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**Materialising the Unseen:
The Multisensory Cinema of
the Invisible Body**

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Abstract

The long century of western cinema has produced numerous depictions of invisible bodies – those bodies that function as any other, save for the distinctive feature of their invisibility. The invisible body challenges conventions of cinematic production, presentation and reception, suggesting an ‘extra-visual’ cinema. But, as well as this, the invisible body also challenges conceptions of the limits and categorisation of the human sensorium. In tracing a *sensory* history of invisible bodies, this thesis is concerned with how such depictions connect with and contribute to constructions of the senses in the twentieth and early twenty-first centuries. This thesis thus makes an original contribution to knowledge by asking: What kind of history of the senses can be found in the onscreen invisible body? In doing so, this thesis engages a film theory of the senses that asks what the depiction of the invisible body – itself a delicate cultural construction that has no direct equivalent in nature – brings to a cultural understanding of the modern sensorium.

Chapter One introduces the sensualities of the invisible body in *Die Nibelungen: Siegfried* (1924). Chapter Two connects the imagery of *The Invisible Man* cycle (1933–1951) with a tendency towards sensory reconfiguration. Chapter Three addresses a Cold War phase of invisible extraterrestrials in terms of technologised sensory extension. Chapter Four identifies the late twentieth-century onscreen invisible body as representative of a reconstituted social sensorium. Finally, Chapter Five analyses sequences from *The Lord of the Rings* trilogy (2001–2003), interpreting invisible embodiment in relation to the disorientations of both pain and intersensoriality. Through my approach, I connect the multisensory with the multidisciplinary, identifying the unsettling character of the onscreen invisible body as a consequence of its taxonomical unsettling of sensory and media boundaries.

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Introduction

Introduction: The Invisible Man Returns

A wanted man, Geoffrey Radcliffe (Vincent Price), having mysteriously escaped from death row in the moments prior to his scheduled execution, hides out with his fiancée, Helen Manson (Nan Grey), in the bedroom of an isolated farmhouse. As well as the suit he wears, Geoffrey's hands are gloved, his head is heavily bandaged and his eyes are covered with dark goggles: no flesh, no body, is visible (fig. 0.1). The couple's intimacy is interrupted by the sound of a policeman downstairs, who intends to explore the house. When the officer enters the room, Geoffrey's peculiar appearance and angry assertion of his right to privacy are enough to send the policeman away to telephone his superiors for advice. Knowing the officer will return, Geoffrey insists that Helen look away as he undresses. Standing in front of the mirror, Geoffrey's removal of his bandages uncovers a head that is not visibly wounded. Rather, it is entirely invisible, its shapely contours delineated by the tumbling wrappings, the shot crosscut with one of Helen, sitting on the bed with her back turned (fig. 0.2). Like Orpheus, Helen, who has already mourned the death of Geoffrey at the hour of his appointed execution, cannot resist slowly turning her head to gaze upon her loved one. An alternative framing reveals Helen's shock, mediated by the mirror, at seeing Geoffrey's invisibility unfold, as he, like Eurydice, disappears in front of her eyes (fig. 0.3). Although she knows that Geoffrey is invisible beneath his costume, Helen is rendered speechless by this seemingly unnatural sight; her eyes roll back as she faints, lolling insensibly onto the bed, prostrate as Geoffrey's panicked striptease continues towards its conclusion (fig. 0.4). By the time the policeman returns, Geoffrey is gone, his empty clothes piled on the floor and the open window revealing his exit (fig. 0.5).

The nature of Geoffrey's invisible body is testified to by the forensic trace of a fingerprint, found by the police on the glass pane of the open window. This nominally invisible detail serves as proof of Geoffrey's continued status as a touching, feeling individual who, in invisibility, has retained his full corporeal form, from the tips of his fingers to, it can be inferred, the soles of his feet. When compared, as it is, with his police record, the unique fingerprint also confirms Geoffrey's retention of his

individuality and identity, even as it stands to emphasise his status as criminal transgressor (fig. 0.6). The visual scrutiny of this invisible man's fingerprint by the film's intra-diegetic detective and extra-diegetic audience alike performs a reconfiguration of sensory data, where, in the absence of primary visual evidence, the smallest and most delicate of touches is amplified, translated into a visual scheme in order that the viewer might better imagine its feel. Throughout this film appear a range of similar such emphases upon ostensibly minor atmospheric sensory interactions of the invisible body, in which the extent of its engagement with objects, other bodies, and with the environment that supports it, is examined and ratified by a range of witnesses. The presence of the mirror in the aforementioned sequence also stimulates a curious moment in which the reproduction of visual representation is undermined, whilst doubling as an expression of fraught self-analysis, in which the invisible man's own image is not properly returned.

This description of a sequence from Universal Pictures' *The Invisible Man Returns* (Joe May, 1940) provides a number of ways of thinking about the peculiarities of the invisible body on film and its engagement with the senses. As such, it is a useful point of entry into the questions with which this thesis is concerned, principally: What kind of history of the senses can be found in the onscreen invisible body? In order to begin to answer this question, this introduction shall lay out the groundwork for the enquiry by defining some of these key terms. Part one of this introduction will define what is meant by the term 'invisible body', while Part two will introduce the cinematic context upon which this project is centred. Part three will address the key film studies contexts amongst which this thesis is intervening, and part four similarly emphasises the importance of the field of sensory studies to this project. Finally, part five will explain the organisation of the thesis as a whole, beginning with a breakdown of the chapter structure and description of chapter contents. Throughout these sections, I will be explaining the research methodology and motivating research questions of the thesis.

The long century of western cinema has produced numerous depictions of invisible bodies – those bodies that function as any other, save for the distinctive feature of their invisibility. The invisible body challenges conventions of cinematic production, presentation and reception, suggesting an 'extra-visual' cinema. But, as well as this, the invisible body also challenges conceptions of the limits and categorisation of the human sensorium. In tracing a *sensory* history of invisible

bodies, this thesis is concerned with how such depictions connect with and contribute to constructions of the senses in the twentieth and early twenty-first centuries. This thesis, thus, engages a film theory of the senses that asks what the depiction of the invisible body – itself a delicate cultural construction that has no direct equivalent in nature – brings to a cultural understanding of the modern sensorium. This thesis thus makes an original contribution to knowledge by asking: What kind of history of the senses can be found in the onscreen invisible body?

One: Defining the Invisible Body

It is appropriate to begin by asking: What is an invisible body and what constitutes it? In what ways does it upset our ideas of what a body is? Is it different, say, to that of a ghost? In *The Invisible Man Returns*, the nature of Geoffrey Radcliffe's invisibility is spoken of initially in spiritual terms, as he describes himself as a 'phantom'. His body does have a precarious relationship with mortality, as he remains alive after the time in which he was to be legally put to death. And, yet, Geoffrey is not like Eurydice: his becoming invisible is not a disappearance that signifies a passing into the beyond to become a mere shade, but is rather one in which the body evidently remains, firmly located in time and space. Observing the figure of the ghost to be one 'excluded from perception', Mariá del Pilar Blanco and Esther Peeren have described the metaphorical potential of the spectral:

The ghost, even when turned into a conceptual metaphor, remains a figure of unruliness pointing to the tangibly ambiguous. While it has insight to offer, especially into those matters that are commonly considered not to matter and into the ambiguous itself, its own status as discourse or epistemology is never stable, as the ghost also questions the formation of knowledge itself [...].¹

In this way, the invisible body's unstable 'status as discourse or epistemology' corresponds with ghostly matters, even if its physical materiality does not, a factor evidenced in Helen's assertion to Geoffrey that 'you're the best phantom I happen to know: I can touch you', with another witness attesting that 'this spook's alive'. This

¹ Mariá del Pilar Blanco and Esther Peeren, 'Introduction: Conceptual Spectralities', *The Spectralities Reader: Ghosts and Haunting in Contemporary Cultural Theory* (London and New York: Bloomsbury, 2013), pp.1–27 (p.9).

sense of physical tangibility is an important distinguishing point: the ghost, bound up with corporeal *absence*, is defined by its lack of a body, while the invisible body is here defined by its persistent corporeal *presence*. The principle absence of the invisible body, then, is its visuality.

As is suggested by the title of *The Invisible Man Returns*, the film is not the first iteration of this particular category of invisible body. The film's opening credits affirm it as 'A Sequel to "The Invisible Man" by H.G. Wells', referring both to Wells's 1897 novel and the 1933 film adaptation of that text. *The Invisible Man* and *The Invisible Man Returns* are part of a series of seven films produced by Universal between 1933 and 1951, each of which centres upon a distinctly different characterisation of an invisible figure.² What 'returns' throughout these films, however, is the concept of embodied invisibility, and these returns contribute to the formation of a category: that of the *invisible body*.

This 'return', though, is borne of a far longer period of gestation than might be thought. The antecedents of this precise expression of invisibility – in which the body, though disappeared, retains its material integrities – are many and varied. The invisible body is a fixture of western culture, and its cinematic incarnation, as exemplified in *The Invisible Man Returns*, is preceded by a rich history of manifestations in art, literature, philosophy and theology. Perhaps the most well known is Plato's parable of the ring of Gyges in *The Republic*, which describes a body made invisible through the wearing of a magic ring.³ Ancient and medieval stories of figures whose bodies are made similarly invisible include the myth of Perseus and his Cap of Hades, and Siegfried and his Tarnkappe in the thirteenth-century poem *Das Nibelungenlied*.⁴ Numerous characters enter into invisibility in Ludovico Ariosto's poem *Orlando Furioso* (1532), while, in the early nineteenth century, the Brothers

² These are: *The Invisible Man* (James Whale, 1933), *The Invisible Man Returns* (Joe May, 1940), *The Invisible Woman* (A. Edward Sutherland, 1940), *Invisible Agent* (Edwin L. Marin, 1942), *The Invisible Man's Revenge* (Ford Beebe, 1944), *Abbott and Costello Meet Frankenstein* (Charles T. Barton, 1948) and *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951).

³ See Plato, *The Republic*, trans. by Desmond Lee, 2nd rev. edn (London and Harmondsworth: Penguin, 1987), 2.359a–2.360d.

⁴ A useful overview of the different version of the Perseus story can be found in Daniel Ogden, *Perseus* (London and New York: Routledge, 2008). These written descriptions are extended in occasional visual depictions of invisible bodies, perhaps most strikingly in Edward Burne-Jones's unfinished series of works depicting Perseus, in which the Cap of Hades sometimes renders a mist over Perseus's head (1875–1890s, oil paintings in Staatsgalerie, Stuttgart and Art Gallery of South Australia, Adelaide, and gouache studies in Southampton Art Gallery).

