. Notable retellings of the 1990s that are neglected as part of an effort to give form and boundaries to a potentially “monstrous” project include Tim Burton’s Gothic fantasy *Edward Scissorhands*, which represents a whimsical and sometimes comedic variation on the tale but does not, I feel, address the concerns of the “digital age”. I have avoided any detailed discussion of *AI: Artificial Intelligence*, a recent retelling of Frankenstein that has already been analysed in great detail by Williams and Clayton. Similarly, I have attempted to limit my discussion of *Blade Runner* – which I do analyse briefly in Chapter Three – because of the density of academic scholarship connected to this text. Another

48 Like many of Burton’s films, *Edward Scissorhands* is set in a pastel suburban fantasy-scape; while the satirical elements of Burton’s film are undeniable, the film makes a notable contrast with contemporary science fiction texts like *Blade Runner* in which a similar story is relocated within a high-tech media-scape. In this way, *Blade Runner* becomes the more important text for this study.


50 Clayton, 94-98.

51 *Blade Runner* has been analysed in detail by too many theorists to list here. Vivian Sobchack and Scott Bukatman both include thorough analyses of this film in their broader investigations of the science fiction genre: see Vivian Sobchack, *Screening Space: The American Science Fiction Film* (New York: Ungar, 1988), 223-299; and Scott Bukatman, *Terminal Identity: The Virtual Subject in Postmodern Science Fiction* (Durham: Duke University Press, 1993), 130-136 and throughout. Giuliana Bruno offers a detailed reading of the film in her essay “Ramble City: Postmodernism and *Blade Runner*”, while Doel and Clarke present
notable omission to this study is the 2008 animation *Igor*, a comedic retelling and gentle subverting of Frankenstein which came to my attention in the latter stages of writing this thesis and an analysis of which, I felt, would contribute little to my overall argument.

The structure of this thesis reflects my desire to tell a story: one that begins with Shelley’s novel and ends with its retelling in digital culture. It does not, however, reflect any desire to create a smooth or continuous history of film, or to suggest that literature, film, and animation can – or should – be seen in the same terms. I acknowledge that this project, which takes as its subject the (broken) communication between media, is built upon a number of crucial disparities. Foremost among them is the disparity between written and visual texts – that crucial tension between word and image, novel and film. This disparity has recently entered into theoretical discussions of science fiction cinema. Annette Kuhn, for instance, writes of the need to consider science fiction film in its own terms and not as an extension of science fiction literature.\textsuperscript{52} Similarly, Brooks Landon discusses the disparity between science-fictional works of literature and the history of science fiction film, arguing that:

\begin{quote}
\end{quote}
while science-fiction writing has always been a narrative medium, science-fiction film actually began as a non-narrative one, its influences and traditions being quite different from those of science-fiction writing. The two media have developed along widely divergent trajectories.\(^5^3\)

For Landon, current science fiction film has more in common with the spectacle and visual magic of early cinema than it might do with science fiction novels (such as *Frankenstein*). Accordingly, Landon recognises a need:

> to rethink science-fiction film in film-specific terms, opting variously for epistemologically based or image-based criteria instead of the source-based or narrative-based assumptions that have so far shaped most discussions of science-fiction film.\(^5^4\)

This thesis does not cohere with such a suggestion because it traces the thematic and story-based echoes and murmurs between Frankenstein (as both a novel and a mythic tale) and certain films of the digital age. Consequently, the tension between film and literature – and the problems initiated by such a tension – pervades this thesis.

The disparity between film and literature becomes particularly noticeable and especially problematic when we are considering filmic adaptations of great literary works. Once again, this has special relevance for the science fiction genre: for, while we might speak of the *visual* and image-based quality of the film medium and trace the history of current science fiction film back to early experiments in cinematic spectacle such as George Méliès’ *Le Voyage Dans La*

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\(^{54}\) Ibid.
Lune, we must also acknowledge that many science fiction films of the last thirty years are adaptations of famous novels or stories by such varied writers as H.G. Wells, Jules Verne, Philip K. Dick, and William Gibson. As Landon observes:

any rigorous attempt to develop a history, theory, or aesthetic of science fiction film must early on confront the special questions posed by the adaptation into film of written SF. That nearly every study of SF film almost routinely assumes adaptations to be intellectually inferior to the written narratives preceding them suggests one aspect of this issue, while the fact that many of the SF films generally regarded as ‘classics’ are themselves adaptations suggests another.\(^{55}\)

Landon goes on to discuss the problem of authorship in Blade Runner, where collaborating screenwriters each contributed to a script that was (somewhat famously) redrafted many times. The image of Frankenstein’s monster, fragmented and sewn-together, might be metaphorically deployed here. Likewise, the relationship between written text and filmic adaptation can be seen in terms of the adaptation as a problematic (or monstrous) “child”, difficult to love; it is the same relationship that Shelley writes of in her novel. Ultimately, the problems of originality and authenticity that Shelley’s narrative negotiates are also the problems faced by any author (or filmmaker) who attempts to rewrite and “adapt” the novel. Thus James Heffernan asks us to consider if filmic versions of Frankenstein can ever “be anything more than vulgarizations or travesties of the original?”.\(^{56}\)

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\(^{56}\) Heffernan, 136.
If Frankenstein is a tale most famous in both its written and filmic forms, then the disparity between film and literature – as well as those problems associated with the very process of “adaptation” – cannot be avoided in any real assessment of the text. Indeed, it has seemed more appropriate, to me, to embrace this disparity as a meaningful, if unavoidable, aspect of this project. After all, Frankenstein is a story about fragmentation, about the very disparity between body parts and the jarring mis-relationship between constructed body and natural world. We can evoke the figure of the Frankensteinian monster as a metaphor for the troubled relationship between writing and film, a body onto which the fantastic tensions between word and image can be projected.

The second major disparity that this thesis incorporates is that between film, in its traditional, photographic sense, and digital animation. It should therefore also be acknowledged that there has been much theoretical murmuring in recent times about the need to consider digital media as distinct from (and not as an extension of) cinema or photography. Sean Cubitt writes of a perceived need to “define the digital in terms of its difference from the photomechanical media”, noting however that this can be a problematic approach because it “rests implicitly – and sometimes explicitly – on a conceptualisation of the mechanical photograph as normative, and the digital as a deviation from that norm”.\(^{57}\) This conception, he tells us, needs to be overturned “if digital criticism is to come of age”.\(^{58}\) Interestingly, N. Katherine Hayles addresses similar concerns in her reading of Shelley Jackson’s hypertext Patchwork Girl, a digital retelling of Frankenstein


\(^{58}\) Ibid.
that will be referred to in Chapter One of this thesis. Hayles discusses the need for “medium-specific analysis” in an age of digital media and electronic writing, and calls for a shift “from the language of ‘text’ to a more precise vocabulary of screen and page, digital program and analogue interface, code and ink, mutable image and durably inscribed mark, texton and scripton, computer and book”.59

While this project does not venture far into the realm of electronic literature, it does bring novels into dialogue with films, digital animation into dialogue with live-action cinema, and refers to various other media texts (including television shows and hypertexts like Patchwork Girl itself) along the way; thus “medium-specific analysis”, the need to consider each medium in its own terms, and the related need to avoid collapsing media into one another, has been a concern throughout the research and writing process. Overall, however, I adopt the perspective that what we might think of as “cinema” is not limited to pure, traditional, photographic modes of filmmaking; it can potentially include new digital modes of production and is expanded and enriched – rather than threatened – by these new modes.60 Thus I use the term “cinema” to refer to live-action film, animation, and digital filmmaking. I also acknowledge that the theoretical discussion of media specificity is ongoing and unresolved in an age

60 Gene Youngblood tells us that cinema “is the art of organizing a stream of audiovisual events in time. It is an event-stream, like music. There are at least four media through which we can practice cinema – film, video, holography and structured digital code – just as there are many instruments through which we can practice music”. Gene Youngblood, “Cinema and the Code”, in Future Cinema: The Cinematic Imaginary After Film, eds. Jeffrey Shaw and Peter Weibel (Cambridge, MA and London: MIT Press, 2003), 156.
where texts of different media are never perceived or received in isolation but meet each other in the wonderful mess that is called media culture; thus Hayles, in calling for medium-specific analysis, notes that this does not mean “media should be considered in isolation from one another”.61

This approach is well-suited to Frankenstein, as it would be to any great literary work that has been repeatedly adapted in popular culture and that consequently poses a challenge to the very concept of media specificity. Ultimately, Frankenstein is a narrative that has been retold in many technological spaces: from early cinema to the science fiction blockbusters of the 1980s and beyond, from Shelley’s original novel to novels of the postmodern and postfeminist era, from writing to hypertext to anime. The Frankenstein “mega-text”, therefore, is spread across many different modes of production; it is by no means a seamless or unproblematic textual “body”. These shifts in medium, as we shall see within, are at least partly responsible for the tale’s endurance and for its evolution – for the remarkable transformation that the Frankenstein myth has undergone. With this in mind, let us begin the analytical journey and turn to Mary Shelley’s *Frankenstein*, a literary work that has had a complicated and compelling relationship with cinema and whose cultural import resonates into the digital age.

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61 Hayles, “Flickering Connectivities”, [3].
CHAPTER ONE

MAPPING AN APPROACH TO FRANKENSTEIN

Figure 1: Elsa Lanchester as Mary Shelley in *Bride of Frankenstein*

Figure 2: Lanchester as the female monster in the same film
The origins of the story: introducing Mary Shelley

The 1935 James Whale film *Bride of Frankenstein* begins with a curious scene. In a peaceful parlour setting Mary Shelley, her husband Percy and the poet Byron are depicted discussing Shelley’s novel *Frankenstein*. The dialogue is playful. “What of my Mary?” Percy asks. “She is an angel”, replies Byron. Mary smiles sweetly. “You think so?” she says, with perhaps a glint of mischief in her eyes, and begins to tell them how “her” story (which concluded abruptly in Whale’s earlier film *Frankenstein*) ends. In this retelling of Frankenstein, Mary-the-writer is made visible; yet she is also made monstrous, her visibility complicated by the fact that she is played by Elsa Lanchester, the same actress who plays the “Bride”. By aligning her with the female monster the film reflects upon the long-held cultural assumption that there is something “monstrous” about a teenage girl who dreams up such a dark and violent tale. At the same time, by writing Shelley into the film Whale and his creative team acknowledge a need to refer back to *Frankenstein*-the-novel in the process of adapting it for the screen – even though their film is a “monstrous” reconstruction of the Frankenstein tale bearing little similarity to the novel “Mary” refers to in the opening scene.

Western culture has long been fascinated by Mary Shelley, and such fascination shows no sign of waning in the digital age. Thus, many decades after Whale’s film, director Kenneth Branagh allows *his* adaptation of Frankenstein to begin with a voice-over from “Mary” herself, reciting words that appeared in her introduction to the 1831 reprint of the novel: “I busied myself to think of a
story”, we hear Mary say, “that would speak to the mysterious fears of our nature”.¹ This ongoing cultural obsession with Shelley is not surprising given the astounding details of her rather tragic life; she has, in many ways, become a character as remarkable as those she created. At the same time, what is articulated in these two films is an obsession not just with Shelley but with the genesis – the origin story – of her novel.

Anne K. Mellor opens her analysis of *Frankenstein* (the novel) by giving voice to this long-lived fascination with the origins of the tale. “Let us begin, then,” she writes, “with the question of origins: why did the eighteen-year-old Mary Shelley give birth to this particular idea on this particular night?”² The story of how Shelley “conceived” *Frankenstein* – her contribution to the “ghost stories” that she, Percy, and Byron decided to create on a rainy day while holidaying in Switzerland – has entered into literary history as profoundly as the novel itself, aided by the 1831 introduction where Shelley famously attempts to “furnish [her readers and publishers] with some account of the origin of the story”.³ This enduring focus on origins, inspiration, and the “spark of life” that initiates a tale is more than significant given that the novel itself is essentially *about* (biological) origins, (scientific) inspiration, and the mystery of the (electric/spiritual) “spark of life”.

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¹ For these words in the context of Shelley’s introduction, see Mary Shelley, *Frankenstein, or, The Modern Prometheus* (Hertfordshire: Wordsworth Editions, 1993), 3.
³ Shelley, 1, my emphasis.
At times, our obsession with Shelley and with the origins of her novel – fuelled by television docu-dramas bringing Shelley to life and/or depicting the search for the “real Frankenstein”⁴ – threatens to eclipse the complexities of the tale itself. Relatedly, this is a tale that we tend to simplify or reduce to certain memorable themes and scenes. As Siv Jansson points out, our knowledge of Shelley’s background and of the details surrounding the creation and publication of *Frankenstein* “have enhanced a ‘Frankensteinian’ mythology which has concentrated upon images of fear and monstrosity at the expense of other issues”; he further comments that “[t]his is a pity, because Mary Shelley deals with a range of significant ideas in her story”.⁵

To Jansson’s concern I would add another: the repeated popular adaptation of Shelley’s *Frankenstein* detaches the tale from its writer, inviting us to reduce the text to an image of a monstrous body or a scene of techno-genesis (perhaps accompanied by the ringing words, “it’s alive!”). When we approach Shelley’s *Frankenstein* today, we usually do so through the haze of cinematic memory – for, as discussed in my introduction, familiarity with the images from any of popular cinema’s Frankenstein adaptations often precedes familiarity with the novel itself. In this sense, it is odd that directors like Branagh and Whale should attempt to reassert Shelley’s authorship over the Frankenstein tale. It is also significant that I begin this chapter on Shelley’s novel with reference to one of the more famous Frankenstein *films*.

⁴ I am thinking particularly of an episode of the History Channel documentary series *Decoding the Past* entitled “In Search of the Real Frankenstein” (aired October 26, 2006).
At the same time, of course, *Frankenstein* is a tale with far-reaching cultural import. Just as we have long been fascinated with Shelley herself, we have – for decades – been claiming the Frankensteinian monster as an allegory for technocultural crises and social or scientific developments. In 1975 – well over thirty years ago – Radu Florescu described the cultural resonance of Shelley’s *Frankenstein* in these terms:

> Given the recent cyberpunk revolution, the implantation of artificial hearts, the latest experiments in freezing bodies in preparation for a hypothetical future life, and the advent of the test-tube baby, the Frankenstein myth has become more topical than ever before.\(^6\)

This assessment of the tale’s relevance comes before certain crucial developments of the digital age. We can make notable additions to Florescu’s list: the ability to reconstruct ourselves virtually in media-worlds such as Second Life; the steepening of the debates over stem cell research and genetically modified food; the threat of climate change; the increasing concern with organic purity in all aspects of twenty-first century life. Florescu was also writing before certain crucial theoretical developments of the 1990s and post-millennium, developments that saw the “techno-body” enter into a theoretical space and become the starting-point for new mappings of subjectivity and embodiment. These are some of the concerns that will be taken up below.

The purpose of this chapter is to map an approach to Frankenstein. If Shelley’s text is buried under a plethora of rewritings and popular adaptations, this chapter

begins with an active re-engagement of *Frankenstein*-the-novel. I focus particularly on the novel’s depiction of a nature/technology tension, on the monster as an artificial body in negotiation with lost origins in nature, and on the themes of writing, production, and embodiment that infuse both the novel and Shelley’s 1831 introduction. This analysis of *Frankenstein* will lay the foundation for the chapters to come.

This introductory chapter also contains analyses of two recent retellings of Shelley’s novel: Victor Kelleher’s book *Born of the Sea* and Shelley Jackson’s hypertext fiction *Patchwork Girl*. Both these later texts offer interesting revisions of Shelley’s novel by giving voice to the female monster. Although these are non-filmic texts – and thus, in many ways, beyond the scope of this study – they are helpful to consider here as something of a preface to the chapters to come. These texts, I feel, exemplify the reworking of Frankenstein in current popular culture, and show us how the tale can be reshaped in a period dominated by film, media, and “the image”. Below, I will consider how both texts subvert the original tale and articulate a need or desire to be “faithful” to Shelley’s novel as originary text. This involves a sort of parent/child relationship that is built upon themes of memory and origins: two important concerns that will be detailed below and revisited throughout this thesis.

Finally, this chapter brings the Frankensteinian monster into dialogue with the more recent figure of the techno-body or the cyborg. This will lead me to the theoretical work of writers like Donna Haraway. We cannot quite call Haraway’s famous “Cyborg Manifesto” a “retelling” of Frankenstein, although
she does refer back to Shelley’s text and to the figure of the monster as a strange precursor to her cyborg; below, I will consider how Haraway subverts (if not retells) the Frankenstein tale by deconstructing its reverential treatment of “nature” and its depiction of the monster as an incomplete being who desires a proper “origin story”. These theoretical ruminations will act as a foundation upon which the analyses that constitute this thesis can be built.

**An overview of Shelley’s *Frankenstein***

How then might we approach Shelley’s novel in the early twenty-first century, a period vastly removed from Shelley’s own and also a period in which “Frankenstein” has evolved into a mega-text frequently “(re)animated” by popular culture? We can start with the story itself. Published in 1818 and authored by the eighteen-year-old Shelley, *Frankenstein* (or, “*The Modern Prometheus*) tells the story of Victor Frankenstein, a student of the sciences who discovers how to create life. He is driven by desires that Shelley perceived to be ingrained in those who study science: Victor longs to “pioneer a new way, explore unknown powers, and unfold to the world the deepest mysteries of creation”.\(^7\) More specifically, he desires to create a new and better human: a new species that would “bless [him] as its creator and source”.\(^8\)

These desires drive Victor until he becomes “capable of bestowing animation upon lifeless matter”\(^9\) and subsequently creates his “monster”, a hideous creature

\(^7\) Shelley, 38.  
\(^8\) Ibid., 43.  
\(^9\) Ibid., 41.
whom he abandons in disgust and horror. The monster berates Victor for his irresponsible act and implores him to create a female companion, a request that Victor partially fulfills before destroying the half-finished “mate”; the monster wreaks vengeance on Victor by murdering his friends and family, a sequence of violence and destruction that culminates in the death of Frankenstein’s bride, Elizabeth, on their wedding night. Enraged and bereft of everything he cherishes, Frankenstein pursues the monster as far as the Arctic, where he dies of exhaustion; the monster, full of remorse, disappears into the wilderness, ostensibly to kill himself – an act that is never depicted in the text. The tale is framed by the narration of Robert Walton, the explorer who meets Victor out in the ice floes of the Arctic Circle and hears his tragic story.

And it is, indeed, a tragic story – with Victor very much the tragic “hero” destroyed by his own weakness and hubris. In seeking to manufacture “life” Victor usurps nature, or attempts to subjugate it; he is particularly driven by fears and anxieties raised by the prospect of mortality. As Jack Morgan points out, “[o]urs is a psychology correlative to and defined by our biological character, but the human psyche is not comfortably at home in this biological landscape it cannot fathom, in a nature everywhere characterised by perishableness”. As Morgan is well aware, this discomfort and anxiety fuels Victor’s unnatural act. In many ways, Frankenstein is thus defined by a struggle between mentality and physicality: the basic human desire to win mental dominance over the natural

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11 For Morgan, this struggle is foundational to the horror genre. He writes: “horror is essentially bio-horror and involves the tenuous negotiations between rationality and a looming biological plenum that defies rational mapping” (3).
world (and over problems like mortality that are rooted in the biological condition) is rendered dramatic in Shelley’s depiction of the conflict between scientific mind (Victor) and monstrous body (his Creature).

Yet if Victor is disturbed by the “perishableness” of nature, this is not an attitude endorsed by Shelley herself. In *Frankenstein*, “Nature” is depicted as everything but perishable: it is vivid, vital, majestic, towering, glorious. This poeticising and revering of the natural landscape is evidenced throughout the text. Early in the narration of his tale Victor describes “the majestic and wondrous scenes which surrounded our Swiss home – the sublime shapes of the mountains; the changes of the seasons; tempest and calm; the silence of winter, and the life and turbulence of our Alpine summers”.\(^{12}\) These sentiments return in the moments preceding the fateful wedding night, when – while rowing on Lake Como – Elizabeth implores him to:

> Observe how fast we move along, and how the clouds, which sometimes obscure and sometimes rise above the Dome of Mont Blanc, render this scene of beauty still more interesting. Look also at the innumerable fish that are swimming in the clear waters, where we can distinguish every pebble that lies at the bottom. What a divine day! how happy and serene all nature appears!\(^{13}\)

Elizabeth herself is Nature incarnate: she is “fairer than a garden rose among dark-leaved brambles”\(^{14}\), she has “celestial eyes”\(^{15}\). She is content to marvel at the beauty of the natural world, a marked contrast with Victor who seeks to

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\(^{12}\) Shelley, 30.
\(^{13}\) Ibid., 148.
\(^{14}\) Ibid., 29.
\(^{15}\) Ibid., 31.
dissect, investigate, and discover causes.\textsuperscript{16} This contrast amplifies the unnaturalness of Victor’s scientific ventures, which are depicted as barren and transgressive (a male attempt at reproduction) as well as violative and penetrative (a rape of Nature).\textsuperscript{17}

Here, then, is \textit{Frankenstein}: a novel that has its roots in both the techno-turmoil of the Industrial Revolution and the natural splendour of the European landscape as perceived by the poets and writers of the Romantic movement. This is a story about the tension between natural and artificial, nature and technology, organism and machine, beauty and monstrosity, birth and construction; above all, as Mellor points out, the novel “is profoundly concerned with natural as opposed to un-natural modes of production and reproduction”.\textsuperscript{18} Any such reading of \textit{Frankenstein} can be underpinned by our knowledge of Shelley’s own life: we know, for instance, that Shelley had deep anxieties relating to birth, and to her status both as mother and as child (not only did her mother, Mary Wollstonecraft, die soon after childbirth, but many of her own children did not live to adulthood – details which themselves have become objects of fascination for readers of the Shelley/Frankenstein text). Driven, perhaps, by these anxieties, Shelley imagines a world where birth can be supplanted by techno-production; she questions what it might mean to exist as a parentless and artificially created

\textsuperscript{16} Shelley, 30.
\textsuperscript{17} This leads us to another important point: that the depiction of both “nature” and “science” in \textit{Frankenstein} is undeniably gendered. Jansson assesses this, pointing out that Shelley’s general attitudes towards science remain ambiguous and difficult to read throughout the novel, but that the gendered aspect to scientific inquiry – both the “essential ‘masculinity’ of scientific thought” and the related marginalisation of women as creators – do not. “The exclusion of femininity [in the novel] extends to the consistent marginalisation and destruction of women by Victor’s ‘progress’”, Jansson writes (x).
\textsuperscript{18} Mellor, “Making a ‘Monster’”, 10.
being; and she probes the emotional recesses of the failed “parent” and irresponsible creator, Victor Frankenstein himself.

At the heart of the Frankenstein tale – and also at the core of these tensions between nature and technology, reproduction and techno-production – is the monster’s body. We can identify this body as one produced outside nature and beyond the organic, a creature of the laboratory and not of the womb. In this sense, the monster is the embodiment of the unnaturalness of Victor’s actions. He/it is also, importantly, other. Frankenstein is a story about otherness, about – as Roberts tells us – “the encounter with difference”.¹⁹ This encounter is performed again and again in the text as various characters interact with or are destroyed by the monster; it is particularly performed in the interactions between Victor and his creature. Significantly, the monster’s otherness is technologically-enabled. He/it is different, monstrous, ugly, because he/it is mechanically produced rather than birthed.

This thesis reads the Frankensteinian monster as an artificial being in strange negotiation with the organic world. Indeed, Shelley’s monster is frequently depicted traversing the majestic natural landscapes that form such a distinctive part of the novel (mountains, forests, the Orkneys, and finally the ice-floes of the Arctic circle). Significantly, the monster begins the narration of his tale with an account of his wanderings in the moonlit forest:

Soon a gentle light stole over the heavens, and gave me a sensation of pleasure. I started up and beheld a radiant form rise from among the trees. I gazed with a kind of wonder. It moved slowly, but it enlightened my path, and I again went out in search of berries… I felt light, and hunger, and thirst, and darkness; innumerable sounds rang in my ears, and on all sides various scents saluted me: the only subject that I could distinguish was the bright moon, and I fixed my eyes on that with pleasure.20

This strangely moving account of the interaction between an artificial being and the natural world from which he is excluded is intrinsically tied to the forlorn question that the monster soon asks: “Who was I? What was I? Whence did I come?”21 The monster’s desire to know his own history – indeed, his status as a being lacking history – is underpinned by his existence as an artificial creation with no true link to the organic world. In this vein, Catherine Waldby describes \textit{Frankenstein} as “one of the earliest attempts to deal with the malleability of life and the possibilities of human ‘technogenesis’, \textit{the loss of an origin securely located in nature}”.22 This, she tells us, leads to the crucial question around which the novel is structured: “what does it mean to be embodied when the body cannot claim the status of nature?”23

We might consider how this problem of organic origins – of the instantly created being who is excluded from the evolutionary narrative – is articulated in quite a different context by theorists today. Palaeontologist Stephen Jay Gould, for instance, tells us:

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20 Shelley, 80.
21 Ibid., 99.
23 Ibid., 33.
Living creatures have to have some form of historical continuity, to grow and to reproduce, to inherit the characteristics of their ancestors. But artificial systems exist, and ones which are capable of behaving in the same way. The only reason we refuse to say they’re alive is that they’re not historically linked to what we call life.\textsuperscript{24}

This lack of a “historical link” to natural “life” is the very quality that defines Frankenstein’s monster; it is also a concern articulated in later discussions of the “cyborg” or techno-body, whom we can assess according to the distance he/she/it has travelled from an origin located in nature. Robert Rawdon Wilson tells us that the more we technologically enhance or alter our organic bodies and minds, the more we will be prompted to look behind us, contemplating what we have lost: “each prosthetic modification”, Wilson writes, “also marks the distance I will have travelled from my original physical condition”.\textsuperscript{25} Similarly, Mark Poster’s “High-tech Frankenstein” – employed as a metaphor for the construction of posthuman identities in the digital age – is a figure “who will stare backwards at us, his/her historical ancestors, like Benjamin’s angel, as if observing a monster”.\textsuperscript{26} Poster is referring here to Walter Benjamin’s reading of the Paul Klee painting \textit{Angelus Novus}, which represents for Benjamin the “angel of history”. Benjamin writes:

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This is how one pictures the angel of history. His face is turned toward the past… The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise… this storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.\(^27\)

We can appropriate Benjamin’s “angel” and use it to express the predicament of the Frankensteinian monster in all its guises: a technologised or posthuman body which, although forever being blown towards the future, is always in negotiation with a receding origin in nature.

This problem of “origins”, of a lost link with the organic world, is foundational to this thesis. It is a problem that we feel deeply in the digital age, a period in which our relationship with nature and our own organic status are both threatened and continually evoked in cultural discourse. For this reason, perhaps, many retellings of Frankenstein in the digital age – particularly those in popular cinema – foreground these origin stories and explore the monster’s status as a being in exile from nature. Furthermore, and most interestingly, we can view the on-screen body, too, in terms of its troubled origin story, its disconnection from an (organic) moment in time. But I am getting ahead of myself here; these concerns will be discussed in the chapters ahead.

The 1831 introduction and the text/body link

Originally published anonymously, Shelley’s novel was revised and republished in 1831\(^{28}\) complete with an introduction in which Shelley writes about her own writing process. This introduction has become an important element of the Frankensteinian textual “body”, even if it was added as an extra “appendage”\(^{29}\) some years after the novel’s first publication. Here, Shelley details the events surrounding the genesis of *Frankenstein*: she describes the holiday with Percy and Byron and the ghost-story challenge, as well as the period of “writer’s block” that followed. What is mythologised in this introduction is the moment when Shelley *thought of her story*, and the dream or vision which presented Frankenstein and his monster to her. Shelley tells us:

> When I placed my head on my pillow, I did not sleep, nor could I be said to think. My imagination, unbidden, possessed and guided me, gifting the successive images that arose in my mind with a vividness far beyond the usual bounds of reverie. I saw – with shut eyes, but acute mental vision – I saw the pale student of unhallowed arts kneeling beside the thing he had put together.\(^{30}\)

This, as Barbara Johnson points out, is a recounting of the novel’s “*primal scene of creation*”\(^{31}\). As many analysts have observed, there is a startling parallel between this primal scene and the one depicted within the novel: the fantastic moment of animation. Indeed, as Victor describes the period leading up to that

\(^{28}\) Unless stated otherwise, this thesis quotes from and refers to the 1831 edition, although I acknowledge the scholarly debate over which edition is more “true” to Shelley’s vision.

\(^{29}\) Shelley herself uses this term to describe the introduction. See Shelley, 1.

\(^{30}\) Shelley, 4.

“dreary night in November”\textsuperscript{32} when the monster comes alive, we can almost imagine that we are listening to Shelley herself detailing the writing of \textit{Frankenstein}. “Winter, spring, and summer passed away during my labours”, Victor states, “but I did not watch the blossom or the expanding leaves – sights which before always yielded me supreme delight – so deeply was I engrossed in my occupation”.\textsuperscript{33} Here we catch a glimpse of Shelley the immersed writer, the obsessed writer. We also glimpse the writer who is horrified by her creation, by the dark depths of her own imagination: “I had worked hard for nearly two years”, Victor tells us, “but now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart”.\textsuperscript{34}

Most affecting here is the eerie correlation between Victor’s description of the monster and that provided by Shelley in her introduction. Victor articulates his horror at seeing the monster’s “watery eyes… his shriveled complexion and straight black lips”;\textsuperscript{35} he flees from the room, only to be wakened from sleep by the sight of the monster looming over him. In her introduction Shelley also stresses the act of \textit{seeing} the monster as a crucial stage in creating/imagining him; like Victor, she is wakened from sleep by the sight of him, and cannot escape his image: “I saw the hideous phantasm of a man stretched out”, she writes, “looking on him with yellow, watery, but speculative eyes… I opened mine in terror… [but] I could not so easily get rid of my hideous phantom; still it haunted me”.\textsuperscript{36}

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\textsuperscript{32} Shelley, 45. \\
\textsuperscript{33} Ibid., 44. \\
\textsuperscript{34} Ibid., 45. \\
\textsuperscript{35} Ibid. \\
\textsuperscript{36} Ibid., 4-5.
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There is a second creation scene depicted in *Frankenstein* – a later scene in which Victor builds, then destroys the body of the *female* monster. Here too we find that the creative process is rendered monstrous, with an emphasis not only on the act of production but on the agony and uncertainty that precedes it. Victor tells us:

> I worked on, and my labour was already considerably advanced. I looked towards its completion with a tremulous and eager hope, which I dared not trust myself to question, but which was intermixed with obscure forebodings of evil, that made my heart sicken in my bosom.  

This description of his “labour” takes us, once again, to the fringes of the fictive world; again, we hear the voice of Mary-the-writer intermingling with Victor’s. Jules Law refers to this second creation scene as an example of the “development of violence out of narrative blockage” that recurs in the novel. Law argues that the pattern of delay and deferral that precedes the scene – Victor’s procrastination as he wanders Europe, dreading the completion of the task he has been assigned – mirrors the delay and deferral recounted by Shelley in her introduction where she delays linking her dream about the monster to the task of thinking up a ghost story. In the novel, this build-up of procrastination culminates in the violent destruction of the female Creature and the discarding of her fragmented body.

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37 Shelley, 126.
39 Ibid.
The parallels between the novel and its introduction – as well as the broader link between *Frankenstein*’s themes of techno-production and the act of textual production behind any book – have been well theorised. Hayles, for instance, refers to a certain Frankensteinian interplay between “monstrous text” and “textualized monster”. Johnson discusses such interplay in more detail, offering a thorough exploration of the parallels between “Victor’s creation of his monster and Mary’s creation of her book”. Johnson observes:

The impulse to write the book and the desire to search for the secrets of animation both arise under the same seemingly trivial circumstances: the necessity of finding something to read on a rainy day. During inclement weather on a family vacation, Victor Frankenstein happens upon the writings of Cornelius Agrippa, and is immediately fired with the longing to penetrate the secrets of life and death. Similarly, it was during a wet, ungenial summer in Switzerland that Mary, Shelley, Byron, and several others picked up a volume of ghost stories and decided to write a collection of spine-tingling tales of their own.

Johnson uses these parallels to fuel her argument that the novel is semi-autobiographical; and in turn, this potentiality for autobiography deepens the parallels between Mary and Victor because, as Johnson suggests, “the desire for resemblance, the desire to create a being like oneself – which is the autobiographical desire par excellence – is also the central transgression in Mary Shelley’s novel”. Her ultimate claim is that the novel – with its powerful themes of production, creation, and creative agony/ecstasy – can be “read as the

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40 N. Katherine Hayles, “Flickering Connectivities in Shelley Jackson’s Patchwork Girl: The Importance of Media-Specific Analysis”, [http://pmc.iath.virginia.edu/text-only/issue.100/10.2hayles.txt](http://pmc.iath.virginia.edu/text-only/issue.100/10.2hayles.txt) (accessed June 10, 2009), [42].
41 Johnson, 7.
42 Ibid.
43 Ibid., 3.
story of the experience of writing *Frankenstein*”. Interestingly, such self-reflexive overtones are acknowledged and possibly fuelled by Shelley herself who, in her introduction, famously refers to the novel as her “hideous progeny”.45

As this playful statement by Shelley indicates, the 1831 introduction is infused with the very themes of procreation and parenthood that punctuate the novel. Novelist and literary theorist Gabriel Josipovici tells us that a book is “in one sense produced biologically, in the same way as a laugh or a scream has biological roots”;46 he hints here at an understanding of writing as a process of “gestation”, for if books are produced biologically then authors are, in part, “parents”. This is a conception that Shelley plays upon in her introduction, which she uses not only to “furnish” us with the story’s origin but also to position herself as the novel’s mother. *Frankenstein*, she tells us, is her “progeny” and her “offspring”;47 she also uses the word “dilate”48 – expressive of childbirth – to describe her creative processes. Her description of the agony associated with her initial inability to think of a “ghost story” conjures an image of a woman struggling to conceive: and as Mellor reminds us, Shelley did indeed fear “the trauma of barrenness”, both as mother and as writer.49 As the author of *Frankenstein*, moreover, Shelley was the “mother” of a monstrous child – a novel that was “conceived” amidst anxiety and the desire to be accepted as a female author within a male domain of authorship; a novel that was heavily

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44 Johnson, 7.
45 Shelley, 5.
46 Josipovici, 10.
47 Shelley, 5.
48 Ibid., 1.
49 Mellor, “Making a “Monster””, 11.
We might conclude here that *Frankenstein* is situated around an act of *technē*, of technologically-enabled *bringing forth*. While we must be careful not to simplify or reduce the text to an image of animation – thus excluding the “significant ideas” that Jansson warns us not to neglect – we can wholeheartedly claim that animation or techno-creation is at the centre of the text. We can also argue that there are three acts of animation that form the backbone of the Frankenstein text: the two creation scenes depicted in the novel, and the creation scene that Shelley details in her introduction (and that has become such an object of cultural fascination). As Vivian Sobchack reminds us, writing too is an act of *technē*, for in writing:

> objectively material means (*technology*) and the tropology of subjective desire (*poiēsis*) are bound in an irreducible intentional relation as a revelatory bringing forth (*technē*) that, in its diverse historical and personal practices, makes matter meaningful and meaning matter.\(^{51}\)

Importantly, Sobchack also describes writing as a hybrid act involving the incorporation of a technique or technology into our bodies:

\(^{50}\) For an excellent account of the editing and rewriting of *Frankenstein* by Percy Shelley, see Anne K. Mellor, *Mary Shelley: Her Life, Her Fiction, Her Monsters* (London and New York: Routledge, 1989), especially Chapter Three – “My Hideous Progeny”.

Although we may trace letters in the sand, chisel words into stone, or sign a childhood pact in the blood from our finger, today in our culture we usually write with pencils, pens, typewriters, and ‘word-processing’ computers – technologies we differently (and to different degrees) incorporate into our bodies and our experience of writing.  

Shelley of course did not use a computer to write *Frankenstein*. Nevertheless, the novel – produced by technologies of writing, language, and imagination – was not only Shelley’s “progeny” but a technological extension of herself.

When we read *Frankenstein* and the 1831 introduction, then, themes of “writing”, “technology”, and “the body” might justifiably jump into our minds. We might wonder about Shelley herself, an imagined body, a gendered body – for it is difficult to divorce the dark and monstrous novel she wrote from an image of her as a young woman. We might consider the act of writing *Frankenstein* as an embodied act, an act informed by the memories, experiences, desires and agonies inscribed into Shelley’s own body. We might think about how the Frankensteinian tension between nature and technology, organism and machine, applies to the act of writing. Josipovici describes writing as an act situated “at the crossroads of the mental and the physical, the orders of culture and of nature”.  

Such a description evokes the figure of the Frankensteinian monster, one of fantastic literature’s first “organic machines” and a creature occupying the liminal space between culture and nature.