Grimm retell a number of stories describing such bodies.⁵ The Victorian period sees many more stories of such embodied invisibility, of which Wells's novel is just one example.⁶ What is certainly crystallised in Wells's book, however, is an assertion of the material and embodied constitution of the invisible body and the trace evidence that its environmental encounters leave.

Yet, despite such emphases on matters of embodiment, such invisible figures also upset ideas of what a body is and how it functions, challenging notions of the body as a fixed and knowable entity, understood through clear empirical knowledge. Where the characterisation of Geoffrey's body both connects and disconnects with the figure of the phantom, so too does it bear unstable correspondences with the figure of the mummy, specifically in its covering in tightly wound bandages. Eric G. Wilson writes of the mummy as 'a monstrous blurring of categories'.⁷ Likewise, the very categorisation of the invisible body operates as a blurring of categories, a challenge to visibility, to legibility, and to the taxonomical. Consequently, the methodology of this thesis takes its cue from the invisible body in blurring categories between film and sensory studies, invoking a multidisciplinary framework that is in keeping with the multisensory condition of the invisible body (which I will describe in more detail below).

The category of the invisible body, in its recurrence over the centuries, then, satisfies the condition of a 'trope' as being a 'significant or recurrent theme' or 'motif',⁸ which is particularly intriguing in its being wholly fictional. A consequence of this fictive nature is that its representation necessarily functions as metaphor, so suggesting an alternative, rhetorical sense of 'trope', as 'a figure of speech; (an instance of) figurative or metaphorical language'.⁹ This thesis shows that the notion of invisibility itself requires a range of carefully deployed metaphors with which to describe it. Ostensibly excluded from the realm of visual culture, invisibility nevertheless infringes upon and questions regimes of cultural values, ratifying its common use as a metaphor with which to describe frameworks of ignorance or

⁵ These include 'Der König vom goldenen Berg' ['The King of the Golden Mountain'].

⁶ There are too many to mention here, but they include: Fitz-James O'Brien's 'What Was It? A Mystery' (1859), Guy de Maupassant's 'The Horla' (1887), and Ambrose Bierce's 'The Damned Thing' (1893).

⁷ Eric G. Wilson, *The Melancholy Android: On the Psychology of Sacred Machines* (Albany, New York: State University of New York Press, 2006), p.34.

⁸ *Oxford English Dictionary*.

⁹ *Oxford English Dictionary*.

prohibition.¹⁰ The monstrous and uncertain metaphor of the invisible body insists upon an approach that addresses a range of associated figurations and forms, both fantastic and quotidian, interweaving a complex network of values into the ambiguous regime of the invisible. By addressing the ways in which the invisible body can be looked at and interrogated, this thesis identifies a range of associations through which this fugitive figure is generated, each with their specific range of values.

Networks of sensory values are especially complicated by the presence of the invisible body, any spectatorial encounter with which necessarily motivating a qualification of vision and the visual. But what impact does such a qualification consequently have upon a wider economy of sensation? To what extent does the invisible body's lack of visibility stimulate an intensification or complication of extra-visual sensory experience, with 'extra-visual' defined as 'not employing or connected with the faculty of sight' or 'outside the normal range of sight'?¹¹ Does the presence of the invisible body suggest a particularly multisensory approach to the reception and interpretation of visual culture? Does it also promote a more sensitive mode of looking? For this thesis, the cultural invention of the object of the invisible body necessitates a corresponding critical approach. Steven Connor discusses the impact of such inventions, arguing that

we should try to invent objects in order to prise ourselves loose from the fascination of concepts, which actually rigidify our thought, objectify our thought, [...] by affirming the channel, the format, that *with which* we think and write, over the message, that *about which* we think and write. We must invent objects, because objects are those things for which modes of attention themselves require to be invented. An object is something for which you have to invent a way of paying attention.¹²

So it is in the case of the object of the invisible body, which requires new modes of attention – new complexities of extra-visual engagement – with which to present and comprehend it. It is the cinematic invention, and reinvention, of the invisible body with which this thesis is concerned. As I will show, the onscreen invisible body, which recurs in multiple permutations throughout the long century of cinema, requires both that new modes of cinematic production be invented in order to support its

¹⁰ Invisibility has been used in this metaphorical context to describe regimes of social exclusion in such works as Ralph Ellison's 1952 novel *The Invisible Man*.

¹¹ *Oxford English Dictionary*.

¹² Steven Connor, 'Tell it Slant', *Dandelion*, 2.2 (2011) <<http://dandelionjournal.org/index.php/dandelion/article/viewFile/74/92>> [accessed 15 August 2014] (para. 11 of 15).

presence, but also that new modes of multisensory attention derive from its manifestation on screen.

However, the identification of a century-spanning genre of *invisible body cinema* itself poses a number of questions. In his 2012 book *Science Fiction*, which ‘embraces more than a century’s worth of sf production worldwide’, Mark Bould addresses some of the problems of defining cinematic ‘genre’:

Genres are heterogenous, but grouping diverse films under a single rubric tends to homogenise them, to emphasise similarities to such an extent that differences are not only marginalised but often made invisible. Genres are discursive phenomena, constantly defined and redefined by a host of different voices, with different degrees of influence, for many different reasons, but genres are frequently regarded as clearly defined objects, as boxes into which individual texts can be smoothly slotted. Genres are produced by the complexly determined, socially situated positions from which they are viewed, but are often treated as if they are pre-existing phenomena with fixed, essential forms. [...] The danger in such an encyclopaedic approach is losing sight of specificities and reducing films to examples of a homogenous genre. To avoid this, in addition to trying to remain sensitive to cultural contexts, this book eschews definitions and generalisations. [...] Furthermore, the clusters of titles interspersed throughout the chapters are concerned with variety, not repetition – they are invitations to dive deeper into the genre’s heterogenous possibilities.¹³

As with Bould, who seeks not to define the genre of science fiction as ‘a sleek Monolith, pristine, transcendent and unassailable’, but rather as ‘a shape-shifting Thing, constantly becoming and without fixed form’,¹⁴ my own definition of invisible body cinema is first affirmed in order to be problematised and its particularities unpacked. Having begun with an act of definition, and of categorisation, it is the work of this thesis to interrogate the specificities of particular incarnations of the onscreen invisible body, and through these interrogations to come towards a complex and multifarious history of cinema and of the senses.

¹³ Mark Bould, *Science Fiction* (London and New York: Routledge, 2012), pp.1–2.

¹⁴ Bould, *Science Fiction*, p.2.

Two: A Cinema of Invisible Bodies

The invisible body, then, finds its definitive mode of expression when materialised through the medium of cinema. A year before *The Invisible Man* was filmed, the suitability of the invisible body for cinematic representation was noted by the writer and artist Anton Giulio Bragaglia, whose 1932 article “Orlando Furioso”, Cinematic Poem’ describes the use of invisibility in this poem as corresponding with the cinematic:

Mysterious appearances and disappearances are essential in a fantastic film and [the poem] Orlando is not lacking in them. In glancing through the poem, the modern cineist may well rejoice in the sublime madness of its wealth of mysterious appearances and disappearances. [...] In the affair of the magic ring (Gyges’ ring of the old legends) there is enough to madden a cameraman and his director.

The difficulty is of photographing that which is invisible and intangible. In visual terms appearing and disappearing are equal to existing and not existing. The visibility of things suggests to the imagination their magic invisibility, like unmaterialised spirits. [...] Amongst the most remarkable prodigies brought about by the Magic Ring, one may note the scene in which Roger, hunting for Angelica who has rendered herself invisible by putting the ring in her mouth, vainly embraces the empty air. It is like a scene from Well’s [sic] ‘Invisible Man’ which has already been filmed.¹⁵

In referring to an existent film adaptation of Wells’s novel, Bragaglia may be thinking of the 1909 short *Le Voleur invisible* [*The Invisible Thief*] (Segundo de Chomon). In that film, a young man buys an edition of Wells’s book (‘L’Homme Invisible’ by ‘G.H. Wells’), returning home to find within it a ‘formule pour l’invisibilité des corps’ (fig. 0.7). Following these instructions, a potion is produced. Although the potion’s taste causes the man some nausea, its effect is immediate: his entire body, though not his clothing, disappears (fig. 0.8). After gradually undressing, he is shown to exit his lodgings as the door opens and closes (fig. 0.9). The invisible man uses a crowbar to enter a well-appointed home, and proceeds to disrupt both furniture and paperwork, departing with money and silverware (fig. 0.10). Back at home, the man covers his invisibility with wig, mask, gloves and suit, and proceeds into the street, where – neglecting to make use of his facility for invisibility – he picks the pockets of a window-shopping couple (fig. 0.11). Two policemen give chase and enter his

¹⁵ Anton Giulio Bragaglia, “Orlando Furioso”, Cinematic Poem’, *International Review of Educational Cinematography*, 4.1 (January 1932), 11–29 (pp.23–24).

apartment, wherein he evades their capture by now removing his clothing, leaving the policemen grappling with nothing but empty jacket and trousers (fig. 0.12). The invisible man then wastes no time in beating the policemen into submission with a stick and a chair (fig. 0.13).

In line with Bragaglia's assertions, *Le Voleur invisible* demonstrates a diverse range of distinctly cinematic technical approaches in order to show the invisible body's occupation of space. First, a high-contrast double-exposure process is employed, in which the undressing body is made to appear invisible through its coverage in dark textiles and positioning before a similarly dark background. Likewise, to depict the invisible body's manipulation of its environment, stop-motion photography shows objects moving as if by unseen agency. Despite the thirty-one years between them, the similarities here to the sequence already discussed in 1940's *The Invisible Man Returns* are plain, though there is a crucial divergence between the two films' definition of the material parameters of the invisible body. While great pains are taken to persuade the audience of Geoffrey Radcliffe's persistent and absolute sense of embodiment, the body of the protagonist of *Le Voleur invisible* betrays a particularly uncertain nature. Although it largely seems as solid as a visible body, at the climax a cinematic cut removes the body not only from its clothing but also from its conventional occupation of space and time: its disappearance motivating an immaterial dissipation, similar to Bragaglia's description of how in 'visual terms appearing and disappearing are equal to existing and not existing'. In this regard, the invisible body of *Le Voleur invisible* deviates from the fully materialised invisible body so carefully described by Wells and emphasised in *The Invisible Man Returns*, seemingly unable to withstand the invisible body's own predilection for deviation, for evasion of classification, and for disobeying the rules.

There is plentiful evidence of the extent of an early cinema of the invisible body, with a number of short works providing formative filmic depictions of the theme, and which tend to accentuate the invisible body's characterisation as transgressive, as a marginalised and criminal figure of excessive appetites.¹⁶ As with *Le Voleur invisible*, these films construct their illusions of invisibility on the foundations of visual effects drawn from the nineteenth-century stage, using hidden

¹⁶ As well as *Le Voleur invisible*, these include: *Siva l'invisible* [*The Invisible Sylvia*] (Georges Méliès, 1904); *The Invisible Fluid* (Wallace McCutcheon, 1908); *Le Foulard merveilleux* [*The Magic Handkerchief*] (Albert Capellani, Georges Monca, 1908); *The Invisible Dog* (Walter R. Booth, 1909); *The Invisible Thief* (Gaumont, 1910); and *The Invisible Cyclist* (Pathé, 1912).

wires, special props, mirrors and darkened sets.¹⁷ As has been described, they also start to take advantage of properties peculiar to the cinematographic medium – employing double exposure and stop-motion photography – and so begin to insist upon the indispensability of that mode in expressing the constitution and capabilities of the invisible body. These films demonstrate a climate, as described by Akira Mizuta Lippit, in which ‘early practitioners imagined the possibility of revealing a visibility unique to film’, and so transforming ‘the conditions of visibility’.¹⁸ But, as I have suggested, the embodied invisible figure was characterised somewhat differently in early cinema. Keith M. Johnston writes that the ‘early trick film revelled in its ability to make people vanish, with either magic or science the source of invisibility powders or potions’,¹⁹ and, indeed, a multiplicity of disappearances in early cinema incites the conflation of many distinctive modes of disappearance under the same umbrella: the illusion of the invisible body appearing as one ‘trick’ phenomenon amongst many. There are numerous useful writings concerned with vanishment in early cinema,²⁰ though these do not interrogate the category of embodied invisibility with which I am concerned, often positioning it as just another one of cinema’s many vanishing tricks and illusions, and so extending early cinema’s tendency to conflate disappearance with dematerialisation. Consequently, the materialised invisible body – and this thesis’ interest in materialising the unseen – emerges from amidst a range of early cinematic disappearances and is more fully evolved as a phenomenon in the cinema of the 1920s and 1930s, with which this thesis proper begins.²¹

Instituting a genre of *invisible body cinema*, however, has provoked additional questions for this thesis. Should I interrogate every instance of such an onscreen invisible body? Early impulses towards the production of a complete genre survey abated with the realisation of the unmanageable scope of such a project, not to

¹⁷ See, for example: Tom Gunning, ‘“We are Here and Not Here”: Late Nineteenth-Century Stage Magic and the Roots of Cinema in the Appearance (and Disappearance) of the Virtual Image’, in *A Companion to Early Cinema*, ed. by André Gaudreault, Nicolas Dulac and Santiago Hidalgo (Malden, MA: Wiley-Blackwell, 2012), pp.52–63.

¹⁸ Akira Mizuta Lippit, *Atomic Light (Shadow Optics)* (Minneapolis and London: University of Minnesota Press, 2005), pp.63, 30.

¹⁹ Keith M. Johnston, *Science Fiction Film: A Critical Introduction* (Oxford and New York: Berg, 2011), p.58.

²⁰ These include Karen Beckman, *Vanishing Women: Magic, Film, and Feminism* (Durham, NC and London: Duke University Press, 2003).

²¹ It became apparent that there would not be enough room to fully engage with questions about an early cinema of invisible bodies. Such a topic would require a different approach, in part owing to the large number of films depicting invisible bodies that have been lost as well as the invisible body in these films, as outlined, being sometimes characterised as immaterial.

mention the problematic ramifications of a monolithic approach. Likewise, with films eligible for entry into such a canon emerging from a diversity of national cinemas, to what extent was this to become an intercultural project? Although each term in the phrase remains somewhat unstable, a decision was made to centre upon a *popular western cinema of the invisible body*, with the term ‘western’ referring to European and North American contexts of cinema, philosophy, history and culture. And while this thesis interrogates a particular range of western concerns and antecedents through the cinema of the invisible body, this is not to say that such concerns belong only to a ‘western’ paradigm.²² The specific examples I address (detailed in part five of this introduction) are drawn from popular cinema and television, thus presenting an opportunity to explore popular cultural understandings of the senses through the articulation of the onscreen invisible body: a platform through which philosophies of the sensed and sensing body can be put to the test.

Three: A Cinema of Embodiment

In addressing relations between cinema and notions of embodiment, a rich field of study has emerged over recent decades, much of which has drawn from philosophical work associated with phenomenology. A detailed phenomenology of cinema was expounded by Vivian Sobchack in her 1992 book *The Address of the Eye: A Phenomenology of Film Experience*, in which she emphasises an intention for her study to ground itself ‘in an interrogation and description of the experiential phenomenon of sensing, enworlded bodies that can see and be seen’, emphasising ‘the signifying activity of embodied vision’ in cinematic frameworks.²³ As Sobchack has since delineated, a ‘phenomenologically inflected’ film theory of sensation emerged

²² Rich intercultural connections and disconnections would have surely emerged from the inclusion of, for example, *Tomei Ningen* (Motoyoshi Oda, 1954), a Japanese film that is inspired by Wells’s novel (and that has been discussed by Bould and Lippit), and that itself inspired a Japanese cycle. Lippit interprets these Japanese ‘invisible man’ films in terms of a conjunction of ‘interiorities’ that he observes to emerge from the fields of psychoanalysis, X-ray and atomic theory (see Lippit, *Atomic Light (Shadow Optics)*, pp.82–96).

²³ Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, NJ: Princeton University Press, 1992), p.xvii. See, also, Vivian Sobchack, ‘Towards a Phenomenology of Cinematic and Electronic “Presence”: The Scene of the Screen’, *Post Script: Essays in Film and the Humanities*, 10.1 (Autumn 1990), 50–59. Sobchack has extended these ideas in such works as *Carnal Thoughts: Embodiment and Moving Image Culture* (Berkeley, Los Angeles and London: University of California Press, 2004).

from the 1920s–1940s writings of such figures as Sergei Eisenstein, Walter Benjamin and Siegfried Kracauer. And, although the influence of these works failed to take significant hold in the discipline of film theory, the film theory of the senses began to be more fully manifested in the 1990s with the work of writers such as Sobchack, Linda Williams, Jonathan Crary and Steven Shaviro.²⁴ As I developed this project, I became increasingly mindful of Sobchack’s concern for ‘the gap that exists between our actual *experience* of the cinema and the *theory* that we academic film scholars construct to explain it – or perhaps more aptly, to explain it away’.²⁵ In wondering about the nature and necessity of a multisensory response to film experience, Sobchack asks a pertinent question: ‘What have we, as contemporary media theorists, to do with such tactile, kinetic, redolent, resonant, and sometimes even taste-full descriptions of the film experience?’²⁶ Responses to such a question, which seeks to challenge and extend a sensuous approach to film theory, have emerged, in particular, through the work of Laura U. Marks and Jennifer M. Barker, for whom the sensuous and visceral textures of screen media open up possibilities for conceiving of the body of the film and the experience of multisensory visuality: approaches that connect directly an understanding of cinema with a sensuous understanding of the body.²⁷

If, as Sobchack asserts, a film ‘is an act of seeing that makes itself seen, an act of hearing that makes itself heard, an act of physical and reflective movement that makes itself reflexively felt and understood’,²⁸ then in what ways might the cinematic manifestation of the invisible body complicate notions of an embodied and multisensory cinema? Might the presence of such a body on screen bring to the surface an alternative understanding of the values of the cinematic mode, so extending and complicating some of the sensuous frameworks described above? Might also phenomenological considerations of audience sensory encounters, which are the principle focus of much of the film theory to which I refer, be extended or

²⁴ A useful overview of this context is in Sobchack, *Carnal Thoughts*, pp.54–61. For works by the other three authors see, for example: Linda Williams, *Hard Core: Power, Pleasure, and the Frenzy of the Visible* (Berkeley: University of California Press, 1989); Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA and London: MIT Press, 1992); and Steven Shaviro, *The Cinematic Body* (Minneapolis: University of Minnesota Press, 1993).

²⁵ Sobchack, *Carnal Thoughts*, p.53.

²⁶ Sobchack, *Carnal Thoughts*, p.54.

²⁷ See, for example: Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham and London: Duke University Press, 2000); Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2002); Jennifer M. Barker, *The Tactile Eye: Touch and the Cinematic Experience* (Berkeley, Los Angeles and London: University of California Press, 2009).

²⁸ Sobchack, *The Address of the Eye*, pp.3–4.

complicated through the sensuous character construction of the invisible individual? This thesis addresses the role cinema plays as a mediating structure through which the invention of the invisible body is expressed and defined, made manifest and interrogated. In defining the invisible body, I have proposed a definition of the invisible that is a condition of the body, and it is the cinematic body through which the idea of the invisible body is itself embodied, and so becomes not merely conceptual but sensible, to be reconsidered in relation to the body of the film's receiver. As I have suggested in the film examples I have so far described, the sensational accommodation of the invisible body within the bounds of the cinematic body necessitates the creative manipulation of screen media, but to what extent does it also promote a creative rethinking of the nature and culture of screen media and its contexts? Interrogating onscreen invisible bodies suggests that the nature and culture of the cinematic body also be interrogated, asking: To what extent is the cinematic body itself *invisible*? I contend that one effect of the cinematic confrontation with the onscreen invisible body is an increased awareness of the multisensory dimensions of the cinematic mode.

In discussing the depiction of invisible bodies on screen, and thus the extra-visual representation of the invisible, I explore a particular conception of invisibility in which the experience of embodiment, understandings of the materiality of the body, and notions of the materiality of the cinematic mode, play a central role. Rooted in the visualities and audiovisualities of cinematic media, this thesis wonders about relations between the visible and the invisible, and the body and its senses. How is the cinema of embodiment intensified or extended by the onscreen invisible body? I will now move on to describe the importance to this project of a number of significant questions raised by the emergent field of sensory studies.