It is therefore interesting that Shelley attempts to naturalise the writing process in her introduction, or position it in relation to nature, working to construct an

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52 Sobchack, *Carnal Thoughts*, 110.  
53 Josipovici, 1.
image of herself as a writer in communion with “natural” powers. Mention is made of the natural settings in which the novel was “conceived”: both the “pleasant hours” spent by the lake in Switzerland where Shelley and her company were holidaying, and the “incessant rain” that drove them to their indoor task of inventing ghost stories. Shelley also presents herself as a saintly or passive vehicle “receiving” her story in a vision rather than an active participant in the writing process. The “primal scene” she recounts is as organic or natural a moment as we could imagine, the writer in a dream-state communing with her character. What Shelley’s introduction cannot avoid, however, is the related tension between mentality and physicality. The introduction details an ethereal act of imagination, for Shelley a mental triumph: finally “thinking of a story” after days of blockage. At its core, however, is an undeniable physicality: the monster’s hideous body, which Shelley describes in such detail.

**Born of the Sea and Patchwork Girl: two recent retellings**

If the body of the Frankensteinian monster is Shelley’s “hideous progeny”, representative of the novel itself, then the body of the female monster – fragmented, unfinished, violently destroyed – is perhaps more interesting than that of her male counterpart. It might be ambitious to claim that she represents a darker part of Shelley’s imaginative processes, but we can certainly suggest that she embodies an aspect of the story that itself seems aborted or cut short: she appears only briefly and is never brought to life; instead she is destroyed and thrown into the sea. Whale’s film *Bride of Frankenstein* takes up both this

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54 Shelley, 2.
unfinished narrative (the story of the female monster) and the monstrous aspects of Shelley herself, collapsing them into one with the double-casting of Lanchester. We also find that the female monster, the unfinished narrative she represents, and her link to Shelley are of interest to other writers who seek to retell *Frankenstein* (and to give voice to some of the novel’s silences).

One such writer is Australian author Victor Kelleher, whose novel *Born of the Sea* functions as a companion piece, of sorts, to Shelley’s *Frankenstein*. *Born of the Sea* takes up the story of the female monster, whom Kelleher names “Madeleine”. In this version of the tale Madeleine survives after she is cast into the sea by Victor; she awakens without memory and begins a journey to uncover her origins. This journey leads her first to Victor, then to the male monster, and finally to Mary Shelley herself. A chaste and devotional relationship develops between the two, one that draws attention to Mary’s position as both “mother” and “author” (Madeleine refers to Mary as “the author of my soul” and repeatedly calls her “mother Mary”). This re-positioning of the writer inside the text is neatly justified by the narrative – Kelleher’s fictional Mary researches and writes *Frankenstein*, a novel based on real occurrences, while Madeleine is still living. For the reader, however, Madeleine and Mary’s relationship seems to defy the boundary between text and reality.56

56 This boundary-crossing relationship between character and author has become an object of recent cultural fascination, and is explored in the films *Stranger Than Fiction* and *The Truman Show*, both of which portray a character who learns of their own fictionality and must find and address their own writer/creator. Although such films do not claim to retell Frankenstein, we can argue that there is a Frankensteinian relationship at work in them: they recall the moment when Victor is confronted by his monster and asked to explain himself.
Two powerful moments in the novel play on this defiance, and both involve (and fetishise) the act of reading (as a response to an original act of writing). In the first, Madeleine learns of her identity and her origins through the writings of Victor Frankenstein, who keeps a record of his work in a “leather-bound book”.

In the second, Madeleine is given a copy of the recently published novel *Frankenstein*, and is thus allowed to read her own story. This latter event restructures the relationship between character and writer. Madeleine narrates the scene: “I glanced at the spine”, she tells us, “read the title printed there in gold Gothic lettering, and instantly let the thing fall from my hands. I nearly toppled to the floor with it.” She then asks the young man who gifted her the book to read from it, and at the same time her narration speaks to Mary the author/character:

> You, dear Mary, must know what he read to me that night, for of course it was your book that he held open in the lamplight; Victor’s family name that rolled so easily off his tongue – the names of Frankenstein and Shelley bound ineluctably from that moment on.

Significantly, Madeleine then “writes” (a letter) to Mary and the two make contact:

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57 Kelleher, *Born of the Sea*, 64.
58 Ibid., 298.
59 Ibid., 298-299.
I shall not describe our first meeting in detail [says Madeleine]. There is no need, for we were both there! In any case, what words exist that can adequately depict the meeting of fact and fiction? That magical moment when a character steps free of the written text and greets her author; and when that same author reaches through the mists of story in order to embrace a flesh-and-blood version of someone she has hitherto only imagined. It is akin to stepping through the mirror and greeting our own reflection, or parleying with our attendant shadow.60

Madeleine thus embodies the metaphoric connection between text and body, novel and monster; she is the living text that Shelley creates, and a fantastic means of giving voice to the (imagined) relationship between Shelley and her novel. What Kelleher creates, furthermore, is a character who is able to address their own writer: the bed-ridden Mary, to whom Madeleine narrates her entire tale, becomes the audience longing to hear how the story will end, while Madeleine, obsessed with her status as a doubly constructed being (first by Victor and then by Mary), finds a voice and with it the ability to construct herself.

What gives this retelling of Frankenstein such power is the way Kelleher mobilises not only the text/body link but the theme of fragmentation that accompanies it. Significantly, Kelleher prefaces his novel with a fragment from the original text describing the moment when Victor, having destroyed the female monster, observes that “[t]he remains of the half-finished creature… lay scattered on the floor, and I… put them into a basket, with a great quantity of stones, and… determined to throw them into the sea that very night”.61 This description of the female monster as “half-finished” can be reworked to refer to both her body (she was never finished by Victor) and her story, which in

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60 Kelleher, *Born of the Sea*, 305.
61 Shelley, 130.
Shelley’s novel ended abruptly with her being cast into the sea. We can surmise that Kelleher himself found this ending unsatisfactory, and decided to “finish” her story. Thus, as Stephanie Trigg points out in her review of the novel, Kelleher’s aim is to “correct” rather than just retell Shelley’s tale; he achieves this not only by giving voice to a silenced character – itself a major correction and clearly a driving force behind Kelleher’s ongoing production of “companion” novels to great literary texts – but by finishing this character’s incomplete story, or, as Trigg puts it (with yet another engagement of the text/body link), by “tying up Frankenstein’s loose threads”.  

Like Whale’s film *Bride of Frankenstein*, *Born of the Sea* demonstrates the extent to which retellings of Frankenstein are shadowed by the memory of Shelley herself. The same woman who once wrote a story about fantastic powers of resurrection becomes the resurrected body in Kelleher’s novel. *Born of the Sea* also demonstrates an awareness of the notion that all authors who adapt *Frankenstein* must contend with Shelley, must open a relationship with her, must remember her (whilst re-membering her story/her monster). We might question why such texts feel the need to defer or refer to her as the “origin” of the story, especially when most retellings of *Frankenstein* violently reconstruct the text. In this sense, the scenes of rape, torture, and suffering that punctuate the narration...
of Madeleine’s tale are the novel’s most powerful aspect: they further solidify the text/body link by demonstrating that a text is also a body that can be violated, taken apart, and monstrously sewn back together.

*Born of the Sea* resembles (or perhaps appropriates) Shelley Jackson’s *Patchwork Girl*, a work of electronic literature made in 1995 using the hypertext authoring system Storyspace. Like Kelleher’s novel, *Patchwork Girl* tells the story of the female monster and places her on a narrative path that leads her to Mary Shelley; in Jackson’s version of the tale, the half-finished creature is completed by Mary and the two become lovers, their stories intertwining. What *Patchwork Girl* shares with *Born of the Sea* is an emphasis on the unnatural status of the heroine’s body and also on her fictionality, which is highlighted through her engagement with her own author. Both writers use the theme of artificiality to confront deeply embedded cultural understandings of embodiment, gender, and agency; both use their writing to give voice to the feminine, the monstrous, and the technological, all of which are profoundly othered in Shelley’s novel. Jackson also shares Kelleher’s interest in the particular “fragment” of the tale that the female monster represents, and by “completing” the body of the female monster she is also completing that unfinished section of the Frankenstein narrative.

These notions of fragmentation and the incomplete text/body are doubly important in the context of Jackson’s work, however, because *Patchwork Girl* is not a novel but a hypertext – the “story” unfolds in a series of fragments that the reader navigates at will. This metaphoric link between fragmented body and
fragmented text is foregrounded by analysts of *Patchwork Girl*. Referring to Jackson’s use of works by such varied writers as Donna Haraway, Frank L. Baum, and Shelley herself, quotes from whom she interweaves into the fragmented textual body she constructs, Clayton calls Jackson’s text “a variegated patchwork of ‘original’ writing and borrowed phrases.” Similarly, Hayles tells us that “[l]ike the female monster’s body, the body of this hypertext is also seamed and ruptured, comprised of disparate parts with extensive links between them.” Hayles mobilises *Patchwork Girl* as part of her discussion of electronic literature: like the body of the Frankensteinian monster (or the *Patchwork Girl* herself) hypertexts are, she tells us, “dynamic” and “transitory”, “mutable” and “transformable”, they are “Generated Through Fragmentation and Recombination”.

*Patchwork Girl* is an extraordinarily detailed text which this thesis does not have the space to analyse in the depth it deserves. Because this project dwells upon *filmic* retellings of Frankenstein, however, it is interesting to compare the body of Jackson’s *Patchwork Girl* to some of the filmic monsters that will be discussed

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66 Jackson quotes from Haraway’s famous “Cyborg Manifesto”, which will be discussed below.
67 The *Patchwork Girl* herself is a variation on a character created by Baum in his series of *Oz* books.
69 Hayles, “Flickering Connectivities”, [23].
70 Ibid., [5].
71 Ibid., [10].
72 Ibid., [7].
73 Such an analysis has already been undertaken by Hayles, whose reading of *Patchwork Girl* matches the text itself in complexity, detail, and power. See Hayles, “Flickering Connectivities”; and also N. Katherine Hayles, *My Mother was a Computer: Digital Subjects and Literary Texts* (Chicago: University of Chicago Press, 2005), Chapter 6.
in the chapters ahead. Cinema has a tendency to offer revisions of the
Frankensteinian monster that are defined by their beauty, perfection, or
seamlessness – we see these characters appearing in films like *Metropolis, Blade
Runner, The Matrix,* and *The Fifth Element.* These bodies stand in for the filmic
machine, which works through fragmentation yet gives the illusion of wholeness.
In contrast the Patchwork Girl “defines herself by her scars”, as George Landow
notes,\(^74\) thus, she suits the fragmented text (and medium) that frames her.

We can also compare the body of the Patchwork Girl to that of Kelleher’s
Madeleine, who is altogether a more conservative version of Shelley’s monster.
Although Kelleher enthusiastically seizes upon the theme of fragmentation in his
novel, he presents Madeleine as a problematically seamless subject (albeit one
who occupies a fragmented body). Trigg touches upon these limitations in her
review of *Born of the Sea,* particularly when she questions why Madeleine’s
“pretty aristocratic head [should] preserve a repressed memory of its past life,
while her anonymous womb, for example, does not?"\(^75\) If Kelleher shies away
from such fragmentation of the subject, Jackson does not: indeed, in the section
of her text entitled “Graveyard” she explores precisely this problematic, giving
voice to the individual body parts that make up her monster. The Patchwork Girl
is consequently a patchwork of different *memories,* as opposed to Madeleine
who slowly uncovers the singular memory-narrative belonging to the woman
whose head she possesses.

\(^74\) George P. Landow, *Hypertext 3.0: Critical Theory and New Media in an Era
\(^75\) Trigg, 39.
Despite their differences, it is significant that both Kelleher and Jackson should introduce memory – and particularly the memory/body relationship – as a theme in their respective retellings of Frankenstein. Both authors, after all, are adapting an earlier text, reconstructing a new “body” from fragmented textual “memories”. With its borrowed writings and self-conscious retellings *Patchwork Girl* in particular functions as a palimpsest, an inscription of the new onto the old. Jackson is keen to open a dialogue between herself and Shelley, as is suggested by the hypertext’s playful title “Patchwork Girl, by Mary/Shelley and herself” (in which Jackson draws upon the apparently coincidental correlation between her first name and Mary’s last name to create a playful “meeting” between the two “authors”). Clayton foregrounds the origin stories embedded in this relationship when he suggests that Jackson’s hypertext “works best when [she] is most true to her maternal origin – most faithful to Mary Shelley’s novel”.

In *Born of the Sea*, the relationship to *Frankenstein* as an originary text is performed through Madeleine’s negotiations with Victor Frankenstein, with the male monster, with Mary Shelley, and with the book itself as a physical object (which she throws to the floor).

More important to this thesis, however, is the notion of “remembering” the organic, of a body’s historical link to nature, and of the disruption of this link by scientific endeavours that technologise the scene of creation. More so than the superficial motif of amnesia and recall, this is a powerful theme in Shelley’s novel. As discussed above, the monster’s nightmarish “birth”, a murky meeting of science, technology, garish occultism, medicine, surgery, and bodily violence,

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76 Clayton, 94.
provides him with a troubled “origin story” that haunts both him and his creator throughout the novel; at the same time, the monster as an artificial being is marked by his severed link with the organic world and thus by a lack of the origin story that an organic being possesses. This, we might argue, underpins or brings new meaning to the memory themes in Born of the Sea and Patchwork Girl. This text/body/memory relationship has become an important part of the analytical framework within which this thesis considers Frankenstein.

From Shelley to Haraway: Frankenstein’s theoretical resonance

As the above analyses begin to suggest, the figure of the Frankensteinian monster can be drawn into tentative dialogue with figures that populate cultural theory in the late twentieth and early twenty-first centuries. This is a period in which the “posthuman body” and relatedly the “techno-body” have theoretical currency. Evoking but not specifically referring to Frankenstein, Gail Weiss states that the techno-body is:

certainly not a future body but is our own bodies and bodily possibilities to the extent that they are discursively represented, psychologically constructed, and physiologically reconstructed through technological processes which include the pen, the analyst’s couch, the speculum, forceps, the surgeon’s knife, the computer, the city and its abjected other, the suburb, as well as the unassuming petri dish, that all-important maternal substitute, which has displaced the female as the ‘originary’ site of genetic experimentation and reproductive speculation. 77

With advances in biotechnology in particular, Weiss tells us, we are “decorporealizing bodies in order to control, manipulate, and exchange them”.

Thus it is no surprise that Shelley’s text – a fantastic depiction of the “decorporealizing” of the body from an early nineteenth-century point of view – still has cultural currency today.

In particular, we can place the Frankensteinian monster in dialogue with the more recent figure of the cyborg: a theoretically delineated figure that also frequently appears in fantastic spaces. In her book *Electronic Eros*, Claudia Springer discusses the blurring of the boundaries between human and machine in the late twentieth century, referring particularly to the rise of the cyborg as a dominant cultural figure. She refers to *Frankenstein* and its cultural/theoretical resonance today when she notes that debates over the obsolescence of human presence and the creation of artificial life have long raged in both academic and popular fields:

In their more esoteric form ideas about posthuman life exist in specialized scientific works, but in a more accessible guide they circulate widely throughout contemporary popular culture, familiarizing the public with posthuman imagery. Science fiction has treated the concept of simulated life for decades, and the scientific creation of human life was a literary topic during the nineteenth century, when Mary Shelley wrote the best-known and most influential example, *Frankenstein*.

The figure of the Frankensteinian monster is thus emblematic of our current struggles both with our own obsolescence and with our desires to recreate and

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78 Weiss, 172.
80 Ibid., 23-24.
technologise life itself. Anne Balsamo also observes that concerns explored by Shelley in 1818 have recently seeped into our social and cultural worlds and into theoretical mappings of these worlds.\(^8\) Like Springer, Balsamo is concerned with the figure of the cyborg. She identifies the 1980s as “the decade of the cyborg”,\(^8\) writing that “[f]rom children’s plastic action figures to cyberpunk mirrorshades, cyborgian artefacts will endure as relics of an age obsessed with the limits of human mortality and the possibilities of technological replication”, two powerful Frankensteinian themes.\(^8\) Balsamo also notes that “our technological imagination imbues cyborgs with ancient anxieties about human difference”,\(^8\) in this sense, too, the cyborg intersects with the Frankensteinian monster.

Some caution must be exercised, however, when comparing Shelley’s monster to the figure of the techno-body or cyborg. Many analysts of the novel are quick to remind us that Frankenstein’s monster is not, in fact, mechanical, but a biological creature consisting of sewn-together body parts and transplanted organs stolen from various dead individuals. As James Heffernan observes:

> the creature consists entirely of natural body parts, so that he is closer to an actual human being with one or more transplanted organs than he is to the mechanical men constructed by futurist designers in the 1920s or to the cyborg of present-day science fiction.\(^8\)

\(^8\) Ibid.
\(^8\) Ibid., 18, my emphasis.
\(^8\) Ibid., my emphasis.
Yet if Shelley’s monster is not in the strictest sense mechanical, he/she/it can be described as artificial, as scientifically produced rather than organically birthed, and as a body defined by his/her/its hybridity: a body that is not all natural. Waldby suggests as much when she writes that Frankenstein plays upon “the fundamentally mechanical nature of the human body” and depicts the possibility of “an interface between electrical life and bodily systems”. Furthermore the novel, as Waldby tells us, depicts “a world in which the human body and human sociality owe a greater and greater debt to technoscientific and machinic systems of production and reproduction, and are less and less able to be thought of outside those systems”; a world, in other words, in which “reference to a natural humanity is always anachronistic”. Consequently, we can designate the monster as a posthuman figure. William S. Haney tells us that Shelley’s monster is in many ways “the archetypical posthuman” because he/she/it is “a merging of the given and the produced, biology and technology”, thus exemplifying the posthuman condition which, in its simplest form, involves “a human-technology symbiosis”.

This sort of “merging” and “symbiosis” is precisely what writers like Donna Haraway concern themselves with centuries after Shelley’s time. Writing in the 1980s, Haraway discusses a figure whom she defines as “a cybernetic organism,

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86 Waldby, “The Instruments of Life”, 31, 32.
87 Ibid., 29.
89 Ibid., 2.
a hybrid of machine and organism, a creature of social reality as well as a creature of fiction”.\(^{90}\) Her famous proclamation is as follows:

By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs. The cyborg is our ontology; it gives us our politics.\(^{91}\)

Haraway thus appropriates a figure from fantasy and science fiction – the cyborg – and introduces it to the academic fields of biology, politics, and gender studies, using it to confront established notions and practices of embodiment, technology, gender, agency, and power. She writes at the point of convergence between theory and the fantastic: her cyborg is a border-crossing figure, challenging the divisions between male and female, human and machine, human and animal, as well as that between theory and fantasy. “The boundary between science fiction and social reality is an optical illusion”, she writes, proclaiming to her readers that “I am making an argument for the cyborg as a fiction mapping our social and bodily reality”.\(^{92}\)

What is important here about Haraway’s work, first and foremost, is her understanding that fictional and fantastic bodies can operate in a theoretical way. This has relevance for the Frankensteinian monster, a fantastic figure with theoretical resonance. Lucie Armitt argues that studies such as Haraway’s have “taken great strides towards showing us how fantasy fictions have provided a


\(^{91}\) Ibid., 150.

\(^{92}\) Ibid., 149.
whole new vocabulary for conceptualizing the real (and by extension the realist)"; she also observes that the cyborg is:

the most important recent concept to have entered the critical discourse of the fantastic, not least because it uses an sf (science/speculative fiction) motif to explore the philosophical, and therefore paves the way for the fantastic to become a means of interrogating texts of all kinds.

Indeed, in her “Manifesto” Haraway acknowledges the influence of science fiction writers on her work:

I am indebted in this story to writers like Joanna Russ, Samuel R. Delaney, John Varley, James Tiptree, Jr., Octavia Butler, Monique Wittig, and Vonda McIntyre. These are our storytellers exploring what it means to be embodied in high-tech worlds. They are theorists for cyborgs.

In this way Haraway places herself within a trajectory that stretches back past generations of (female) science fiction writers to Shelley herself. That Haraway takes on the role of “storyteller” and seeks to explore “what it means to be embodied” in her own high-tech world links her to Mary Shelley, who explored similar concerns two hundred years prior.

In bringing these two writers into dialogue, however, it is important to stress that Haraway subverts the Frankenstein myth. In particular, she deconstructs the nexus of absence and desire that defines the relationship between technobody/monster and natural world. As part of her efforts to disrupt established understandings of “organic wholeness”, Haraway stresses that her cyborg has

94 Ibid., 9.
95 Haraway, *Simians, Cyborgs and Women*, 170.
“no origin story”\textsuperscript{96} she defines “origin story” in the “Western’, humanist sense” as a “myth of original unity… represented by the phallic mother from whom all humans must separate” and argues that “the cyborg skips the step of original unity, of identification with nature in the Western sense”.\textsuperscript{97} Here, she tells us, is the crucial difference between her cyborg and its predecessor, the Frankensteinian monster:

Unlike the hopes of Frankenstein’s monster, the cyborg does not expect its father to save it through a restoration of the garden; that is, through the fabrication of a heterosexual mate, through its completion in a finished whole, a city and cosmos. The cyborg does not dream of community on the model of the organic family, this time without the oedipal project. The cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust… Cyborgs are not reverent; they do not re-member the cosmos.\textsuperscript{98}

In many ways, Haraway’s writing on the cyborg addresses the same question that Waldby attributes to Shelley’s \textit{Frankenstein} – “what does it mean to be embodied when the body cannot claim the status of nature?”\textsuperscript{99} – but if Shelley’s novel offers a mournful silence in answer to this question (the monster is at a loss to describe his own unnatural embodiment, and seeks only to approach organic status) Haraway \textit{responds}. Her cyborg represents meaningful embodiment \textit{without} claiming the status of nature.

Haraway further subverts the Frankenstein myth by taking apart the division between \textit{natural} and \textit{unnatural} production so central to Shelley’s writing.

“Taking on the ultimate ‘proof’ of woman as body and thus biological function”,

\textsuperscript{96} Haraway, \textit{Simians, Cyborgs and Women}, 150.
\textsuperscript{97} Ibid.
\textsuperscript{98} Ibid., 150-151.
\textsuperscript{99} Waldby, “The Instruments of Life”, 33.
Armitt tells us, Haraway “deconstructs the ‘naturalness’ of this phenomenon, biological mothering being replaced by reproductive technology and all technology becoming inherently reproductive”. If Shelley’s novel is defined by an irresolvable tension between nature and technology, organism and machine, reproduction and techno-production, Haraway seeks to disturb such boundaries. This allows her to fulfill what is arguably her ultimate goal: the imagining of a “post-gender world”. Here again her Manifesto veers away from Shelley’s *Frankenstein*, in which the characters are as strictly gendered as we might expect from a novel published in early nineteenth-century England.

Nevertheless, we can recognise some shared concerns between Shelley and Haraway as writers who concern themselves with production, textuality, technology, and with the techno-body as fantasy, scientific project, and social possibility. I propose that what the cyborg and the monster particularly share is a position at the heart of an apocalyptic narrative. In her deconstruction of millennial culture, Lee Quinby takes Haraway to task for her use of apocalyptic rhetoric, arguing that Haraway “claims apocalyptic drama for her cyborg figure”. For Quinby, Haraway’s famous statement that “[b]y the late twentieth century, our time, a mythic time… we are cyborgs” is a “utopian pronouncement” informed by what she terms “technological millennialism”: the interweaving of technology into narratives of salvation or catastrophe, a deifying

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100 Armitt, 75.
101 Haraway, *Simians, Cyborgs and Women*, 150.
103 Haraway, *Simians, Cyborgs and Women*, 150.
or demonising of technology that is symptomatic of millennial culture. Yet Shelley’s novel, too, was a text written at the turn of the century (if not the millennium), and more importantly, a text that addresses the social and technological upheaval of its time. If Haraway’s cyborg is “salvific”, we might argue that Shelley’s monster is more “catastrophic”: a techno-body with a demonic face (who is repeatedly called “daemon” by his creator). In recent popular culture, this has led to a plethora of what Waldby refers to as “apocalyptic” readings of the tale. Both the monster and the cyborg, then, are threshold figures, emblems of a nearly or newly postorganic future; thus, they can be framed by narratives that celebrate or demonise them and the technoscientific rewriting of the body they represent.

I dwell upon this relationship between monster and cyborg – as figures of fantasy and theory, as boundary-creatures who confront a posthuman future and who are inscribed with apocalyptic responses to the technologising of organic presence – because cinematic retellings of Shelley’s Frankenstein frequently reconfigure the monster as cyborg. As I will observe in Chapter Two, the influence of other, mostly science-fictional texts on the project of retelling Frankenstein has given rise to a menagerie of mechanical monsters. Even the monster of the famous James Whale films is somewhat mechanical, while in films of the 1990s and beyond we find that hybridity and the interface between organic/mechanical components is emphasised. In this sense, theoretical work on the cyborg maintains an important dialogue with Shelley’s novel and its continued adaptation in popular culture.

104 Quinby, 126, 125.
The cinematic retelling of Frankenstein will be the subject of the chapters ahead. In this chapter I have charted an approach to Shelley’s novel and to the process of adapting it, an approach that is particularly defined by themes of writing, production, technology, and embodiment. I have also suggested that we can assess the Frankensteinian monster as a body defined not only by its artificiality but by problems of originality, authenticity, and organicism. The recognition that one does not originate in nature, I have asserted, creates a crisis for the techno-body (although Haraway would suggest that this supposed “crisis” is merely an opening for a new and empowered identity to be constructed). In different degrees, this crisis is faced by popular rewritings of the Frankensteinian monster. Kelleher’s Madeleine is a perfect example of this: she, like Haraway’s cyborg, is decidedly not “born in a garden”; the fact that she is born “of the sea” might be a reference to her creation in the depth of Shelley’s imagination but does not provide her with “natural” origins. The filmic and animated bodies that I explore in chapters ahead also grapple with this problem, while cinema itself has, over the years, created new variations on the relationship between (techno)body and organic world. In my next chapter, I will continue to draw upon these concepts and concerns as I consider what happened when Shelley’s novel was first brought to the screen.
CHAPTER TWO

TECHNO-GENESIS AND THE SPARK OF LIFE:
FRANKENSTEIN AND FILM

Figure 3: Edison Studios’ 1910 adaptation of Frankenstein

Figure 4: The robot Maria in Metropolis
Interlude: cinema and/as fantasy

In 1896, the pioneer French filmmaker Georges Méliès created a film entitled Le Manoir du Diable. This two-minute-long fantasy depicts a bat flying into a castle and then morphing into the Devil, who subsequently brings to life a series of supernatural creatures out of a cauldron. A film with vague Frankensteinian overtones – themes of monstrosity and creation – Le Manoir du Diable is often identified as the “first” horror film. Jeremy Dyson goes further and recognises it as the first film of the “supernatural horror” sub-genre, which can be defined as “the strand of the [horror] genre that deals with the fantastic, the non-ordinary, and the metaphysical”.\(^1\) Films in this sub-genre, Dyson argues, “show us a glimpse of another world, an impossible world, a world that contains something larger than ourselves”.\(^2\)

Like most of Méliès’ films, Le Manoir du Diable is a spectacular and early example of how editing can be used to create the illusion of magic. As Dyson puts it, the film demonstrates that “technology could be utilized to simulate supernatural phenomena”.\(^3\) This is also true of Méliès’ later film Le Voyage Dans La Lune, a more famous exercise in using filmic technologies to depict fantastic or impossible events. Importantly, both these films exist on one side of a division between “fantasy” and “realism” that defined early cinema. As Nick Lacey reminds us, two distinct readings of the filmic “machine” emerged in the late 1800s and early 1900s:

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2. Ibid.
3. Ibid., 1.
Since the early days of cinema the tension between film as a realist medium and one that can make the fantastic appear real has been evident. The first public screenings by Louis Lumière took place in Paris 1895, and were images of real people leaving the factory or a train entering a station; a few years later George Méliès was producing *A Voyage to the Moon* (1902).

As pioneer films that asked their audiences to occupy very different viewing positions, the Lumière brothers’ *L’Arrivée d’un Train à La Ciotat* and Méliès’ *Le Voyage Dans La Lune* encapsulated these competing notions of cinema. Audiences watching the Méliès film were confronted with the fantastic; they were invited to suspend their disbelief and enter a realm of impossible occurrences. “On the other hand”, Lacey writes, “the audiences ducked for cover as the Lumière’s train entered the station in all too real a fashion”. Arguably, it is the understanding of film as a realist medium, a means of framing and depicting reality, that came to deeply permeate media culture in the twentieth century, and to dominate understandings, both popular and academic, about the cultural operations of film. To this day, rational discourses shape the way we engage with, study, and teach all media texts, often at the exclusion of the fantastic.

What Méliès seemed to be aware of, however, and to play with enthusiastically in his films, is the idea that filmic technologies can not only be used to depict fantastic events, but can themselves be seen in a fantastic light. Tzvetan Todorov has famously defined the fantastic as “that hesitation experienced by a person

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5 Ibid.
who knows only the laws of nature, confronting an apparently supernatural event”;  
he proclaims that the fantastic acts as “a dividing line between the uncanny and the marvelous”.  
Yet cinema, too, evokes this sense of hesitation; filmic technologies themselves have long been culturally understood in a manner that hovers between the “marvelous” and the “uncanny”.  Cinema’s reproduction of “life” invites us to gasp, marvel, bathe in the spectacular, but it also evokes anxieties and a sense of unplaceable strangeness.  In this sense, the work of “magician” Méliès is more cinematic than that of his realist contemporaries because these films explore and flaunt the fantastic aspects of film, foregrounding the apparatus and its capacity for spectacle, magic, and transformation.

Méliès, of course, never produced an adaptation of Frankenstein (although we can hungrily wonder what such a film might have been like).  What then does this filmmaker and his tales of ghosts, devils, and spaceships have to do with Shelley’s novel?  Two connections can be forged here.  Firstly, Frankenstein films – especially the early adaptations – inherit much from Méliès because they too depict fantastic and supernatural events.  Thus Dyson, who identifies Le Manoir du Diable as the first “supernatural horror” film, also places James Whale’s version(s) of the Frankenstein tale within this generic framework, writing that Whale’s 1931 film is “in many ways… the prototype for the post-sound supernatural horror film”.  The first and famous Frankenstein films – including Whale’s adaptations – can be defined as fantastic texts because they

7 Ibid., 27.
8 Dyson, 13.
depict at least one supernatural or impossible event: the creation of the monster. This, of course, is the turning point in Shelley’s narrative: it is the moment at which this narrative shifts and becomes fantastic, horrific, or science-fictional. Screen versions of this scene are no different: they are often the most iconic and spectacular moments of Frankenstein films, but just as often they are the scenes that push the text (and its viewers) into a fantastic space. These scenes evoke Todorov’s sense of fleeting indecision created by an encounter with supernatural events; and a similar teetering between the marvelous and the uncanny (or the spectacular and the strange) is aroused by the bodies of the various Frankensteinian monsters that have appeared in cinema. Interestingly, an oscillation between wonder and fear is often imprinted upon the faces of those characters who encounter the monster and/or witness its creation: most notably, this position of “inner spectator” is occupied by Victor Frankenstein himself. As I will explore below, moreover, Frankenstein films – which depict the “instruments of life”9 at the heart of Shelley’s tale in ever more imaginative ways – also foreground the fantastic aspects of cinema as a mode of production. This, too, they share with the films of Méliès.

Secondly, Méliès can be identified as an example of the filmic director in his/her most Frankensteinian capacity. J.P. Telotte notes that this pioneer filmmaker was essentially concerned with “exploring what sort of ‘games’ the camera and its evolving techniques might allow one to play with the nature of both the world

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Méliès was not only a magician, then, but a manipulator of nature akin to Victor Frankenstein himself. William Nestrick brings this aspect of Méliès’ work – and of the director’s role in general – into his analysis of the early Frankenstein films, arguing that these early adaptations play upon an understanding of the film director as magician and as “wondermaker, illusionist, and life-giver.” The self-reflexivity of early filmic versions of the tale, Nestrick writes, hinges on “[m]agic and the central relation between maker and Monster” which have:

continued to make the novel appealing to film-makers fascinated by the independence of their own animated and self-expressive artworks. If Victor follows in the footsteps of Albertus Magnus, Paracelsus, and Cornelius Agrippa to learn about the ‘raising of ghosts or devils’ (p.34) the first filmmakers also saw themselves in the role of magician, debased in the nineteenth century to the theatrical showman.

He continues, observing that “[t]he pioneer Méliès, called the Magician of the Screen and King of Fantasmagoria, accidentally brought about a metamorphosis such as the artist-alchemists had always promised” when his camera jammed while filming traffic outside the Paris Opera and he continued “cranking”, lending the finished film a magical and transformative quality. As we shall see below, the sort of innovations that Méliès contributed to the art of filmmaking were used to depict the metamorphic creation of the monster in the first filmic

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12 Ibid., 291.
adaptation of Frankenstein: and interestingly so, given that Méliès himself was such a Frankensteinian figure.

The purpose of this chapter is to chart the relationship between Frankenstein and film. In the previous chapter I introduced Mary Shelley and her monster; here, I begin my study of the filmic monsters that have appeared on our screens since the early days of cinema – strange, uncanny, mechanical, or purely fantastic bodies upon which are imprinted anxieties, desires, and problems relating to cinematic presence and the filmic apparatus itself. In this chapter I will draw from Nestrick and other theorists who analyse Frankenstein films in a manner that brings cinema itself into the analytical spotlight. These theorists concur that Frankenstein films offer a fantastic image of the technologies of cinema, the filmic “machine” itself. These connections between cinema and the fantastic consequently form an important foundation for a discussion of Frankenstein in film.

Just as the previous chapter sought to re-engage Shelley’s novel as an originary text, this chapter engages some of the prominent, early, and/or famous filmic adaptations of the tale. I analyse the Frankenstein films by Dawley (1910), Whale (1931), and Branagh (1994); I also address Fritz Lang’s Metropolis, an early science fiction film with a Frankensteinian creation scene. These films, I propose, are “originary texts” in their own right: their strange and scintillating dialogue with Shelley’s novel provides the foundation upon which later and looser versions of the tale would operate. In the analyses that follow I pay particular attention to the changing image of cinema that is fantastically deployed
across the scope of these four texts: I follow a trajectory from the eeriness and uncanniness of early screen presence to the electric spectacle of the Golden Age, moving towards the emerging concern with hybridity and the organic that marked the 1990s. Consequently, this chapter leads us into the digital age and towards the very Frankensteinian problems of organicism and fragmented presence that define an era of digital filmmaking.

**Mirrors, monsters, and mise-en-abyme: the “Edison” film**

Let us begin, however, at the beginning. Frankenstein was first cinematically adapted in 1910 in a film produced by Edison Motion Picture Studios. The film, simply entitled *Frankenstein*, was written and directed by J. Searle Dawley and received no creative input from Edison himself; nevertheless, it is difficult to view the film without being aware of the link between Victor Frankenstein and Thomas Edison as scientists and “inventors”. The invention that is usually associated with Edison is of course the light bulb, which itself is rather Frankensteinian (Victor too is a producer of electric “life”). Significantly, however, Edison did his most pioneering work in the field of communication; his inventions – most famously the phonograph, and, in visual media, the kinetoscope – were the first of the “lively machines” that paved the historical path to cinema. There is consequently some significance to the declaration, in one of the film’s titles, that “Frankenstein has discovered the mystery of life”: a declaration that is accompanied by the mystery of cinematic life as the jerky and flickering images unfold before us.
Like all the adaptations that would follow it, this film reworks Shelley’s narrative liberally: it begins with Victor Frankenstein leaving for college and discovering the “mystery of life”, and depicts his quest to create “the most perfect human being that the world has known”; the “evil in Frankenstein’s mind”, however, leads to the creation of a monstrous rather than a perfect Creature. The exchanges between monster and creator in this film are dramatic but ultimately stripped of the violence that marks Shelley’s novel. Instead, the film depicts a more ethereal struggle: that between Victor and this so-called “evil in his mind”. The vanquishing of such evil is conveyed in the astounding image of the monster’s reflection disappearing from a mirror – a moment of such maturity and artfulness that its presence in such an early film might surprise today’s viewers.