Four: The Multisensory Cinema of the Invisible Body

Writing in 1998, the cultural historian Constance Classen applies a metaphorical framework of invisibility in order to elaborate on the necessity of contemporary multisensory research:

The very visualism of modernity has, so to speak, thrown a cloak of invisibility over the sensory imagery of previous eras. So thick is this cloak that one can scarcely see through it, or even recognize that there might be something worth exploring underneath. When this cloak is lifted, however, the cosmos suddenly blazes forth in multisensory splendour: the heavens ring out with music, the planets radiate scents and savors, the earth springs to life in colors, temperatures and sounds.²⁹

In this way, Classen articulates the preoccupation with exploring the extra-visual senses in the growing discipline of sensory studies. She continues:

With the ‘cloak of imperceptibility’ removed from our sensory past (and from the multisensory reality of our present) we can discern the operation and transformation of sensory paradigms across cultural fields and historical periods, and come to appreciate the diversity of Western sensory life.³⁰

While Classen describes the symbolic power of this cloak of invisibility in terms of an obscuring and obfuscating force, I am interrogating the ways in which the cultural construct of the cinematic invisible body in fact opens up multisensory discourse, the senses likewise being culturally constructed.

In a 1997 essay, Classen explains how the senses are products of culture as well as physical acts, arguing that

sight, hearing, touch, taste and smell are not only means of apprehending physical phenomena, but also avenues for the transmission of cultural values. [...] The senses themselves may each be linked with different trains of associations, and certain senses ranked higher in value than others. Particular sensations [...] may have symbolic value in different contexts. Sensory metaphors [...] may be used to convey meaning through evocative sensory referents. Not all cultures will make use of all sensory domains to the same extent. [...] It is the task of the scholar to uncover the distinctions and interrelationships of sensory meaning and practice particular to a culture. In order to do so the scholar must not only look at the practical uses to which the senses are put [...] but at the ways in which different sensory domains are invested with social value.³¹

The anthropologist David Howes writes similarly that this ‘revolution in the study of perception highlights the fact that the senses are constructed and lived differently in

²⁹ Constance Classen, *The Color of Angels: Cosmology, Gender and the Aesthetic Imagination* (London and New York: Routledge, 1998), p.1.

³⁰ Classen, *The Color of Angels*, p.2.

³¹ Constance Classen, ‘Foundations for an Anthropology of the Senses’, *International Social Science Journal*, 153 (1997), 401–412 (p.401).

different societies and periods. The perceptual is cultural and political, and not simply (as psychologists and neuroscientists would have it) a matter of cognitive processes or neurological mechanisms located in the individual subject.³² In this way, as I will demonstrate in this thesis, the cinematic depiction of the invisible body collides with reconfigured sensory understandings in both its exploration of the extra-visual senses as well as its status as a shifting cultural construct.

To what extent, then, can the cinematic invisible body be considered as both metaphor for and embodiment of the *sensorium*? The evolution of this challenging term is described by Howes in a 2009 text:

Used interchangeably with the words *brain* and *mind* in the early modern period, *sensorium* straddles the divide between mind and body, cognition and sensation. [...] In addition to denoting the ‘percipient centre,’ or ‘seat of sensation in the brain of man and other animals,’ the concept of the sensorium extended to include the circumference of perception. [...] The notion of the *sensorium* is thus a very capacious or *holistic* one. Thanks to its holism it can stand for ‘the five senses,’ which is one way of constructing the totality of percipience, but nothing prevents it from being extended to other constructions, other models, such as ‘the two senses’ or ‘the seven senses,’ and so forth.³³

The sensorium thus emerges as a framework through which myriad sensory entanglements operate, an indistinct construction that might appear to be centralised – in the mind or in the body – were it not for the decentralising work of the senses themselves through which an individual becomes part of wider social, cultural and environmental contexts. This thesis will show that, in its ‘monstrous blurring of categories’,³⁴ the invisible body challenges distinct sensory categorisations, evoking a complex and hybrid sensorium that often shocks and unsettles conventional sensory configurations.

To what extent, then, do these entries into a particularly embodied and multisensory mode of invisibility coincide with, and so reveal, a wider unsettling of the sensorium? In charting a cinema of invisible bodies, it is the intersection of four strands – invisibility, cinema, the body and the sensorium – that propels the narrative of this thesis. The depictions that I am concerned with involve images and sounds that

³² David Howes, ‘Architecture of the Senses’, in *Sense of the City: An Alternate Approach to Urbanism*, ed. by Mirko Zardini (Montreal and Baden: Lars Muller, 2005), pp.322–331 (p.322).

³³ David Howes, ‘Introduction: The Revolving Sensorium’, *The Sixth Sense Reader* (Oxford and New York: Berg, 2009), pp.1–52 (pp.1–2).

³⁴ Wilson, *The Melancholy Android*, p.34.

assert the material integrity of the body, as well as the inseparability of the self from the body and from the environment in which it is embedded. But concomitant with this is also the inexpressibility of selfhood: the difficulties of sharing psychic and sensual experience. With its prohibition of the image of the sensory agent, does the onscreen invisible body instead communicate something of the sensorium itself, representing the sensorium through its expression of a multisensory cinema? How are questions of vision and invisibility embedded within wider sensory contexts? To what extent does the cinematic expression of the invisible body provide ways of rethinking relationships between vision and the extra-visual senses, and between vision and the body?

This thesis thus intervenes amongst what Elizabeth Andrews and Kaushik Bhaumik describe as the ‘critical mass’ of work being done, across a range of disciplines, that ‘links the ambiguities of visual experience within a broader sensory domain and the state of “being-in-the-world”’.³⁵ As Ruth Barcan states:

The major tenets underpinning contemporary cultural approaches to the senses are the historical separation and hierarchization of the senses; the phenomenological interdependence of the senses; the variation and cultural specificity of sensory understanding, valuation and experience; and the connection between the senses and social values, including the gender, class and racial meanings associated with different sensory orders.³⁶

This thesis thus addresses the traditional western hierarchy of the senses – with vision at its apex – through exploring what happens when the visual is undermined.

Five: The Organisation of the Thesis

A philosophical definition of the word ‘trope’ relates to an ‘instance of a property as occurring at a particular time and place; a particular unrepeatable property, as opposed to a universal’.³⁷ Just as the trope of the invisible body recurs on screen in a range of alternative iterations throughout the long century of cinema, so too does this

³⁵ Elizabeth Edwards and Kaushik Bhaumik, ‘Visual Sense and Cultures of Sight: An Introduction’, *Visual Sense: A Cultural Reader* (Oxford and New York: Berg, 2008), pp.3–16 (pp.10–11).

³⁶ Ruth Barcan, *Complementary and Alternative Medicine: Bodies, Therapies, Senses* (London and New York: Berg, 2011), p.50.

³⁷ *Oxford English Dictionary*.

thesis take an iterative approach in the organisation of its five chapters, each of which focuses upon a specific moment in the cinema of the invisible body, through which its particular and unrepeatable properties can be interrogated and interpreted, and from which emerge the distinctive themes of the five individual chapters.

Chapter One begins to answer the question: What is it that is seen when looking for invisible bodies on screen? This chapter introduces the sensualities of embodied invisibility as they are constructed and presented in *Die Nibelungen: Siegfried* (Fritz Lang, 1924). I take the film's striking manifestation of Siegfried's invisible body in terms of a cast shadow as an invitation to begin a particular study of embodiment and the senses, asking: To what extent is this vision of Siegfried's invisible body to be understood in extra-visual terms? Does the cinematic presence of the invisible body institute a particular language of sensuality that can be interrogated and so comprehended? How are the senses made sense of, and how do cinematic depictions of invisible bodies assist in such an undertaking? Chapter One examines closely the material and cultural constitution of this particular invisible body. As we will see, the nature of Siegfried's invisible body insists upon an unpacking of a number of particular body contexts, including post-First World War understandings of the flawed material realities of the body. The film describes invisibility as a fully embodied phenomenon, and the ultimate frailties exhibited by this body provide an exploration of questions of vulnerability and mortality. However, a sequence in which Siegfried's invisible body is partially visualised as a tactile agent of thought presents an exciting and challenging understanding of how the mind and the senses intermingle. In this way, this opening chapter begins this thesis' exploration of the ways in which the onscreen invisible body institutes a complex undermining of the rigid hierarchy of the senses, serving as an agent of thought, interiority and intersubjectivity, but also as an agent of sensual embodiment.

Chapter Two investigates the ways in which the sensorium is disordered and so reconfigured in the *Invisible Man* cycle (Universal, 1933–1951), films that, through their stylistic interconnections, form a particularly influential subcategory of invisible body cinema (a cycle from which this introduction's opening example is drawn). This chapter explores three of the principal qualities that most characterise the invisible body's depiction across this cycle. One is the invisible mouth, a multifunctional organ that performs as a cinematic model for a multifunctional sensorium in its complication of relations between sound, image and the body. Second is the invisible body's styling

in terms of mummification, a characterisation that locates invisible form at the intersection of a number of bodily debates for which ruin, preservation and representation figure large, and that speaks of a morbid sense of dislocation from the world. Finally, this chapter explores the invisible body's propensity for the adoption and rejection of a range of prosthetic parts, interpreting this in terms of sensory disorder. In each case I centre upon a reading of these motifs in which I ask the wider question of this thesis: What kind of history of the senses can be found in the onscreen invisible body?

Chapter Three focuses primarily upon the *Star Trek* television and film series (1966–1986) and the film *Predator* (John McTiernan, 1987), addressing their invisible extraterrestrials in terms of a Cold War context of technologised sensory augmentation and extension, and the anxieties that accompany such notions. Both the feature film format and earlier television incarnation of *Star Trek* conceive of invisible alien spacecraft that complicate the series' central metaphor of the spacecraft as symbol for both human body and sensorium. Likewise, the techno-organic body of *Predator* evokes an awkward transcendence, encumbered with sensory prostheses at once natural, cultural and technological. This chapter thus considers the cryptic and incomprehensible nature of the technologically facilitated invisible extraterrestrial in terms of an encounter with the shifting vicissitudes of technologised systems of sensory mediation – including those of screen media like television and cinema – so questioning the nature of such sensory reconfiguration in the second part of the twentieth century. In the context of the onscreen alien invisible, this chapter therefore asks: What kinds of distortion to the human sensorium are expressed through recourse to media technologies of sensation?

Chapter Four begins with a history of invisible body cinema through the recurrent motif of the empty mirror (as described in the example with which this introduction leads), moving on to interrogate this motif in the context of its significant appearances in two films from the end of the twentieth century. In *Memoirs of an Invisible Man* (John Carpenter, 1992) and *Hollow Man* (Paul Verhoeven, 2000), the relationship between the invisible body and the mirror emphasises themes of representational crisis, but also of masculine identity crisis and the challenges of a reconstituted social sensorium. In questioning the nature of these films' expressions of a multisensory cinema, I ask: To what extent does the invisible body perform as agent of a transgressive regime of sensation? This chapter pays particular attention to the

social nature of sensory formations, whilst also coming to centre upon the peculiarities of the digital production techniques that both *Memoirs* and *Hollow Man* utilise in their construction of the onscreen invisible body. Amidst the contemporary, domestic milieu of both films, the innovative use of computer-generated imagery in both films foregrounds a relationship through which the invisible body is positioned as an agent between anxious frameworks of the virtual and the real, the immaterial and the material, the clean and the dirty, and the pure and the obscene.

Finally, Chapter Five analyses sequences from *The Lord of the Rings* trilogy (Peter Jackson, 2001–2003), interpreting those films' construction of the experience of embodied invisibility in relation to the disorienting and reorienting networks of hyperaesthesia, intersensoriality and enworldment. In order to explore these films as both a cinematic expression of the senses and as a sensory expression of cinema, this chapter principally attends to the four intense sequences in which the character of Frodo Baggins (Elijah Wood) enters into an experience of embodied invisibility: a psychophysical state in which he finds himself problematically embedded within his environs, and problematically positioned in relation to the visual sense. I address the diverse values of sensory intensity and disorder that connect frameworks of both invisibility and pain, before moving on to discuss the challenging and unsettling of the visual sense that is in evidence throughout *The Lord of the Rings* – and that is implicit throughout this thesis – arguing for the trilogy as a testament to contemporary notions of 'intersensoriality', a term defined by scholars such as Howes and Connor. I also explore the nature of the trilogy's positioning of the invisible body amidst environmental locations, so demonstrating the onscreen invisible body's suitability as representative of notions of 'enworldment', and the eco-system of sensation that this term implies. In complicating the relationship between vision and invisibility with respect to the body, this chapter asks: What kind of alternatives to the ocularcentric do these films suggest? This final chapter will end the thesis by demonstrating the ways in which *The Lord of the Rings* provides a popular expression of the invisible body that animates both the cultural construction of the senses and also the particular relationship between the cinematic mode and understandings of – and enactments of – sensory formations.

Throughout each chapter I attend to the motivating question: To what extent, and in what ways, does the invisible body itself provide a provocation to ways of understanding the body and the sensorium, and to the representation of both? As the

above chapter descriptions suggest, in tracing the cinematic history of a generic motif my approach is concerned with attending to the diversities of the particular embedded historical, cultural, social, philosophical, cinematic and symbolic contexts through which each specific onscreen appearance of the invisible body is mediated. Each of the particular examples I interrogate provokes reflection upon such specific frameworks, affording analysis of a range of angles upon questions of materiality and sensuality within and across each context. In this way, I interrogate the values with which these depictions are imbued across a multifarious range of contexts, and so interrogate how the recurrent appearance of the onscreen invisible body provides a lens through which to interrogate changing cultural understandings of invisibility, embodiment, materiality and the sensorium. The questions that motivate each chapter intersect with the overarching questions of the thesis, so accommodating the alternative ways in which alternative invisible bodies respond to questioning. As with systems of sensory distinction, these chapters are intended to operate as structurally discrete modules that are both connected to and disconnected from each other; this focal dispersal is an explicit methodological performance that has emerged as a response to the topic and contents of my enquiry. Taken together, these five chapters generate a particular constellation of invisible body cinema that questions both what similarities connect their subjects but also what peculiarities distinguish them. I have remained aware that there are alternative ways of organising this material, and alternative canons of invisible bodies. I hope that my approach stimulates a greater recognition of such figures as expressions of a multisensory cinema.

Lynda Nead proposes an ‘idea of modernity’ not ‘as a rupture with the past, or as a fresh start, but as a set of processes and representations that were engaged in an urgent and inventive dialogue with their own historical conditions of existence’.³⁸ To illustrate this notion, Nead interprets the philosopher Michel Serres’s conception of the structure of time as ‘pleated’ or ‘crumpled’, with moments potentially either ‘superimposed’ or ‘unrelated’:

This image of pleated time is literally visualised by Serres in his metaphor of the handkerchief. Spread out and ironed, the handkerchief represents a metrical, geometric concept of time, in which distance and proximity are stable and clearly defined; but crumpled in the pocket, the handkerchief

³⁸ Lynda Nead, *Victorian Babylon: People, Streets and Images in Nineteenth-Century London* (New Haven, CT and London: Yale University Press, 2000), p.8.

evokes a ‘topological’ concept of time, in which previously distant points ‘become close, or even superimposed’. Moreover, if the fabric is torn, previously adjacent points may be rendered distant and unrelated. Our experience of time resembles the crumpled version of the handkerchief, rather than the flat, ironed one. Modernity, in this context, can be imagined as pleated or crumpled time, drawing together past, present and future into constant and unexpected relations and the product of a multiplicity of historical eras.³⁹

In suggesting the cinematic invisible body as a peculiarly modern manifestation, it seems pertinent to consider Serres’s enfolded garment in relation to Classen’s invisibility cloak. Rather than the invisibility cloak being an obscuring force, as Classen suggests, the crumpled invisible garment can be regarded as a ‘topological’ configuration that connects with my structural approach, in which five distinctive cultural phases – each with its own range of specific contextual questions – are drawn together under the generic rubric of the multifunctional metaphor of the invisible body.

In announcing its particular set of concerns, each of my five chapters leads with a detailed description of a specific film sequence: a scene in which the witnessing of an invisible body unfolds. The sequence is subsequently interpreted in a way that draws out the principal themes and theoretical concerns of the chapter. Yet, these introductory examples are not solely subservient to the main events of the chapters that follow. Rather, the stuff of these opening sequences is what motivates such themes and concerns, which themselves have emerged, during the research and writing of this thesis, from a certain oscillation between reflections upon my own cinematic experience of these moments and the investigative cultural research that has informed the project. This structuring principle, through which a cinematic moment demands both attention and explication, also expresses my desire to take seriously both the characters’ experiences as depicted in such sequences and the experience of the cinematic audience.

*

In this introduction’s opening example from *The Invisible Man Returns*, the invisible body’s almost-invisible fingerprint trace and bandaged disguise suggest its occupation

³⁹ Nead, *Victorian Babylon*, p.8.

of an in-between zone: between visible and invisible; between living and dead; between victim of circumstance and volatile transgressor; between sensed object and sensing subject. The sensory engagements of this body mobilise an intersection of visibility, audibility and tangibility, but, as my analyses of other examples explored throughout the thesis will suggest, the unsettling character of the onscreen invisible body feeds into but is also a consequence of a taxonomical unsettling, and – to use a term signifying visual ambiguity – a *blurring* of sensory and media boundaries. This body allows for a diverse range of conceptions of sensory understandings, stimulating questions of how we can think of that which lies *between* sensory categories, and questioning the extent to which the cinematic imagination and realisation of the invisible have a wider impact on the configuration of the sensory economy.

In her 2010 book *Crash*, Karen Beckman argues that:

the crash – as critical metaphor, narrative device, and visual image – is something to think through, not to just gawk at or avoid. It functions as an enabling critical and visual trope that insists on the continued usefulness of the hybrid, messy, and contaminated discourse of film theory.⁴⁰

This thesis proposes the invisible body as a similarly ‘enabling critical and visual trope’, the persistent presence of which, likewise, suggests and also enables a particular mode of discourse. Through its study of the onscreen invisible body – a presence as exciting as it is challenging, and as involving as it is alienating – the thesis is animated by principal questions: To what extent does the theme of invisibility provide a way of interrogating the body and the senses away from conventional visual regimes of knowledge? In what ways does the register of embodied invisibility bring forth a viable mode of analysis of our selves and our worlds? In what ways do the reconfigured sensory schemes of the onscreen invisible body provide new ways of understanding the sensoriality of cinema? This thesis thus explores the extent to which a history of onscreen invisible bodies provides a window on specific cultural understandings of the senses, and will address the role of cinema amidst such a sensual atmosphere.

⁴⁰ Karen Beckman, *Crash: Cinema and the Politics of Speed and Stasis* (Durham, NC: Duke University Press, 2010), p.4.



Fig. 0.1, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.2, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.3, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.4, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.5, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.6, *The Invisible Man Returns* (Joe May, 1940)



Fig. 0.7, *Le Voleur invisible* (Segundo de Chomon, 1909)