One of the outstanding features of this early venture into filmmaking is precisely this self-reflexive preoccupation with visuality, spectatorship, and mirrors. In one particularly memorable shot, Victor sits with a mirror before him that we, the audience, can also see. Momentarily, he too is a spectator watching a “screen”. The monster enters the room, appearing first as a reflection in the mirror: he confronts Victor, but stops when he catches sight of his reflection, becoming a doubled presence confronting himself. This shot set-up is repeated in the film’s climax. Again, the mirror takes up almost half the screen; the monster rushes in and confronts his own image, gesticulating wildly, and then disappears. When Frankenstein enters the scene he finds only the monster’s mirror image, not his body. For a moment Victor looks into the mirror and sees the monster’s image reflected back at him; then this image of the monster disappears and is replaced by Victor’s own reflection. Normality is restored.
These mirror scenes rework an important moment in Shelley’s novel. When Shelley’s monster, newly made and abandoned, wanders in the forest, he views his reflection in a pool of water and consequently discovers his own monstrosity:

How was I terrified when I viewed myself in a transparent pool! At first I stared back, unable to believe that it was indeed I who was reflected in the mirror; and when I became fully convinced that I was in reality the monster that I am, I was filled with the bitterest sensations of despondence and mortification.\textsuperscript{13}

This is a very “cinematic” part of the novel – a moment that exemplifies a concern with visuality and “the eye” that reverberates throughout the text. It is also a moment that recalls Lacanian notions of the “mirror stage” of development, notions that became central to psychoanalytic studies of cinema undertaken by theorists like Laura Mulvey.\textsuperscript{14}

Not surprisingly, this small scene in the original novel becomes a point of energy in filmic adaptations of the tale, including the Edison film. After all, we can read the process of cinematically adapting 	extit{Frankenstein}-the-novel in terms of a monolithic shift from Shelley’s time – a period when writing was the primary vehicle of articulation – to the early years of cinema and the advent of the visual age. Any latent concerns with visuality expressed in the novel would therefore have exploded into being with the adaptation of the tale into film. Furthermore, filmic versions of Frankenstein are shaped by what James Heffernan calls the visual language of cinema. Drawing on the work of Christian Metz, Kaja

\textsuperscript{13} Shelley, 88.
\textsuperscript{14} See Laura Mulvey, 	extit{Visual and Other Pleasures} (Basingstoke: Macmillan, 1989).
Silverman, and André Bazin, Heffernan argues that this “stubborn visuality of cinema”\(^{15}\) inflects upon and alters the tale:

> By forcing us to face the monster’s physical repulsiveness, which he can never deny or escape and which aborts his every hope of gaining sympathy, film versions of *Frankenstein* prompt us to rethink his monstrosity in terms of visualization: how do we see the monster, what does he see, and how does he want to be seen?\(^{16}\)

In line with Heffernan, we can suggest that the mirror scenes in the Edison film are responding to a cinematic desire to “see” the monster, to frame him and render him *visible*, and also to allow him to function as a spectator.\(^{17}\)

It is the creation scene, however, that is the centrepiece of this film. In this scene, we – and Victor, who is again placed in a spectatorial role – witness the monster rising from his alchemical cauldron, his hideous features revealing themselves bit by bit. This is surely one of the creepiest images ever to grace the silver screen: the nebulous figure with its outstretched arms has the power to chill audiences even a century after its production, and even in an age when digital effects can be (and are) used to create endless new variations on the horrific, the spectacular, the strange. In imaging this monstrous body and its eerie scene of creation the film relies upon the special effects that defined early cinema: the “magic” of editing, in particular, and the related ability to play with presence, absence, disappearance, and transformation. Indeed, in this moment...


\(^{16}\) Ibid., 136.

\(^{17}\) For a fuller discussion of themes of visuality in filmic adaptations of *Frankenstein*, see Heffernan’s article in its entirety (133-158). See also Chapter Three of this thesis, where I consider how such themes are reworked in science fiction cinema of the 1990s and beyond.
the monster’s body *becomes* a special effect – a trend that would continue with filmic adaptations of Frankenstein across the history of cinema.

Shadowy and indistinct at this point in the film, the monster’s body is also momentarily uncanny. Later it will be more recognisably a human actor “made up” as a monster, and thus less threatening; emerging in the creation scene, however, it is human-like but also chillingly inhuman, evoking the eerie sense of familiar unfamiliarity pinpointed by psychologist Ernst Jentsch in the early 1900s. For Jentsch, the uncanny emerges when we have “doubts whether an apparently animate being is really alive; or conversely, whether a lifeless object might not be in fact animate”.18 This state of unsettling indecision is played upon in the creation scene of the Edison film, as we wait for Frankenstein’s “perfect” human to be revealed and slowly begin to wonder what he has created instead; is it human, we ask, and if not, why does it seem so alive?

A sense of the uncanny is crucial to the Frankenstein tale in all its forms: this, after all, is a tale about bringing the body as “lifeless object” to dubious life. In his analysis of Shelley’s novel Jules Law writes of “a body made newly uncanny by Victorian science” that exists at the heart of Gothic literature.19 In the days of early cinema, we find that the body is again made “newly uncanny” by the filmic apparatus itself: for the invention of cinema asked us to revise our understandings of what is human, what is alive, and what it means to be embodied. What the monster in the Edison film performs, therefore, is the

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uncanny nature of the filmic image and of cinematic presence. We can consequently read the film as a fantastic depiction of cinema’s power to turn the body into something familiar-yet-unfamiliar, something alive-yet-not-alive, something supernatural and only dubiously present.

Altogether, the 1910 film emphasises magic rather than science, playing upon disappearance and absence/presence rather than technological or scientific spectacle. This foregrounding of magic at the exclusion of science might have been a move to distance the film (and its depiction of a deluded, half-mad inventor) from Edison himself. As a result, the film offers an image of cinema and its powers of animation in their most magical, supernatural, and uncanny sense. Furthermore, the monster in this film is other and inhuman but not yet mechanical: he/it is more ghostly, especially in the moment of his creation. His appearance may remind viewers of the ghostly apparitions captured in spirit photography in the nineteenth century: and indeed, he fulfills something of the same purpose as these spectral figures, expressing the supernatural or uncanny nature of the medium and its replication of human presence. In contrast, later films would depict both the monster and his/her/its scene of creation in more mechanical terms. With this in mind, let us turn now to some of the adaptations that followed the 1910 venture.

**Electricity and animation: from Whale to Branagh**

What we can glean from an analysis of the Edison film is the importance of the animation scene as a keystone in the Frankenstein/cinema relationship. Various
theorists have recognised a link between the Frankensteinian “instruments of life”20 (however they might be depicted or imagined) and the animating powers of cinema: Nestrick, in particular, has argued that cinema realizes the very “myth of animation” that the Frankenstein tale is founded upon.21 Relatedly, Esther Schor writes of the “reflexivity of the animation scene”22 in Frankenstein films, pinpointing this scene as the moment “in which cinema explores most acutely its power to realize a conundrum the novel merely glimpses”.23 Bouriana Zakharieva elaborates on the importance of the animation scene:

what in the novel is allotted a mere paragraph with no details of the actual process, only a description of the result – i.e., the appearance of the creature, becomes an elaborate, highly visualized scene of creation in the films. This emphasis on the process is dictated not only by the very nature of film art with its demands for spectacularness, but it is simultaneously the point where film art and scientific creation are able to mutually comment on each other. The film, seen as a generator of life through the mechanical movement of pictures, and the Romantic narrative of the creation of an artificial being coincide in their principle of animation.24

When investigating animation as a link between cinema and Frankenstein, we cannot avoid a discussion of electricity. In a passing reference to the Edison film, Scott Bukatman mentions “electricity” and “light”: with this first filming of the Frankenstein tale, he tells us, the monster is “brought to life” with the “stuff of cinema”.25 This is certainly true insofar as the Edison film, the first of many cinematic adaptations of Shelley’s novel, brought artificial “life” to a story about,

20 Shelley, 45.
21 Nestrick., 292.
23 Ibid., 66.
precisely, artificial life. Electricity and light however are notably absent from
the film, the creation scene of which is dark, gloomy, and alchemical. Later
adaptations would depict a creation scene that was both spectacular and
(literally) electrifying.

Shelley herself did not imagine a literally electric scene of creation: her
description of that “dreary night of November” when the monster comes to life
is grounded in secrecy and occultism. Nevertheless, she alludes to a process of
electric animation and there are references to electricity throughout the text.
Early in the novel, for instance, Victor describes watching a thunderstorm as a
young man:

I beheld a stream of fire issue from an old and beautiful oak which stood
about twenty yards from our house; and so soon as the dazzling light
vanished the oak had disappeared, and nothing remained but a blasted
stump… On this occasion a man of great research in natural philosophy
was with us, and, excited by this catastrophe, he entered on the explanation
of a theory which he had formed on the subject of electricity and
galvanism.27

Shelley also mentions “galvanism” in her introduction, where she speculates
“[p]erhaps a corpse would be re-animated; galvanism had given token of such
things: perhaps the component parts of a creature might be manufactured,
brought together, and endued with vital warmth”.28

26 Shelley, 45.
27 Ibid., 33.
28 Ibid., 4.
Electricity also epitomises the sort of technologising and externalising of the natural “life-force” that is depicted in *Frankenstein*. In her analysis of the novel, Waldby tells us that:

> Victor Frankenstein treats life as a material quality, one that can be understood analytically as mechanism rather than as transcendental essence… [he] treats vitality as a separable force, which exceeds its location in any particular body.²⁹

For Waldby, Shelley’s novel is revolutionary in its depiction of life as a force that can be “isolated as a capacity, analyzed, quantified, and controlled, irrespective of the form of embodiment in which it is temporarily located”, and thus rendered “open to instrumentation”.³⁰ Electricity can be seen in the same terms, especially when it is harnessed by media technologies that use it to produce disembodied and artificial “life”. As Jeffrey Sconce tells us, media and communication technologies such as telegraphy changed our understandings of electricity and also led to a perceived technologising and externalising of “natural vitality”:

> The focus of much popular scientific interest in the eighteenth and nineteenth centuries, electricity was for many a mystical and even divine substance that animated body and soul. When harnessed by the telegraph and the media that were to follow, this ‘life force’ seemed to allow for a mechanical disassociation of consciousness and body. Telegraph lines carried human messages from city to city and from continent to continent, but more important, they appeared to carry the animating ‘spark’ of consciousness itself beyond the confines of the physical body.³¹

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³⁰ Ibid.
This comment contributes to Sconce’s argument that media – his study dwells
upon telegraphy, radio, television, and cyberspace – evince an uncanny
“liveness” that has long fascinated Western culture.\footnote{At times, he writes, “this sense of liveness can imply that electronic media
technologies are animate and perhaps even sentient”, a comment that recalls the
Frankenstein tale and its image of an animated body, a sentient machine.
Sconce, 2.} We can, of course, add
cinema to Sconce’s list. Images on the cinema screen are unnaturally or
uncannily “alive”; they represent a disembodied and technologised “vitality”, an
act of relocating the spark of life “beyond the confines of the physical body”\footnote{Sconce, 7.} –
and of rendering such life manipulable, “open to instrumentation”\footnote{Waldby, “The Instruments of Life”, 30.} – that finds a
wonderful parallel in the Frankenstein tale.

Electricity as a signifier of cinematic “life” is famously incorporated into the
Frankenstein myth by James Whale, whose 1931 film \textit{Frankenstein} is described
by Zakharieva as “still… the most influential of the film adaptations”.\footnote{Zakharieva, 739.} Whale’s
film offers us the images most commonly associated with Frankenstein in
cinema: the vaulted laboratory with its complex apparatus; the ferocious
lightning storm; the shower of sparks; the supine and bandaged monster covered
by a sheet. Whale turns the moment of electric animation into a spectacle; he
even allows Frankenstein to bring spectators – Elizabeth, his friend Moritz, and
his professor Waldman – into his laboratory to witness the moment of creation.
This moves the scene from a solitary event, depicting the solitary toilings of a
writer, to a performance. “Quite a good scene, isn’t it?” titters Frankenstein
hysterically: “One man, crazy, and three very sane spectators!” These spectators

\footnote{32 “At times”, he writes, “this sense of liveness can imply that electronic media
technologies are animate and perhaps even sentient”, a comment that recalls the
Frankenstein tale and its image of an animated body, a sentient machine.
Sconce, 2.}
\footnote{33 Sconce, 7.}
\footnote{34 Waldby, “The Instruments of Life”, 30.}
\footnote{35 Zakharieva, 739.}
then as watch the lifeless body of the monster is raised skywards on a platform while lightning and thunder batter the laboratory; they see the ominous twitching of the animated monster’s fingers, and hear Frankenstein’s dramatic proclamation, “it’s alive!”

It is significant that “life” in Whale’s film is signified by the uniquely cinematic combination of electricity (the lightning) and *movement* (the twitching of the monster’s fingers). As Sean Cubitt tells us, “the depiction of motion” is the “first and most special of all effects… an event as dizzying as the invention of perspective in the Quattrocentro”, and an event that invites the crucial question, “[w]hat happens when the still photograph begins to move?” Cubitt quotes from a review of the first public film screening: “[i]magine a screen”, the review commands us, “placed at the end of a room. On the screen appears a photographic projection. So far, nothing new. But, suddenly, the image… is animated and springs to life”. These words evoke an image of Frankensteinian creation. In Whale’s film, we can argue, the body of the lifeless monster stands in for the photographic image, and the first flickers of movement are intensely dramatic because they represent a turning point in the history of visual representation – the shift from photography to motion pictures.

Decades later, Kenneth Branagh would pay tribute to the electric spectacle of Whale’s film in his 1994 adaptation *Mary Shelley’s Frankenstein*. With its unabashed “bigness”, the creation scene of this film reads as a supplication to the

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life-giving powers of cinema itself: at the climax of the scene we see a wide shot of the laboratory, with Victor standing atop the complex apparatus he has constructed, naked to the waist, arms upraised, with bursts of flame beneath him and flickers of blue lightning all around him. With shout-outs to previous Frankenstein adaptations, the monster’s coming-to-life is signified in Branagh’s film by vision and movement: his eyes open, and his fingers twitch. Upon confirmation of this miraculous scientific “birth”, Victor channels his predecessor in the Whale film and exclaims “it’s alive!”. To some extent, the scene thus functions as a reanimation of our cultural memories of Frankenstein in cinema. This scene also makes visible Nestricks link between Victor Frankenstein and the filmic director as “wondermaker, illusionist, and life-giver”, particularly because Branagh encodes himself into the scene (he plays Victor). The director is rewritten here not as “magician” but as master of an electric light show: most appropriate for an era in which special effects dominate and in which the most cutting-edge visual effects are created by George Lucas’ company, Industrial Light and Magic.

Branagh’s adaptation is a strange film, replete with the problems of authorship and originality that seem to surface in most retellings of Frankenstein. The text can be critically approached via the relationship between Branagh (as director/father) and Shelley (as writer/mother). Branagh defers to Shelley by including her name in the film’s title; at the same time, he repeatedly mobilises his power as adapting writer/director and imposes it on the text. Shelley’s narrative is liberally played with and remoulded in this film: for instance,

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38 Nestrick, 306.
Branagh underscores Victor’s actions with an Oedipal motive, transforming him from over-eager scientist to Freudian victim traumatised by the death of his mother. Branagh also notably includes (or “invents”) a scene in which Victor, devastated by his bride Elizabeth’s death, attempts to restore her to life by attaching her head to the body of the female monster (which is actually the body of Justine, another of the monster’s victims). These additions to the narrative have led analysts like Esther Schor to suggest, with a wonderful play on words, that Branagh “deforms Shelley’s plot”.\(^{39}\)

Dyson, too, decries Branagh’s film as “limply directed”, adding that Branagh “shout[s] his way through the title role” and proclaiming that the film:

> demonstrates so well what is wrong not just with the genre but with contemporary Hollywood cinema in general in the way it reeks of ‘package’ and pre-selling and you can hear the pitch as you sit through the opening credits… It’s no surprise that these large-scale remakes failed to initiate a 1990s horror cycle to match Universal’s.\(^{40}\)

Interestingly, some of the elements of the “supernatural horror film” that, for Dyson, Branagh’s text fails to adopt are inherited by science fiction films of the 1990s and beyond which engage problems of otherworldly embodiment with far more rigour and imagination. I agree that *Mary Shelley’s Frankenstein* is a problematic film, not only because of its authorship issues – which seem only too appropriate in the context of Frankenstein, a tale about the troubled relationship between inventor/father and progeny – but also for its refusal to address the

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\(^{39}\) Schor, 74.

\(^{40}\) Dyson, 259-260. By “large-scale remakes” Dyson is referring to Branagh’s film and the Francis Ford Coppola version of *Dracula* which appeared two years earlier.
digital age: a film of the 1990s, Branagh’s text is more concerned with repeating 
the Frankenstein motifs of earlier adaptations than with transposing these motifs 
for a new era. For this reason, the film plays a smaller role in this thesis than 
would initially seem necessary. I also find that this film has been heavily 
theorised, particularly by Zakharieva: her detailed analysis will be discussed, in 
brief, below, because it in many ways is a more substantial addition to the 
unfolding Frankenstein/film narrative than the text it reads.

**Fragmentation and nostalgia for wholeness**

The adaptations of Branagh and Whale share more than a scene of spectacular 
electric animation; these directors also agree, to a certain extent, on the *look* of 
the Frankensteinian monster.\(^{41}\) I refer here to his physical presence and 
appearance, not his gaze (which has already been discussed): in both texts the 
monster has an imposing physique and is notably scarred. Fragmentation is a 
visual theme in both films; this reaches its climax in *Mary Shelley’s* 
*Frankenstein* when Branagh “sews” together the bodies of the two main female 
characters, Elizabeth and Justine, in a bizarre deconstruction of the myth of 
cinematic “beauty”.

Zakharieva’s analysis of these two films is an important theoretical milestone 
here, because she uses this analysis to shift the emphasis away from Nestrick’s

\(^{41}\) I will discuss momentarily the places where these directors *disagree*: in 
particular, Branagh’s monster is far more “organic” than Whale’s.
“myth of animation” and towards the monster’s body – a “composite body”42, she tells us, a body defined by its fragmentation. She writes:

Mary Shelley introduces two innovations to the traditional narratives of creation: first, the scientific method and second, the idea of a composite body. In other words, the motif of creation through science – not magic or miracle – and moreover, creation through cutting and montage brings the ideology of *Frankenstein* closer to the aesthetics of cinema.43

She also observes that:

A film individual can be ‘born’ through the montage of different parts of different real life individuals. The same principle of montage accounts for the originality of Mary Shelley’s monster. Or, to paraphrase Nestrick: the word that bridges the world of film and man (or monster) is the word ‘montage’.44

Although Zakharieva does not refer to digital or animated versions of the tale, the fragmentation of which she writes becomes particularly important in the digital age when a “film individual” can be created from scratch, from the disparate body parts of a series of actors, or through an unsettling mesh of digital code and human acting.45 At the same time, the fragmentation of the filmic actor’s body (and consequently of on-screen presence) is a problem that has been discussed since the inception of cinema. In 1935, for instance, Walter Benjamin was already telling us that the filmic actor’s “creation” is “by no means all of a

42 Zakharieva, 741.
43 Ibid.
44 Ibid., 740-741.
45 My analysis (in Chapter Four) of Aki Ross, the protagonist of *Final Fantasy: The Spirits Within*, will attest to this.
piece” because “there are elementary necessities of equipment that split the actor’s work into a series of mountable episodes”.

Interestingly, however, filmic retellings of Shelley’s tale do not always depict the monster as fragmented. Indeed, one of the major revisions that cinema has made to the Frankenstein tale is the re-presenting of the monster as a seamless being, an outwardly unproblematic body. In my next chapter I will discuss films of the digital age that, unlike Branagh’s adaptation, rewrite the monster as replicant, cyborg, or artificial being, and emphasise perfection rather than fragmentation. Such revisions, however, are not unique to the digital age. I will now turn my attention to a film of the 1920s that re-imagines the Frankensteinian monster as a seamless and beautiful body.

The film in question is Fritz Lang’s 1927 masterpiece *Metropolis*. Lang’s film is a science-fictional tale about the oppression of workers in a futuristic city; interestingly, the film dwells upon the notion of the city itself as a mechanical and automated “body”. These themes are mirrored in a sub-story about the creation of a robot. At the heart of the film, we find a Frankensteinian creation scene in which the mad scientist Rotwang transfers “life” from the captive heroine Maria to the robot who takes her form. Maria lies supine in a glass tube, while the robot is seated behind her; both are still. When Rotwang pulls a lever, blinding streams of electricity connect the two, and circles of electric light run up and down the robot’s lifeless body. Harnessing the magic of editing, Lang has

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the robot’s face dissolve into that of Maria; then the robot opens her/its eyes, signifying “life”.

A comparison between Lang’s robot and the Frankensteinian monster produces notable similarities and differences. Like the monster, the robot of Metropolis is artificial and electrically animated; however, she is depicted as seamless rather than fragmented, beautiful rather than monstrous, defined by perfection rather than scars; her otherness lies in her ability to deceive rather than in outward ugliness. It can be argued that Lang’s depiction of this robot/Maria figure is infused with a certain “cinematic” nostalgia for corporeality and wholeness. Indeed, cinema’s fragmentation of the body creates such nostalgia. As Brigitte Peucker tells us, cinema is a fragmented medium that suffers from “an underlying fear of castration and of death” which is allayed by the framing of the whole body.47 Peucker draws a connection between cinema and its roots in early photography, a medium that fetishised “the whole body, centred within the frame”;48 she also argues that, despite cinema’s ability to “dismember” the body — through editing, and through close-ups of individual body parts — the medium is forever “playing on the spectator’s desire for the whole actor”.49 In a similar vein, Tim Armstrong writes that film “offers the cinematic body as recompense for the fragmented body of technology”.50 He also writes of “capitalism’s fantasy of the complete body” which is visible “in the mechanisms of

48 Ibid., 19.
49 Ibid.
advertising, cosmetics, cosmetic surgery, and cinema”. Such fantasies are interrupted in filmic versions of Frankenstein where the monster is depicted as a problematic body defined by scars. Yet in Metropolis, the reverse occurs. Wholeness, corporeality, and a fantasy of completeness all come into play in this film’s creation scene: here the robot is framed in full; its metallic body is rather seamless, but even this mechanical exterior disappears when the robot takes Maria’s beautiful and perfect form.

This nostalgia for corporeality becomes particularly visible in a later scene when the robot-Maria dances seductively, moving in a strangely beguiling and sensuous manner. When I view this scene I am reminded of Cubitt’s discussion of the 1935 film Top Hat, in which he argues that actor and dancer Fred Astaire “evokes the sensuous embodiment for which the incorporeal cinematic machine yearns”. Drawing on the work of French theorist Gilles Deleuze, Cubitt describes the filmic apparatus as a “desiring machine” that positions the body as an object of yearning; this, he argues, informs the dance scene in Top Hat, which involves “a compound of the cinema longing for embodiment, Fred and Ginger leaping to escape it”. This “yearning” for “sensuous embodiment” is confronted by the body of the robot Maria in Metropolis: when Maria dances, she brings embodiment and sensuality back into the incorporeal or decorporealised filmic machine. Like Cubitt’s Astaire, Maria channels a cinematic desire for the body and its ability to move, as well as for the organic status that

51 Armstrong, 3.
52 Cubitt, The Cinema Effect, 177.
53 Ibid.
such movement signifies. That this dancing body is also a robot, a mechanical and constructed being, only makes such nostalgia for embodiment more intense.

These expressions of desire and nostalgia are, of course, related to gender and the fact that Metropolis re-genders the body of its “monster” as female. Relatedly, Maria-the-robot is seductive rather than monstrous. Throughout the film, she/it is presented as an object to be seen. In the creation scene both the robot (with her metallic though clearly feminine body) and Maria herself are laid out for us to view, framed in full; later, when the robot dances seductively for her “audience”, she positions herself as an object to be gazed upon. This recalls Heffernan’s suggestion that the emphasis in filmic versions of Frankenstein is often on seeing rather than simply reproducing the body. At the same time, this figure of woman-as-(mechanical)-other embodies all that is mysterious, seductive, and disturbing about cinematic technologies. This is, after all, a film about technological otherness and allure: as Telotte reminds us, Metropolis “examines both the seductive lure of the technological and the anxieties that play just beneath the surface of that lure”. We can add to Telotte’s comment by suggesting that Metropolis self-reflexively depicts both the “seductive lure” of filmic technology and the anxieties that such technology evokes.

Finally, I would like to point out that the fragmented monster is replaced in Metropolis not only by a perfect and beautiful figure expressive of a desire for wholeness, but by a posthuman figure. Maria lacks the scars and seams of a true Frankensteinian monster, and thus expresses a (cinematic) yearning for

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54 Heffernan, 135-136.
55 Telotte, 58.
corporeality; but she is also a *mechanical*, if still corporeal, creature. With astounding foresight, the creation scene of Lang’s film depicts an interplay between *human* and *posthuman* presence, mediated by technologies of animation that stand in for cinema itself. This interplay is imaged in the dissolve from Maria’s face to that of the robot, and back again. The final dissolve suggests that the robot has “become” Maria and that the boundaries between human and posthuman have consequently collapsed; indeed, the fusion of robot and Maria creates a being that is neither human nor posthuman but somewhere inbetween, a suitable ambassador for a cinematic world where screen presence is similarly ambiguous and unplaceable.

**Technologising (and re-organicising) the monster**

Across the course of these Frankenstein films, an interesting shift in the depiction of the monster is evidenced. With the exception of the Edison film, in which alchemy, magic, and monstrosity are the dominating themes, these films share an undercurrent of concern with the mechanical status (or lack thereof) of the monster’s body; an interplay of technology and organicism that I find particularly pertinent. We cannot claim that such concerns are unique to filmic versions of the tale. After all, Shelley’s novel is defined by its crucial tension between “nature” and “technology”; if her monster isn’t entirely mechanical, then the technologising of this monstrous body has been the project of popular culture in general – from literature to television and beyond – and is by no means a defining aspect of filmic adaptations of the tale. Nevertheless, such interplay between organicism and technology is crucial to an understanding of the way
cinema has reshaped the Frankenstein myth and also leads us to problems deeply inscribed in the medium of film itself.

Some mention can be made here of the fusion of Frankensteinian monster with science-fictional robot. Jay Clayton tells us that, over the course of the twentieth century, a textual cross-breeding occurred whereby Shelley’s tale came to intertwine with science-fictional stories about robotic bodies. “Though the Creature in Shelley’s novel was made up entirely of flesh and blood”, he writes, “filmmakers, and, later, science fiction novelists, have added a mechanical dimension of increasing complexity to her creation”.56 He refers particularly to the work of science fiction writer Isaac Asimov, whose robot tales of the 1940s came to influence popular perceptions of the artificial body and consequently to inflect upon retellings of Frankenstein. Metropolis, however, shows us that such intertwining of monster and robot predates Asimov. As Claudia Springer observes, robot tales have always contained “Frankenstein themes”.57 She observes these themes at work in the earliest text about robots: Karel Capek’s 1920 play R.U.R. After this introduction of the figure of the robot, she notes, “robot imagery became a staple of early-twentieth-century science fiction, which usually maintained the Frankenstein theme enacted in R.U.R. by depicting robots as dangerous entities determined to overthrow humanity”.58 We can trace the connection back further, to a text contemporary with Shelley’s: E.T.A.

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58 Ibid.
Hoffman’s story “The Sandman”, in which a man unwittingly falls in love with a mechanical woman. Roberts reminds us that:

Hoffman’s robot is ‘uncanny’, unsettlingly neither human nor non-human; a borderline creation of technology that forces the reader to reappraise her own relationship to notions of ‘humanity’ and ‘nature’. In this respect it anticipated, by only two years, an even more influential SF tale… in which an ‘uncanny’ technological creation unsettles our assumptions about the identity of the human.59

He is referring, of course, to *Frankenstein*. What the monster and the figure of the robot share, then, is a certain status as a boundary-creature: they are figures that unsettle our assumptions about human being, that challenge our ability (and our need) to distinguish between human and *not*-human. *Metropolis* exemplifies this fusion of monster and robot. Here the “monster” is rewritten as robot *and* re-gendered as female; Frankensteinian tropes of artificiality and animation are applied to a body that is mechanical and beautiful. This monster/robot is certainly deployed in Lang’s text as a boundary-creature, at once testing, challenging, and confirming the difference between human and inhuman. As an uncanny body, the robot inherits much from the monster in Dawley’s *Frankenstein* and performs the uncanny status of the filmic image.

Yet the monster of Whale’s film – a more faithful adaptation of Frankenstein – is also mechanised as part of the adaptation process. His/its defining feature is not necessarily his scarred visage but the metal bolt through his neck. Whale’s creation scene, too, includes mechanical elements. Comparing the creation scene of this film to its counterpart in the Edison Studios adaptation, we can observe a

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clear shift from the magical/alchemical to the technological/scientific – and perhaps also from the technologies of cinema in their “magical” aspect to an image of cinema as machine. As Zakharieva tells us, Whale’s Frankenstein:

features a very machine dominated scene of creation – the laboratory setting is constructivist in style; wheels and relays, electric circuits and bulbs, elevating devices, etc., as opposed to tubes and retorts filled with colourful liquids of the cliché lab setting. Whale’s laboratory is a machine in itself and what it produces is a semi-machine.60

Whale’s film is thus allegorically linked to what has been called the “Golden Age” of film: the period in which cinema became an industrial “machine”. As Schor observes, Boris Karloff’s lumbering, bolt-necked monster – with his “sutured parts, jerky movements, stumbling speech, and hunger for light” – makes “a plausible allegory of cinema” itself, especially the industrial and technological monster that cinema became in the 1930s.61

Branagh’s film is somewhat different. The monster in Mary Shelley’s Frankenstein is a very corporeal figure: with his scarred-but-distinctly-human face, he/it resembles an organic being who has suffered physical violence rather than a fantastic or mechanical creature. The creation scene in this film also demonstrates a strange nostalgia for the organic. This is a moment of techno-electric birth: the monster is immersed in amniotic fluid and flushed into the world like a monstrously overgrown infant. The result is a messy hybridity, an overstated fusion of machine and organism. This re-organicising of both the monster and the creation scene is set against a dramatic natural backdrop. With

60 Zakharieva, 748.
61 Schor, 67.
sweeping shots of the natural landscape Branagh returns the presence of “Nature” to the Frankenstein tale, remedying its exclusion from earlier adaptations.

This re-organicising of the Frankenstein tale has been discussed at length by Zakharieva, who analyses Branagh’s film in terms of “the new importance of the corporeal (the organic) which is absent from the early film versions (too abstract) and from the novel (too psychological)”.\(^\text{62}\) She also discusses the hybridity of the monster in this film, noting that:

Branagh’s Creature ultimately becomes a sophisticated compound of symbolized science, medicine, and technology as cultural phenomena, on one hand, and of sublime nature, on the other. It is a merger of the given (the organic) and the produced.\(^\text{63}\)

Interestingly, Zakharieva compares Branagh’s monster to some of the figures that populate the science-fictional and fantastic cinema of the 1990s. She argues that Branagh’s film is “antithetical” to films like James Cameron’s *Terminator 2*, for instance, where the “monster” is depicted as a liquid-metal, inorganic, specially-affected body:

the fearful body of the Terminator is totally ‘inorganic’, it is not like the composite body of Frankenstein’s creature. It is an absolute creation of the film medium – a harmonious and proportionate naked body emerges on the screen; it is unified, powerwise very effective but, as a matter of fact, physically absent. Contrary to Frankenstein’s monster, it is aesthetically functional not through its corporeality (complicated and deformed as it is) but because of the lack of it.\(^\text{64}\)

\(^{62}\) Zakharieva, 747.
\(^{63}\) Ibid., 745.
\(^{64}\) Ibid., 748.
Of particular interest is her subsequent suggestion that “[m]odern cyborgs have gone far beyond the Romantic and modernist contrast of human versus machine – they are the effect of the machine, a mere image, a series of light impulses”\(^{65}\). I find however that the hybridity emphasised in Branagh’s portrayal of the monster functions in a similar manner to representations of what Springer calls the “hard-bodied cyborg”, a figure contemporary with Branagh’s monster and epitomised by the muscular/mechanical body of Arnold Schwarzenegger in the *Terminator* films.\(^{66}\) While Zakharieva writes of the cyborg as inorganic, “physically absent”, and “a mere image, a series of light impulses”, Springer notes that in many popular depictions of the mechanical body corporeality is powerfully emphasised:

> instead of effacing the human body, these texts intensify corporeality in their representation of cyborgs. A mostly technological system is represented as its opposite: a muscular human body with robotic parts that heighten physicality and sexuality.\(^{67}\)

Branagh’s monster might not be “hard-bodied”, but he, like the Schwarzenegger cyborg, is defined by a certain “intensification of corporeality”. Both figures are constructed in a way that brings organic presence back into the body of the “machine”.

We can further add to Zakharieva’s work by suggesting that the emerging concern with organicism in this film of the 1990s might be symptomatic of the digital age. In a period when digital bodies can be produced – bodies that

\(^{65}\) Zakharieva, 748.


mere “light impulses” – there is a counteractive desire to re-organicise the screen, to bring organic presence back into the filmic machine.\textsuperscript{68} This desire links Branagh’s monster to the hard-bodied cyborgs and corporeal machines of science fiction cinema in the 1990s. I reiterate, however, that Branagh’s monster is still a problematic body, a body defined by scars: in this way the film, for all its failings, makes visible cinema’s own fragmentation of organic presence. In the digital age, we find that the monster is more frequently re-presented as seamless – that, indeed, the robot of \textit{Metropolis}, deceptively perfect, is a more influential figure on Frankenstein tales of this period. I will take this up in Chapter Three.

If \textit{Frankenstein}-the-novel is defined by a tension between nature and technology, then clearly this tension extends into the film versions and particularly to their depiction of the monster. The interplay between machine and organism becomes a defining feature of these films: the balance tips variously and is reorganised in different adaptations, so that in Branagh’s film organicism explodes into the mechanical as never before; but the tension, the interaction, is the same. I propose that we can also use this Frankensteinian tension between nature and technology, organism and machine, to analyse the filmic body, the bodies that appear on our screens. This argument will be pursued below.

\textsuperscript{68} This is an argument that will be taken up in chapters ahead.
Mechanical reproduction (or, the origin stories of the screen body)

This chapter has introduced a number of key themes in the Frankenstein myth that function as self-reflexive points of energy in filmic adaptations: animation; electricity; visuality and spectatorship; fragmentation and the desire for wholeness. I want to conclude by adding a final theme or concept to this list: mechanical reproduction. This is by no means an untheorised or unrecognised connection between cinema and the Frankenstein tale. It is quite obvious to most theorists who study Frankenstein films that “film versions of *Frankenstein* implicitly remind us that filmmaking itself is a Frankensteinian exercise in artificial reproduction”, as Heffernan puts it. Nestrick, moreover, tells us that the Frankensteinian monster – in all its guises – functions as “our prime image of mechanical reproduction”. Indeed, he/she/it can be read in conjunction with Walter Benjamin’s 1935 essay “The Work of Art in the Age of Mechanical Reproduction”: like Benjamin’s copied artwork, the monster is defined by a loss of “aura”, a gaping and irresolvable absence of the authenticity and organicism that defines a “real” person.

In Shelley’s novel, the monster’s mechanically reproduced status allows him/it to symbolise the industrial age: her tale allegorises a nation’s move towards machine-based manufacturing and the social and technological change that followed. Interestingly, if Shelley’s *Frankenstein* is a tale about the mechanical reproduction of the body, it can also be allegorically linked to photography, the invention of which strangely parallels the writing and publication of the novel.

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69 Heffernan, 139, my emphasis.
70 Nestrick, 309.
The first cameras were developed in the 1820s and 1830s, mere years after *Frankenstein* was first published; Shelley may not have been aware of such developments when she wrote the novel, but her monster *does* function as a fantastic suggestion, a preemptive glimmer, of this eerie new means of representing and technologising human presence. In filmic versions of the tale, however, both the monster’s body and the animation scene attest to *cinema’s* powers of mechanical reproduction, and the cinematic ability to turn human presence into a moving image projected endlessly on a screen.

This filmic body, Benjamin tells us, is a body that we the audience view through a mediating layer of technology that separates and distances actor from spectator. The film audience, he tells us, views a film “without experiencing any personal contact with the actor”; consequently, the “[t]he audience’s identification with the actor is really an identification with the camera”.71 This mediating layer of technology is what distinguishes film from theatre, in which the audience’s link to the actor is more organic. Indeed, throughout his essay Benjamin investigates the difference between stage acting – as an organic, corporeal art form – and cinema as a mode of representation defined by an *absence* of the organic:

The artistic performance of a stage actor is definitely presented to the public by the actor in person; that of the screen actor, however, is presented by the camera, with a twofold consequence. The camera that presents the performance of the film actor to the public need not respect the performance as an integral whole. Guided by the cameraman, the camera continually changes its position with respect to the performance. The sequence of positional views which the editor composes from the material supplied him constitutes the completed film. It comprises certain factors of

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71 Benjamin, 230.
movement which are in reality those of the camera, not to mention special camera angles, close-ups, etc.\textsuperscript{72}

In film, he continues, “the camera is substituted for the public. Consequently, the aura that envelops the actor vanishes, and with it the aura of the figure he portrays”.\textsuperscript{73} For Benjamin, then, the cinematic process of mechanical reproduction results in both a loss of authenticity – represented by the diminishing of the “aura” – and a loss of organic presence. Both these qualities are embodied by the Frankensteinian monster, whether we view him/her/it as a mechanical body, a reanimated corpse, a hybrid of machine and organism, or a simulation of human presence. The monster’s metaphoric relevance for film thus extends beyond the mechanical and/or fragmented quality of his/her/its body: we can take the monster as an icon for the loss of both organicism and originality (indeed, for the loss of organic origins), and in this sense, he/she/it becomes a fantastic double of the mechanically reproduced body of the filmic actor.

Benjamin dwells upon this troubled relationship between filmic image and embodied performance, and uses the words of Italian writer Luigi Pirandello to express the sense of loss that defines such a relationship:

‘The film actor’, wrote Pirandello [in his novel \textit{Si Gira}], ‘feels as if in exile – exiled not only from the stage but also from himself. With a vague sense of discomfort he feels inexplicable emptiness: his body loses its corporeality, it evaporates, it is deprived of reality, life, voice, and the noises caused by his moving about, in order to be changed into a mute image, flickering an instant on the screen, then vanishing into silence… The projector will play with his shadow before the public, and he himself must be content to play before the camera’.\textsuperscript{74}

\textsuperscript{72} Benjamin, 230.  
\textsuperscript{73} Ibid., 231.  
\textsuperscript{74} Luigi Pirandello, quoted in Benjamin, 231.
This somewhat beautiful description of the “loss of corporeality” that defines cinema is echoed in later theoretical work on the relationship between filmic technologies and organic presence. Reminiscent of Benjamin and Pirandello, for instance, is Tom Gunning’s discussion of the spectral or incorporeal quality of the actor’s on-screen image. Gunning reminds us that the invention of photography “radically transform[ed] traditional beliefs in solidity and unique identity” until “the body itself appeared to be abolished, rendered immaterial, through the phantasmagoria of both still and motion photography”.75 For Mary Ann Doane, the filmic body is also defined by its spectrality and its absence of corporeality: she writes of “the necessary absence of the actor or the object which is simply represented on the screen by differences in the intensity of light”.76 Engaging similar imagery is Gore Vidal, who states that “film is filtering present light through past images and voices”.77 Ethnographic filmmaker David MacDougall, in turn, refers to bodies on film as “phantoms”, writing that “film gives us the bodies of those we have filmed, yet those same bodies dissipate or are transformed before our eyes”.78 The relationship between the actor’s original, embodied performance and his/her image on screen is explained by MacDougall in terms of a “tearing apart of the signifier from its

object”, a separation which “is progressively exacerbated and transformed by
time, as the film comes further adrift from the present tense of filming”.\textsuperscript{79}

MacDougall also recognises a gradual paring away of the actor’s corporeality
throughout the process of filming:

A person I have filmed is a set of broken images: first, someone actually
seen, within touch, sound, and smell; a face glimpsed in the darkness of a
viewfinder; a memory, sometimes elusive, sometimes of haunting clarity; a
strip of images in an editing machine; a handful of photographs; and finally
the figure moving on the screen, of cinema itself.\textsuperscript{80}

As many of these descriptions of the filmic body suggest, the relationship
between organic presence and its reproduction on screen is a relationship akin to
memory – a relationship, in other words, that involves a temporal disjunction, an
ever-widening separation between the image of the actor and the moment-in-time
that the original performance represents. We can refer to Benjamin’s angel of
history here: the body looking back on its (lost) past. We can also refer to the
Frankensteinian monster, a mechanical or otherwise postorganic being forever in
negotiation with its lost origins in nature.

What emerges here is a theoretical mapping of the “origin story” of the screen
body. Such a body, we can conclude, needs to be seen not only in terms of its
fragmented presence but also in terms of its absence. In many ways, this takes
us back to where we started: the Edison film. This film plays upon the spectral
aspect of filmic presence, with the monster re-presented as an almost ghostly
figure – especially in the moment of his wavering creation, and again at the

\textsuperscript{79} MacDougall., 33-34.
\textsuperscript{80} Ibid., 25.
moment of his disappearance in the mirror. Even the image of the monster standing before the mirror, confronting his reflection, can be read as a performance of the mediation of the actor’s body and the separation of body from image that defines the cinematic act of mechanical reproduction. In this sense, it is interesting that Benjamin himself observes that “[t]he feeling of strangeness that overcomes the actor before the camera… is basically of the same kind as the estrangement felt before one’s own image in the mirror”.

If this subtext of absence, incorporeality, and separation is less noticeable in the Whale films, which represent the monster as fragmented and/or mechanical but as toweringly present, it returns with vigour in some of the reworkings of Frankenstein to appear in the digital age. Indeed, in the digital age this problem of organic presence and its disappearance from the cinema screen becomes increasingly relevant. If Benjamin saw the filmic body as ghostly, incorporeal, or eternally exiled from its original moment-in-time, what might he have made of digital modes of production that overwrite organic presence, or simulate it, or construct it “from scratch”? This will be explored in chapters to come. My focus here has been early cinema, with the exception of the Branagh film (which we might read as a regression or, more sympathetically, an homage to the adaptations of Whale’s time). In the following chapter I will shift my attention to more recent retellings of Frankenstein and consider how the tale has been reworked in response to new concerns, many of which pertain to digitality itself.

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81 Benjamin, 232.
CHAPTER THREE
RE-IMAG(IN)ING FRANKENSTEIN IN
CINEMA OF THE DIGITAL AGE

Figure 5: New “creation” scenes: *Blade Runner* and *The Fifth Element*

Figure 6: *The Matrix* and *Jurassic Park*: digital “monsters”?
From animation to simulation

In the 1910 film *Frankenstein* the monster confronts his reflection in a mirror, contemplating his own monstrosity as well as the cinematic mediation and framing of his body. Many decades later, in the 1982 film *Blade Runner*, the postmodern “monster” Rachael contemplates a photograph of herself and her mother. As she does so, the cold-hearted hero Deckard explains to her that both the photograph and the memories it represents are false. This scene strips Rachael of her history, and thus performs her status as a filmic image: for, as we saw in the previous chapter, the filmic image too has a dubious origin story and is marked by a tenuous and disrupted connection to an original moment-in-time. As a meditation on artificial memory, visual culture, and the framed body, this famous scene is also a moment in which desires and concerns pertaining to cinema itself coalesce; it thus functions much like the creation scene in earlier filmic versions of *Frankenstein*, and indeed it is a moment in which Rachael, to some extent, is “created”.

An iconic film of the 1980s, *Blade Runner* is often theoretically addressed as a retelling of *Frankenstein*. Taking the place of Victor in this text is the bio-engineer Tyrell, and his replicants – from the scary/camp Roy Batty to the beautiful and mournful Rachael – are postmodern “monsters”. As Jay Clayton has pointed out, this film shares with Shelley’s novel a thematic concern with embodiment and power, continual references to vision and “the eye”, and an

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1 Partly, at least, because this is the moment she learns she is a replicant.
exploration of the “emotional dynamics between a creator and his creation”. The key thematic in *Blade Runner* is not animation, however, but *simulation*. The film is concerned with a quiet and insidious process of replicating human presence, and explores the effect of such a process on both the replicants themselves (who are “more human than human”) and on those who perceive themselves to be human (but can never be sure). Steeped in such thematics, *Blade Runner* lacks a spectacular scene of animation or a moment of electric spectacle. Cinema’s obsession with its own power to “animate”, it seems, has waned since the 1930s, when such a power was in its infancy; in the digital age, there are new concerns that inflect upon the filmic retelling of Frankenstein.

The aim of this chapter is to track these new concerns, and to investigate the way the Frankensteinian monster and/or the creation scene have been rewritten in cinema of the digital age. Having assessed the relationship between Frankenstein and film in my previous chapter, I want to move beyond what Nestrick calls the “myth of animation”, that crucial link between Shelley’s tale and the medium that repeatedly adapts it. Zakharieva tells us that it is not just the myth of animation but the “composite body” that links cinema and the Frankenstein tale; but we can move beyond this, too, particularly as we turn our attention from very literal adaptations of the tale (such as Branagh’s film) to

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looser retellings, especially those that operate within the science fiction genre. As Picart observes, this shift in generic location often allows for a stronger reworking and subverting of the original tale.\(^5\) In this chapter, I will identify a shift in emphasis from monstrosity to artificiality, from animation to mediation, and from photomechanical to digital bodies. My focus will be particular films of the 1990s that either reposition the monster to confront concerns pertaining to the digital age or rewrite the monster as digital “other”.

I begin, however, with this scene from *Blade Runner* – a film of the 1980s – because it captures the spirit in which these later retellings operate. I find this scene to be definitive of the way Frankenstein has been reworked and retold in response to concerns of the digital age. Without a literal depiction of digital technologies, it performs some of the concerns that accompanied the rise of digital culture (simulation, mediation, artificiality, deception). The presence of the photograph itself – a frame within a frame, a media text within a media text – suggests the importance of vision and mediation as self-reflexive themes in this film. What Rachael recognises when she views the photo, furthermore, is not that she is a mechanically constructed *monster* but that she is a bio-engineered *replicant*: this scene, and the film in its entirety, consequently suggest a shift in emphasis from electricity and robotics to genetics and biotechnology (a coding rather than a galvanising of the body).

At the same time, this scene suggests an awareness of the encroach of digitality onto the cinematic space. Garrett Stewart reads the scene as a nostalgic moment that appropriates both the photograph and the body it frames as a defence against postcinematic technologies. “The photograph marks a nostalgia for the human body per se”, Stewart tells us, a nostalgia symptomatic of a world in which both the image itself and the bodies it captures can be “digitally engineered”. For Stewart, the photographed body thus functions, in Blade Runner and in many other science fiction films, as a “funerary icon” for the disappearance of both organic presence and cinema itself in its pure, photographic, pre-digital aspect.

Many analysts of science fiction film are beginning to acknowledge the influence of digital technologies, not just on how stories are being told within the genre, but also on what sort of stories are being told and how these stories might depict technology, the body, and human presence. Drawing from Stewart, Charles Tryon notes that “recent science-fiction film tends to associate the incursion of the digital onto film with the attenuation of human presence”; he reiterates Stewart’s argument with his suggestion that:

digital effects inevitably encroach on stable definitions of the human, with the result that science fiction films have been marked by a double nostalgia for stable definitions of the human and for the photographic technologies that ground them.

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7 Ibid., 238.
8 Charles Tryon, “Virtual Cities and Stolen Memories: Temporality and the Digital in Dark City”, Film Criticism 28, 2 (2004), 43.
9 Ibid.
The influence of digital technology on fantastic and science-fictional images of the human becomes of importance when we consider Frankenstein, a tale about the dialogue between human presence and technology that is often (re)told in fantastic and science-fictional texts revolving around cyborgs, replicants, and posthuman bodies. As I will discuss below, digital effects have a double impact on the process of screening and retelling Frankenstein: they offer a fantastic new means of bringing the tale to life and of imaging the monster’s body, yet they also often become an object of anxiety within such texts.

This chapter will be structured around two concerns: mediation and digitality. I will address two films, in particular, that rework the Frankenstein tale in conjunction with these concepts: Kathryn Bigelow’s Strange Days, a film about mediation and memory that offers a fantastic image of the spectator (rather than the actor) as a constructed, fragmented, and technologically enhanced body/subject; and Steven Spielberg’s Jurassic Park, a film that deals with the creation of “monsters” and also a film that employs groundbreaking digital effects, projecting these new technologies onto the bodies of its monsters and thus offering an image of the Frankensteinian Creature as digital other. Between my analyses of these texts I will also refer briefly to other films, including The Matrix and The Fifth Element, which rework the Frankensteinian creation scene (and other motifs from the tale) in response to the concerns of a new era. In combination, these films show us that our cultural understanding of “life” itself – the monolithic concept at the heart of the Frankenstein tale – has changed, not only since Shelley’s day but since the time of Whale, Lang, and Edison/Dawley. Life today is not necessarily organic or electric (or indeed, if we are to refer to
the Edison film, alchemical); it can also be an electronic flicker on a screen; it is digital or genetic code; it is information; it is a computer-generated “effect”.

This shift, and its influence upon the process of retelling Frankenstein, will be investigated throughout the chapter.

**Mediation and memory**

It is not only *digitality* that is on our minds in the so-called “digital” age. This is a period in which a concern with media and mediation, in general, runs through the cultural bloodstream. Mark Williams argues that the advent of the digital age has brought about an increased awareness of our own mediated status, and a desire to see this status reflected and explored in popular culture. He writes:

> as the rise of digital culture has become evident, so has popular interest in media history, including interest in the media as industries. Essays and feature articles about media history/industry now appear regularly in news and cultural magazines (e.g., *Time*, *Newsweek*, *The New Yorker*). The *New York Times* has greatly expanded its coverage of media and technology, and other newspapers have followed suit. Documentaries and talk-show discussions about media technology, media moguls, media conglomerates, and media effects have become standard fare on PBS and several new cable channels. Contemporary media dynamics (textual, industrial, economic, interpersonal, etc.) and an apparently attendant desire to understand how they are and have been determined, now exist at an unprecedented level – as staple topics for news and information media outlets."^{10}"

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Williams refers to this as “popular attention to media dynamics”, a cultural phenomenon that involves “a desire to understand the media and our mediated experiences with greater detail and complexity”.

Interestingly, Williams also argues that the advent of the digital age “must entail at some level a recognition or underlying sense that we have tended to ignore or repress, rather than be merely unaware of, some of the media matters we now seek to understand”. If we bear in mind Freud’s suggestion that repression leads to the uncanny, we can argue that this exploration of previously repressed anxieties leads to the depictions of uncanny media that we find in fantastic, horror, and science fiction films of the digital age. Uncanny depictions of media presence can be found in sci-fi/horror hybrids like The Ring (in which a ghostly apparition crawls out of the television set and murders its victims) and Signs (in which creepy aliens are glimpsed on news footage and reflected in the television screen), films that perform cultural anxieties over television, visual media, and cinema itself in an age when “digitality” is perceived to be on everyone’s minds. These films may not openly engage Shelley’s tale, but they do offer interesting new images of the “monster” as a mediated, mechanically reproduced, technologically animated figure.

In this period there is also an increasing interest in the techno-body as an allegory for the media spectator. In the 1960s Marshall McLuhan announced

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11 Williams, 161.
12 Ibid., 162, my emphasis.
that media technologies extend our bodies, our senses, and our consciousness, rendering us postorganic.\(^\text{14}\) “The new media and technologies by which we amplify and extend ourselves”, he wrote, “constitute huge collective surgery carried out on the social body”\(^\text{15}\), a strange image that brings Frankenstein to mind.\(^\text{16}\) McLuhan’s media cyborg finds a place in science fiction, horror, and fantastic cinema of the 1980s and beyond. Techno-bodies become spectators in films like *Robocop*, in which a memorable scene has the cyborg seated and watching a screen.\(^\text{17}\) Later films of the 1990s and early 2000s flirt with cyberpunk and imagine a plugged-in subject bombarded with data and images:

14 McLuhan writes: “During the mechanical ages we had extended our bodies in space. Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned. Rapidly, we approach the final phase of the extensions of man – the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and our nerves by the various media.” Marshall McLuhan, *Understanding Media: The Extensions of Man* (London: Routledge, 2001), 3-4.

15 Ibid., 70.


17 This scene has been analysed by Healy, who writes: “The cyborg is seated. We watch the cyborg, the monitoring devices to which it is attached (video monitors and continuous charting graphs… Perhaps the most interesting aspect of these rememberings and bodily enactments of remembering is that both Murphy’s and Robocop’s memories become increasingly cinematic in at least one important sense – Murphy cannot exist as a figure of identification because the spectator’s relationship to his ‘experiences’ is spectacular – we see but do not identify with the body of Murphy in the construction of POV... In the end though, we learn to see both the past and the present through the eyes of a cyborg.” Chris Healy, “Total Recall? Bodies, Cyborgs and Memory”, in *Screening the Past: VIth Australian History and Film Conference Papers*, eds. John Benson *et al* (Melbourne: La Trobe University, 1993), 235.
these include *Strange Days* and the films of the *Matrix* trilogy. These films express an interest in mediation, an anxiety about the pervasiveness of visual culture; they also position their techno-bodies as spectators or bodies in negotiation with visual technology. As tales about technologically modified bodies, as apocalyptic depictions of postorganic presence – like McLuhan’s text itself – these films also place themselves in dialogue with the Frankenstein tale.

Closer to home, we can argue that the cultural desire both to understand and to represent our own mediation has shaped retellings of Frankenstein. *Blade Runner* offers the best example of this: as discussed above, it is a film about simulation rather than animation, and it contains a scene of spectatorship and contemplation rather than a scene of animation. In the previous chapter it was noted that many filmic versions of Frankenstein are self-reflexively concerned with vision; Heffernan, for instance, tells us that cinematic adaptations of Shelley’s tale are marked by a desire to “see” the monster and also to represent him/her/it as a *creature who sees*. In *Blade Runner*, the emphasis shifts from viewing the monster’s monstrosity to viewing the perfection and beauty of the replicants; at the same time, these replicants are both visible and viewing creatures. The scene in which Rachael contemplates “herself” in a photograph, for instance, recalls the moment in Shelley’s novel when the monster glimpses his own reflection in a forest pool.

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Yet the “monsters” of Blade Runner are confronted not only with their own image but with the barrage of images that constitute postmodern media culture. Relatedly, the plight of the monster in Blade Runner is relocated from the Gothic landscape of eighteenth-century Europe – the mountains and cities where Shelley situated her tale – to a cluttered, spectacular, futuristic-but-recognisable media-scape: a “noir” city, but also a space inhabited by images and simulations, a space where the key thematic of “replication” signals not only the biotechnological construction of bodies but also the machine of advertising and the workings of media culture itself.

Memory, too, is on our minds in the digital age – and Blade Runner is in part a film about the mediation of individual and cultural memory. Chris Healy refers to this film, along with Total Recall and Robocop, in his investigation of the way “anxieties about an enfeebled historicity have been confronted through the metaphors of the body and in particular through the figure of the Hollywood cyborg”. Here, the story of the mechanically reproduced body becomes a story about historical absences, about contemplating/viewing the past, and about technologies that both remember and re-member the body. A similar interweaving of memory themes into the Frankenstein myth was discussed in Chapter One with particular reference to Victor Kelleher’s novel Born of the Sea. Kelleher’s Madeleine, like the replicants of Blade Runner, is an artificial creature struggling with memory problems; afflicted with amnesia, she searches for her creator Victor Frankenstein, her lost past as a French aristocrat, and finally for

20 Healy, 233.
Mary Shelley (her “other” creator). The replicants of Blade Runner are afflicted not with amnesia but with the related problem of false and implanted memories.

Many of the “techno-body tales” that followed Blade Runner followed suit. Alongside the aforementioned Robocop and Total Recall, these stories include the films Johnny Mnemonic and Paycheck, science-fictional tales that feature characters with technologically extended memories; they also include the novel Neuromancer, which was published two years after Blade Runner and which deals with similar themes. In each case, the techno-body – the artificial or mechanically extended being – is positioned to confront the memory-crises that characterise a hyper-mediated world. Many of these texts dwell upon what Alison Landsberg has termed “the ‘otherness’ of prosthetic memory”; they resound with anxieties over the possibility of false, simulated, or artificial memory. The Frankensteinian monster as an emblem of technologically-created otherness finds new applicability in these stories about implanted memory and the struggle for authenticity.

Of particular interest here is the notion of a memory/body connection. Films like Blade Runner explore and deconstruct the understanding that the body is an archive of memory, or a text on which memories are inscribed. Such an understanding has been beautifully articulated by Jeanette Winterson in her novel Written on the Body, where she proclaims that “written on the body is a secret

The idea of bodily memory, however, becomes problematic in the context of Frankenstein, a tale about a fragmented being constructed from stolen body parts; a creature who is created rather than birthed, brought to life in a technologically-induced instant rather than grown and nurtured. As Shelley almost articulates in her novel, one of the monster’s fundamental problems is his/its lack of the memories that are usually inscribed into a human body. Significantly, the interior part of the novel – that which gives voice to the monster himself – begins with the words “[i]t is with considerable difficulty that I remember the original era of my being”.23 The monster is referring here to his inability to recall the moments straight after his creation, but this rather opaque line can also be read as a reference to his lack of the collection of memories that constitutes and defines a subject. Throughout the novel, Shelley is also at great pains to establish the personal histories of her male protagonists, Walton and Victor; if this is merely an attempt to stress the importance of family – the connection each man has to his sister/father/fiancée – it still renders all the more stark the monster’s background or lack thereof. Across the course of the novel, the monster struggles to situate himself within the sort of historical narrative that Walton and Victor possess: he negotiates history, literature, nature, although forever as an outsider.24

23 Shelley, 79.
24 Literature and history, for instance, he learns while spying on the De Lacey family. During this period of surveillance, he encounters such texts as Volney’s Ruins of Empires and Milton’s Paradise Lost. Shelley, 92-98.
In films like *Blade Runner* these memory problems are lifted to the surface of the tale. To some extent, the foregrounding of memory as a theme in this “adaptation” of Frankenstein is indicative of a need to address the digital age, a period in which external devices and technologies of memory – the camera, the computer, cyberspace – inflect upon our capacity to remember (and upon our understanding of memory itself). It is worth pointing out here that the technologising of memory has long been theoretically recognised as a by-product of the process of mechanical reproduction – that very process around which the Frankenstein tale revolves. In his essay “On Some Motifs in Baudelaire”, Walter Benjamin discusses the changes to memory and history brought about by reproductive technologies. Drawing on Benjamin’s work, Mark Hansen observes that “reproductive technologies [are] functioning as the exteriorized (and collective) embodiments of memory” and that “technological reproducibility marks the eclipse of interior, associated memory as the privileged mode of storing experience”. As a result, memory “finds its home not in the depths of psychic interiority but in the brute materiality of physical things”. Such externalisation of memory is intrinsically related to the development of media, photographic, and cinematic technologies. As Josko Petkovic tells us, “the invention of photography and film made it possible to objectify elements of our interiority – our thoughts, desires and fantasies – and render these as

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27 Ibid., 240.
28 Ibid., 241.
elements of our visual exteriority”.

Scott McQuire calls this the camera’s “capacity to objectify vision”, reminding us that in the media age “both personal and collective memory [have been] relocated in the virtual landscapes of new media technologies”. Such concerns become more acute in the digital age. Digital technologies have altered the way we remember: for years we have described the capacity of computers to store information in terms of “memory”; and today the Internet, in particular, acts as a giant external brain, a pool of collective memory disconnected from any individual body. These concepts background the depiction of the artificially-created and amnesiac “monster” in *Blade Runner*; they are flirted with in this film and in many of the “techno-body” stories that followed.

This theme of manufactured memories – an emerging theme in some of our Frankenstein-like tales of the digital age – shifts the emphasis from the construction of the body to the construction of less tangible things: historicity, temporality, mind, consciousness. Let us return again to Rachael and her photograph. Assessing this scene in relation to Frankenstein, we can observe that *Blade Runner* is less concerned with the fragmented body than with the fragmentation of the subject: Rachael is not a sutured monster, but she is a subject split between her embodied self and the external memories that the

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photograph represents. The technologising of the body is here matched and mirrored by the construction and colonisation of the mind by visual culture.

There is a wonderful scene from the 1997 film *Dark City* that exemplifies this shift in emphasis from constructed body to constructed mind. *Dark City* is not, strictly speaking, a retelling of Frankenstein, although it resounds with Frankensteinian themes: the construction of the self by social circumstance; the cruelty of scientific experiment. The film depicts the creation of an entire social world by alien beings, The Strangers, who are intent on studying the human race. The Strangers construct not artificial bodies but artificial space – a fake “city” for their human subjects to live in – and artificial memories. Helping them is the human character Doctor Schreber, a caricature of the popular image of Frankenstein: a mad scientist shuffling through his laboratory, muttering and cackling. In one memorable scene we see Schreber manufacturing his false memories, narrating his creative work gleefully: “a touch of unhappy childhood”, he says, “a dash of teenage rebellion, and last but not least, a tragic death in the family”. As with *Blade Runner*, the figure of the fragmented or constructed body is replaced in this scene by an interest in the fragmentation of the subject: the colonisation and construction of the mind by exterior forces and technologies. At the same time, *Dark City* is a film about films: it transforms the Frankenstein tale into a story about the production of space and time, a very cinematic theme.\(^{32}\)

\(^{32}\) As Charles Tryon has pointed out, the city in *Dark City* “is characterized by images of industrial production, including the elevated trains, the Automat, and the fifties automobiles”. Tryon argues that “[t]his industrial image corresponds to cinema’s status as an art of ‘mechanical reproduction’”, as does the depiction
Arguably, then, an emerging cultural interest in media and mediation is shaping our Frankenstein stories, resulting in a new generation of visible and viewing monsters. In many ways, the myth of the techno-body has become a space for performing and cathartically expelling anxieties about mediation, visual culture, and media technology, about the fragmentation of the subject, about the colonisation of both mind and body by exterior technologies that remember for us and re-member us. I will take this up in my analysis of the film *Strange Days*, a film that offers an image of the fragmented/constructed “media cyborg” and that also beautifully merges the Frankenstein tale – and the Gothic mode to which it belongs – with a late twentieth-century concern with spectatorship, image culture, and the media apparatus.

**Cyborg spectators and fragmented subjects in *Strange Days***

Released in 1995, Kathryn Bigelow’s *Strange Days* unfolds on the streets of Los Angeles during the frantic days before the turning of the millennium. In this “future-scape” of 1999 memories and experiences can be recorded, bought, sold, and “played back” on a device called a SQUID, essentially a form of virtual reality that saturates the viewer with sensory information. Participating in this culture of artificial memory and recorded experience is Lenny Nero, a dealer in playback and also an addict to it. Lenny is immersed in a world of past images, mostly clips of his ex-girlfriend, Faith, who rejects his advances in the present but the image of whom he can repeatedly recall and view via his SQUID unit.

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of “classically modernist technologies such as the gears, wheels, levers, and assembly lines that serve as the city’s substructure”. Tryon, 49-50.
As the narrative progresses, Lenny struggles to “unplug” himself from this violent and voyeuristic world and from the technology that defines it, leading to his rejection of Faith and the beginnings of a healthier romance with his companion Mace.

*Strange Days* has been described by Jules Law as “contemporary permutation of the gothic in the emergent subgenre of ‘virtual reality’ narrative”, and thus as a text that has much in common with Shelley’s *Frankenstein*.\(^\text{33}\) Both texts, Law argues, are characterised by a desire for “transcendence” that marks the Gothic mode, and also by what he terms a “double apparatus”:\(^\text{34}\) in Shelley’s tale, the framing narration and the constant references to other modes of writing (poetry, letter writing); in *Strange Days*, the short clips of “playback” that punctuate the narrative. *Strange Days* is also a violent film that shares with Shelley’s *Frankenstein* a sense of techno-fear linked to horrific and transgressive depictions of the technology/body relationship. The film’s most disturbing scene features the rape and murder of a girl named Iris, who is wired into a SQUID unit and is consequently forced to witness her own violation and to experience her killer’s sexual gratification as she dies. This murder is perpetrated not by a “monster” but by a mechanically enhanced individual who uses the playback apparatus to heighten his pleasure as he rapes and kills; the technology is here made monstrous and the killer is technologised in a manner that recalls Shelley’s text.

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\(^\text{34}\) Ibid.
To some extent, however, the true Frankensteinian “monster” of this film is the dubious and erotic character of Faith. She features in most of the playback clips: we see her skating with Lenny, making love to him, and we even see her raped and murdered in a similar manner to Iris (although this clip is later revealed to be fake). Through the technology of playback Faith is repeatedly “brought to life” for us to view: memories of her are reanimated, largely to satisfy Lenny’s desire for her (absent) body. She is thus an artificial, constructed, and repeatedly viewed body; a mechanically reproduced “work of art”. Fittingly, she is presented to us as both seductive and sleazy, an erotic image repeatedly re-created for Lenny’s pleasure and also a worn-out shell of a person who appears as tired and bored as she is beautiful. We might view her within the context provided by Benjamin’s work and suggest that her authenticity is compromised in a way that matches her status as mechanical reproduction – that she is, in other words, stripped of her “aura”.

Yet Lenny, too, can be read as a type of Frankensteinian monster. With his addiction to playback and his attachment to his SQUID unit, Lenny turns himself into a cyborg; he becomes, *literalises*, McLuhan’s mechanically extended media viewer. The film also recalls the work of Benjamin on the relationship between spectator and actor:35 when Lenny, forlorn and lovesick, views clips of Faith, his identification with the technology of playback takes the place of his lost relationship with her as a real person. We might also describe Lenny as a sewn-together composite, not of different body parts but of different people’s

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35 Benjamin writes that the spectator views a film “without experiencing any personal contact with the actor”; consequently, the spectator’s “identification with the actor is really an identification with the camera” (230).
experiences and memories (which are “animated” by the technology of playback): he is a fragmented, technologised subject inhabiting a whole, organic body. *Strange Days* thus reverses the problematic of Shelley’s tale, in which the monster is depicted as a unified subject in a fragmented body. As the film progresses, however, Lenny’s fragmentation becomes less noticeable. When he acknowledges his feelings for Mace in the film’s climax and seizes her in a passionate kiss (to a suddenly romantic and soaring soundtrack) we might suggest that he has become *whole*. This ending, which Quinby refers to as “apocalyptically romantic”,36 performs a rapturous escape from the technological trappings and unhealthy addictions that have bound Lenny and the world in which he lives.

Overall, *Strange Days* is just as anxious about the hyper-technological media-world it depicts as Shelley was of the world she constructed in *Frankenstein*. The film’s strident techno-fear and its othering of technology is particularly linked to its themes of invasion, penetration, and rape. This becomes evident early in the film when we witness Lenny’s dealing with a customer, new to the playback experience, whom he terms a “virgin brain”, and who is subsequently penetrated and invaded by Lenny’s technologies. Meanwhile a killer is raping women and recording the experience; his victims are penetrated doubly, by the killer and by the SQUID unit he straps to their heads.

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Central in this othering process is the character of Mace. As David Crane has pointed out, Mace undertakes a certain “guardianship of the real” in this film.\footnote{David Crane, “In Medias Race: Filmic Representation, Networked Communication, and Racial Intermediation”, in Race in Cyberspace, eds. Beth E. Kolko \textit{et al} (London and New York: Routledge, 2000), 101.} Associated with moral fortitude, strength, and selflessness, she represents the body that is not yet technologically penetrated, and thus the path that Lenny must ultimately choose if he is to “save” himself.\footnote{As both David Crane and Claudia Springer have pointed out, this characterisation of Mace is grounded in racial stereotypes: as an African American woman, she is exploited as a signifier for physicality rather than technology, honesty rather than duplicity, embodiment rather than virtual reality. Springer argues that films such as \textit{Strange Days}, \textit{Virtuosity}, \textit{Johnny Mnemonic} and \textit{Hackers} feature African American characters who help, support, or “ground” the white main characters, while Crane writes of the same films that African American characters are often associated with the “real” because “blackness provides a more authentically resistant otherness than hybridity, and that authenticity associated with blackness visually enhances the intersection between cyberspace and cinematic space”. See Crane, “In Medias Race”, 91, and Claudia Springer, “Psycho-Cybernetics in Films of the 1990’s”, in \textit{Alien Zone 2: The Spaces of Science Fiction Cinema}, ed. Annette Kuhn (London and New York: Verso, 1999), 215.} In many ways, Mace is a version of Shelley’s “Elizabeth”, who represents a similar path of salvation for Victor. The two characters share a status that might be referred to as \textit{technological virginity}. Elizabeth represents “nature” in its pure form, free from technological and scientific entanglements, while Mace’s purity is related to her refusal to wear a SQUID unit (like Lenny’s customer, she is a “virgin brain”). In \textit{Frankenstein} the “penetration” of nature by technology is symbolised by the brutal murder of Elizabeth on her wedding night; in \textit{Strange Days} there is a less bloody but still horrific moment to depict such penetration: Mace loses her “virginity” when Lenny all but forces her to watch the violent and confronting clip of Iris’ murder.
Alongside these motifs of penetration, virginity, and techno-fear, *Strange Days*—like its predecessor *Blade Runner*—shares with Shelley’s *Frankenstein* a concern with visuality and “the eye”. Clayton writes that *Blade Runner* “invokes *Frankenstein* from its opening sequence, in which a disembodied eye stares down on an aerial view of Los Angeles at night”, adding that “[i]n Shelley’s novel, disembodied eyes terrify Frankenstein repeatedly”.\(^{39}\) Similarly, *Strange Days* opens with the image of a (seemingly disembodied) eye in close-up, an image that creates the unsettling illusion that audiences are themselves being viewed by the film. This particular image recalls the work of psychoanalysts such as Christian Metz and the notion that “the [cinema] spectator identifies with himself, with himself as a pure act of perception”.\(^{40}\) In this sense, *Strange Days* also shares much with some of the early filmic versions of Frankenstein: particularly the Edison film, with its mirror-play and doubling of spectatorship.

More specifically, *Strange Days* has been described by Roz Kaveney as “a film about the gaze, and about not being able to look away”.\(^{41}\) In this respect it draws attention to the voyeuristic position of the cinema spectator. Voyeurism, too, is a recurring theme in Shelley’s text: the monster, in particular, is positioned as a voyeur during his lengthy period of spying on the DeLacey family, and later when he watches Victor construct and then destroy (or violate) the body of the female Creature. Interestingly, in filmic adaptations there is often an inversion whereby *Victor* becomes the voyeur and the *monster* is the object of his/our gaze:

\(^{39}\) Clayton, 89.  
in the Edison film, for instance, Victor spies upon the monster’s eerie birth, peering through a gap in the closed doors. In *Metropolis*, the mechanically reproduced Creature is female and she/it dances seductively for an audience. This is mirrored many years later in *Blade Runner*, where the replicant Zhora performs a similarly seductive dance on stage while being spied upon by Deckard; it is also mirrored in *Strange Days*, where Lenny sits in a darkened audience watching Faith perform with her band. This leads us back to the understanding that today’s Frankensteinian monsters are often incorporated into (gendered) narratives of cinematic surveillance. In *Strange Days*, Lenny’s relationship with Faith’s mechanically reproduced body – and the gendering of visual technology throughout the film – resonates with both psychoanalytic readings of cinema and the trappings of the Gothic genre itself, in which, as Law reminds us, the body is “caught up in the violent, gendered field of the gaze”.42

As science-fictional tales set in futuristic worlds, devoid of monsters and lacking a scene of true animation, *Blade Runner* and *Strange Days* are examples of films that, in Frank Smooth’s words, “extend the [Frankenstein] myth outward a considerable distance”.43 Nevertheless, because they appropriate and rework the figure of the techno-body – a very old figure whose history in myth and literature predates Shelley – they resonate with the Frankenstein tale. They can be further linked to Frankenstein because they explore the problems relating to the act of mechanical reproduction, although they afford the problem of memory greater scrutiny than Shelley’s novel did. Like the early Frankenstein films,

42 Law, 975.
furthermore, these later retellings contain an image of the filmic machine: both texts are obsessed with visuality and spectatorship, and *Strange Days* in particular depicts a complex and fantastic apparatus that stands in for cinema itself.⁴⁴ Both texts also respond to and ruminate on the problems associated with living in a world dominated and defined by visual media. They are films about simulation, subjectivity, the gaze and the frame; they explore the human/machine interface and offer a fantastic image of the media spectator as “monster”; and they dramatise the construction, colonisation, and penetration of body and mind by media technologies.

Yet if *Blade Runner* and *Strange Days* retell Frankenstein, they do so with an awareness of important shifts in the cultural understandings about what it means to be *embodied* and what it means to be *alive*. *Blade Runner* reminds us that, at the end of the twentieth century, developments in genetic engineering and biotechnology paralleled those in media culture; *Strange Days* depicts the emergence of cyberculture and its impact on our understandings of the relationship between body and mind, body and technology, self and other. Both films also demonstrate an awareness of the encroach of digital effects onto the cinematic space. This, as previously discussed, informs the famous photograph scene in *Blade Runner*, with its decidedly elegiac tone and its positioning of both the organic body and photographic modes of representation as (lost) objects of desire. In *Strange Days*, the playback apparatus both stands in for cinema and suggests its demise: as Law points out, playback acts as a “rival medium”, allowing the film to participate in “a defence of the cinematic apparatus against

⁴⁴ See Law (990) for a discussion of playback as a stand-in for the filmic apparatus.
the incursions of a rival technology”. In the remainder of this chapter I will discuss these developments in biotechnology, cyberculture, and digital filmmaking, developments which in combination have contributed greatly to the evolution of the Frankenstein myth.

**Coded bodies and the changing concept of “life”**

In 1997 the Frankenstein tale was updated for a new era of filmmaking. Taking a different path from the more introspective *Blade Runner*, director Luc Besson returned to a spectacularisation of the creation scene in his space opera *The Fifth Element*. In this film Leeloo, an alien being and the potential saviour of humankind, is created before our eyes: fibre by fibre she appears, her artificial origins exposed for all to see; from bones, to muscles, to a strikingly beautiful young woman with pale skin and flaming orange hair. A group of male scientists approach the tube in which she lies, a futuristic version of the mythical Sleeping Beauty. “Perfect”, they murmur breathlessly. Their expressions of combined awe and appreciation may well mirror the expressions of the film’s inscribed spectator, its ideal audience: the geeky sci-fi fan, the young adolescent male who is blown away by both the scene’s stunning use of special effects and the nearly naked body of the “perfect” woman before them.

An artificial being who is constructed before our eyes in a clear homage to Frankenstein, Leeloo is nevertheless defined by her beauty, not her monstrosity; the actress who brings her character “to life” is former model Milla Jovovich

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45 Law, 990.
(once the face of L’Oréal advertising campaigns). Accordingly, this spectacular moment of techno-genesis dwells less upon cinema’s fragmentation of the body than upon the construction of beauty in the media age, and upon the related reduction of the (female) body to an image for viewing. This digitally-enabled creation scene also functions as a strange foreshadowing of the creation of digital actors such as Aki Ross, who was to appear some years later in Final Fantasy: The Spirits Within, and whose creators did much to stress her beauty and “perfection”. At the same time, the scene raises Frankensteinian questions. It is a very mechanical scene that involves a process of de-naturing – Leeloo is “built” instantly and at the “hands” of quick, efficient machines – and it strips the body of its organic basis, removing any suggestion of an origin in nature.46 What, we are invited to ask, does it “mean to be embodied, when the body cannot claim the status of nature?”47 What happens when a body is instantly and artificially created rather than born? Although these questions are not taken up by the largely superficial narrative that follows, it does not seem to matter: the creation scene, with its imaging of a posthuman, postorganic, postcinematic body, is the film’s most powerful moment.