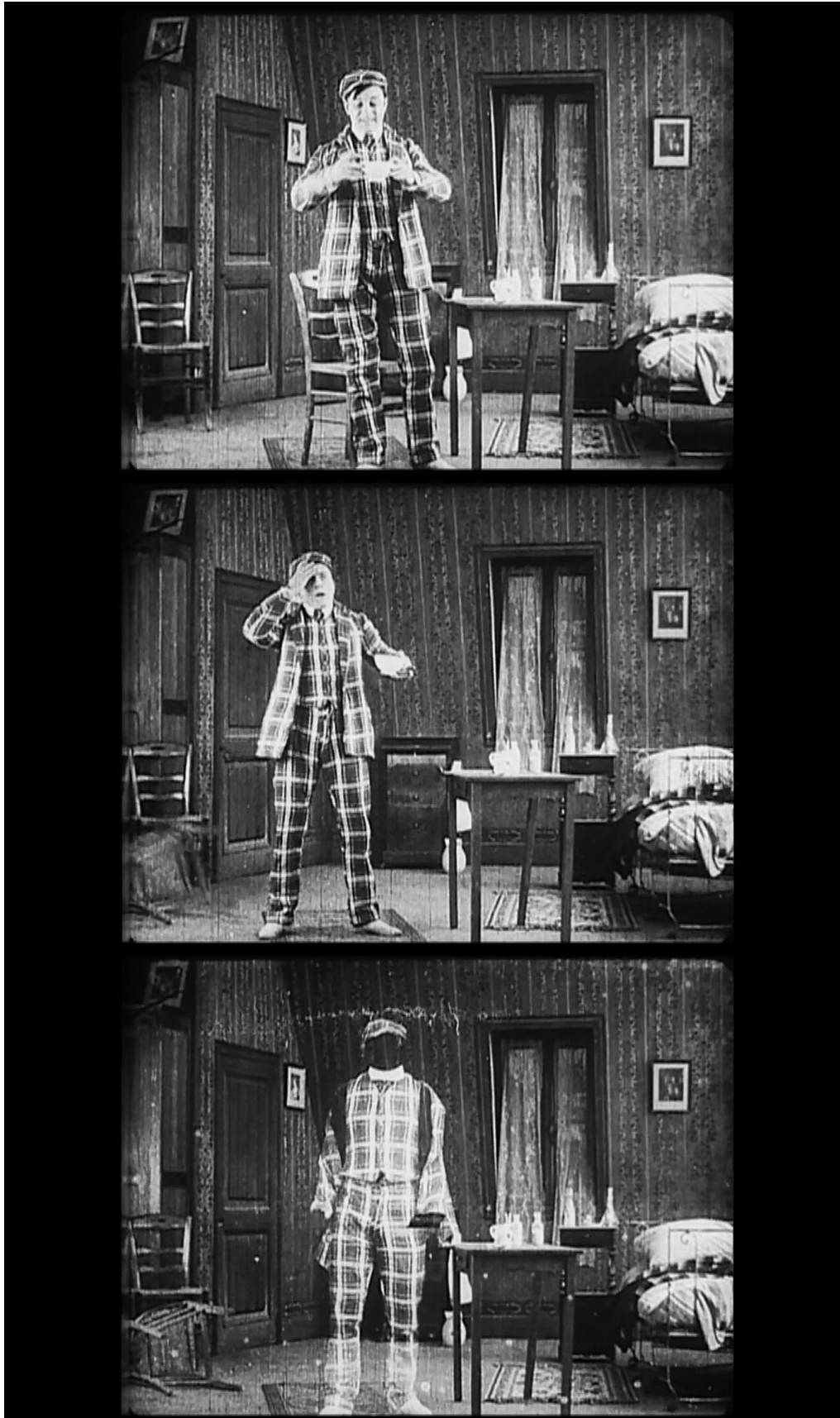


Fig. 0.8, *Le Voleur invisible* (Segundo de Chomon, 1909)

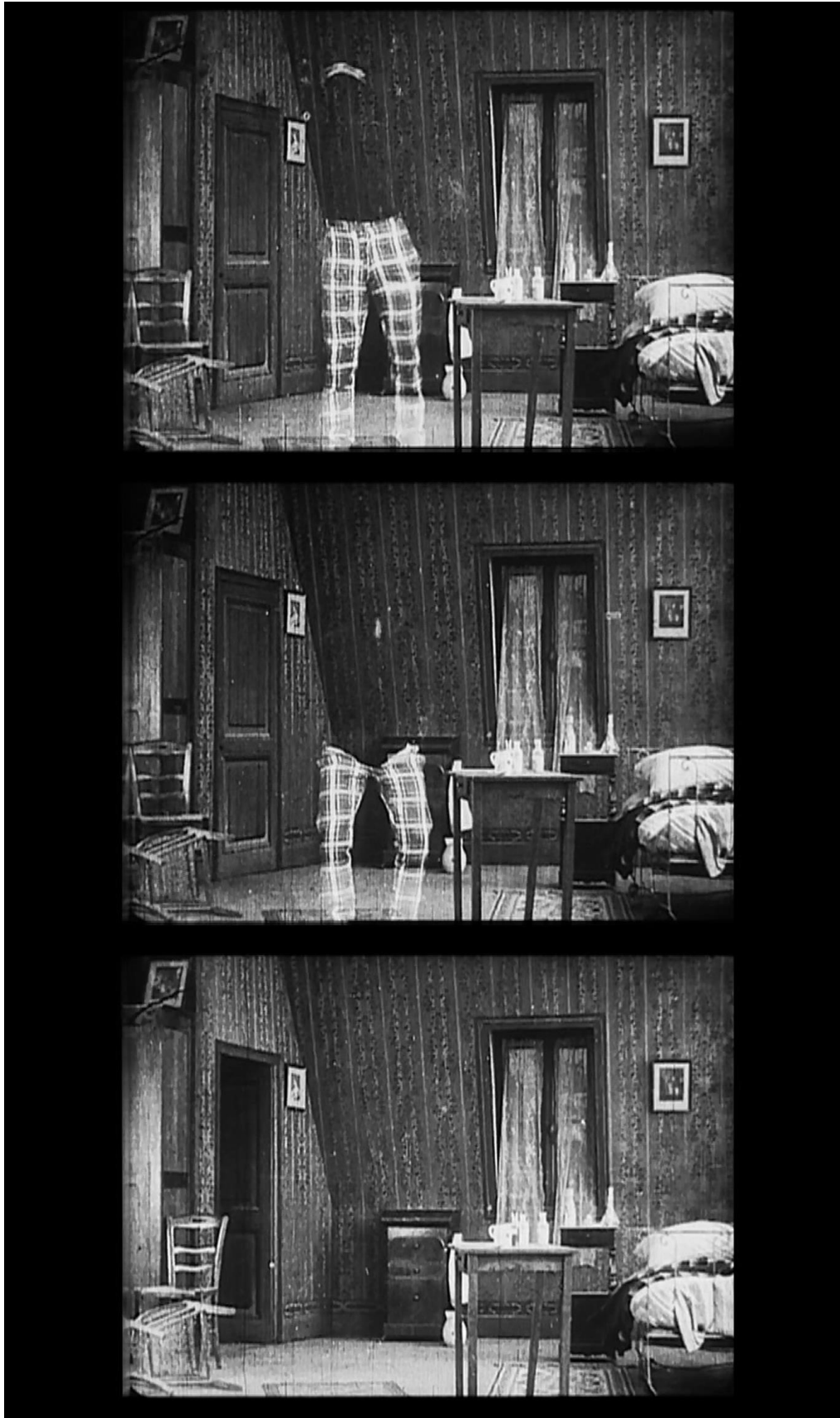


Fig. 0.9, *Le Voleur invisible* (Segundo de Chomon, 1909)

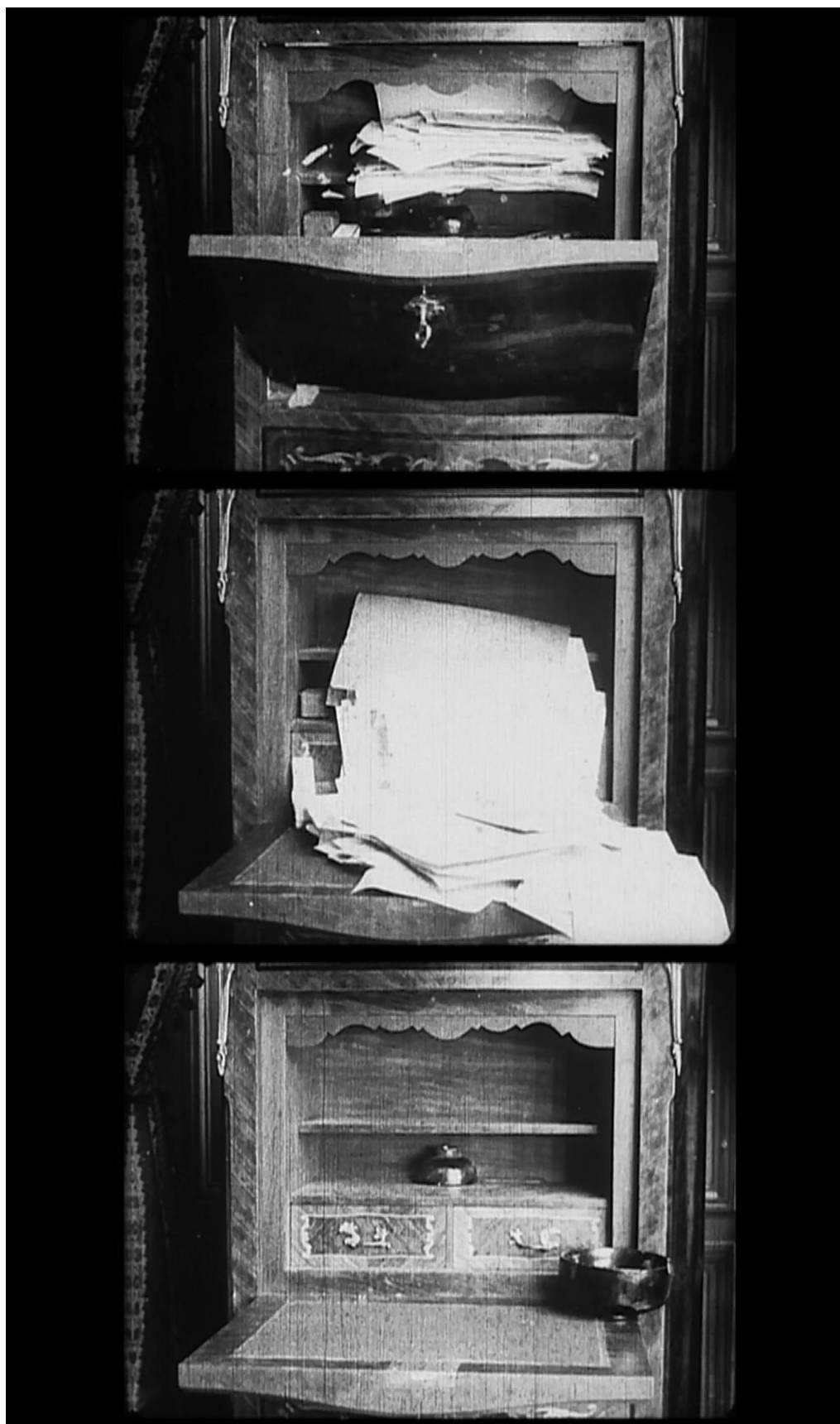


Fig. 0.10, *Le Voleur invisible* (Segundo de Chomon, 1909)