If this scene in The Fifth Element questions the human body’s link to “nature”, it does so with reference to crucial developments in biotechnology that marked the 1990s as a period. In 1997, when the film was released, the Human Genome Project – which sought to sequence every human gene and thus provide a “map”

46 It does not accomplish this with as much gusto, however, as the film from which it borrows this very scene: the anime Ghost in the Shell. I will compare these two films in my final chapter.
of the entire organism – was well underway and near completion, bringing with it a new understanding of the body. Writing in the mid-1990s, Evelyn Fox Keller captures the essence of this new understanding:

Today’s biological organism bears little resemblance to the traditionally maternal guarantor of vital integrity, the source of nurture and sustenance; it is no longer even the passive material substrata of classical genetics. The body of modern biology, like the DNA molecule – and also like the modern corporate or political body – has become just another part of an informational network, now machine, now message, always ready for exchange, each for the other.48

Such loss of “vital integrity” is also, of course, fantastically depicted in Shelley’s Frankenstein, a text that foreshadows the biotechnological developments that occurred more than a century after its publication. That this loss of “vital integrity” should, for Keller, be best seen in the eclipse of the body’s “maternal” function – another theme that Shelley dwells upon – is significant given that many of the “monsters” who are created on our screens today are, like Leeloo, female.

It is also interesting to note Keller’s allusions to the technologies of media and communication in this description of the genetically coded body: as she describes it, the mapping of the genome and the surrounding biotechnological developments turned the body into a “medium” for DNA “messages”. A comparison can be drawn here with an earlier period in which developments in the way information was communicated gave rise to a view of the female body, in particular, as a “medium”: in the nineteenth century, the invention of new

media technologies such as telegraphy inflected upon the Spiritualist movement (with its mostly female “ mediums”) to produce, as Jeffrey Sconce observes, a “theory of woman as technology”.\textsuperscript{49} For Sconce, this demonstrated “that media ‘liveness’ was from the very beginning a concept understood through a compelling complex of arterial metaphors linking body and consciousness with technology and information”.\textsuperscript{50} We witness a similar intertwining of concepts in the 1990s when an emerging image of the body as a medium for textual flickers of DNA “life” can be partly attributed to the dominance of media culture and the familiarity of media objects such as the television, the computer, and the cinema screen.

What we glimpse in \textit{The Fifth Element} and its reworking of the Frankensteinian creation scene is thus a shift in the cultural conception of “life” itself. As Waldby tells us in her analysis of Shelley’s novel, “[l]ife today is information, molecular or neuronal data, and it circulates freely between bodies and computational systems”.\textsuperscript{51} The Human Genome Project exemplifies this shift towards life-as-information (rather than “energy”). Elsewhere, Waldby tells us that this project presented itself as a new way “to map and know the human”\textsuperscript{52} that implied:

\begin{itemize}
\item \textsuperscript{50} Ibid.
\item \textsuperscript{51} Waldby, “The Instruments of Life”, 32.
\item \textsuperscript{52} Catherine Waldby, \textit{The Visible Human Project: Informatic Bodies and Posthuman Medicine} (London: Routledge, 2000), 7.
\end{itemize}
a disconcerting threat to any idea of the human as a stable, knowable ‘species’, an organic integrity whose limits can be positively specified. If human bodies can be rendered as compendia of data, information archives which can be stored, retrieved, networked, copied, transferred and rewritten, they become permeable to other orders of information, and liable to all the forms of circulation, dispersal, accumulation and transmission which characterise informational economies. Any fantasy of organic integrity is lost in the face of the interface, the potential for data bodies to be integrated into data circuits, cybernetic or genetic.\(^{53}\)

Waldby is here comparing the Human Genome Project with the Visible Human Project, a research project of the mid-1990s that involved the photographing and digitising of (dead) human bodies. Both these projects powerfully evoke the Frankenstein tale, but this is not all they share: both also resulted in the digital archiving of the body-as-information (the databases that contain the completed sequence of the human genome are available on the Internet, as are the images of the cross-sectioned cadavers from the Visible Human Project).

This digression into cyberspace is significant, because the biotechnological advances that marked the 1990s were inextricably linked to parallel developments in cybernetics. As Keller reminds us, these two areas of study borrowed and swapped their concepts and terminologies, until words like “system” and “organism” came to be used as descriptors for both living and non-living entities (humans and computers).\(^{54}\) Furthermore, if the mapping of the genome and related developments in biotechnology changed our understandings of body and life then so did these concurrent developments in cybernetics. Keller argues that at the end of the twentieth century:

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53 Waldby, The Visible Human Project, 7.
54 Keller, 90.
electricity has given way to electronics and matter and energy to information. In the late 20th century, it is the computer that dominates our imagination, and it has liberated us from that odd locution ‘man has a body’.  

We can consider cinema’s reworking of Frankenstein, particularly in the science fiction cinema of the 1990s, in light of these new understandings. From the galvanised bodies of the 1920s and 1930s – and from the related emphasis on electric spectacle and the “spark of life” – we move, in the 1990s, to the notion of “jacking in”, the fantasy of leaving our material bodies behind to construct a new identity in cyberspace. Claudia Springer writes of a similar shift in emphasis when she considers the rise and fall of the “hard-bodied cyborg” as a mythic figure. In cinema of the 1990s, she argues, this familiar figure becomes less visible: “[l]eaving the hard-bodied cyborg behind, Hollywood turned to cyberspace and the expansion of the mind”, she writes, also noting that the “new cultural fantasy” of cyber-immersion came to eclipse the popular image of the muscular/mechanical hybrid body seen in films of the 1980s such as The Terminator. Drawing on Springer and upon this well-theorised shift from “energy to information”, we can trace the development of the cinematic monster from the galvanised bodies of the 1920s and 1930s through the cyborg years of Hollywood science fiction and into the 1990s and beyond, where popular culture becomes obsessed with the body-as-information and with the ability to reconstruct human presence in the ethereal realm of cyberspace.

55 Keller, 118.
56 Exemplified today by the phenomenon of Second Life.
58 Ibid., 212.
Jodi O’Brien describes the act of rewriting the body in cyberspace with an emphasis on Frankensteinian themes of embodiment and re-embodiment, construction and reconstruction, writing and techno-production: she tells us that “(re)embodying the self in [the] disembodied realm [of cyberspace] is an exercise in textual production”.59 Cyberpunk, the literary genre that responds to these technological and cultural developments, often plays upon these Frankensteinian concerns of techno-creation and bodily (re)construction. As Bell, Loader, Pleace and Schuler write in their definition of the genre, cyberpunk deals with:

the nature and essence of humanity in a future in which the use of VR and the ability to extensively change and modify one’s own body allowed individuals to constantly re-invent themselves and to avoid dealing with the ‘real’ world if they did not want to.60

This brings us to films like The Matrix, which perform such negotiations between cyber-fantasy-scapes and the so-called real world.61 As a story about the posthuman future, and a text that imag(in)es the body as both a plugged-in hybrid and a reconstructed cyber-self, The Matrix can be read as a retelling of Frankenstein for the digital age. This immensely popular film of 1999 exemplifies the shift from electricity to information that marks its period, a shift that is suggested in the film’s opening image – streams of glowing green computer code pouring down the screen (an image that was also extensively used

61 It is important to note, however, that The Matrix is not a cyberpunk text in the true sense of the word; it draws from the iconography of the genre but ultimately rejects the cyberpunk ethos of abandoning the real world/body.
in the promotion of the film and its sequels). Alongside the fantasy of “jacking in” and the reconstruction of the self in cyberspace, the film also addresses genetic manipulation and the production of the self by media fantasies (including popular film itself) that pacify, control, and create. These concerns are enthusiastically taken up by the film’s two sequels.

Let us consider two scenes from the *Matrix* trilogy that operate as “creation” scenes, of a sort. In the first film, both techno-creation and procreation are hinted at in the sequence that depicts hero Neo’s exit from cyberspace and his rebirth into the “real world”. In this scene we see Neo’s body swallowed by code, covered in a silvery substance as his cyber-self “dies”; he then appears within a womblike space, breaks through a sac of amniotic fluid and is flushed into the real world, hairless and naked as an infant. He finds himself, however, in the “farm” where human bodies are genetically manufactured by the machines who enslave them. An uneasy Frankensteinian tension between production and reproduction is evoked here. A scene from *The Matrix: Reloaded* gives us a complementary image of cyber-production and reanimation. Towards the end of this film the heroine Trinity dies, but is resurrected by Neo: as Roz Kaveney describes the scene, Neo “rewrites her code so that her heart beats again”.62 Here is a telling reference to both computer/genetic code – and thus to new understandings of “life” – and to the constant rewriting that virtual bodies can undergo, allowing them to be continually reanimated. We might seize upon this scene as a Frankensteinian moment reworked for the digital age, a translation of

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62 Kaveney, 81.
Frankensteinian themes, images, and narrative instances into the language of cyberculture.

Ultimately, however, both *The Fifth Element* and the *Matrix* trilogy respond to this digital/genetic coding of the body with conservatism, falling back upon the same division between natural and unnatural production that defines Shelley’s text. Susan Hayward points out that the world imagined by Besson in *The Fifth Element* is associated with and ultimately saved by the “reproduction of life”, which reaches its fullest depiction in the loving (and love-making) bodies of Leeloo and the hero Corban Dallas. The film thus moves from mechanical reproduction to organic reproduction: Leeloo saves the world not through her superpowers or the fantastic abilities inscribed into her artificial body, but as a romantic heroine who can make love and potentially reproduce. That the final love scene takes place in the same tube in which she was “built”, and is viewed by the same set of gaping scientists, only reinforces this transition.

Similarly, *The Matrix* may be a film about data, digitality, and code, but it responds to such a coded future with anxiety and nostalgia. Neo is horrified, for instance, to learn from his mentor Morpheus that humans in this post-apocalyptic world “are no longer born – they are grown”, genetically manufactured by the machines themselves. This line from Morpheus is significant because it articulates a nostalgia for natural bodies and natural birth in a period dominated by techno-production. Such nostalgia is visually expressed in the film’s version

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of the Frankensteinian creation scene, which is imbued with a nostalgia for birth itself: a desire not just to return to the womb but to escape the trappings of a hyper-technological existence and re-experience a moment of organic wholeness.

We might compare The Matrix to Branagh’s Frankenstein, discussed in the previous chapter: for in Branagh’s more literal adaptation of Shelley’s novel, the creation scene is similarly rewritten as a sort of high-tech birth. Both films, we might argue, exhibit a nostalgia for organicism that is symptomatic of their context – a period when self, body, and subject are all perceived to be constructed, reduced to information, or inextricably entangled with technological and artificial systems.

*Jurassic Park: digital monsters*

This chapter has addressed many concerns that have inflected upon the retelling of Frankenstein in the digital age: simulation, mediation, the fragmentation of the subject and the removal of our organic power to remember, the coding of the body during an age of biotechnological advances, the emergence of cyberculture, the shift from “energy” to “information”. I will conclude the chapter with reference to a film that engages many of these concerns, and that also provides us with a more literal adaptation of Frankenstein than any of the texts discussed above: Steven Spielberg’s *Jurassic Park*. Spielberg’s film occupies an important position in this unfolding history of Frankenstein in cinema, not only because it responds so well to the cultural understandings of its period but also because it employs cutting-edge digital effects and projects these effects onto the bodies of
its “monsters”. Consequently, the film not only adapts Frankenstein but injects
the Frankenstein myth with new meaning and purpose.

Jurassic Park was released in 1993, one year before Branagh’s adaptation of
Frankenstein. The films share similar themes – both depict monster-making and
comment on the dangers of scientific ambition – but they are, of course, very
different in iconography, setting, and narrative structure. Branagh’s film is a
period piece as well as an acknowledged adaptation of Shelley’s novel; Jurassic
Park is based on a novel by Michael Crichton and tells the story of reanimated
dinosaurs running amok on a remote island. This shift in location is telling. As
previously mentioned, Branagh’s film is often critiqued for its absurd
restructuring of Shelley’s narrative: but in many ways, this film should be taken
to task for its desire to be faithful to the novel in the first place. As a looser
retelling of Frankenstein, Jurassic Park more successfully asks us to consider
what problems of “life”, “technology”, and “embodiment” are most on our minds
in the digital age.

The film follows the endeavours of entrepreneur John Hammond: a jolly,
misguided version of Victor Frankenstein who, like his predecessor, makes a
scientific discovery which he chooses to exploit for his own gain rather than
share with humanity as a whole, and which specifically involves the creation of
monsters. These “monsters” are long-extinct dinosaurs, genetically engineered
by Hammond and his scientific team. Unlike Victor, Hammond does not
abandon his creatures – indeed, he delights in adopting a motherly role towards
them, and demands to be present each time a new dinosaur is born – but he is
portrayed as an irresponsible creator. Tellingly one of the other characters accuses him of a “lack of humility before Nature”; by attempting to usurp the reproductive and creative powers of the natural world, he thus shares Victor’s biggest sin. Designed for entertainment and controlled by the monstrous machine of capitalism itself, Hammond’s monsters are also heraldic of a media age that turns everything into spectacle and then tries to package, brand, and offer it for consumption.

*Jurassic Park* also inherits the Frankensteinian tension between “natural” and “unnatural” production. Against the backdrop of genetic engineering, reanimation, and monsters running amok, a struggle over the future of human reproduction and the human family is played out in the interactions between the characters: maternal Ellie, reluctant father-figure Alan, and seemingly parentless children Lex and Tim. Alan begins the film with a pronounced dislike for children: “babies smell”, he tells Ellie, his disappointed partner. However, the film’s resolution sees him overcome this dislike and leaves us with the suggestion that Alan and Ellie will eventually start their own family. Alongside a return to the primordial world of the Jurassic era, therefore, the film performs a return from the dead world of science, fossils, and bio-engineered infants to the “natural” world of the family. This opposition between production and reproduction infuses the character of Hammond: he strives to create a primal scene, yet as a male scientist he can only do so by technologising the very act of
creation; thus John O’Neill refers to his “park” as an “off-shore techno-Eden”\(^6^4\). Ultimately, Hammond’s desires to “play mother” result in bloody catastrophe.

Yet if Hammond is a sort of Victor Frankenstein, a maker of monsters, then so too is Spielberg, who creates his own dinosaur “theme park” with this film. Indeed, *Jurassic Park* is also Spielberg’s “techno-Eden” – a space within which monsters can be created, digitally birthed, lovingly constructed. With this film, Spielberg and his animators revolutionised the use of computer-generated imagery in cinema: the dinosaurs were some of the first digital creations that audiences had ever seen in a live-action film. A startling image in *Jurassic Park* suggests the origin stories of these digital/bio-engineered monsters: when a dinosaur, stalking human prey in the film’s climax, walks in front of a projector and genetic code is momentarily “screened” on its body, we are reminded that this body is coded, built, postorganic – and also digital. For the first half of *Jurassic Park*, at least, we are invited to look upon these digital creations with wonder and awe; such wonder and awe is deflected onto the characters, who gape at the dinosaurs. In this sense, the dinosaurs operate like Roberts’ spaceship, which in science fiction cinema “focus[es] our fascination with the medium itself” and with the special effects that define it.\(^6^5\)

Yet Spielberg’s digital creations are not just fascinating technological objects but terrifying monsters: they are figured as other to the cinematic, rampaging onto its


“natural” terrain. The simple Frankensteinian divide between “natural” and “unnatural” modes of production is complicated here by the possibility that cinema itself can be privileged as a “more natural” mode of production in the face of encroaching digital effects. Seemingly aware of these tensions, Spielberg allows the image of his computer-generated dinosaurs to be neutralised in the film by more traditionally “cinematic” shots of nature itself: the final image of birds flying over the ocean, for instance, soothes the audience with a gentle and truly cinematic form of spectacle, quietening any anxiety that the otherness of the CGI might evoke.

This projection of post- or non-cinematic technologies onto the body of a villainous, duplicitous, or monstrous other is nothing new. When stop-motion and other “non-cinematic” techniques were employed in early live-action films, they were frequently used to depict the body of a monster or fantastic other. Indeed, as Jeremy Dyson points out, a version of Frankenstein was in production in the 1920s in which the monster was to be presented using stop-motion animation, thus “allowing the monster to perform super-human feats”. The project was later scrapped, leaving Dyson to speculate that such a film would have changed the future of Frankenstein in cinema, perhaps eclipsing or replacing the Whale films that would become so famous in the 1930s. For a more tangible example, non-cinematic otherness is wonderfully displayed in the 1963 film *Jason and the Argonauts*, in which pioneering stop-motion animation is used to depict the bodies of “monsters” (creepy sword-wielding skeletons).

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67 Ibid., 11-12.
Thirty years later, Spielberg famously rejects stop-motion techniques and turns to computer-generated imagery to animate the bodies of his monsters, the dinosaurs of *Jurassic Park*. Spielberg’s film demonstrates that digital effects have offered a new means of imag(in)ing the Frankenstein tale, of bringing its monster(s) to life, indeed, of turning the monstrous body into a spectacle. At the same time, the film shows us that in the digital age the Frankensteinian monster becomes a body onto which the otherness of digital technologies can be projected.

We find versions of such digital otherness in other texts contemporary with *Jurassic Park*. In *The Matrix*, for instance – a film that Joshua Clover describes as a “digital entertainment about being digital”\(^{68}\) – we have the character of Agent Smith, a computer “program” who appears in human form. Both the digital effects used to produce the film and the character’s digital (and non-human) status allow Smith to surpass the normal rules of embodiment: he shape-shifts, morphs, and multiplies. Smith represents – indeed, *embodies* – the digital otherness within this text, a live-action film that relies heavily upon postcinematic powers of representation. Smith resembles the shape-shifting T-1000 in James Cameron’s *Terminator 2: Judgement Day*, a liquid-metal body depicted using the digital technique known as the “morph”.\(^{69}\) With its ability to shape-shift, to borrow the image of other humans and to disguise itself as objects, the T-1000 embodies cultural anxieties over the “deceptive” nature of the digital


image – its ability to mimic, alter, and replace the “real” – while offering a monstrous body onto which the film’s digital otherness can be displaced. These films remind us that representing new modes of on-screen embodiment often involves inventing them. Special effects have largely developed in response to stories that depict strange, unusual, and often technological bodies; and these bodies can in turn be used to contain, perform, and give form to the anxieties that special effects might evoke. This has great relevance for Frankenstein: a story about embodiment, technology, monstrosity, and the techno-body as other, and also a story that, increasingly, relies upon special effects to bring it to life.

To close the chapter, then, what might we conclude after an examination of these various filmic retellings of (or “extensions” on) the Frankenstein myth? In particular, how might we link them to the earlier (and often more literal) adaptations of Frankenstein, those films that embedded a fantastic image of the filmic “machine” in their on-screen rendition of Shelley’s tale? I propose that the films I have considered here do offer us an image of cinema, but quite a different one. They are, for instance, less concerned with Nestrick’s “myth of animation” than with cinema as part of broader systems of simulation and mediation. They also depict a filmic machine that is beset by a dangerous new hybridity: for the simple tension between filmic apparatus and organic body has more recently become a threefold tension between cinema, organicism, and digitality. At the same time as we have been mapping the genome and leaping into cyberspace, we have invented new ways to represent ourselves – and our “monsters” – using digital technologies. Like the concurrent developments in biotechnology and cybernetics, these new technologies of representation can
reduce the body to code, turning organic presence into information; they offer new understandings of embodiment, challenging and disrupting our preconceptions about what it means to be human, what it means to be alive, what it means to watch a film and what it means to act in one. I will take this up in my next chapter, which will examine the (re)construction of organic presence via new technologies of digital animation.
CHAPTER FOUR

“HUMANS ARE HISTORY”:
THE POSTHUMAN BODIES OF DIGITAL ANIMATION

Figure 7: Origin stories: Aki Ross and her voice actor, Ming-Na

Figure 8: Aki negotiates the “natural” world

Figure 9: Nature and technology – “Floating Films” at the 2008 Perth International Arts Festival
Posthuman/postcinematic

In this chapter, I will shift my focus from digitally-enabled live-action film to digital animation. My intention here is to bring the figure of the Frankensteinian Creature face to face with a new type of cinematic “monster”: the digitally animated, photorealistic “actor”. I will accomplish this with particular reference to the 2001 film *Final Fantasy: The Spirits Within*, a fantastic text (with tropes borrowed from both the science fiction and the horror genres) that, with its digital recreation of human presence, opens an interesting dialogue with the Frankenstein myth. While other chapters of this thesis have contained analyses of films that adapt or retell Frankenstein, this chapter will be somewhat different: for although *Final Fantasy* reworks some elements of Shelley’s tale, its narrative is the most loosely bound to Frankenstein of all the stories I consider in this project. We find, however, that the figure of the Frankensteinian monster surfaces in descriptions of, and cultural responses to, the technologies used to create this film.

Throughout this chapter, I will use the concept of the “posthuman” to theorise the link between Frankenstein and the new modes of digital animation that films like *Final Fantasy* employ. We can begin with the assertion that much of Frankenstein’s current cultural importance lies in its assessment of a posthuman condition. Shelley’s novel can be situated within a long line of myths, fables, and stories that respond to concerns and challenges about what constitutes “human-ity” by rewriting the very concept of human being. We can also identify the Frankensteinian monster as a “boundary-creature” whose power lies in its
challenge to established cultural divisions between what constitutes human being and what does not. As Elaine Graham argues:

One of the ways in particular in which the boundaries between humans and almost-humans have been asserted is through the discourse of ‘monstrosity’. Monsters serve both to mark the fault-lines but also, subversively, to signal the fragility of such boundaries.¹

We might recognise the late twentieth and early twenty-first centuries as a period in which these boundaries seem particularly fragile; hence, perhaps, the renewed importance of the Frankensteinian monster as a mythic figure.

Earlier in this thesis, I brought the Frankenstein myth into dialogue with the work of Donna Haraway and the fantastic/theoretical figure of the cyborg. Similarly, we can consider the tale’s resonance with the work of writers who map a posthuman condition. Halberstam and Livingston were among the first to theorise such a condition,² followed closely by Hayles, whose book How We Became Posthuman charts (and challenges) a future-present in which human presence is disrupted by its own interface with digital and artificial systems.

Writing at the turn of the millennium and working mostly within the field of cybernetics, Hayles is concerned with the rise of a “posthuman view” that “configures human being so that it can be seamlessly articulated with intelligent machines”.³ This posthuman condition, she tells us, is at least partly defined by

² See Judith Halberstam and Ira Livingstone (eds), Posthuman Bodies (Bloomington: Indiana University Press, 1995).
an overwriting of embodied presence: in the digital age, “the erasure of embodiment is performed so that ‘intelligence’ becomes a property of the formal manipulation of symbols rather than enacted in the human lifeworld”.\(^4\) In the face of such disembodiment, Hayles stresses the need to resist the overwriting of the body and bodily experiences. Her work therefore has much in common with that of Haraway, who deploys her cyborg as a sort of resistance against the “erasure of embodiment” that might otherwise define a high-tech, postmodern world.\(^5\) That both theorists should concern themselves with hybridity and with maintaining the body as an object around which stories can be told brings their writing in line with that of Shelley.

When Shelley wrote of her monster, furthermore, a *post- or super-*human creature whose cobbled-together and reanimated body poses a challenge to any understanding of organic, whole, *human* presence, she was arguably exploring the sort of “posthuman view” that Hayles unpacks – as it would have applied to a pre-digital, industrial, early-nineteenth-century world. Frankenstein’s monster is created with the desire that he should make humankind, with its weaknesses and susceptibility to death and disease, obsolete; at the same time, with its theme of techno-genesis, the novel depicts a world in which “reference to a natural

\(^4\) Hayles, *How We Became Posthuman*, xi.

\(^5\) As Melissa Colleen Stevenson observes, the two theorists “share a common goal: each focuses on what Hayles calls here ‘the splice’ and what Haraway refers to as ‘weaving’, the fruitful connections made between bodies and identities across categorizations previously thought to be mutually exclusive”. Melissa Colleen Stevenson, “Trying to Plug In: Posthuman Cyborgs and the Search for Connection”, *Science Fiction Studies* 34, 1 (2007), 88.
humanity is always anachronistic”, as Waldby tells us.\footnote{Catherine Waldby, “The Instruments of Life: Frankenstein and Cyberculture”, in Prefiguring Cybertculture: An Intellectual History, eds. Darren Tofts et al (Cambridge, MA and London: MIT Press, 2002), 29.} This speculative depiction of a posthuman body/world is what Shelley’s novel shares not only with the work of theorists like Hayles and Haraway but also with fantastic and science-fictional texts of the digital age: for films such as Blade Runner, The Matrix, I, Robot, and AI: Artificial Intelligence – alongside novels of the cyberpunk genre – all indulge in a depiction of what Mark Williams calls a “literally posthuman future, in which humans are history amid a world of advanced informational dynamics”.\footnote{Mark Williams, “Real-time Fairy Tales: Cinema Prefiguring Digital Anxiety”, in New Media: Theories and Practices of Digitextuality, eds. Anna Everett and John T. Caldwell (London and New York: Routledge, 2003), 160, my emphasis.}

But posthuman bodies are also appearing on our screens – and often in the same films. In the digital age, new modes of animation allow human presence to be manipulated, restructured, simulated, and overwritten. This brings an interesting new emphasis to the “erasure of embodiment” that Hayles interrogates. Indeed, we can use her work – which is grounded in a discussion of cybernetics, not cinema – to theorise this posthuman/postcinematic convergence. In her essay “The Condition of Virtuality” Hayles again discusses the human/computer relationship and explores (without necessarily endorsing) the view that “human beings are essentially informational patterns rather than bodily presences. If a technology can replicate the pattern, it has captured all that really matters in a human being”.\footnote{N. Katherine Hayles, “The Condition of Virtuality”, in The Digital Dialectic: New Essays on New Media, ed. Peter Lunenfeld (London: MIT Press, 1999), 72.} Today, many films employing computer-generated imagery ask technology to “replicate the pattern” of human presence on screen; the question

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remains as to whether such replication captures “all that really matters in a(n on-screen) human being”.

Such posthuman filmmaking is discussed by Joshua Clover, who warns us about the impending arrival of the “actorless movie”. Clover uses this term in his analysis of *The Matrix*, a film that depicts the digital threat to human presence while also making use of the potentially overwriting power of digital effects. “To be human in the Matrix”, Clover writes, “is to be mesmerised by digital fabrication”. Indeed, Trinity’s time-defying leap in the film’s opening sequence truly does exemplify the digital future – if only by imag(in)ing a body that is subsumed and frozen by special effects. According to Clover, these special effects “render the humans peculiarly insubstantial. The movie is not about them. From the perspective of pleasure, the movie is about digital effects”. Of particular concern here is principal actor Keanu Reeves, who is “digitally smoothed” and “destined not to distract from the digital *mise en scène* but to integrate with it”.

Interestingly, this digital overwriting of human presence is also the subject of cyberpunk literature, the sub-genre of science fiction from which *The Matrix* draws considerable influence. As Howard Hendrix observes, cyberpunk – particularly that written by William Gibson – emphasises “the etherealisation of human beings, their transformation to *pure information* downloaded to machine

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10 Ibid.
11 Ibid.
12 Ibid., 21.
systems as they leave their bodies behind them”. There is a wonderful image in *The Matrix* that visually performs such a transformation: during the scene of Neo’s rebirth, his body is swallowed by a quicksilver-like substance, and in a spectacular manifestation of the relationship between organic body and digital effects Neo/Keanu fights for visibility as computer code seemingly overwrites him. Unlike the novels of the cyberpunk genre, however, *The Matrix* and its sequels respond with some anxiety to the (doubly) digital future they depict. Charles Tryon writes of the trilogy as “cyberphobic”, and argues that *The Matrix* is informed by certain “millennial worries framing representations of digital technologies” which “often informed debates about definitions of the human in the age of digital reproduction”. The posthuman and the postcinematic might intersect in films like *The Matrix*, then, but both are frequently depicted in apocalyptic terms.

Other films of recent years have invited their audiences to view posthuman/postcinematic bodies. In the same year as *The Matrix* revolutionised the use of digital effects in live-action cinema, George Lucas released *The Phantom Menace*, the first of his *Star Wars* prequels and a film that made excessive use of special effects. Fans of the *Star Wars* franchise reacted against this film, and were vocal and acerbic in their criticism of the CGI alien Jar Jar Binks, one of

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15 Ibid., 42.
the first digitally animated characters to share the screen with human actors. Critics offered a broader deconstruction of the film and its posthuman elements. Many reviewers argued that Lucas’ reliance on special effects and digital techniques stripped the film of its human qualities (emotion, expression, humour). Desson Howe of the *Washington Post*, for instance, wrote that “Lucas is so busy trying to digitally blow everyone’s mind that he forgets about his characters. The sacrifice of humanity for special effects creates an unfortunate disturbance in the Force”. He further complained that “the actors are caught like cosmic deer in the headlights” and that the film gives seasoned actors like Liam Neeson “little opportunity to do more than interact with computer beings”. Similarly, Todd McCarthy wrote in *Variety* that Neeson had “only moderate charisma” and that the film “is neither captivating nor transporting, for it lacks any emotional pull”; McCarthy further dismissed the film as “easily consumable eye candy” that “contains no nutrients for the heart or mind”. Like Clover’s announcement that *The Matrix* foreshadows an “actorless future”, these reviewers hone in on the interaction between mechanical and organic presence as a defining feature of the film. Arguably more so than *The Matrix*, however, Lucas’ tendency to isolate the bodies of his actors in front of the “green screen”, and consequently to remove the “organic” interaction between them, resulted in

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the creation of a posthuman, postorganic, postcinematic space that audiences and critics reacted to with distrust and discomfort.

This removal of organic presence from the screen becomes more pronounced in some of the new modes of animation that have emerged over the past ten years: motion-capture or performance-capture technologies, in particular, will be discussed below, but we might also consider the technique known as “rotoscoping”\(^\text{19}\) whereby live-action film footage is digitally “animated over” to produce a dreamy, sketchy, half-real image-scape. This technique was used in the science fiction film *A Scanner Darkly*, based on the novel by Philip K. Dick; the protagonists of this film are addicted to a new type of drug, and their hallucinatory experience of the world suits the new style of animation, as does the thematic suggestion that identity and embodiment are illusory concepts in a world where new visual technologies allow for the concealment, replication, and mis-representation of human presence. Ultimately, rotoscoping involves the writing-over of original (rooted in the body) performances; like other new modes of animation, it creates new and interesting variations on the problem of filmic presence and its link to an organic origin.

What these films share with Frankenstein is less a particular narrative or thematic pattern – although each are science fiction texts that inherit from their generic predecessors an inclination to question, if only fleetingly, what it means to be human in an increasingly posthuman world – than an engagement with a

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\(^{19}\) Rotoscoping is, of course, a very old technique that was used in animation as early as 1915. When labelling it a “new” mode of animation, I am referring specifically to the digital rotoscoping pioneered in the mid-1990s and first used by Richard Linklater in his films *Waking Life* and *A Scanner Darkly*.  

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technology that de-organises the body. Those who write about film often tell us that “technology” is a character in any film: Nick Lacey, for instance, states that “[u]nlike most art forms, film requires sophisticated technology both to be made and to be shown”; similarly, Rachel Moore argues that:

The material elements of cinema – slow, fast motion, jump cuts, angles of all directions and frames in all sizes, coloured filters, and the very aging of the film itself – all serve to give technology a key part in a movie, any movie.

In these digitised ventures, however, technology is arguably the main character, and its relationship with human presence is often the main “story”. Frequently, we watch such films because we want to see the cutting-edge technologies at work: we become fascinated with these “actorless” movies because they confront us with new images of the human. Whether the films themselves are marginal or mainstream, challenging or conservative, the technologies upset our understandings of what it means to be embodied, present, alive, real. At the same time, our response to such texts often hovers between fascination and fear. We marvel at the technologies while wishing we could identify more closely with the characters, or that they would appear more real; frequently, we leave the experience feeling unsettled. Cultural and critical responses to such texts are polarised: the technologies are often described in terms of both the sublime (we have never seen anything like this before) and the catastrophic (they suck the life out of the movies that utilise them). The film under scrutiny in this chapter –

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20 Nick Lacey, An Introduction to Film (New York: Palgrave MacMillan, 2005), 295.
Final Fantasy: The Spirits Within – evoked these mixed feelings in me when I first watched it in 2001: like many others, I was fascinated by the use of digital technology to reconstruct human presence, but I was simultaneously disappointed by the coldness of the film and its posthuman actors. I will elaborate on this below.

My investigation of Final Fantasy will pay particular attention to the film’s digital protagonist, Aki Ross. As a new type of cinematic “machine”, Aki has been read by critics and theorists alike in fantastic terms. In countless reviews of the film she is described as robotic or as a walking cadaver; these tropes, stolen from the fantasy genre, are also played with in academic analyses of the film. In many ways, Aki is a Frankensteinian monster for the age of digital filmmaking: she becomes an object of cultural anxiety because she represents a future that is disturbingly posthuman and postcinematic. Turning from Aki’s body to the narrative that contains it, I will investigate the film’s themes of ghostliness and its depiction of a “luminous” (if digitally reconstructed) natural world. I will conclude the chapter with the assertion that the struggle between “nature” and “technology”, depicted in Shelley’s Frankenstein and a crucial part of the tale in all its manifestations today, becomes an effective template for

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23 Livia Monnet, for instance, refers to Aki as both a “ghostly” body (111) and a medium, in the Spiritualist sense of the word (110); she argues that the film’s digital technologies “vampirize” the human actors (99) and also writes that “Final Fantasy’s virtual actors perform as undead digital vampires or zombies” (99). See Livia Monnet, “A-Life and the Uncanny in Final Fantasy: The Spirits Within”, Science Fiction Studies 31, 1 (2004).
understanding the new modes of digital representation that are reshaping film and media in the twenty-first century.

“*The desire to create a being like oneself*”: the new monsters of digital animation


> evokes something mythic, beautiful and terrifying, a being that hovers unsettlingly between states: neither dead nor alive, neither subject nor object, neither human nor machine… In this erstwhile emblem of cinema’s future, [Parisi] finds an image from cinema’s past – yet evidently not the image intended by its creator. Rather than seeing Marilyn Monroe’s breathy 50s sexuality, situated precariously between natural innocence and knowing artifice, Parisi finds Elsa Lanchester’s fright-wigged, wild-eyed portrayal of a thing, cobbled together in the charnel house and electrically animated.25

The words of both these writers, one commenting upon the other, demonstrate the extent to which the Frankenstein myth and, particularly, images of Frankensteinian animation – once so evocative of cinema itself and the spectacle of filmic “life” – have been re-engaged in discussions of the digital replication of human presence.

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25 Bode, 8-9.
Parisi and Bode are discussing the unique phenomenon of artificial or computer-generated beauty: an appropriate pretext for a discussion of *Final Fantasy* and its “perfect” heroine Aki Ross. Yet their accounts also draw upon the status of the Frankensteinian monster as a resurrected body. Just as Shelley’s novel evoked, in the early 1800s, weighty problems of what it means to be “alive”, digital animation is often received in terms of its ability to alter our understandings of “life” and “death”. This is not surprising given that new digital technologies are often employed in a resurrective capacity. If we can digitally generate an image of anyone, unbound by the laws of nature or physical presence, why not bring to life someone who is both famous and dead, if only to see them speak and act and move again? This perverse logic is, at times, accompanied by seeming necessity. When an actor dies during the production of a live-action film, he or she can now be “replaced” by a CG-simulacrum and filming can continue. The figure of the Frankensteinian monster – as other, and as resurrected or reanimated body (the ghostly and ghastly creature who unsettles the boundary between life and death) becomes a suitable allegory for such digital presence.

As Nathan Hunt tells us, there are “complex issues of authenticity that surround the use of CGI to alter or replace the role of actors in films”. He uses the example of the 1994 film *The Crow*, noting that “there was some concern over the ‘macabre’ use of CGI to complete [the film] after its star Brandon Lee died during filming”. Two words strike chords of recognition here: *authenticity* (a crucial sub-theme in the Frankenstein tale) and *macabre* (suggestive of

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26 Hunt, 199, note 5.
27 Ibid.
monstrosity as well as the supposedly uncanny or transgressive nature of such resurrective technologies). Appropriating his example of The Crow, we might question why audiences objected to the digital resurrection of Brandon Lee but not to the film’s cinematic representation of him after death. CGI might give the illusion of suspending mortality but, as a wealth of theorists have pointed out, cinema too can generate “spectral images of the dead”;28 how then did audiences discern between “real” cinematic representations of Lee after his death and “faked” digital representations of him that were somehow transgressive, beyond imposing on the latter a cultural fear of digitality?

Digital animation can indeed be viewed in Frankensteinian terms – as a new means of monster-making for a culture addicted to screen images – and not just because we can use such animation to resurrect the dead. Frankenstein, after all, is a story about the act of reshaping and attempting to control human presence. Shelley’s novel takes its place in a long line of stories and myths dealing with the creation of an artificial being: we can trace this trajectory from the ancient Greek myths of Prometheus and Pygmalion (and their respective retellings by the Roman poet Ovid) to Shelley’s Frankenstein and onwards to newer science-fictional tales of cyborgs, replicants, robots, and automata. As J.P. Telotte observes, these tales are fuelled by desires relating to the “subjection” of the body: particularly the desire to “rein in or reconfigure the unruly self” and to see

the body “rendered as a thing to be explored, mastered, and reshaped”. Such desires, Telotte continues, particularly informed the filmic versions of Frankenstein that appeared in the 1930s, which “depict the problematic nature of the modern self, confronted with a science that wants to explore, control, and even reshape the body – to render it as artifice”. These Frankenstein films dwell upon the figure of the scientist/creator and:

this figure’s single-minded concern… with demonstrating his mastery over the body: by carving it up and reconfiguring it, by adding or eliminating parts of it, or, as is most prominently the case in Frankenstein, by fashioning it into a mocking double of the human.

This in turn is demonstrative of “the desire to render the body a manipulable and subject thing, ultimately little more than a raw material upon which the scientific spirit might exercise its will to artifice”. We might ask ourselves if these are the same desires that inform recent endeavours in digital animation. In many of these endeavours there is seemingly a very Frankensteinian wish to render the body as “a thing to be explored, mastered, and reshaped”; here too are desires to demonstrate “mastery over the body” by “carving it up and reconfiguring it, by adding or eliminating parts of it” and ultimately “by fashioning it into a mocking double of the human”.

Such desires are particularly evidenced by the recent need to create digital “stars” – computer-generated bodies that take the place of “real actors” and that

30 Ibid., 75.
31 Ibid.
32 Ibid.
are made to appear as human as possible. “For years now”, Karen Moltenbrey
tells us in a recent edition of Computer Graphics World, “digital artists have
been trying to solve one of the most difficult challenges in computer graphics
today: the creation and animation of realistic digital humans”. Moltenbrey
refers to such endeavours as a “quest”, highlighting the Frankensteinian
overtones to what has become a passionate scientific venture. She also reminds
us that this “quest to create a photoreal digital human… opens doors for stars to
create and license detailed replicas of their likeness without making a physical
appearance”. Such a project, then, is steeped in themes of replication, cloning,
and the simulation of human presence: indeed, photorealistic digital bodies strive
for life in a manner that was preemptively performed by the replicants of Blade
Runner and by Shelley’s monster itself, making it significant that science fiction
and fantastic texts are often the first to “benefit” (and I use the term
questionably) from these technologies.

This quest for digital photorealism also satisfies that particular “desire for
resemblance, the desire to create a being like oneself” that Barbara Johnson
identifies as the “central transgression in Mary Shelley’s novel” and also one of
the most powerful links between Mary and Victor as writers/creators. We
might recall the Edison film here and the proclamation that Victor desires to
create “the most perfect human being that the world has known”; this film’s use
of mirrors further reminds us that Victor seeks to “perfectly” re-create his own
image, a transgression that results in the creation of a monster (or a monstrous

34 Ibid.
35 Ibid.
image of the self). Like the endeavours of Victor, our quest for digital photorealism has not unfolded according to plan. If there were certain utopian overtones to the initial declaration that we could digitally recreate a photorealistic human, thus forever changing the fundamentals of filmic production, the cultural reception of these animated “stars” has been uneasy and fraught with problems.

We can approach the cultural reception of computer-generated actors using the somewhat unusual framework provided by roboticist Masahiro Mori.37 Writing in the 1970s, Mori explores the emotional reaction of humans to robots: as a robot becomes more human in appearance and in movement, he proposes, the human response towards it generally becomes more positive, until “a point is reached at which the response suddenly becomes strongly repulsive”.38 When the robot’s appearance and movement becomes indistinguishable from that of humans, the response becomes more positive again. The graphic representation of this changing response creates what Mori calls the “uncanny valley”. Tangentially, we might argue that the body of the Frankensteinian monster occupies a similar space or position: his/her/its uncanny monstrosity is due to a tension between likeness and difference; he/she/it is “repulsive” not because he/she/it is inhuman but because he/she/it is not human enough. As Roberts reminds us, Shelley’s Frankenstein is a text that revolves around an “‘uncanny’ technological creation” that “unsetsells our assumptions about the identity of the

human.” For Mori, the body of the robot “unsettles” us in the same way; so too, we can argue, do the bodies of certain digitally animated characters who are made to appear real but whose movement, appearance, and expression is not real enough.

Mori’s theory is no doubt informed by the extensive body of psychological work on “the uncanny”, a cycle of texts that begins with E.T.A. Hoffman and his 1816 story “The Sandman”. Hoffman’s tale – previously identified in this project as a text closely bound to Shelley’s *Frankenstein* – depicts a man falling in love with an automaton. The psychologist Ernst Jentsch used Hoffman’s story and the automaton Olympia as demonstrations of the state he called “the uncanny”, described as “doubts whether an apparently animate being is really alive; or conversely, whether a lifeless object might not in fact be animate”; both Hoffman’s story and its analysis by Jentsch in turn formed the basis for Freud’s 1919 essay “The Uncanny”. This trio of texts – Hoffman, Jentsch, and Freud – is often incorporated into academic discussions of photorealism in digital animation. The creepy ambiguity of a state that hovers between life and death, between familiarity and strangeness – a state that Donna Haraway also hints at when she asserts that our machines have become “disturbingly lively” – is most applicable to photorealistic digital films and the otherwise indescribable eeriness

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41 For instance, and of particular interest in the context of this chapter, Monnet reads *Final Fantasy* in terms of the uncanny and compares the film’s digital heroine Aki to the automaton Olympia from Hoffman’s tale. See Monnet, 97, and throughout.
evoked by their characters, who often appear on-screen much like living dolls or automata.

Mori’s work is particularly applicable to films that employ motion-capture or performance-capture models. In such films, the movements and expressions of real human actors are captured on camera and used to inform the animation process: here, the “liveliness” of real bodies is transferred into a computer-generated space. Motion-capture often accompanies attempts at photorealism; yet like Mori’s robots, motion-capture photorealistic characters are too real and not real enough, and consequently they evoke the uncanny. Other animated characters, including the fantastic inhabitants of the Disney/Pixar universe and the wide-eyed, colourful-haired folk of Japanese anime, have not attracted this kind of repulsion, precisely because they do not strike the same chord of eerie resemblance. In contrast Final Fantasy, the film I will examine below, lands itself firmly in Mori’s valley with its creepy, half-real, motion-capture humans. It is worth noting that the films that followed Final Fantasy in the quest for photorealism did not seem to alienate audiences and critics to the same extent. Most notable to date have been the Robert Zemeckis productions The Polar Express (2004), which elicited mixed reactions while still deemed by some viewers to be “creepy”, and Beowulf (2007), which incited far more positive responses and was considered by many critics to have “solved” the problem of motion-capture “creepiness”. With each film the technologies and their ability to

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43 Moltenbrey, 2.
simulate human presence improved, allowing the film in question to clamber further out of the “valley” into which *Final Fantasy* had fallen.\(^{44}\)

When discussing the anxieties evoked by the quest for photorealism (and their link to the Frankenstein tale) we can also return to Walter Benjamin and to the problems associated with filmmaking-as-mechanical-reproduction. As Nestrick tells us, the Frankensteinian monster is “our prime image of mechanical reproduction”;\(^{45}\) yet if cinema was once the ultimate expression of such reproduction, it is now being surpassed by these new projects in animation that seek to mechanically reproduce human presence in a far more astounding manner. The figure of Frankenstein’s monster is here charged with new applicability. We find, furthermore, that Benjamin’s notion of a loss of “aura” takes on new meaning in the world of motion-capture and performance-capture animation. For Benjamin, the mediating presence of the camera impacts upon cinema’s processes of representation to the extent that “the aura that envelops the actor vanishes, and with it the aura of the figure he portrays”.\(^{46}\) In films that employ the motion-capture technique, the original movements of an “actor’s” body are filmed, then digitally transformed into a screen image; the on-screen bodies that result from such a process are *doubly* mediated and have doubly lost

\(^{44}\) We can use the film review website Rotten Tomatoes to assess this: *Final Fantasy* receives 44% positive reviews, *The Polar Express* receives 56% and *Beowulf* 71%. See http://au.rottentomatoes.com/m/final_fantasy_the_spirits_within/, http://au.rottentomatoes.com/m/polar_express/, and http://au.rottentomatoes.com/m/beowulf/ (all accessed 1/11/2009).


their aura. This loss of aura may be responsible for the tremulous cultural reception that such technologies elicit. Benjamin also writes of the distance between audience and actor, telling us that the difference between cinema and theatre is primarily that the film audience will identify with the camera, not the actor.\footnote{Benjamin, 230.} In motion-capture animation, however, the audience is one step further away from contact with the “actor”, who is presented to us as a body mediated by both the screen and the animation process. This, too, may contribute to cultural readings of such films as cold and unengaging.

*Final Fantasy* provides us with an example of just such a film. Directed by Japanese game designer Hironobu Sakaguchi, it is notable for being the first feature film to use motion-capture technologies together with CGI to create a photorealistic style of digital animation. The film thus undertakes the sort of Frankensteinian quest for “likeness” discussed above. There is a coldness about the film, however, and a certain lifelessness about the characters, that led to its box-office demise. Moltenbrey notes that “[w]hile the CG characters were amazing for the time, they were not quite real enough to satisfy theatregoers… As a result, the movie failed miserably at the box office, with losses estimated at more than $120 million”.\footnote{Moltenbrey, 2.} Hunt also links the movie’s failure to its unsuccessful depiction of human presence, and likens *Final Fantasy* to *The Phantom Menace* and the public outrage and rejection that was levelled at the computer-generated character Jar Jar Binks.\footnote{Hunt, 199, note 5.} Let us turn our attention to *Final Fantasy*, then, and to Aki Ross, the problematic body at the heart of the film.
The mechanical body re-imagined: reading Aki Ross

Given that both academic analyses and industry reviews of Final Fantasy usually dwell upon the appearance of the characters and the perceived success or failure of the technologies used to create them, those who have never seen the film might be surprised by the complexity and pensiveness of its storyline. The story events unfold in the year 2056: humans are at war with alien creatures known as “phantoms”, strange insubstantial beings who pull the life out of anyone they touch. Aki is the heroine, a young scientist working to understand the phantoms. She and her marine corps companions, who seem plucked from the familiar narrative spaces of earlier science fiction films like Aliens, undertake a journey to stop the ultra-aggressive military from destroying both the phantoms and the Earth itself (which has already been reduced to a post-apocalyptic wasteland in the human/phantom war). This journey leads the characters beyond the barrier cities into which the human population has withdrawn, out into the wasteland and, eventually, to “Gaia”, the soul of the Earth itself. In a conclusion that draws from anime, from deep ecology, from Shintoism, and from a host of science fiction and fantasy texts, Aki uses a combination of “spirits” – energies taken from various living creatures – to neutralise the phantom threat and peacefully save the Earth.

50 This complexity was another of the film’s self-destructive aspects, however: Final Fantasy was frequently criticised in the media for its overly intricate and confusing plot.
However, if “technology” is a key character in digital animation – as was suggested above – it is not surprising that audiences, reviewers, and academics alike have neglected this storyline and tuned their response to the film into Aki-as-technological-body, reading her as the product of a complex technological procedure rather than as the heroine of an imaginative if long-winded fantasy film. In many ways, Aki is a more important “text” than the film in which she appears. Certainly, her status as digital actress – the first of a new generation of computer-generated screen “stars” – eclipses the role she plays in a narrative that many viewers deemed forgettable or confusing. Consequently, my analysis of *Final Fantasy* will address Aki’s mechanical body before turning towards two of the film’s important themes: ghostliness and the nature/technology tension.

Like all the characters in this film, Aki is a digital creation. Thomas Lamarre cites the makers of *Final Fantasy* as initially stating that “[n]o reference models were used or digitizing of real humans done to create these characters; they were all built from scratch within the computer”. As Lamarre points out, however, Aki and the other characters were *not* created “from scratch” by a computer; instead this process was aided by the capturing of human movements located in the “real” world. As I watch *Final Fantasy* for perhaps the twentieth time, I am wondering about the person whose movements provided Aki with “life”. Ming-Na is credited as the actress who “plays” Aki, yet she provides only the voice and some of the facial expressions; the body who acts out Aki’s movements – the body to whom the motion-capture markers are attached – is ultimately uncredited and unacknowledged.

Why, I also wonder, did the makers of the film mislead their fans about Aki’s motion-capture status? This ambivalence is itself indicative of the importance of origins, and of the relationship between animated body and “real” body, to this film. As Lamarre tells us, *Final Fantasy*:

> presents a challenge to the logic of origins in several ways. In addition to bypassing the need for real places as shooting locations, the film destabilises relations to a place of production. It is a movie produced everywhere and nowhere, bits of information transmitted electronically between computers in various locations in Japan and the United States.  

This, we might add, gives the film a lack of grounding in a physical scene of production, contributing to its uneasy relationship with a “real”, organic landscape. Lamarre also notes that Aki herself is particularly beset with problems of originality; with her raceless features, she:

> need not be designated as Japanese or American, and more importantly, she harbors an alien close to her heart, literally. She is a creature of multiple origins. And we might say the same for the digital actors in general… their physical appearance has indeterminate, multiple origins.

Aki, then, is a new type of filmic body who shares with the figure of the Frankensteinian monster a tenuous and dubious origin story, a fragile link to the organic world.

These origin stories will be returned to later in the chapter. First, however, let us consider some of the other elements that Aki shares with the mythic figure of the

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52 Lamarre, 138.
53 Ibid., 140.
Frankensteinian monster. We can begin with her artificial and mechanical status. Aki is an experiment in techno-production, constructed by humans who seek to represent and duplicate themselves. She is also, to use Haraway’s term, a “lively” machine; to be more precise, she inhabits a hybrid zone, representing both sides of the problem articulated by Haraway – she is both a machine that is “disturbingly lively” and a representation of human presence that is “frighteningly inert”. 54 Like the monstrous-yet-beautiful “Bride” in Whale’s film Bride of Frankenstein – who embodied the female “star” as meticulously “built” by the Hollywood studios of the cinematic Golden Age – Aki is a constructed beauty, a manufactured star, although her digital presence bestows new meaning on the very notion of “stardom” itself.

There is no creation scene for Aki in Final Fantasy – at least, not within the confines of the narrative. The film is rather conservative about what it shows of her body, especially when compared to anime like Ghost in the Shell (the subject of my next chapter) in which the body is repeatedly exposed and apocalyptically deconstructed. Yet although the narrative does not give her a creation scene as such, the publicity surrounding the film betrays an obsession with Aki’s mechanical body and with the technologies used to create her. My DVD copy of Final Fantasy comes with a promotional documentary that details the “making” of the film (and which consequently gives us an echo of Mary Shelley’s announcement, in her 1831 introduction, that she will “furnish” us with an account of the making of her “hideous progeny”). 55 This documentary dwells

54 Haraway, Simians, Cyborgs and Women, 152.
particularly on Aki, showing us the computer models used to create her and thus taking us “inside” her body. The documentary also literally takes Aki apart, fragmenting her body into various parts to be discussed by the animators responsible for them (including a detailed and slightly fetishistic discussion of her hair by the young man whose job it was to construct and perfect each strand).

Again, we might recall the words of Benjamin here. Discussing cinematic presence he tells us that the filmic actor’s “creation” is “by no means all of a piece” but is “composed of many separate performances”, because “there are elementary necessities of equipment that split the actor’s work into a series of mountable episodes”.\(^{56}\) As an animated character, Aki is even further fragmented: like the Frankensteinian monster she is assembled bit by bit, her facial expressions, her voice, her movements, and even her individual body parts originating from different sources. We might also recall the words of Frankenstein himself, who – in Whale’s version of the tale – proclaims of his Creature: “That body is not dead. It has never lived. I created it. I made it with my own hands with the bodies I took from graves, from the gallows, from anywhere”. He insists that he is not bringing a dead body back to life; instead, he has created a new body from fragments and animated it into being. We can describe Aki’s creation in a similar way: she too is created from fragments, built by various actors, voice artists, and animators, and then she too is brought to life; she too, in other words, was never a \textit{whole} body prior to being animated.

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\(^{56}\) Benjamin, 232.
If we think of Aki’s construction in these rather violent terms, we might find it strange that the narrative is so peaceful and presents her in such a non-violent manner. Physically, there is nothing particularly monstrous about Aki; with her smooth freckled skin, her shiny hair and her slim figure, she is a digital angel, made to appear “perfect”; she is not overtly seductive but instead somewhat wholesome, a digitally animated girl-next-door. Although the technologies that create her render her a cyborg, of sorts, she is depicted within the confines of the narrative as human, with some variances: she is locked in a symbiotic relationship with an alien “phantom”, and wears a mechanical breastplate that keeps her alive. She also remains whole, unscathed, and unruffled throughout the film; indeed, she is so unproblematic a body/character that she almost becomes invisible. Monnet suggests as much when she writes of Aki as a vanishing character who is “erased or abducted” and ultimately robbed of both her agency and her physical presence.\(^57\) There are some violent elements to the plot of Final Fantasy: the film borrows from the generic repositories of horror cinema (and from horror/sci-fi hybrids such as Alien) by allowing its characters to be picked off by the phantoms one by one, so that Aki, the sole survivor of her team, becomes a version of Carol Clover’s “Final Girl” (the pure and virginal survivor of many horror film narratives).\(^58\) Even so, little bodily violence appears on-screen: the phantoms kill their victims by pulling out their souls, and this somewhat beautiful imaging of the ensouled body merely strives to emphasise wholeness and human status. The film thus refuses to physically

\(^{57}\) Monnet, 111.

deconstruct the bodies of its characters, bodies that are rendered so problematic by the technologies used to create them.

Ultimately, we can link Aki to the live-action characters discussed in the previous chapter – Neo in *The Matrix* and Leeloo in *The Fifth Element* – characters whose construction we witness but who are nevertheless depicted as seamless, perfect, and beautiful rather than fragmented, monstrous, and problematic. Similarly, we can read into the film a version of the nostalgia discussed in Chapter Two: the nostalgia for organic presence and (unproblematic) corporeality generated by cinema’s fragmentation and reproduction of the body. Such nostalgia contributes to the production of Aki as a *normalised* and non-confronting body (with perfect features and shiny hair). This continuation of a nostalgia unique to the filmic “machine” might lead us to suggest that the problems that spring from cinema’s mechanical reproduction of the body – including both the fragmentation and the attenuation of organic presence – are not solved in the digital age; instead, they are complicated by new technologies that overwrite, reconstruct, or replicate the organic body.

**Ghostliness and the nature/technology tension in *Final Fantasy***

As this analysis of Aki might suggest, *Final Fantasy* is thematically less concerned with monsters, cyborgs, and mechanical bodies than with ghostliness and spirituality – even if the animation process behind the film does suggest a Frankensteinian narrative of construction, replication, and fragmentation. At its core, the film investigates what happens after death; as the DVD commentary
informs us, writer/director Sakaguchi was deeply interested in this subject, and even named his protagonist Aki after his dead mother. Such interests permeate the narrative. The “phantoms” are revealed to be the ghosts of long-dead alien creatures, and when these phantoms steal a human life we see a glowing spirit pulled from the lifeless body. The visualisation of both these phantoms and the human ghosts is perhaps the film’s most beautiful aspect – ironically, the half-real human characters seem no more alive than when they are colourful, transparent ghosts pulled from their dead human form. Here, the film intersects with Shelley’s tale. As we know, Shelley wrote *Frankenstein* in response to the challenge of writing a “ghost story”; if her monster seems not at all like an incorporeal ghost, we might remind ourselves that Victor is driven by a quest to suspend mortality – to “renew life where death had apparently devoted the body to corruption”.  

In the media age, this notion of ghostliness and the related concepts of reanimation and resurrection take on new meaning. As Alessia Ricciardi reminds us, “photography, cinema, and television confront us with human referents whose mortality has been technologically suspended or annulled through the visual production of the perpetual simulacra of life”. This creates a new variation on the Frankenstein myth: if film and media are technologies that can both animate and suspend death, they are similar to the “instruments of life” that Victor employs in his act of techno-genesis. Such notions have been played upon in a host of recent media texts that do not seek to *retell*

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59 Shelley, 43.
61 Shelley, 45.
Frankenstein, but that nevertheless offer a new reading of the monster as resurrected and simulated presence; these include *Solaris* (2002),62 *The Ring* (2002),63 and various episodes of the television series *Doctor Who*64 and *Torchwood*,65 all of which engage a cultural fascination with the media’s capacity to “reanimate” the dead. As I write this chapter, Christopher Nolan’s film *The Dark Knight* is opening in cinemas, generating much hype over Heath Ledger’s posthumous performance as The Joker: the film offers a very eerie and uncanny resurrection of Ledger’s image at a time when his death is still being mourned, and the fantastic nature of the text – as well as the macabre nature of Ledger’s role – contributes greatly to this sense of eeriness. Such a fascination with filmic ghostliness can also be read into *Final Fantasy*, and is often mentioned in academic critiques of the text. In her analysis of the film, for instance, Monnet takes us back to early cinema, which was “regarded by its spectators (particularly by middle-class bourgeois viewers) as a medium/technology for transcending death – an ersatz of life or lifelike illusion that seemed capable of keeping death at bay”.66 The sort of digital technologies

62 Adapted by James Cameron (producer) and Steven Soderbergh (director) from the novel by Stanislaw Lem. Anthony Enns tells us that the novel’s “confusion between dreams, ghostly visitations, and technological recordings” allows it to “emphasize the notion that technological media expand ‘the realms of the dead’”; such themes are taken up by the film. See Enns, 43.
63 A Hollywood remake of the Japanese horror film *Ring*, in which the ghost of a murdered girl is captured on video and crawls out of the television screen to murder its victims.
64 In particular, “Silence in the Library” and “Forest of the Dead” (series 4, 2008), written by Steven Moffat, poignantly depict the retention of dead characters’ consciousness on communication devices. “The Idiot’s Lantern” (series 2, 2006), written by Mark Gatiss, features a character known as “The Wire”, a spectral televitual image (if not a literal ghost) who comes to life in a spectacular lightning storm.
65 In “Ghost Machine” (series 1, 2006), written by Helen Raynor, a mechanical device creates ghostly projections of long-dead people.
66 Monnet, 99.
employed in *Final Fantasy* bring new urgency and new meaning to this filmic ability to suspend death: the development of computer-generated imagery, in particular, has allowed filmmakers to continue to “work” with actors who have died during the shooting process. The aforementioned digital resurrection of Brandon Lee in *The Crow* offers an early example of such computer-generated ghost-making and the cultural anxiety it evoked.

The theme of “ghostliness” becomes a useful link between the two texts in question here. Shelley’s *Frankenstein* was a ghost story for the industrial age: a period in which traditional images of spirits and phantoms were less important (in the mind of one eighteen-year-old writer, at least) than a monstrous, posthuman, sewn-together-and-reanimated body. Similarly, we might read *Final Fantasy* as a ghost story for the digital age: a period in which spirits, phantoms, and resurrected bodies have strange equivalents in the digitally animated bodies that populate our screen texts. Ultimately, then, it is not merely Aki’s mechanical and fragmented nature that allows her to be read in conjunction with the Frankensteinian monster. She is also a ghostly body, a reanimated body, a body that is only half alive; with her strange half-presence she becomes the focal point for the film’s concern with spectrality, even though she is depicted by the narrative as “human”. While she is not a literal resurrection of a dead actor, furthermore, she embodies cultural anxieties over the digital recreation of human presence and its potential link to the macabre.

There is another strong thematic link between these two texts: both explore, romanticise, and are infused with the tension between “nature” and
“technology”. In *Frankenstein* Victor’s scientific, masculine act of techno-production – an act that displaces the natural process of reproduction – takes place against the backdrop of Shelley’s stunning descriptions of the mountains, lakes, forests, and natural landscapes she so obviously adored as a writer. In *Final Fantasy*, Aki’s more peaceful scientific quest leads her into a natural world that Sakaguchi and his animators clearly take great pride and pleasure in bringing to life. Perhaps compensating for its lifeless, semi-present human actors, *Final Fantasy* images and imagines a natural world that is animated in many senses of the word: not only presented to us in lively and colourful “animation”, but inhabited by spirits (the phantoms, who are not grey and gruesome as their name suggests but big, beautiful, and brightly coloured) and itself ensouled (given a spirit or “Gaia”).

This luminous natural world, however, is also a world threatened by invasive and penetrative technologies. These are symbolised by the phantoms, creatures who invade both the human body and the barrier cities into which the human

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67 Interestingly, *Final Fantasy* flirts here with Shintoism. The “phantoms” resemble the Shinto deities known as *kami*, best described as the spirits of natural phenomena, natural objects, human beings, and departed ancestors (see Sokyo Ono, with William P. Woodard, *Shinto: The Kami Way* (Rutland and Tokyo: Tuttle, 1962), 6, 7, 109.) The concept of Gaia, too, while borrowing its name from the Earth Goddess of ancient Greek mythology, works in conjunction with the Shinto term “Great Nature” (*daishizen*) which, as Stuart Picken tells us, “is used with a cosmic or metaphysical flavor to describe the total context of human physical and spiritual life and that of the world itself” (Stuart D.B. Picken, *Essentials of Shinto: an Analytical Guide to Principal Teachings* (Connecticut and London: Greenwood, 1994), xxiii.) With these Shinto overtones, *Final Fantasy* shares much with films by anime master Hayao Miyazaki – which, as Wright and Clode tell us, resonate with Shinto themes (Lucy Wright and Jerry Clode, “The Animated Worlds of Hayao Miyazaki: Filmic Representations of Shinto”, *Metro* 143 (2005), 46-51). In particular, *Final Fantasy* recalls Miyazaki’s *Nausicaā of the Valley of the Winds*, a film about a feisty heroine who mediates between aliens and humans in an effort to protect the natural world.
population has retreated. More powerfully, such penetration of the natural world is symbolised by the “Zeus cannon”, a weapon capable of literally penetrating the Earth from space. This becomes a literalisation of the concerns explored by Shelley. *Frankenstein* is often read as a critique of the techno-scientific (and gender-informed) desire to penetrate nature and reveal its (“Her”) secrets. Early in the text, Victor tells us that he will “pioneer a new way, explore unknown powers, and unfold to the world the deepest mysteries of creation”; he is inspired by the words of Professor Waldman, who lectures on the scientific desire to “penetrate into the recesses of nature, and show how she works in her hiding-places”. This desire to penetrate nature becomes a more brutal and aggressive act in *Final Fantasy*. In her dreams, Aki witnesses the apocalyptic scorching and destruction of the phantom planet, an ultimate violation of the natural world by a high-tech and aggressive race of creatures; she saves the Earth from a similar fate, protecting it from the violence imposed by an over-zealous, technologically-enabled, penetrative, “masculine”, military.

These deep-set tensions between nature and technology converge in Aki, a digital character with a troublesome link to her own origins in nature. Indeed, we frequently see digital Aki traversing and negotiating a “natural” landscape (albeit one that is digitally animated): she wanders the post-apocalyptic wasteland, clambers over mountains, and in her dreams she travels the sometimes harsh, sometimes beautiful landscapes of the alien world. These negotiations echo the negotiations between Frankensteinian monster and natural world: in Shelley’s novel the monster, an artificial creature, is also frequently

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68 Shelley, 38.
encountered in dramatic natural settings. Both relationships between body and landscape are defined by a sense of exile. In Shelley’s novel the beautiful natural landscapes continually remind us of the monster’s artificial status; in Final Fantasy Aki may appear to be “embraced” by the (fake) natural landscape she traverses, but this sweeping natural beauty makes her digital body seem all the more artificial and uncanny. As a digital body Aki, like the Frankensteinian monster, is in exile from the organic world.

As noted in Chapter Two, the term “exile” is used by Italian writer Luigi Pirandello to describe the status of the filmic actor. These words, which inspired Walter Benjamin, are worth repeating here in a slightly different context. In the novel Si Gira, Pirandello writes that the filmic actor:

feels as if in exile – exiled not only from the stage but also from himself. With a vague sense of discomfort he feels inexplicable emptiness: his body loses its corporeality, it evaporates, it is deprived of reality, life, voice, and the noises caused by his moving about, in order to be changed into a mute image, flickering an instant on the screen, then vanishing into silence… The projector will play with his shadow before the public, and he himself must be content to play before the camera.69

Much of what Pirandello is saying here has great relevance for Aki Ross. She too experiences a loss of corporeality, a certain “evaporation” of presence; she too is deprived of reality, life, and voice, and this very lifelessness has caused audiences to generally reject her or find her unpleasant to watch. Even a discussion of “her” as actor, performance, body – as anything other than “image” or “text” – causes problems, for who exactly is “she”? Overall, the sense of exile that Pirandello writes of – what MacDougall sees in semiotic terms as the

69 Luigi Pirandello, quoted in Benjamin, 231.
“tearing apart of the signifier from its object”70 – becomes a perfect description of Aki’s status as on-screen image, an image that is exiled or torn apart from original movements, expressions, and organic presence.

In this sense, the two themes discussed here – ghostliness and the nature/technology tension – are intrinsically related. In her analysis of Frankenstein and its various filmic retellings, Zakharieva points out that “[t]he sentimental current underpinning the Romantic movement finds full force in the conflict between the mechanical and the natural”, the tension at the heart of Shelley’s novel; she also argues that Romanticism’s “glorification of the natural is in its essence a fear for the lost soul of man”.71 It is therefore significant that Final Fantasy’s obsession with the “ensouled” body – expressive of an anxiety over the very absence of the “spirits within” referred to in the title, an absence that marks the motion-capture body – accompanies the film’s quest to bring the organic landscape to the screen using digital techniques. Whether there is a return in Final Fantasy to the Romantic idealism of Shelley’s novel is debatable; what we can argue, however, is that this problem of organic presence haunts the film and underpins the interaction between nature and technology that is dramatised in the narrative.

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Animation as an “organic machine”

I began this chapter with reference to digital bodies and the posthuman. Running through the chapter, however, has been a concern with organicism (and postorganicism) in animation. Our efforts to digitally reconstruct human presence, and the uncanny bodies they produce, might recall the operations of Victor Frankenstein; but there are deeper tensions at work in animation that evoke the Frankenstein tale – namely, the irresolvable tension between organic and mechanical worlds. Such tensions have always been part of animation; they are exacerbated in, but not unique to, the digital age.

Recently, I found these tensions spectacularly demonstrated by an unusual cinematic event. In February 2008 the Perth International Arts Festival opened with an event known as “floating films”: a huge screen was “floated” over the Swan River, presenting a film to spectators watching from the banks. The event was designed to celebrate Perth’s “river culture” and to combine the Perth community’s love of picnics, swimming, and the outdoors with the sense of highbrow “artiness” that the festival entailed. This event particularly caught my attention, however, because the film to be screened (or “floated”) was *My Neighbour Totoro*, an animated film by Japanese master of anime Hayao Miyazaki. This is a gentle film about the relationship between two young girls and the spirits that inhabit the natural world around them: like many of Miyazaki’s creations it brings to life a “lost” world in which, in Susan Napier’s words, “nature is not yet dominated by humanity and exists as a powerful force
in itself, strong in its identity as the nonhuman Other”. By dramatising the interaction between nature and humankind (or nature and technology) Miyazaki tells the story of the medium within which he works; for in animation “nature” is also othered, held at a distance by the technologies that depict it. These tensions were amplified and further spectacularised when the film was screened not only in conjunction with a natural setting but as part of an artistic event that incorporated nature into the performance.

Arguably, the attempt with these “floating films” was to create a cinematic experience that resembled a sort of “organic machine”. Immersed in the writing of this thesis when I came across this event, I was instantly reminded of the Frankenstein narrative – of the monster’s body, not as a violent and dark reconstruction of human presence, not as a hideous body marked by scars, but as a body that exists at the point of tension between nature and technology. As I read about the event, I was also reminded of David Chute’s use of the term “organic machine” to describe the films of Miyazaki, a filmmaker who shuns digital animation but whose films depict a luminous and often sacred natural world. Chute observes that the films of Miyazaki – which alongside My Neighbour Totoro include Princess Mononoke and Nausicaä of the Valley of the Winds and, more recently, Spirited Away and Howl’s Moving Castle – are defined by a tension between the natural and the technological: they feature both machinery and nature in imaginative manifestations, yet they are also redolent of the notion that “the natural world may or may not be one enormous organic

machine”. For Chute, the term “organic machine” also describes the care and precision taken to create Miyazaki’s imaginary worlds, and with the production process behind them. Operating within the machine that is animation itself, Chute suggests, are the “organic” qualities to Miyazaki’s work: because the famous animator shuns computer-generated imagery and “personally draws up to 70 percent of the individual frames in his movies” his films are stripped of the “high gloss of CGI” and contain “images that appear hand-crafted (a look as distinctively Japanese as the ‘organic’ surface textures of an ancient teacup”).

Chute also uses the term “organic” to describe the way Miyazaki “manages to seduce us into believing that these places actually, or at least ‘virtually’ exist – that they could be turned and tipped and looked at from any angle, and contemplated as a whole”.

By distinguishing between hand-crafted and more mechanical or mass-produced modes of production, Chute calls the Frankenstein narrative to mind: for Shelley’s novel, as we have already seen, is defined by a struggle not only between nature and technology but between natural and unnatural modes of production. This divide, as I have suggested elsewhere, can be appropriated to depict the struggle between cinema (in its “more natural” photographic form) and new digital technologies. When discussing animation, it should be noted that a similar tension informs the representation and cultural reception of new, digital modes of animation, which take on an “unnatural” status in the face of traditional hand-drawn methods. This division informs Chute’s argument that Miyazaki’s

74 Ibid., 62.
75 Ibid.
work is “organic”; perhaps also informing his argument is the understanding that Miyazaki personally draws many of his images and thus is organically involved. Hand-drawn animation is an embodied act, as opposed to the production of images by a computer; in this way, the shift from traditional hand-drawn methods to computer-generated imagery echoes the shift from writing to film, and the technologising of the Frankenstein text as it was taken from its original author (and from an original, embodied act of writing) into the mechanical and mass-produced world of film.

This very “Shelleyian” division between natural and unnatural production is articulated in the recent Pixar film Ratatouille. In a play upon the film’s subject matter – it is set in a kitchen, the main character a chef – a label appears in the end credits attesting to the film’s “ingredients”. “100% Pure Animation”, we are told: “No Motion Capture!” This is strangely relevant in an age where questions of organic purity dominate the world of food production as well as that of film production. Yet if Chute writes of handcrafted animation as “organic”, what might we say of the films produced by Pixar: vastly commercialised, relying heavily on computer graphics, yet defined by image-scapes that are beautiful, fluid, and magical? The Pixar films often revolve around mechanical or artificial subjects, foregrounding the mechanical or artificial nature of the production processes behind them. We see this in Toy Story and Cars, and in their most recent film, Wall-E, a science fiction film that depicts a doubly posthuman world: both a fictional world populated by robots, and an on-screen world defined by a lack of human presence (for the character of Wall-E himself communicates using robot noises and body language rather than a human voice).
Other Pixar projects, however, have ventured into the natural world: arguably their most successful venture was animating the ocean in *Finding Nemo*, the undersea world of which almost seems to ebb and flow “organically”.

*Final Fantasy*, too, can be described as a digital animation determined to make present the organic world. Indeed, director Sakaguchi seems almost to go in search of a form of “organic-digital” imagery: he uses cutting-edge digital techniques to bring to life stunning landscapes and a vibrant “natural” world. More recently, this venture has been undertaken by James Cameron and the creative team behind the film *Avatar*. Cameron’s film blends live-action, motion-capture, and other digital effects technologies (and is consequently a highly fragmented text attempting to appear seamless). Currently being hailed as a technological masterpiece, *Avatar* also brings to life an “organic” world and communicates an ecological “message” similar to that of *Final Fantasy*.

In brief, the film depicts a future in which humans are mining on the moon Pandora, thus threatening the indigenous population (the Na’vi), who revere nature and live in harmony with the natural world around them. The humans use genetically engineered Na’vi bodies controlled by human minds to aid their research and their negotiations with the pagan tribe. These alter-identities, or manufactured “others”, are known as “avatars”. Although writer/director Cameron seems to have adopted the name “avatar” in its Hindu sense – meaning incarnations of the gods on Earth – the term also has cyberpunk connotations: it is the name given to one’s constructed identity online or in a digitally imagined

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At the time of completing this thesis, *Avatar* has only just been released: for this reason, my comments on this important text will be superficial.
space. Interestingly, the film reverberates with the cyberpunk dream of escaping the limitations of the body and rewriting an idealistic existence in the digital world: crippled protagonist Jake “jacks in” to the dreamy world of Pandora, eventually rewriting himself as a Na’vi. This difference between “real world” and (digital) dream/fantasy is underscored by the decision to have humans appear in live-action while the Na’vi are animated using motion-capture.