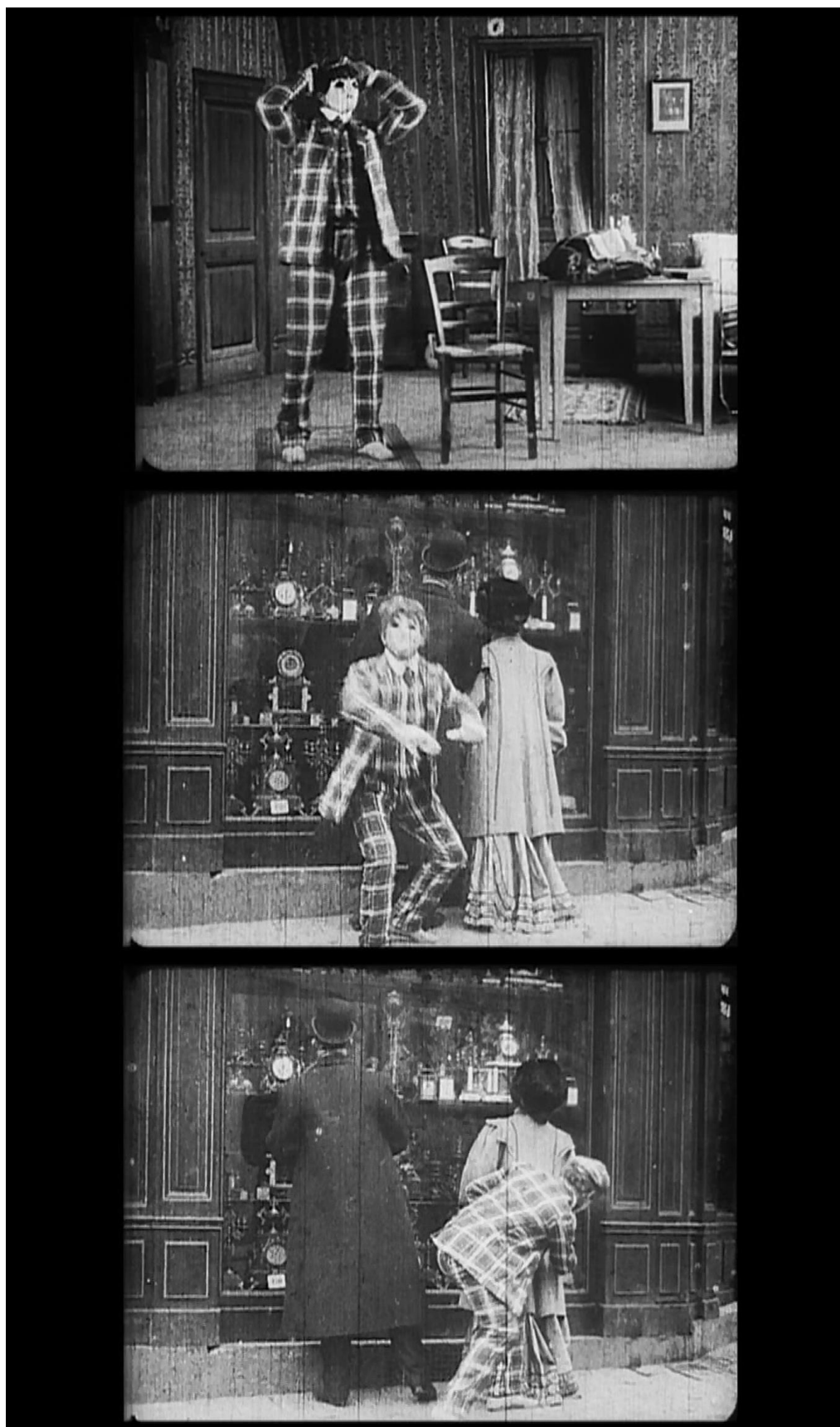


Fig. 0.11, *Le Voleur invisible* (Segundo de Chomon, 1909)



Fig. 0.12, *Le Voleur invisible* (Segundo de Chomon, 1909)



Fig. 0.13, *Le Voleur invisible* (Segundo de Chomon, 1909)

Chapter One

Thinking the Invisible Body in *Die Nibelungen: Siegfried* (1924)

Introduction: A Shadow on the Ground

A spectacular sun shines down. Two men stand together, dressed for battle and supported by ranks of soldiers. As they look ahead, seemingly in nervous anticipation of impending events, Hagen, the older and more battle-scarred of the two, notices something unusual, off screen. Hagen's one good eye widens and he grabs the other man, King Gunther, gesturing towards what he has seen. This vision is constructed, cinematically, as a near point-of-view shot, with the shadows of the two men falling forwards upon a featureless patch of ground. A third shadow has entered this shot from the left and begins to pass across the terrain. The shadow, falling to create a well-defined profile, is clearly that of a man; yet, where the shadow should connect with its source, no body is visible (fig. 1.1). And yet, the spectator knows – and Hagen and Gunther know – that this shadow belongs to a body and, therefore, that the body itself is present in this same frame, only it is invisible. This detail is known because, moments before, the visible Siegfried – comrade in arms of the two – has secretly equipped himself with the Tarnkappe, an invisibility device, placing it over his head for the very first time and dissolving out of view (fig. 1.2). Before the shadow is thrown, as Hagen and Gunther take their positions, the high framing draws attention to the sun, created through a special visual effect (fig. 1.3). With his gesturing towards the shadow, Hagen insists that both Gunther and the film's audience pay close attention to this moment, in which the body whose invisibility is initially off screen momentarily enters the onscreen space, to show its invisibility as fully as possible. The presence of the shadow on the ground insists upon a looking downward, groundward: a depressive looking. The tilt of the camera allows the earth to dominate the frame entirely. As I watch, I feel my neck twisting to an unnecessary incline, even as my eyes are fixed forward. A double exposure with some masking, the effect is carefully produced and rewards close scrutiny with its plausibility. In their comprehension of this strange shadow, Hagen and Gunther appear to relax, as they watch and wait for the results of Siegfried's invisible intervention.

Framed by shots of its two observers, Siegfried's shadow appears for just five seconds, but its significance to the narrative of *Die Nibelungen: Siegfried* (1924)¹ belies the brevity of this appearance: its inherent tensions serving as a visual manifestation of many intersecting narrative threads. One definition of 'shadow', as 'an obscure indication; a symbol, type; a prefiguration, foreshadowing',² is particularly appropriate here, as the shadow's appearance in this scene foreshadows the following sequence, in which the invisible Siegfried, a near-invincible figure, is shown to secretly assist Gunther in defeating the challenges of Brunhild, the supernaturally strong Queen of Iceland. It is the unravelling of this injustice that will culminate in the tragic death of Siegfried at the hands of Hagen and Gunther. The sight of Siegfried's shadow, as seen by the orchestrators of his eventual downfall, thus serves as a key movement in the trajectory of fate that the story pursues, signifying that which would be understood by any viewer already familiar with the popular tale: Siegfried will die.³ With this in mind, as Siegfried's shadow falls on the ground it creates the impression of a hollow in the terrain: a dark, earthy zone that conforms, gravely, to the contour of his body, as though waiting to accommodate its corporeal form. The shadow is thus a central ingredient in the revelatory scheme of materiality and mortality that Hagen and Gunther – who view their associate's great strength and apparent invulnerability as a threat – discover and observe, and insists on their role as chief contributors to Siegfried's doom. The intersection of Siegfried's shadow with theirs also draws the king and his vassal into this trajectory of misfortune, and it is in the second part of the story, *Die Nibelungen: Kriemhilds Rache* (1924), a film haunted by Siegfried's absence, that the tragic hero is avenged by Kriemhild, his wife and Gunther's sister, the epic climaxing with a genocide in which Hagen and Gunther, along with all the remaining principle characters, die. Siegfried's shadow thus falls across the narrative as the 'shadow of death' – the biblical *umbra mortis*.⁴

¹ Hereafter referred to in the text as *Siegfried*.

² *Oxford English Dictionary*.

³ Writing on *Siegfried* in 1947, the film critic Siegfried Kracauer remarks that 'the story closely interlinks causes and effects [...], nothing seems left to mere chance. An inherent necessity predetermines the disastrous sequence of love, hatred, jealousy, and thirst for revenge.' (Siegfried Kracauer, *From Caligari to Hitler: A Psychological History of the German Film* (Princeton and Oxford: Princeton University Press, 2004), p.93); the seventh chapter of Kracauer's book, entitled 'Destiny', is partly concerned with *Die Nibelungen* (pp.88–95). A number of works have explored the tendency of Fritz Lang's films to centre upon the unfolding of fate, a characteristic well invoked by Tom Gunning's term 'destiny-machine'. See, for example, Tom Gunning, *The Films of Fritz Lang: Allegories of Vision and Modernity* (London: BFI, 2000), esp. pp.10–11, 15–22.

⁴ *Oxford English Dictionary*.

In the absence of a primary image of Siegfried's body, the shadow, in this scene, speaks out as a dark alternative to the body, featureless and insubstantial.⁵ However, this shadow can also be related to the material properties of the surface onto which it is cast, with certain parameters of the body mapped onto the expanse of inchoate landscape upon which the shadow flows. In this way, Siegfried's shadow performs as his ruined double; projected onto the ragged earth, this by-product of the body delineates a dark patch of rubble: material fragments that oppose the ostensibly invincible Siegfried's impermeable unity and wholeness. Thus portending Siegfried's demise, the shadow also serves as a shade, that disembodied form of the dead in ancient thinking.⁶

From out of this introductory scheme in which invisibility is haunted by absence, this chapter will address the descriptions of apprehension, materiality and presence that unfold in the film *Siegfried*. The foreboding shadow speaks of the sense of tragedy that propels the narrative and also of pervasive tensions between corporeal presence and absence. As a foreshadowing, it also serves as potent preamble to the other sequence of the film with which this chapter is preoccupied, in which Siegfried's invisible body is descriptively visualised in sensual detail.

*

The 1924 film *Siegfried* was produced in Germany by Ufa and was directed by Fritz Lang from a screenplay by Thea von Harbou and Lang. The film is adapted from the first part of the Middle High German epic poem *Das Nibelungenlied*,⁷ which relates a story that originated in the Early Middle Ages as part of an oral tradition and is believed to have been first written down around 1200.⁸ Three early written versions of the tale, dating from the thirteenth century, are known to exist, referred to as

⁵ Among its many definitions for 'shadow', the *Oxford English Dictionary* lists: 'An unreal appearance; a delusive semblance or image; a vain and unsubstantial object of pursuit. Often contrasted with substance'; 'An attenuated remnant; a form from which the substance has departed'; 'A slight or faint appearance, a small insignificant portion, a trace.' (*Oxford English Dictionary*.)

⁶ Marina Warner, for example, describes the 'wraith-like nature' of the shadow, 'prophetic of the afterlife' (Marina Warner, *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-first Century* (Oxford: Oxford University Press, 2006), p.177).