While exploring these complex negotiations between organic and digital bodies, the film also deals with cultural anxieties over our lost link with the organic world. As with Final Fantasy, Avatar’s narrative explores the techno-human threat to the natural world and the dangers that human ambition poses to nature itself. At the same time, Avatar – like Final Fantasy – uses digital technologies to recreate a convincing and glorious nature-scape. That the film is intended to be viewed in 3D brings new meaning to the idea of “organic” digital imagery: like the image-scapes that Chute describes, the world of Avatar, too, can seemingly be “turned and tipped and looked at from any angle, and contemplated as a whole”.77

As “nature” becomes a tempting subject for ambitious animators, more and more films are taking this path. Films like Final Fantasy, Finding Nemo, Avatar, and the various master-works of Hayao Miyazaki show us that the organic world can now be animated and/or digitally reconstructed for us to view. As analysts of film, how should we approach such ventures? Can we describe them as Frankensteinian “reconstructions” or “penetrations” of nature, or should we

77 Chute, 62.
consider them interesting demonstrations of the fusion between organic and mechanical worlds? Overall, the relationship between the organic and the mechanical – whether we describe it as a struggle or a harmonious interface – has become a crucial issue for animation in the twenty-first century. This, alongside the digital construction of (post)human presence, is where today’s animated texts resonate with Frankenstein.

Of course, there are many animated texts that more openly and violently retell Frankenstein. The nature/technology tension that drives Final Fantasy, Avatar, and the films of Miyazaki is, in other Japanese animation, reconfigured as the relationship between organic and mechanical bodies: a relationship that is frequently aggressive, apocalyptic, and spectacularly destructive. This leads me to my final chapter, where I will discuss the relationship between Frankenstein and anime in greater detail, dwelling particularly on the cyberpunk film Ghost in the Shell. More so than any of the texts discussed thus far, Ghost in the Shell revels in a posthuman/postcinematic future. In my analysis of this film I will consequently return to many of the ideas discussed in this chapter, including both the overwriting power of digital animation and the problems of techno-production, ghostliness, and (absent) organicism that Final Fantasy evokes.
CHAPTER FIVE

THE MONSTROUS/MECHANICAL BODY: FRANKENSTEIN AND ANIME

Figure 10: Kusanagi’s creation scene in *Ghost in the Shell*

Figure 11: Vanishing acts – Kusanagi negotiates the cityscape
Strange bodies: transformation, otherness, and the animated “monster”

Throughout this thesis I have tracked cinema’s reworking of the Frankenstein tale, moving towards postcinematic modes of filmmaking and the problem of digitally (re)constructing organic presence. This chapter will conclude the project by discussing how Frankenstein is appropriated and retold – often with startling power – in the unique cultural space provided by Japanese animation. Many anime engage the Frankenstein myth by depicting the body in both monstrous and mechanical terms, often dwelling upon this body’s creation at the hands of malevolent scientific or political institutions. Below, I will consider how this monstrous/mechanical body is positioned to confront historical and social problems specific to Japanese culture, thus initiating a unique and culturally inflected reworking of Frankenstein; I will also examine how such retellings incorporate a fantastic image of media culture in the twentieth and twenty-first centuries, and are frequently underscored by concerns specific to the medium of animation itself. My main text for consideration will be the 1995 anime Ghost in the Shell: a now fifteen-year-old text that I feel can still be described as the most powerful, subversive, and spectacular retelling of Frankenstein in the digital age.

Before delving into these analyses, a brief discussion of animation and the animated body is needed. We can begin with the very Frankensteinian theme of “life” itself. Richard Weihe tells us that animation is the art of “breathing life or
movement into dead matter”;¹ for Weihe, animation involves “creating the illusion of a ‘soul’ by means of a technique somewhere between photography and film that exploits a specific mode of perception” – it is, in other words, “[t]he art of enabling the spectator to envision the dead as alive”.² Consequently, we can think of animation as a Frankensteinian act. Indeed, Shelley’s narrative of monster-making and techno-creation has much in common with the narrative of animation itself as a technology by which on-screen bodies are built and given life. The very problems associated with “breathing life into dead matter” and “creating the illusion of a soul” are inscribed into Final Fantasy, which was discussed in the previous chapter: a film subtitled “The Spirits Within”, the narrative of which asserts the presence of a soul, but also a film in which the illusion of a “soul” in the animated characters wasn’t quite enough – a film whose characters were critiqued and rejected for their cold, lifeless, soulless demeanour.

These problems of life, soul, and techno-production – which have their roots in the Frankenstein tale – are also negotiated in Ghost in the Shell. Throughout this film the protagonist, a cyborg known as Major Motoko Kusanagi, self-reflexively questions the existence of her soul (or “ghost”). The film also offers a spectacular creation scene that depicts Kusanagi’s body as a mechanical shell ready to be “animated”; it thus pinpoints the precise moment at which “life” will be “breathed” into her “lifeless” form. This scene is inter-cut with images of computer code that slyly suggest how such animation will take place: the scene is

² Ibid.
suggestive of a digital creation, which is significant given that *Ghost in the Shell* was a film that revolutionised digital filmmaking with its unique blend of CGI and cel animation.

If the problem of “life” is paramount to the act of animation, then animation exacerbates some of the problems associated with live-action cinema. Weihe suggests as much when he writes that “animation film seems paradigmatic of film as such the premise of which is the spectator’s willing acceptance of the moving image as a representation of ‘life’”. Such problems are engaged in the very first cinematic adaptation of Frankenstein: the 1910 Edison film. Let us consider “Edison’s” monster once again: he/it is transformative, disconcerting, fantastic, embodying all the flickering uncertainty of early cinema and performing the new medium’s marvellous yet uncanny use of technology to shape and alter the body. Animated bodies, especially those that appear in science-fictional and fantastic anime, often have these qualities too. These are strange bodies, imbued with the unnatural aspects of the medium that contains them.

However, when analysing animated film it is also important to distinguish the medium – and the bodies it contains – from live-action cinema. Anime expert Susan Napier writes of the “otherness” of animation: “perhaps from its very inception”, she tells us, animation “has existed as an alternative form of

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3 Weihe, 42.
representation, a representation that privileges very different properties and conventions from that of live action". Such otherness particularly involves the capabilities and qualities of the animated body, which for Napier has a fantastic aspect that live-action cinema cannot replicate: “what animation can do to the human body is one of the most interesting and provocative aspects of the medium”, she writes. Drawing from Napier, we can consider the animated body in terms of its technologically-enabled otherness; and this, too, is a Frankensteinian quality. In this sense, animation (and specifically anime, a subgroup of screen texts that plays upon such otherness with dark enthusiasm and wonderful self-awareness) provides a perfect space for new reworkings of the Frankenstein tale.

Paul Wells also argues that the animated body is defined by its strange, wonderful, and non-cinematic qualities, which range from “malleability” to various “impossible abilities”. He argues, for instance, that in animation “[t]he body is a mechanism – it may be represented as if it was a machine”; he also tells us that the animated body is “fragmentary – it can be broken into parts, reassembled and conjoined with other objects and materials”. Both these (Frankensteinian) qualities are literalised in anime such as Ghost in the Shell, where Kusanagi is a mechanical body whose fragmentation is violently depicted on-screen. Wells further suggests that these fantastic qualities disrupt traditional rules of embodiment, character, and identity, creating narrative patterns that

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6 Ibid., 35.
8 Ibid., 189.
differ markedly from those found in classical Hollywood cinema; in this sense, the animated body also initiates “new modes of storytelling”. This becomes crucial in the context of a discussion of anime, as the analyses below will demonstrate. In *Ghost in the Shell*, for instance, Kusanagi’s destruction at the end of the film is accompanied by a narrative that becomes (depending on one’s perspective) confusing, abstract, or unsettling; her mechanical and fragmented body seems to drive the story, which does not so much end as splinter.

For both Wells and Napier, moreover, the defining feature of animation is *metamorphosis*. Napier tells us that “the animated body is perhaps best understood in relation to the process of metamorphosis”, and that “[p]art of the pleasure of watching animation is being invited into [a] destabilized and fluid world”. Referring to the transformative quality of animated bodies, she argues that live-action cinema simply cannot represent the body in the same way:

> Since movement is at the heart of animation, animation can and does emphasize transformation in a way that simply no other artistic genre is capable of doing. Even contemporary live-action films with their superb special effects have a jerky uneasy quality when compared with the amazing fluidity of the animated image.

Similarly, Wells argues that metamorphosis is “unique to the animated form” and in many ways “the constituent core of animation itself”. Continuing, Wells suggests that metamorphosis defines animation in the same way that fragmentation defines live-action cinema: “[t]he ability to metamorphose

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9 Wells, 68.
10 Napier, 36.
11 Ibid.
12 Wells, 69.
images”, he writes, “means that it is possible to create a fluid linkage of images through the process of animation itself rather than through editing”.13 This becomes of particular interest if we recall Zakharieva’s “composite body”14 and her suggestion that fragmentation or “montage” is what links Frankensteinian monster and filmic text.15 In animation, we might argue, the monster can be represented as a morphing body (rather than a “composite” body) in a manner that reflects back on the medium itself (and its inherent difference from live-action film).

Metamorphosis is a device used with great frequency in anime, often in conjunction with representations of the monstrous/mechanical body (which is frequently seen to transform in a grotesque, horrific, or otherwise disturbing manner). These moments of metamorphosis are moments that stop the narrative; moments when the body becomes a special effect; moments of spectacular self-reflexivity when the capabilities of the medium are made fantastically visible. Thus, they function in a similar manner to the Frankensteinian creation scene. Indeed, many anime that appropriate the figure of the monstrous/mechanical body replace the creation scene with a moment of metamorphic destruction. I will pursue this argument below with particular reference to Akira, an anime of the apocalyptic sub-genre that resonates with Frankenstein on many levels. 

Ghost in the Shell, too, is concerned with bodily transformation and deconstruction; although this film does contain a creation scene, this scene is

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13 Wells, 69.
15 Ibid., 740.
complemented by an end sequence in which the heroine’s body is violently taken apart and in which she ultimately transforms into something else.

We can also address the Frankensteinian creation scene, both as it was written by Shelley and as it has been depicted in cinema, as a type of metamorphosis. At the core of this scene, after all, is a shift: the monster’s body transforms from lifeless to living, from object to organism, in a manner that challenges our preconceived notions of life, body, and human being. This is also a moment when the body becomes fantastic. In her discussion of the fantasy genre, Lucie Armitt argues that metamorphosis “is a device which lies at the centre of all fantasy texts, not simply in terms of the symbolism used, but also in the transformative impulses it employs”.\textsuperscript{16} In a manner that relates to Frankenstein as a fantastic and horrific tale about embodiment, Armitt remarks:

\begin{quote}
alongside those narratives which cite the metamorphic body as the central source of pleasure, empowerment, terror or horror, the fantastic in general takes us into a realm where the static and the finite shift, be it ever so slightly, to metamorphose the formerly familiar into a defamiliarized state.\textsuperscript{17}
\end{quote}

This is precisely what happens in Shelley’s creation scene (which is also the moment when Shelley’s Gothic tale “morphs” into a science fiction story). These aspects of the creation scene are imaged in the Edison film, where the monster’s creation is depicted as an alchemical transformation; they are, however, neglected in later live-action films, which foreground the mechanical, galvanised, or artificial aspects of the monster’s body rather than his/her/its

\textsuperscript{17} Ibid., 65.
transformative nature. I propose that the device of metamorphosis, “constituent” of animation as Wells tells us, is used in many anime to express a Frankensteinian moment: a point at which the body as monstrous object becomes living and/or the living body becomes monstrous.

This initial theorising gives us a picture of the animated body: a body that is both fantastic and technologised, that is other, that transforms, fragments, and metaphorically gestures to the medium that contains it. As I have discussed throughout this thesis, we might describe the body of the Frankensteinian monster in the same terms. In the analyses below, I want to consider *Ghost in the Shell*’s Kusanagi as both an animated body and a rewriting of the figure of the monster. I will examine the film’s reworking of the creation scene, its redefinition of the cyborg, and its particularly poignant depiction of the vanishing of organic presence in a digital world. First, however, I will investigate how anime – as a technology, a cultural phenomenon, and a mode of storytelling – negotiates with the Frankenstein tale. I will accomplish this firstly with an analysis of a definitive example of anime, the 1988 film *Akira*, and secondly with a theoretical investigation of the places and spaces where anime and the Frankenstein myth overlap.

**Apocalyptic bodies and embodied apocalypses in *Akira***

Katsuhiro Otomo’s anime *Akira* is a film about the end of the world: it brings to the screen a sense of apocalyptic glee (and/or horror) associated with the annihilation of “New Tokyo” and the destructive rampages of telekinetic
teenager Tetsuo. Based on Otomo’s manga, the film tells the story of a world where legal and parental structures have broken down, and where teenagers run amok as abandoned “monsters”. With its extended battle sequence and astounding graphic realization of the trope of “metamorphosis”, Akira is also a film that exemplifies both the special qualities of the animated body and the violence that has come to be associated with science-fictional anime.

Moreover, Akira draws on the tradition established by manga and anime such as Astro Boy and Tetsujin 28-go, the stories of which revolve around robotic characters created by scientists (and which in turn draw on Shelley’s Frankenstein as an influence). The characters in Otomo’s film, however, are not robots but teenagers with godlike psychic powers that have been unleashed during scientific experiments; like Shelley’s Creature, they become “monsters” on a rampage, the result of scientific inquiry gone wrong. Like Shelley’s monster, furthermore, central character Tetsuo is ambivalently situated between good and evil. His monstrosity and his rage against the human race are “constructed” by the world around him – an oppressive world in which he is treated as an outcast. In this sense he, like the Frankensteinian monster, is not completely responsible for the violence and destruction he unleashes.

However, the film is most interesting not for its narrative-based allusions to Shelley’s novel but for its imaging of a monstrous body. In the film’s climax, the apocalyptic destruction caused by Tetsuo’s rage is performed back onto his own body, which hideously mutates. This mutation sequence begins when his

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18 I refer here to Tetsuo and his predecessor, Akira.
arm is severed by a laser blast; soon afterwards he “grows” a mechanical replacement limb. His body then turns into a monstrous mass that he cannot control; and in a strange variation on Shelley’s narrative – in which Victor’s monster murders his bride Elizabeth – Tetsuo unwillingly crushes his girlfriend Kaori to death with his own monstrous bulk. At the end of his painful mutations Tetsuo disappears in the explosion that consumes New Tokyo, with only his voice remaining to chant “I am Tetsuo” over the series of abstract images with which the film ends. Like Shelley’s monster, then, Tetsuo is – or becomes – a boundary-creature: his mutating figure challenges the logic of embodiment and human-ity by crossing the boundaries between human and inhuman, human and animal, organic and mechanical, “body” and “thing”, reality and fantasy, monstrous and beautiful, violent and innocent, grotesque and divine. To this extent, he is also a version of Haraway’s border-crossing cyborg.

Taking up the figure of the monstrous/mechanical body and writing it into this apocalyptic narrative (and/or image sequence), Akira offers a unique reworking of Frankenstein. In this film, first and foremost, the (monstrous) body becomes a site of apocalyptic violence. We rarely find references to Frankenstein in Hollywood films of the apocalyptic sub-genre; indeed, we find that in such films the body is usually removed from the apocalyptic moment. As a mere example we can consider the 1998 film Deep Impact, which contains an extended end sequence involving “deep” and “impactful” special effects from which the entire large cast of characters is excluded, and in which the only “body” to be
deconstructed is that of the Statue of Liberty (which is decapitated). In *Akira*, conversely, the body *participates* in the apocalyptic moment. The trope of metamorphosis is used to facilitate this apocalyptic de(con)struction, allowing outsider Tetsuo (perhaps unwillingly) to rewrite his own body, reshaping it for a world that does not accept him. At the same time, the film – with its spectacular, symbolic, and rather abstract ending – exemplifies Wells’ suggestion that the strangeness of the animated body inflects upon the narrative, and that metamorphosis in particular is a device that can “resist logical developments and determine unpredictable linearities (both temporal and spatial) that constitute different kinds of narrative construction”.

In applying the figure of the monstrous body to an apocalyptic narrative, *Akira* also reworks the Frankenstein tale to incorporate and confront elements of Japanese history. Napier has suggested that the apocalyptic mode of anime is “deeply ingrained within the contemporary Japanese national identity” because Japan is “shadowed by memories of the atomic bomb”. Even science-fictional anime like *Akira*, which do not set themselves in a necessarily realistic world, are therefore engaged in an oscillation between a violent, postmodern denial of history and a spectacular re-imag(in)ing of iconic and painful past events. Accordingly, we can locate the film’s apocalyptic imagery within a historical narrative that refers back to the bombing of Hiroshima and Nagasaki: the white,

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19 Other Hollywood blockbusters contemporary with *Deep Impact* follow the same pattern, most notably (in the apocalyptic sub-genre of science fiction) *Armageddon* and *Independence Day*. These films also feature lengthy sequences in which landscapes or cityscapes are apocalyptically deconstructed while the body is removed to a safe – and spectatorial – position (often in the form of the gaping onlooker).

20 Wells, 69.

21 Napier, 193-194.
domed explosions that consume the film’s fictional “Tokyo” are reminiscent of mushroom clouds, and the image of the charred crater that Tokyo becomes calls to mind the Japanese term yaki-nohara, or “burned plain”, used to describe the ruined cities after August 1945. Even Tetsuo’s spectacular bodily transformations – which can be read as a form of wounding, associated as they are with pain and with images of sinew, flesh and blood – have historical resonances. In the context of Japanese history, the relationship between apocalypse and body is a troubled one, especially given that the atomic blasts marked a generation of bodies through mutation. Tetsuo’s transformations may thus appear as historical inscriptions, whether as national “scars” or as powerful reminders of individual suffering and physical or psychological trauma.

Akira also rewrites the Frankensteinian narrative with an emphasis on transience, making the poetic suggestion that we might leave behind our (monstrous) bodies and enter a higher order of being where bodily inscriptions and scars do not matter. As Freda Freiberg observes, the climactic mutation sequence ends with Tetsuo “appear[ing] to become one with the cosmos, to be liberated from the torments of the flesh and the world into a kind of divine spiritual essence”. Given the clear influence of cyberpunk fiction on the film, we can further suggest that Tetsuo’s disappearance performs what Springer

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22 For a discussion of yaki-nohara see Gary D. Allinson, Japan’s Postwar History (New York: Cornell University Press, 2004), 45.

refers to as the “new cultural fantasy”\textsuperscript{24} of cyber-immersion, a forgetting and transcending of the body that mirrors the apocalyptic moment’s forgetting and transcending of time itself. This cyber-fantasy has a millennial as well as a near-religious tinge: as Quinby has noted, dreams of transcending the body have “a two-thousand year history, updated March 1997 when the Heaven’s Gate members poisoned and suffocated their ‘containers’”.\textsuperscript{25} Whether through cyber-immersion or the ascension into heaven, such transcendence – part of the iconography of millennial culture, which clearly informs Akira, a text of the late 1980s – offers an interesting solution to the problem of the monstrous body: an escape route opened by the cultural fantasies of the late twentieth century but unavailable to Shelley’s monster, the product of a more restrictive era in which individuals were born into a body (with its set of cultural inscriptions) and imprisoned there for life.

Finally, Akira represents an unusual rewriting of the Frankenstein tale because it takes the teenage body as its subject. The film interweaves a traditional coming-of-age narrative with darker stories about rage, self-loathing, violence, and the technologising of adolescence; it projects “monstrosity” onto the body of an adolescent boy and thus deviates from previous retellings of Frankenstein with their images of male or female but always adult “Creatures”. This might further explain the addition of the theme of transcendence to this retelling: for the fantasy of transcendence can suggest a desire to escape the flesh experienced by

\textsuperscript{24} Claudia Springer, “Psycho-Cybernetics in Films of the 1990’s”, in Alien Zone 2: The Spaces of Science Fiction Cinema, ed. Annette Kuhn (London and New York: Verso, 1999), 212.

\textsuperscript{25} Lee Quinby, Millennial Seduction: A Skeptic Confronts Apocalyptic Culture (Ithaca and London: Cornell University Press, 1999), 135.
and associated with the (male) adolescent. Indeed, the end sequence of Akira is infused with what Anne Balsamo calls “masculinist dreams of body transcendence” that “signal a desire to return to the ‘neutrality’ of the body”, a desire that uncomfortable, frustrated Tetsuo achieves when he becomes a “divine essence” (or divine image).

Influenced by Akira, several other anime have featured the monstrous and/or mechanical body in adolescent form: the television series Guyver and Neon Genesis: Evangelion, for instance, depict teenage characters who merge with monstrous/mechanical beings. Like Akira these texts deal with the unnatural qualities of a body, and a society, that has been removed from its organic origins; they also provide fantastic depictions of the relationship between machine and organism. Neon Genesis: Evangelion, in particular, is replete with images of teenage hero Shinji inside the enormous metal body of his “Eva”; so too is its filmic extension, The End of Evangelion, which spirals into apocalyptic spectacle and systematically deconstructs (or makes monstrous) the bodies of each of its characters (who mutate, disintegrate, or are violently killed). In allowing its protagonists to interface with a monstrous technology, Evangelion realizes Haraway’s claim that “machines have made thoroughly ambiguous the difference between natural and artificial, mind and body”. Alongside these spectacular images of monstrous machines, however, Evangelion also reminds us

27 I use the title Evangelion to refer to these texts in combination.
that, in Haraway’s words, “modern machines are quintessentially microelectronic devices: they are everywhere and they are invisible”.^29 With its emphasis on isolation and technological barriers, the text comments on the degree to which technology mediates personal relationships; hence many of the characters communicate not face to face but across radios, phones and intercoms.

Communication, or its interruption, is indeed at the heart of the Evangelion narrative: dialogue is perpetually cut off, characters continually misunderstand one another, relationships are destroyed due to the awkwardness and angst of adolescence.^30 The “monstrosity” depicted in Evangelion is therefore also interior, a psychological and social condition as well as a physical one.

Interestingly, Evangelion screened at a time when Japan was haunted by the so-called “shut-in” syndrome, or hikikomori, a social phenomenon whereby “young people in their late teens or twenties shut themselves in their room and refuse to come out”,^31 often immersing themselves in computer games, videos, television, comics, and other media texts. These “shut-in” teenagers are often anime fans, as are the otaku, defined by Tetsuo Sakurai as:

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^29 Haraway, Simians, Cyborgs and Women, 152.  
^30 This is beautifully demonstrated in one episode of the TV series where we find Shinji isolated in his room, listening to his friend Misato, who, in another room, is listening to the voice of her dead lover replaying on an answering machine. Shinji tells the audience, via voice-over, that he cannot go and comfort the sobbing Misato, though this lack of motivation is never fully explained.  
young people who [are] so engrossed in animation, comics or video games that they [turn] their back on any pretense that relationships with others [are] important… a young generation completely divorced from the social and moral world of their elders.  

With its reference to teenage isolation and interrupted communication between the generations, Evangelion seems to engage these (mediated) social problems, using them to fuel a narrative that is far more worldly, human, and grounded than it initially appears. The isolated and unmotivated Shinji becomes in this respect an exaggeration of the “shut-in” teenager, the passive Japanese youth in his media cocoon. Like some of the American films discussed in previous chapters, then, Evangelion takes the figure of the mechanical body and positions it to negotiate concerns of the media age – including the cultural “machine” of anime itself.

If these texts contain Frankenstein monsters, of a sort – bodies that are both mechanical and monstrous, that are scientifically restructured or technologically extended, that operate at the point of tension between machine and organism – they notably lack distinct moments of creation. Instead, they are marked by scenes and sequences of apocalyptic violence and spectacular de(con)struction. We might refer to these moments as reverse creation scenes: moments when the body is not brought to life but taken apart. In live-action versions of Frankenstein, we often find that the creation scene brings the narrative to a point of arrest: in the James Whale films Frankenstein and Bride of Frankenstein, for instance, the spectacular scenes of creation halt the story, inviting us to focus

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upon the body-as-image and drawing our attention to the technology – the *machine* – of cinema itself. The destruction scenes that feature in anime like *Akira* and *Evangelion* function in a similar manner. What these scenes of cinematic creation and animated destruction share is a grounding in special effects, which are themselves, as Scott Bukatman reminds us, “especially effective at bringing the narrative to a temporary and spectacular halt”. This will be discussed further in the following section, where I will assess the relationship between Frankenstein and anime.

**Visible monsters and dividual selves: Frankenstein and anime in dialogue**

When compared to some of the Hollywood texts analysed in this project, the anime discussed above seem more willing to dwell upon the *monstrosity* of the bodies they depict – more determined to turn the monstrous body into a spectacle. Unlike Hollywood films that adapt the Frankenstein tale or engage its themes, these anime capture a certain sentiment present in Shelley’s novel: a combination of horror and fascination evoked by the sight of the monster’s body. In Shelley’s 1831 introduction she describes the vision that so horrified and yet obviously fascinated her:

> I saw the hideous phantasm of a man stretched out… looking on him with yellow, watery, but speculative eyes… I opened mine in terror… [but] I could not so easily get rid of my hideous phantom; still it haunted me.”

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Shelley writes her response to the image of the monster into the text: for Victor too articulates both a disgust at the sight of the monster and a desire to view him, or an inability to tear his eyes away (evident in the amount of detail he provides about the monster’s appearance):

His limbs were in proportion, and I had selected his features as beautiful. Beautiful! – Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same colour as the dun white sockets in which they were set, his shriveled complexion and straight black lips.35

This act of viewing the monster, and the accompanying sentiments of disgust and fascination, are never quite captured by Hollywood adaptations of the tale, even those that spectacularise the scene of creation (like the Whale films) or make constant references to vision and “the eye” (like the later science fiction films Blade Runner and Strange Days). Films like Akira, however, invite their audiences to look upon the body-made-monstrous. Tetsuo’s body is turned into a spectacle, but it also evokes a combination of horror, disgust, fascination, and wonder; a sort of sublime terror that can be traced back to Shelley’s text.

The need to view the monstrous/mechanical body as expressed in filmic versions of Frankenstein has already been discussed in this thesis with reference to Heffernan and his claim that cinematic adaptations of the tale are informed by the visual language of film.36 This focus on the visual, Heffernan claims, allows

35 Shelley, 45.
filmic versions of Frankenstein to reveal “what the novel hides or suppresses”.\textsuperscript{37} Arguably, this becomes more pronounced in anime, the “visual language” of which is addressed by many theorists. Helen McCarthy, for instance, tells us that anime are part of an established “imagistic” trend in Japanese storytelling, drawing influence from medieval scroll paintings and woodblock prints.\textsuperscript{38} In a similar vein, Susan Napier writes that “Japan is a country that is traditionally more pictocentric than the cultures of the West, as is exemplified in its use of characters or ideograms, and anime… fit easily into a contemporary culture of the visual”.\textsuperscript{39} We can remind ourselves here that most anime are based on manga, the comic books or graphic novels that Donald Richie refers to as “image propelled entertainment” which the reader “scans” rather than properly reads.\textsuperscript{40} Within a space so dominated by the image, the monstrous/mechanical body is easily turned into a spectacle, while some of the elements that remain “hidden” in both Shelley’s novel and its Hollywood adaptations are brought to the screen – including the apocalyptic, horrific, and simultaneously beautiful qualities of a body that escapes the confines of human being, as does Tetsuo’s in \textit{Akira}.

The desire to turn the monstrous/mechanical body into a spectacle particularly defines the \textit{mecha} mode of anime to which \textit{Evangelion} belongs: a sub-genre that plays upon the interface between giant mechanical vehicles and the human subjects who control them. \textit{Mecha} anime tend to problematise the divisions between human and machine, organic and mechanical – as does the figure of

\textsuperscript{37} Heffernan, 139.  
\textsuperscript{39} Napier, 7.  
\textsuperscript{40} Donald Richie, \textit{The Image Factory: Fads and Fashions in Japan} (London: Reaktion Books, 2003), 105.
Frankensteinian monster, to some extent, even as he/it was first imagined by Shelley. The emphasis in mecha anime, however, is on fusion rather than the sort of self/other, nature/technology opposition around which the Frankenstein tale is structured. Napier tells us that “the world of hard science fiction anime known as mecha revolves around a quest to contain the body, this time quite literally in the form of some kind of technological fusion”; \(^4^1\) continuing, she observes that:

> the fusion of human pilot inside armored machine leads to bizarre combinations of mechanical/organic violence in which huge machines combat each other in fantastic displays of mechanical agility while at the same time hinting at the organic bodies inside them with graphic glimpses of dismembered limbs flying around and blood seeping through mechanical armor. \(^4^2\)

The monstrous/mechanical body in this case is both violently organicised and violently de-natured – and thus it is fundamentally different from the monsters, cyborgs, robots, replicants, and simulacra that populate Hollywood retellings of Frankenstein.

Representations of the body in most science fiction texts – including Frankenstein in all its manifestations – articulate cultural understandings about selfhood, subjectivity, and human identity. It is not surprising, then, that the representations of the monstrous and/or technologised body in these Japanese texts differ from parallel representations offered by Hollywood. As Margaret Lock reminds us, Japanese understandings of self and body differ from those in Western culture. “The idea of an autonomous, individualized self”, Lock states,

\(^4^1\) Napier, 86.
\(^4^2\) Ibid., 90.
“essentially synonymous with the ‘person’ in the West, does not sit well in Japan, where ‘person’ is above all reproduced in the public domain, beyond the bounds of the body”. It is perhaps in response to such an understanding that anime like *Akira* depict an *escape* from the monstrous body, interweaving themes of deconstruction, transcendence, and disembodiment with the Frankenstein myth. Other theorists have investigated this uniquely “Japanese” sense of self in a manner that has relevance here. Winston Davis points out that:

>a Japanese human being (*ningen*) is never an individual in the Western sense of the word; he or she is always defined in terms of a set of relationships with others (*hito no aida*)... Unlike the Western self, which is predicated on clearly defined ontological boundaries, the Japanese self expands and contracts to fit shared relationships or situations.

Similarly, Takie Sugiyama Lebra has outlined a “socially contextualized, indeterminate, multiple” Japanese self that exists “in striking contrast to the Western idiom of self as consistent, continuous, unique, intrinsic, or clearly bounded”. Lebra goes on to explore how elements of possession, surrogacy and “self-other reflexivity” in Japanese culture have lead to a conception of the self as “‘dividual’, instead of ‘individual’”. We can argue that this, too, inflects upon the retelling of Frankenstein in anime. As I have already argued in this thesis, Shelley imagined her monster as a unified subject in a fragmented body; he/it was also written into an established division between self and other which

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46 Ibid., 111, 118.
Shelley negotiates throughout her tale. Japanese understandings of selfhood are not necessarily regulated by such divisions. Accordingly, the monstrous/mechanical body in anime often appears as both self and other, as subject and object, singular and multiple, absent, present, transformative, and in-between.

Alongside their articulation of cultural codes of embodiment and subjectivity, adaptations of Frankenstein usually respond to a sense of techno-fear distinct to a particular time and place: to localised cultural anxieties about technological progress and the mechanical tampering with organic presence. What sort of techno-fear, then, defines the cultural space in which these anime are produced? Murphie and Potts argue that Japanese culture actually lacks a pronounced sense of techno-fear. “Japanese culture is perhaps less prone than the West to techno-fear, as is reflected in the tradition of friendly robots and androids in animation”, they write, adding that “Japanese SF often portrays the bond between humans and machines with less pessimism and fear than is found in Western SF”.47 This lack of techno-fear might be responsible for the unflinching depictions of the monstrous/mechanical body that we find in anime like Akira and Evangelion. The bodies that appear in the anime under scrutiny here, however, have apocalyptic and quite horrific qualities: they are far from the friendly robots of Astro Boy (the text to which Murphie and Potts are particularly referring). To state that Japan lacks “techno-fear” is to deny the darker sides of these anime, which are frequently “pessimistic” – often apocalyptically so – about the human/machine interface they depict.

47 Andrew Murphie and John Potts, Culture and Technology (Hampshire and New York: Palgrave MacMillan, 2003), 108.
Lock tells us that there is an element of techno-fear at work in Japanese culture, and that this is related to a conception of the West-as-other and to a perceived loss of both authentic Japanese culture and a connection with the natural landscape. The “technologising” of Japan took place after the Meiji Restoration of the mid-1800s, when the nation opened itself up to Western influences; in hindsight, such technologising has been perceived by many to have taken the nation away from its traditional culture and also from its grounding in nature, the landscape, and a primarily rural way of life. Lock argues that cultural responses to contemporary issues like organ donation – a subject which itself evokes the Frankenstein tale – are built upon these older tensions. She writes:

the current debate about body technologies in Japan – the feasibility of tinkering with the margins between culture and nature, and the very creation of those margins – takes place in light of received wisdom about the Other, the West. At the same time, nostalgia about the loss of an ‘authentic’ Japanese past contributes prominently to the debate.48

This culturally distinct othering of technology shapes the retelling of Frankenstein in anime, bringing a dark quality to the tale that frequently emerges in apocalyptic sub-tones. These are not necessarily anxious films; they do not reverberate with the overt technophobia that drives a film like The Terminator, for instance, or later The Matrix. Yet neither are they celebratory about the hyper-technological, postorganic futures they depict. Technology in these texts is othered, but such otherness is embraced rather than held at a distance, and this allows for a more confronting depiction of the postorganic body than we tend to find in Hollywood.

48 Lock, 149.
Interestingly, Lock’s description of Japan as a national body that is technologised but “nostalgic” about the “loss of an ‘authentic’… past” contains the suggestion of a national origin story. The origins that are negotiated here involve both a sense of tradition and a link to nature, which combine to create the “authentic past” of which Lock writes. Emiko Ohnuki-Tierney discusses the importance of these traditional/natural origins to the Japanese perception of selfhood, writing that in Japan:

agriculture symbolizes the past. As in many cultures, the pristine past embodying a distinct and sacred Japanese identity, uninfluenced by foreign influences and modernity, represented by the city, is symbolized in the reconstituted agriculture and the rural. The valorization of the primordial self of the Japanese symbolized in agriculture saw heightened expressions by intellectuals during the late Edo period... and through the Meiji period... and continues today when the Japanese search for nature in the countryside, now nostalgically referred to as furusato (old homestead; literally, one’s home region).49

Nature, in other words, “serves as a temporal metaphor of self representing a past that is pure, simple, imbued with pristine beauty, and uncontaminated by foreign influences”.50 This brings a new inflection to the nature/technology tension that is articulated in Frankenstein, and to the problem of organic origins that constitutes the core of the tale. It is primarily the absence of nature that defines science-fictional anime, most of which take place in post-apocalyptic worlds or futuristic, high-tech cities; nevertheless, the hybrid organic-mechanical bodies that populate such anime can be read as fantastic expressions of a national body

50 Ibid., 171.
that is penetrated by technology and for whom a traditional way of life rooted in
the natural landscape has become a period of remembered innocence that can
never be returned to. Indeed, the body of the Frankensteinian monster in its most
mythic form – a mechanical body in negotiation with its lost origins in nature –
offers an interesting allegory for the technologising of Japan and the associated
sense of vanishing tradition and lost organicism.

Ultimately, then, if anime like Akira and Evangelion negotiate the Frankenstein
tale they also substantially rework it, interweaving it with a set of understandings
about embodiment, selfhood, technology, nature, and power that are unique to
Japanese culture. Such understandings also inform Ghost in the Shell, a film that
was heavily influenced by Akira and that similarly challenges the established
understandings of embodiment, selfhood, and technology that are likely to be
harboured by a Western audience. Ghost in the Shell also performs the
mechanical body’s loss of organicism in a way that suggests, if fleetingly, Japan-
as-nation’s loss of tradition, culture, and organic past. The film is thus
exemplary of the strange relationship between Frankenstein and anime; it also
shows us how the Frankenstein tale can be stunningly reworked to address the
digital age.

**Vanishing acts: the disappearing cyborg in Ghost in the Shell**

*Ghost in the Shell* is a film directed by Mamoru Oshii and is based upon the
manga by Masamune Shirow. With its very title, the film (like the manga)
engages the problem of mind/body dualism, drawing influence from the work of
a succession of theorists. These include René Descartes, who wrote of the body as a “machine” but considered the mind to be, in contrast, immaterial; Gilbert Ryle, who attacks Cartesian dualism and its flawed “dogma of the ghost in the machine”;\textsuperscript{51} and Arthur Koestler, whose book \textit{The Ghost in the Machine} critiques Ryle’s work while still rejecting the mind/body dualism.\textsuperscript{52} \textit{Ghost in the Shell} takes its name from Koestler’s book, which in turn borrows a phrase from Ryle. The film inserts itself into this ongoing theoretical discussion and demonstrates that our understandings of \textit{mind} and \textit{body} have evolved into the digital age, where cyberspace technologies and other digital media bring new complications to the debate. Jodi O’Brien has observed that “online interactions provide an excellent site for observing the dislocation of mind and body”,\textsuperscript{53} and thus bring about new possibilities in both Cartesian dualism and in the existence of “ghosts” that might now occupy very different “machines”. This is something that writers of cyberpunk literature have recognised for decades, and it is a notion that is enthusiastically seized upon and developed in \textit{Ghost in the Shell}.

It is important to recognise that the problem of mind/body dualism and the contested notion of a “ghost in the machine” takes us back to \textit{Frankenstein}. Shelley’s text, and the various retellings that followed, must necessarily – because they revolve around the figure of a constructed body – grapple with the question, what is “mind”? Can there be a natural mind or indeed a “human nature” if the body itself does not originate in the natural world? Dror and

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Thomas point out that “the underlying view in [Shelley’s] story is that the mind is a scientific object. That is, if you ‘put it together’ correctly, you can create a sentient being with a mind”.54 Thus Frankenstein’s monster “has a mind by material design”.55 They compare Shelley’s book to Carlo Collodi’s Pinocchio, in which Pinocchio “has to acquire a mind through the fairy godmother’s gracious miracle”;56 of the two contrasting texts, it is Pinocchio, they claim, that “reflects Gilbert Ryle’s dogma of the ghost in the machine”.57 Ghost in the Shell, interestingly, borrows from both these fictional tales: we are given clear insight into the constructed nature of the mental and physical attributes of protagonist Kusanagi; yet at the same time, the film intermittently insists that her “ghost” – her soul or psyche – is an immaterial, spiritual self that can control but also be separated from her material, constructed body. Kusanagi thus differs from the Frankensteinian monster, whose mental existence is constructed along with his body. Relatedly, as I will observe below, Kusanagi is able to escape the confines of her (monstrous) body, and thus her narrative path is quite different from that of Shelley’s Creature.

Ghost in the Shell is set in a cyberpunk-ish future, a high-tech urban world where cyber-crime prevails and in which technological enhancements to the body and mind are common. The film depicts the internal and external battles faced by Kusanagi, a cyborg who works for a counter-terrorist organisation known as

55 Ibid.
56 Ibid.
57 Ibid., 285.
Section 9. Kusanagi and her colleagues become entangled in a fight against the Puppet Master, a sentient computer program capable of hacking into and controlling human brains. At the same time Kusanagi reflects on her own existence as a subject inhabiting a postorganic body, negotiating a world that is increasingly artificial and de-natured; she searches for individualism and authenticity, qualities that she ascribes to her “ghost”. Eventually, these interior and exterior concerns collapse: the film ends with an extended physical battle between Kusanagi and the Puppet Master, that soon becomes a mental negotiation as Kusanagi must decide whether to merge with her enemy and become a conjoined cyber-entity.

The film prefaces these events with a startling sequence that takes us back to the Frankensteinian creation scene while simultaneously endowing that scene with new meaning. *Ghost in the Shell* opens with a meeting between “city” and “body”: we enter the film to find Kusanagi standing on top of a high building overlooking the city below. We then see her dive from the building, her body gracefully falling backwards through the air and into the empty cityscape. Moments later there is a second fall sequence, this time in close-up. Once again Kusanagi falls backwards, and this time her body is erased: she flickers and becomes invisible, gradually dissolving into the backdrop of the city. We soon learn that Kusanagi is a cyborg capable of superhuman feats (including the “therm-optic camouflage” that aids her disappearance). For a moment, however, it seems as though she loses her body as she falls, or that she is overwritten by the city itself.
These images of vulnerability and power, visibility and disappearance, offer a fitting introduction to Kusanagi. As these opening moments suggest, she is a vanishing character whose absent-presence is designed to both “wow” and confuse us. She is also a character whose body is continually removed and then re-presented for us to view. Immediately after the fall scene we are invited to view her body once again: this time we witness her construction. Every fibre is laid bare in this construction sequence, and any potential mystery about her posthuman status is removed. The film’s climax mirrors its beginning by enforcing Kusanagi’s artificiality: in the dramatic end sequence her body is torn apart, once again revealing every fibre. She survives this violent “death”, and is reborn into a new manufactured body with an altered personality. The film ends with Kusanagi awakening in this new body after having mentally merged with a cyberspace construct, and declaring to her companion Batou that “here before you is neither the program called the Puppet Master nor the woman that was called the Major”.

Those familiar with Hollywood science fiction might be surprised when they view *Ghost in the Shell* – not only by the inherent darkness of the film, but also by the multitude of images distinctive to this text that nevertheless seem familiar because they would later be “borrowed” by Hollywood blockbusters. The image of streaming computer code that we see at the start of the film, a gesture to both its cyberpunk influences and the digital technologies involved in its production, was famously used in *The Matrix* four years later, and somewhat fittingly given

58 This mystery is central to other science fiction films involving the artificial body, most notably *Blade Runner*, in which we are invited to question – and are ultimately never told – whether Deckard himself is a replicant.
that *The Matrix* revolutionised the use of digital effects in live-action cinema just as *Ghost in the Shell* was applauded by Hollywood for its revolutionary style of digital animation. *Ghost in the Shell*’s distinctive creation-and-fall sequence was also imitated by Luc Besson’s *The Fifth Element*, in which the heroine is similarly created before our eyes, fibre by fibre, before diving from a high building into the dazzling cityscape below. We might also note that the film’s references to ghostliness and the problem of a “soul” were inherited by *Final Fantasy*: a significant connection, given that both films contain digitally constructed heroines whose fundamental problem is the illusion of “life” she presents (her absent or troublesome “soul”).

If *Ghost in the Shell* influenced these later films – all of which rely heavily on new modes of digital production, as does Oshii’s anime – it can be distinguished from them because it does not fall back on a “safe” image of the human body or nostalgically attempt to recall organic presence to the screen. As previously suggested, *The Fifth Element*, *The Matrix*, and *Final Fantasy* all move towards a privileging of what Susan Hayward calls “the reproduction of life”: they end with a suggestion of romance, love, fertility, or continuity. Consequently, they perpetuate the division between natural and unnatural production that was so important to Shelley and that so informed the writing of *Frankenstein*.

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60 In *The Fifth Element* and *The Matrix*, this is suggested in the relationship between the lead characters. In *Final Fantasy*, protagonist Aki’s lover Grey dies at the end of the film; but even this sacrificial act suggests a certain continuity, and the film’s eco-friendly ending restores our faith in the “reproductive” powers of “nature” itself.
Conversely, *Ghost in the Shell* ends with destruction – and notably, with the de(con)struction of the female body as a potential site of natural reproduction. It also ends with the body no longer as its centrepiece, a notion that contributes to the unbalanced, incoherent and disconcerting atmosphere felt at the conclusion. The image of Kusanagi’s falling and dissolving body anticipates this conclusion, suggesting both the loss of her character and the loss of the body as a stable site of identity.

As I will continue to suggest in this analysis and in the remainder of this project, these fall scenes – particular to *Ghost in the Shell* and *The Fifth Element*, but played upon in the *Matrix* trilogy as well, with its constant imaging of the body suspended in space and flying or falling through the cityscape – bring something new to the Frankensteinian moment of creation. By constructing the body on-screen moments before/after spectacularly suspending it in space, both *Ghost in the Shell* and *The Fifth Element* play with the artificial body’s visibility; reading these films as Frankensteinian texts, we can recall Heffernan’s suggestion that Frankenstein films are obsessed with “seeing” the “monster”. The invisibility of Kusanagi, however, is arguably a more important addition to the evolving Frankenstein myth. Ultimately, *Ghost in the Shell* is a more challenging film than *The Fifth Element*, and its rewriting of the Frankenstein tale is arguably more powerful: one that speaks eloquently of the absences and vulnerabilities that characterise embodiment in the digital age.

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61 Heffernan, 136.
Continuing this comparison with Hollywood retellings of Frankenstein, we might observe that *Ghost in the Shell* also differs from a film such as *Blade Runner*, which it otherwise visually and thematically resembles. The replicants of *Blade Runner* can be described as postorganic “monsters” who approach organic status: not only do they obsess about organic origins in the form of mothers, but they also retain at least a semblance of organic wholeness best seen at the moment of death: Roy, completely still, a figure sitting quietly in the rain; and Pris and Zhora, shot in the back, bleeding, but whole. This wholeness – and indeed the security of death itself, with its promise of a narrative and thus a history – is transcended in *Ghost in the Shell*. Kusanagi’s narrative moves not from birth to death but from construction to deconstruction, and thus is not a narrative at all, at least, not one involving the organic body (the postorganic body can be repeatedly deconstructed and then re-constructed, as *Ghost in the Shell* suggests, and thus it follows not a linear narrative but a form of feedback loop associated with computers, machines, and artificial beings).

With its created, coded, deconstructed, and transcended bodies, *Ghost in the Shell* offers a reworking of Frankenstein that resonates with contemporary understandings about digital media and cyberspace. As early as the opening sequence, when Kusanagi is constructed but also falls into the cityscape and disappears, the film reveals its grounding not only in the Frankenstein myth but in cyberpunk fiction: for this disappearance suggests her disembodiment in cyberspace; it is a manifestation or a metaphoric expression of the act of “jacking in”. Later, Kusanagi fulfills this visual promise when she escapes her mechanical body and becomes a cyberspace construct. This second
“reconstruction” of Kusanagi mirrors the creation scene and offers the suggestion that, in the digital age, the Frankensteinian act of techno-creation can also be a disembodied act (occurring in the realms of cyberspace). The film thus demonstrates the extent to which the Frankenstein tale can be interwoven with tropes and themes from other story cycles, including those of the cyberpunk genre.

There are also references to the genetic coding of the body in this thematically complex film. The creation scene, which depicts the body as a mechanical entity but which also involves images of “code”, responds to the mapping of the human genome and the resultant coding and de-naturing of the body. The Puppet Master orates on this subject in the film’s climax, telling us that “life… relies upon genes to be its memory system”. By implication, the human body is a computer and genetic code is digital code. This reference to DNA as a “memory system” also articulates the film’s sub-themes of (mechanical) remembrance.

Like other films discussed in this project, Ghost in the Shell introduces the theme of artificial memory into its retelling of Frankenstein; unlike Blade Runner or Strange Days, however, Oshii’s film does not play upon what Alison Landsberg calls “the ‘otherness’ of prosthetic memory”.62 This is demonstrated early in the film, when Kusanagi and her companions encounter a man who has been “ghost hacked” – his cyborg brain invaded, his memories erased and replaced with implants that allow the Puppet Master to control him. “Your original memory will never be restored”, the devastated man is told somewhat heartlessly, “and

there might be residual simulation”. The lack of a resolution re-emphasising the
primacy of organic memories is striking, and contributes to the overall inflection
that this film brings to the Frankenstein myth: an inflection perhaps best
described as a post-cyberpunk disenchntment with organicism.

*Ghost in the Shell* also brings something new to the Frankenstein myth because it
uses the figure of the constructed and mechanical body to disrupt traditional
notions of gender. This, arguably, is a singular achievement unmatched by any
of Hollywood’s Frankenstein or techno-body films. Claudia Springer has
discussed Hollywood’s gendering of the mechanical body with reference to the
American cyborg films of the late 1980s and early 1990s, which “enthusiastically
explore boundary breakdowns between humans and computers, [while] gender
boundaries are treated less flexibly. Cyberbodies, in fact, tend to appear
masculine or feminine to an exaggerated degree”; she concludes by noting that
“cyborg imagery has not so far realized the ungendered ideal theorized by Donna
Haraway”. Even as the prominence of the “hard-bodied” cyborg has waned,
Hollywood has continued to gender its science-fictional characters, even those
whose artificial and constructed nature seemingly allows them to transcend any
biological difference between the sexes. Hollywood’s female monsters, in
particular – we might refer to Leeloo from *The Fifth Element* as an exemplary
character here – are often held up as guarantors of organic reproduction, as
romantic heroines, and/or as desirable (“perfect”) bodies to be gazed upon. The
cyborg imagery of *Ghost in the Shell*, however, *does* approach the “ungendered
ideal” of which Springer writes. Although we see repeated shots of Kusanagi’s

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naked body, she remains oddly desexualised, shown to be muscular and somewhat androgynous in appearance. The opening sequence offers up her body for viewing and then renders it invisible, letting us know that throughout the film Kusanagi will defy the gendered gaze just as she defies her own “womanhood”: she will continually disappear and be deconstructed before our eyes. The film also plays with notions of gender by allowing Kusanagi to merge with a supposedly male character, the Puppet Master, to form a genderless or doubly-gendered being. This becomes Kusanagi’s escape when her body is torn apart; in this scene of deconstruction, the body of the female cyborg is rendered monstrous, fragmented, and horrific, and this in turn is used to violently unpack traditional understandings of feminine beauty.

As a retelling of Frankenstein that operates in conjunction with both cyberpunk fiction and cultural writings on gender, technology, and embodiment, Ghost in the Shell is a surprisingly sad film. Kusanagi’s final “escape” from her artificial body is not as gleeful or celebratory as we might expect from a text that adopts the cyberpunk ethos of transcendence while simultaneously de-gendering the mechanical body; there is a sense of loss here that is anticipated at key moments throughout the narrative, when we are invited to reflect upon both Kusanagi’s artificiality and the possibility of her disappearance. In these moments, significantly, we hear traditional Japanese music with a distinctively mournful tone.\textsuperscript{64} The effect of hearing such traditional music over shots of a futuristic, hyper-technological cityscape is markedly elegiac: the suggestion is almost that the past lies outside the on-screen image, is present but not quite reachable. Iain

\textsuperscript{64} Napier (113) tells us that this music is in the style of a Shinto liturgy.
Chambers has commented on the relationship between music and memory, stating that “music, as a language of repetition, continually proposes this play between recalling and resisting the past”. The music in *Ghost in the Shell* operates in precisely this manner; and the “past” that is “recalled and resisted” here is both an *organic* past (an organic or natural world that has become nothing more than a memory) and a *national* past (for the music is suggestive of a sense of Japanese tradition that is otherwise absent from a setting devoid of any national inscriptions). As suggested above, the organic past and the national past coincide in the notion of a Japanese tradition rooted in the landscape. Such national/organic origin stories are powerfully performed in *Ghost in the Shell*. As a mechanical being, furthermore, Kusanagi is separated from such origins, her body positioned in exile from a past that is constantly sung-into-being around her. This theme of exile gives the film another important link to Frankenstein, and particularly to Shelley’s text: for the Frankensteinian monster, too, is an exile from both the organic world around him and the social world he negotiates.

**Mechanical/“motherless” reproduction: reading Kusanagi as digital monster**

Let us return to *Ghost in the Shell*’s version of the Frankensteinian creation scene. Mary Ann Doane has written of a certain “terror” evoked by “the motherless reproduction associated with technology”. Doane tells us that the

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anxiety over such “replacing” of the mother’s body fuels the narratives of science fiction films such as *Blade Runner*; we can add that it also fuels Shelley’s novel, which has been interpreted as a cautionary tale about what happens when men try to give birth. “Motherless” reproduction is also represented in *Ghost in the Shell*’s rendition of the creation scene, although perhaps it is depicted as not-so-terrifying: the scene of Kusanagi’s “birth” is calm, haunting, and free from anxiety. In her reading of the film Napier comments upon both the references to Frankenstein in this scene and the related lack of violence or terror: “although both the technological and organic imagery is redolent of science fiction tropes of monster-making”, she writes, “the sequence itself is lyrical, quiet, and rhythmically paced”. Yet if this scene plays upon motherless reproduction, we might comment that animation itself is a form of such reproduction: a means of reproducing the body-as-image, of manufacturing bodies rather than birthing them. The “tropes of monster-making” that are engaged in Kusanagi’s creation scene thus have a dual function: they refer back to Frankenstein as an originary text (a source of inspiration for all cyborg stories) and outwards to the technologies of animation itself.

As layers of variation on the same story, each contributing to an evolving cultural myth about techno-production, *Frankenstein, Blade Runner*, and *Ghost in the Shell* form an interesting trio of texts. In particular, they resound with the problem of origins. What, indeed, “does it mean to be embodied when the body cannot claim the status of nature?”, they ask. This question is articulated quite

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67 Napier, 109.
68 I am quoting once again from Catherine Waldby, “The Instruments of Life: Frankenstein and Cyberculture”, in *Prefiguring Cyberculture: An Intellectual*
openly in *Ghost in the Shell*, with Kusanagi frequently analysing her mechanical status and posing philosophical questions about body, self, soul, and identity; at one point, for instance, she asks her friend Batou “how much of your original body do you have left?” As an animated film, however, *Ghost in the Shell* offers a far more interesting origin story than *Blade Runner* or even Shelley’s *Frankenstein*: one that questions, where did these on-screen bodies come from? How were they produced? Were they modelled on human bodies that are now absent? Each statement that Kusanagi makes about her manufactured body thus has the potential to lead viewers back to the understanding that the animated body cannot “claim the status of nature” any more than Frankenstein’s monster could.

Like many of the films already discussed in this thesis, *Ghost in the Shell* can consequently be read as a self-reflexive text that spectacularises and explores its own technologies of production. This is particularly evident when we examine the film’s thematic concern with memory, history, and durée. As noted above, *Ghost in the Shell* questions what it means to “remember” when both body and mind are artificially constructed. The film tackles these themes openly and philosophically; as a consequence, it gives us insight into the durée of the postorganic body. For instance, Kusanagi’s bold statement that “my thoughts and memories are unique only to me” is undermined by repeated suggestions that there are other cyborgs identical to her, and that neither her body nor her mind is at all unique. It is also threatened by the loss of her character at the film’s end, suggestive of a fractured durée; this is only heightened by the discontinuity

between *Ghost in the Shell* and its sequel, *Innocence*, which features “Kusanagi” in a different body and indeed as a different character. This continual swapping of characters, bodies, narratives and memories is conducive to animation with its built rather than “lived” bodies; it is also facilitated by the lack of an actor’s body, and the related lack of a single durée to drive the film.

Elsewhere in this project I have discussed the “origin story” of the filmic body, using the figure of the Frankensteinian monster as a metaphor for the on-screen body’s troubled link to an organic past. I have also observed that, in digital animation, the historical link between actor’s body and on-screen image is notably missing. Writing of the difference between computer-generated imagery and live-action film, Michael Allen states that:

> whereas the photographic record automatically assumes a referent, an original object whose image has been captured by light passing through a camera lens and altering the chemical make-up of a strip of celluloid, a digital image need have no such referent.69

The temporal disruption created by such imaging of bodies-without-referents is pinpointed by Esther Leslie, who observes that digital technology in general:

> promotes the fascination with images and, specifically, an enchantment with representation without referent. Without referent, it is as if the link to history and memory is severed in favour of a permanently overwriting present without recall.70


This is the ultimate absence behind Kusanagi-as-animated-body: she lacks an original presence, and exists as image without referent. This, too, brings strange new meaning to the film’s under-themes of construction, broken memory, and forgotten identity.

Such absence is performed in the film’s iconic fall scene. Indeed, if the creation scene and the ensuing narrative position Kusanagi as a Frankensteinian monster and reference her creation as an animated body, the fall scene performs her status as an animated *image*, a “representation without referent”. In her essay on embodiment and digital culture, Vivian Sobchack discusses the “increased transparency of one’s lived-flesh enabled by new technologies as well as the ubiquitous visibility of new technologies”.71 We can read *Ghost in the Shell* and its fall scene in the context of this comment. When Kusanagi falls and begins to disappear, the fantastic new technologies that enable the scene – both the imagined feat of thermoptic camouflage and the revolutionary technologies of digital animation that created Kusanagi – become “visible” through her “transparent” body. In this moment Kusanagi also recalls Clover’s description of the transparent or “insubstantial” nature of the actor in effects-driven films like *The Matrix*.72 She, however, is far less “substantial” than *The Matrix*’s Neo, who performs himself into profound visibility with his cyber-acrobatics; in my opinion, Clover’s reading of *The Matrix* as a film that foreshadows “the future of

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71 Vivian Sobchack, “Beating the Meat/Surviving the Text, or How to Get Out of This Century Alive”, in *Cyberspace, Cyberbodies, Cyberpunk: Cultures of Technological Embodiment*, eds. Mike Featherstone and Roger Burrows (London: Sage, 1995), 211, my emphasis.
the actorless movie" is far more applicable to *Ghost in the Shell*, in which the invisibility of Kusanagi’s falling body reminds us of the lack of (an actor’s) organic presence to inform the film.

Here we can return once again to Walter Benjamin, who tells us that, in cinema, the “audience’s identification with the actor is really an identification with the camera”. This is exacerbated in animation, where the audience identifies not with an actor mediated by the camera but with the technologies of animation and the “virtual” actors/bodies they create. As both a cyborg and an animated body, furthermore, Kusanagi is the ultimate mechanically reproduced “work of art.” Her search for a soul or “ghost” might be construed as a search for “aura”, for the “authenticity” that a reproduced work of art lacks. Authenticity is precisely what Kusanagi seems to desire when she makes the hollow assertion that “my thoughts and memories are unique only to me”. This parallels Benjamin’s suggestion that the original work of art is defined by its historicity and its existence within a narrative of tradition. If “the technique of reproduction detaches the reproduced object from the domain of tradition”, then Kusanagi – like the Frankensteinian monster – is an exile: she has no link to a historical narrative, no past-ness, no family, no racial or cultural inscriptions, no place in any “fabric” of tradition. As a digitally animated body, she is further detached from the organic world as a “domain” of tradition/memory. Unlike Aki of *Final Fantasy*, who can be dubiously connected via the motion-capture process to

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73 Clover, 19.
75 Ibid., 233.
76 “The uniqueness of a work of art”, Benjamin writes, “is inseparable from its being imbedded in the fabric of a tradition”. Benjamin, 225.
organic movements in the “real” world, Kusanagi is literally created “from scratch”. She is a digital monster without an origin story.

It is interesting that Kusanagi’s animators do not attempt to simulate such organic origins in their portrayal – and exposure – of her mechanical body. Instead, the film meditates upon the loss of such organicism, and visually deconstructs Kusanagi in response to this loss. There are fleeting moments when her mechanical body seems to negotiate its lost origins in nature. In one notable scene Kusanagi goes diving in the harbour, immersing herself in water as though in an attempt to surround herself in the nature from which she is excluded. Napier writes of this scene that “Kusanagi seems to be attempting to discover a core self, one that is accessible through the technological apparatus of her diving gear but is encased within the organic womb of the sea”. Significantly, Kusanagi’s experience of this natural world is mediated by technology; the scene, like many in the film, expresses loss and absence rather than fulfilment and presence, a mere negotiation with an ultimately inaccessible organic world.

With both its narrative and its technologies driving towards an apocalyptic end of embodiment, the film – which leaves us with the sense of an amnesiac abandoning of the (memory of the) organic body – is somewhat postmodern, if also hauntingly sad. Kusanagi is Frankenstein’s monster turned into a digital simulacrum: as a cyborg and ultimately a cyberspace construct, but also as an animated image, she demonstrates the extent to which, as Andreas Huyssen puts it, “in the scheme of simulation… the body as referent becomes so much

77 Napier, 110.
refuse”. Yet she is also a poignant character, inhabiting a tale that resounds with a sense of mourning. Such mourning is conveyed by the haunting and elegiac musical theme, which, significantly, often coincides with moments of bodily loss. The music is prominent, for instance, in an extended scene where Kusanagi floats down the river on a boat, gazing at mannequins in shop windows who eerily seem to resemble her, her on-screen presence eventually replaced by shots of the city and its anonymous inhabitants. This scene, a more subtle version of her earlier disappearing act, can be read as a prolonged funereal sequence, lamenting the disappearance of the organic. Such a sense of mourning also works its way into the film’s dialogue. Kusanagi’s line, “how much of your original body do you have left?”, is a perfect example of this: it is delivered wistfully and plaintively, with regret rather than anxiety. The mechanical body is thus framed with sadness in this film, a sadness that also incorporates the loss of the body from the postorganic spaces of digital animation.

In summary, then, we can describe Kusanagi as a Frankensteinian monster for the digital age. As an artificial being who constantly questions the existence of her soul, she has much in common with her Gothic precursor, who asks similar questions. Both are beset by the problem of organic origins; both, too, are given a creation scene that not only attests to the absence of such origins but that also speaks of their status as fictional, textual, literary/filmic characters. Barbara Johnson tells us that Shelley’s Frankenstein can be read as “the story of the

experience of writing Frankenstein”; similarly, *Ghost in the Shell* can be read as the story of what it means to be an animated body – what it means to build one, and what it means to exist as one. At the same time, both Shelley’s *Frankenstein* and *Ghost in the Shell* are dark texts whose representation of embodiment is theoretically resonant; both imagine (and in the latter case, spectacularly image) a postorganic future, and do so in a manner that incorporates the cultural, political, and scientific discourse of their times. However, Kusanagi differs from Shelley’s monster in one fundamental aspect: she is granted the ability to escape the confines of her body. Like *Akira*, *Ghost in the Shell* rewrites the story of the monstrous/mechanical body to emphasise transcendence; but it does so with reference to its own technologies of digital animation and the forgetting or overwriting of organic presence they entail.

This chapter has examined the rewriting of Frankenstein in anime. *Ghost in the Shell* is merely one example of a Japanese animation that not only incorporates the figure of the artificial body but makes elaborate contributions to the evolving myth of the cyborg. My extensive focus on *Ghost in the Shell* here is due to the text’s closeness to Frankenstein and its articulation of Frankensteinian concerns – not to mention, of course, its wonderful re-imaging of the Frankensteinian creation scene. Nevertheless, there are numerous other anime that – because of their depictions of techno-organic protagonists and exploration of an apocalyptic end-of-embodiment – can be read in conjunction with Shelley’s novel. This thesis does not have the space to discuss other notable anime films and series including *Guyver*, *Serial Experiments Lain*, *Appleseed*, or *Patlabor*, and we can

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only speculate what the future of anime will bring and what new variations on
the Frankenstein myth might rise from this cultural phenomenon. As I write this
chapter, a live-action version of *Akira* is in production; meanwhile, cutting-edge
new anime are emerging year by year, from *Appleseed* and *Ghost in the Shell 2:
Innocence* (both in 2004) and beyond. With each text, new monsters come to our
screens.
The writing of this thesis has been informed by twofold passions: an interest in what is happening in visual culture – especially in cinema – at the moment, and a love of the Frankenstein tale in all its manifestations. The points at which these two personal passions converge have become the points of energy around which this project is structured. “Why Frankenstein?” is a question that I have been asked on numerous occasions, giving me plenty of opportunity to ruminate on the importance of Shelley’s tale: both the novel that she wrote and the myth, constantly “reanimated” in the popular culture of today, that it has become. It is not surprising that theorists write of Frankenstein’s “durability”, its cultural longevity and its resonance long beyond the time of its publication. As a tale about embodiment, technology, and the interface between the two, Shelley’s novel and its various retellings have functioned as a sort of depository of cultural thoughts about selfhood, about what constitutes a person/subject, and about what (to call upon Waldby once again) it means “to be embodied when the body cannot claim the status of nature”. In the digital age, these are also the sort of questions we ask about our media. What does it mean to be embodied on screen? What does it mean to be a viewing subject? What role do external cultures, technologies, and discourses, including the media, play in shaping our selves? Can we, as embodied subjects, “claim the status of nature” if we are

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1 George Levine and U.C. Knoepflmacher (eds), The Endurance of Frankenstein: Essays on Mary Shelley’s Novel (Berkeley: University of California Press, 1979), xii.

constantly interfacing with media technologies, if we are reproduced and even replaced by them? Throughout this thesis, I have argued that the Frankenstein tale has been reworked in the digital age to address such questions.

Across the five chapters of this thesis I have examined the filmic “machines” and animated “monsters” that appear in cinematic retellings of Frankenstein. “Filmic machine” is a term I have used to describe both the technologies of cinema and the body of the monster as he/she/it appears in film. Largely, these filmic monsters are indeed mechanical: in popular cinema we find a technologising of Shelley’s Creature that begins with Metropolis and continues with Whale and his bolt-necked fiend. Accompanying these depictions of mechanical monsters in the early Frankenstein films is a scene of spectacular electric animation. The Edison film is the exception here: this first version of Shelley’s tale offers an uncanny body birthed by alchemical means. In Chapter Two it was argued that all of these films play upon cinema’s own powers of animation and depict cinema itself in fantastic terms. This is not surprising: as we saw in Chapter One, Shelley’s novel – a tale of techno-creation – is strangely self-reflexive, a story about writing and the production of a “monstrous” text. We find that such self-reflexivity exploded into being when the tale was further technologised: that is, when it moved into a filmic space. As suggested in Chapter Two, the body of the monster is central in this metaphoric play. From the alchemical Creature of the Edison film to the robotic Maria in Metropolis, and beyond, these screened monsters – uncanny, mediated, mechanically reproduced, and posthuman – are spectacular attestations to the cinematic restructuring of human presence.
In Chapter Three I argued that, in the digital age, these filmic monsters become simulations, cyborgs, replicants, avatars, genetically-engineered or otherwise artificial beings. This shift away from animation and electricity occurs as part of a need to address new concerns pertaining to digital culture and the media “world” of the late twentieth and early twenty-first centuries. In Blade Runner and Strange Days we see the monster rewritten as the replicant and the cyborg: mechanical and/or artificial bodies positioned to confront problems of memory, mediation, and spectatorship. Similarly, films like The Fifth Element and The Matrix offer variations on the Frankenstein myth by exploring constructed bodies of a different sort: bodies that are coded with digital, genetic, or media “life”. The imprint of cyberculture, digital media, and developments in biotechnology is clearly visible on these fantastic films of the 1990s; other films of this period like Spielberg’s Jurassic Park would offer closer adaptations of Shelley’s tale while still operating in the shadow of these new concerns.

Spielberg’s dinosaurs are the crossover figures in this thesis: iconic figures in the history of special effects, they are digitally animated “monsters” that operate within the spaces of a live-action film. It was argued in Chapter Three that the Frankensteinian monster as technological “other” becomes, in the digital age, the effects-enabled villain of science fiction, horror, and fantastic film; the otherness of digitality itself is inscribed onto the bodies of these new monsters. We can also describe the animated heroines Aki Ross (from Final Fantasy) and Kusanagi (from Ghost in the Shell) in terms of this digital otherness: Aki is a digitised presence who incites cultural anxiety, and Kusanagi is an on-screen body who
acts as other to the cinematic (she vanishes, fragments, changes, and is repeatedly deconstructed).

Adam Roberts tells us that otherness or “alterity” is always involved in science-fictional depictions of technology, because technology itself:

is something with which we are simultaneously familiar and already estranged from; familiar because it plays so large a part in our life, estranged from because we don’t really know how it works… What this means is that technology focuses our attitude to difference.³

If we can apply these words to cinema – a technology we are “estranged” from because we don’t always “know how it works” – then clearly we can also apply them to digital effects, which mystify and enchant us and from which we are similarly estranged. Herein lies the metaphoric power of Frankenstein, a story about what Roberts calls “the encounter with difference”.⁴ This, indeed, is what filmic and digital monsters have in common: if the monster of the 1910 Edison film or the robotic Maria in Metropolis embody the otherness of filmic presence, then many of the animated monsters that appear on our screens today are emblazoned with the otherness of digital presence.

This project has culminated in a discussion of such animated “monsters”. I have argued that the fantastic qualities of animation as a medium open up a space where the Frankenstein tale can be imaginatively and spectacularly retold; I have also suggested that technologies of animation – both old and new – create fascinating variations on the myth of techno-production and on the

⁴ Ibid., 54.
Frankensteinian relationship between body, technology, and organic world. In her 1831 introduction to *Frankenstein*, Mary Shelley offers us the image of her monster, the “hideous phantasm”, lying lifeless “and then, on the working of some powerful engine, show[ing] signs of life, and stir[ring] with an uneasy, half-vital motion”. Drawing on these words, Telotte reminds us that cinema, too, is “a powerful engine for crafting new images of the self”. However, the “new images of the self” that can be crafted via the “powerful engine” of animation are just as interesting, and often (if we look to the bodies of fantastic and science-fictional anime) more monstrous. As Susan Napier observes, “the animated space becomes a magical tabula rasa on which to project both dreams and nightmares of what it is to be human, precisely as it transforms the human figure”. Such dreams, nightmares, metamorphoses, and speculations on (post)human-ity link anime like *Akira* and *Ghost in the Shell* – which epitomise Napier’s claim – to Shelley’s novel and to the Frankenstein myth in general.

This link between Frankenstein and animation was discussed in Chapters Four and Five with particular reference to digital animation and computer-generated presence. We find glimmers of the Frankenstein myth in our very need to create these animated bodies, our desire to view them, and the anxieties they instill in us; in the questions they evoke not just about “what it means to be human” but about the relationship between organic presence and technology, about what it means to be “embodied”, and about the body’s link with its origins in “nature”.

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My analyses of Kusanagi and Aki Ross have taken place within the framework provided by these questions and concerns. Like the Creature of Shelley’s novel, these two animated figures are imbued with the problem of “life”: Aki, of course, is not always as “animated” as she needs to be, while Kusanagi – whose “life” as a cyborg spectacularly begins and ends on-screen, exposed for us to witness – is constantly pondering the existence of her “soul”. Both characters are objects of cultural fascination due to the pioneering modes of mechanical reproduction that created them; they are also invisible and/or vanishing characters who must seemingly “make way” for these technologies, which often become the most interesting or spectacular aspect of the texts they enable.

Throughout this thesis, I have been concerned with the areas where cinema and digitality bleed into one another. This is plausible given that I am writing on the cusp of the postcinematic future: filmmaking today encompasses, is transformed by, and exists alongside cutting-edge modes of digital production. Like others before me, I am also interested in what is post-human about this future. Digital modes of production give us posthuman modes of representation: new bodies, new expressions of “life”. Much of the relevance of the Frankenstein tale for digital filmmaking thus lies in its imagining of a posthuman condition.

Nevertheless, we should remind ourselves that there are posthuman elements to

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8 In this thesis I have quoted from theorists who write about the relationship between digital filmmaking and representations of the human, and/or those who discuss a collapse of the posthuman and the postcinematic. In particular, this is discussed by Garrett Stewart in Between Film and Screen: Modernism’s Photo Synthesis (Chicago: University of Chicago Press, 1999) and “Body Snatching: Science Fiction's Photographic Trace”, in Alien Zone 2: The Spaces of Science Fiction Cinema, ed. Annette Kuhn (London and New York: Verso, 1999), 226-248. Stewart’s work is cited and built upon by Charles Tryon in “Virtual Cities and Stolen Memories: Temporality and the Digital in Dark City”, Film Criticism 28, 2 (2004): 42-62.
cinema (in its photographic sense) as well. Cinema has always mechanically tampered with organic presence, as Walter Benjamin reminds us. This, indeed, is why the figure of the Frankensteinian monster – a posthuman figure from the realm of Gothic literature, emerging from the imagination of a young woman in nineteenth-century England – is such a cinematic figure; this might even be the reason behind cinema’s long-standing fascination with the Frankenstein tale.

An overarching theme of this thesis has been the problem of “origin stories”, a problem that Shelley’s monster negotiates and that allows Shelley’s own writing to function in dialogue with that of recent theorists such as Donna Haraway. As suggested in Chapter One, the artificial, mechanical, or scientifically reconstructed body can be read as a body in negotiation with lost or problematic origins in nature. Let us briefly return to the image of Benjamin’s “angel of history”\(^9\) and to Mark Poster’s “High-tech” but backward-looking “Frankenstein”\(^10\); both are figures in dialogue with the (organic) past that lies behind them. This too is the monster as Shelley wrote of him, a de-historicised being who, rather than celebrate his post- or super-human status, longs for what he does not have. His desire for a “mate” can be read as an expression of such longing; a desire to approach organic status. Throughout this project, I have attempted to interrogate this relationship between mechanical presence and organic origins, questioning what it might mean for us in the digital age. While theorists like Poster examine the construction of new media identities and


posthuman subjects in this so-called digital age, I have limited my investigations
to filmic presence and to the filmic or digital body-on-screen. If Frankenstein is
a tale about embodiment (or techno-embodiment), I have argued, then its filmic
adaptation has allowed for fantastic representations of various cinematic modes
of embodiment: spectacular depictions of what cinema does to the body, of how
we might relate to cinematic bodies in the digital age, and of the “origin story”
behind the cinematic image itself.

In conclusion, if Frankenstein is a story about the postorganic body and its “lost
origins in nature” then what we find at the heart of this story is a crucial absence.
What defines the Frankensteinian monster, in other words, is not just his/her/its
monstrous and fragmented presence but the absence of organicism in his/her/its
body. This sense of loss and absence lingers into the digital age and, in the
context of digital modes of production that reconstruct and overwrite the organic
world, becomes the most important feature of the tale. As I have argued
throughout this project, an awareness of such loss – and the anxieties and desires
it evokes – is what cinema in the digital age brings to the ever-evolving
Frankenstein myth. This is confronted in various ways in the films I have
discussed within: from the photograph scene in Blade Runner, which addresses
both the re-membering (the replication) and the remembering (the reduction to
memory) of organic presence in an age of genetic/digital engineering; to The
Matrix, with its image of the digitally overwritten body, an image accompanied
by anxiety and a potent nostalgia for organicism; to Clover’s reading of this film
as a “foreshadowing of the future of the actorless movie”; to Final Fantasy, an

actorless movie, and to the traces (or memories) of organicism that constitute motion-capture actress Aki’s “presence” on screen; to *Ghost in the Shell*, to Kusanagi’s resonant line of dialogue – “how much of your original body do you have left?” – and to the image of her disappearing body. These films give us our monsters for the digital age; they depict the disappearance of organic presence from both our worlds and our screens.
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