⁷ This common title is drawn from the final words of the earliest known manuscript, which dates from around 1225: 'daz ist d[er] Nibelunge liet' ('that is the song/epic of the Nibelungs'). (Nibelungen-Handschrift C, Blatt 89r.)

⁸ Bettina Bildhauer describes this work as 'a heroic epic from the Northern European oral tradition, written down in medieval German around 1200 CE, which was stylized into a "national epic" in the eighteenth century' (Bettina Bildhauer, *Filming the Middle Ages* (London: Reaktion, 2011), p.174).

Manuscripts A, B and C,⁹ and it is these manuscripts that form the basis for most subsequent interpretations of the story.¹⁰

This film adaptation, produced between 1922 and 1924, retains many aspects of these early manuscripts, dividing the epic into two parts: *Siegfried*, which was released in Germany in February 1924, and *Kriemhilds Rache*, with screenplay written by Von Harbou alone, which was released in April of the same year. Lang was keen for this new adaptation to be distinct from other modern interpretations, a number of which had appeared from the middle of the nineteenth century, following the poem's rediscovery in 1755.¹¹ As well as in Germany, the films – the first part, in particular – were successful in much of Europe and in the United States.¹² While the sequence with which I began this chapter resonates with its interpretation in prior visual adaptations of *Das Nibelungenlied* across a range of media, the momentary recasting of Siegfried's extraordinary body as a shadow form, which inaugurates a prolonged visualisation of the invisible, is unusual, and certainly not a straightforward translation from the written text. The manner in which this sequence, and that which follows, is cinematically presented can be provoked, in numerous ways, into speaking of and for some of the particularities of the cinematic mode. I will use part of this chapter to explore how this mythological invisible body is generated as part of this modern medium and how its depiction connects with contemporary culture and thought of and around the 1920s.

In its examination of sequences depicting an invisible body in *Siegfried*, this chapter thus interrogates the constitution of invisible form, contributing to this thesis' negotiation of categories of cinema, representation, thought and sensation through

⁹ Manuscript C is the oldest and is believed to have been written around 1225. It is held in the Badische Landesbibliothek Karlsruhe, having been rediscovered in 1755. A useful overview of the history of this epic is provided in *The Nibelungen Tradition: An Encyclopedia*, ed. by Francis G. Gentry, Winder McConnell, Ulrich Muller and Werner Wunderlich (London: Routledge, 2002).

¹⁰ Many corresponding motifs can be found in a range of other stories from the period, including *Völsungasaga*, *Poetic Edda*, *Þiðrekssaga*, *Hildebrandslied*, *Rosengarten*, *Biterolf und Dietleip*, *Buch von Bern* and *Rabenschlacht*. Similarities and differences between these texts and their oral sources are described in detail in Edward R. Haymes and Susann T. Samples, *Heroic Legends of the North: An Introduction to the Nibelung and Dietrich Cycles* (New York and London: Garland Publishing, 1996).

¹¹ See Fritz Lang, 'Worauf es beim Nibelungen-Film ankam', reprinted in Fred Gehler and Ullrich Kasten, *Fritz Lang: Die Stimme von Metropolis* (Berlin: Henschel, 1990), p.170. Bildhauer asserts that 'Fritz Lang's 1924 film version, like Richard Wagner's opera and Friedrich Hebbel's drama, played an important part in the trajectory of turning the medieval poem into an expression of German nationalist mentality' (*Filming the Middle Ages*, p.174).

¹² See, for example: Anke Wilkening, 'Fritz Lang's *Die Nibelungen*: A Restoration and Preservation Project by Friedrich-Wilhelm-Murnau-Stiftung, Wiesbaden', *Journal of Film Preservation*, 79/80 (April 2009), 86–98 (p.89).

understandings of the body. In the figure of the ostensibly invincible Siegfried, the phenomenon of invisible form is located at a site of intense, dense physicality, in which the power of Siegfried's strong white masculine body is repeatedly emphasised. As Siegfried's seeming *invulnerability* finally gives way to a fatal, inescapable *vulnerability*, a scheme can be perceived in which density and tangibility invite frailty, piercing and decay. The film's register of invisibility, emerging from a Europe in the wake of the First World War, thus intersects with a reassessment of the vulnerability and sensitivity of the body in modernity. This chapter looks at how *Siegfried* instils its conception of invisibility within a tragic scheme (in contrast to the predominantly comic episodes of invisibility that had preceded it in short format cinema, as discussed in the thesis Introduction). I also position the above sequence in relation to the regime of shadows and light that animates much writing on 1920s German cinema. The depiction of Siegfried's invisibility itself casts a shadow over the cinematic history of invisible bodies. Its foreshadowing is thick with clues about how to respond to this developing conceptual category and it here prefigures that which is to come in this thesis, posing the question: What is it that is seen when looking for invisible bodies on screen? This understanding of invisibility, however, cannot necessarily be reduced to thinking about vision: it can instead provide a way of thinking about the world, about bodies, about perception, and about thinking. While I am compelled by David Levin's contention that *Siegfried* 'presents a vision of vision itself' in which 'character traits are inflected in terms of vision and important dramatic events are organized around it',¹³ I am also interested in the extent to which the central matter of invisibility provokes a sensual movement beyond vision, so leading a wider enquiry into the kinds of sensations experienced in an encounter with invisibility. As with later chapters, I will here be asking questions of the multisensory nature of cinematic mediation: In what ways might invisible body cinema address a mingling of sensory modalities and so precipitate reflections on the nature and culture of the sensorium?

¹³ David Levin, *Richard Wagner, Fritz Lang and the Nibelungen: The Dramaturgy of Disavowal* (Princeton, NJ: Princeton University Press, 1998), pp.97–98.

One: The Shadow of the Invisible Body

This matter of the shadow of the invisible body can be first examined with reference to the wider terrain of shadows on which it falls. The presence of Siegfried's shadow as a distinct profile, his features clearly delineated as the shadow traverses the frame, suggests a relationship with the work of the influential Swiss physiognomist Johann Kaspar Lavater (1741–1801).¹⁴ Using a strong light source and a silhouette screen, Lavater created shadow profiles that he thought of as idealistic representations, revealing the true psychic character of the subject, otherwise invisible; the shadow on Lavater's screen obscures the body, even as it prompts the viewer to fill in the gaps, replacing the screened visibility with an invisible imagining (fig. 1.4).¹⁵ Marina Warner notes that Lavater's work, alongside contemporary means of mapping and measuring the body such as phrenology and palm reading, contributed to the 'masses' developing a 'modern sense of self, as an external being with unique traits operating in the world' with 'heightened psychological self-awareness mediated through their physical differences'.¹⁶ Similarly, Victor I. Stoichita observes that 'Lavater exploits – probably unconsciously – another ancient tradition: the one which recognized man's soul in his shadow, and a shadow in his soul'. Stoichita suggests that to 'analyze the shadow is tantamount to a *sui generis* psychoanalysis [...], the outlined profile is a hieroglyph that has to be deciphered. The aim of Lavater's "shadow-analysis" is that it should be a new "cure for the soul."¹⁷

Aspects of Lavater's work contributed to a rich cultural climate of shadows in European thought in the nineteenth and early twentieth centuries, in which the body and the mind, so distinctively disconnected in the influential philosophical work of René Descartes (1596–1650), become anxiously interrelated. Siegfried's shadow, which first appears so disembodied, can also be considered as part of a literary lineage in which a distinct schism cleaves the shadow from the body whence it originates. Its

¹⁴ See, for example, Johann Kaspar Lavater, *Physiognomische Fragmente zur Beförderung der Menschenkenntnis und Menschenliebe* (1775–1778), the first part of which had involved collaboration with the German writer Johann Wolfgang von Goethe.

¹⁵ As Warner notes, 'the onlooker supplies features from memory, so that the act of looking and filling in the shadow activates his or her memories. The mind engages strongly with the "unfinished thing": the aesthetic principle of *non finito*' (*Phantasmagoria*, pp.159–60). Warner devotes an entire section of *Phantasmagoria* to the theme of shadow (pp.145–166).

¹⁶ Warner, *Phantasmagoria*, p.162.

¹⁷ Christopher Turner and Victor I. Stoichita, 'A Short History of the Shadow: An Interview with Victor I. Stoichita', *Cabinet: A Quarterly of Art and Culture*, 24 (Winter 2006–2007), 65–69 (p.67).

forebears include: Hans Christian Andersen's 1847 story 'Skyggen' ['The Shadow'], which describes an insubstantial shadow taking leave of its host and seeking to replace it, despite repeated assertions of its inauthenticity from the body to which it once belonged; J.M. Barrie's 1904 play *Peter Pan; or, the Boy Who Wouldn't Grow Up* and 1911 novel *Peter and Wendy*, which both feature a similarly isolated shadow; *Die Frau ohne Schatten* [*The Woman Without a Shadow*], a 1919 opera by Richard Strauss with libretto by the poet Hugo von Hofmannsthal, which is loosely based upon a Scandinavian fairy tale in which the loss of a woman's shadow portends her inability to bear children.¹⁸ In the literature of invisible bodies of the period, it is notable that in H.G. Wells's influential 1897 novel *The Invisible Man*, the invisible body is able to cast no such shadow, although Jack London's 1903 short story 'The Shadow and the Flash' features a scientist whose attempts to fashion himself invisible result in his body taking on the appearance of a shadow and, finally, in his death.¹⁹

Perhaps most influential, however, is Adelbert von Chamisso's popular 1814 story *Peter Schlemihls wundersame Geschichte* [*Peter Schlemihl's Miraculous Story*], in which the character of Peter Schlemihl sells his shadow, which is equated with his social status as well as his soul, thus becoming 'an ill-fated shadowless man'.²⁰ Chamisso's tale finds its way into much western culture throughout the nineteenth century,²¹ but most pertinent to Lang and Von Harbou's *Siegfried* is Chamisso's

¹⁸ The opera premiered in Vienna in 1919.

¹⁹ In later literature, the British author J.R.R. Tolkien, who had a great interest in Norse and German stories, was perhaps influenced by the sequence in *Siegfried* when he described, in his 1937 book *The Hobbit*, the witnessing of an invisible character's shadow, visible on the ground (J.R.R. Tolkien, *The Hobbit, or There and Back Again* (London: Unwin Books, 1966), p.83). During the 1920s and 1930s, Tolkien was also writing a version of the *Völsungasaga*, an Icelandic variation on *Das Nibelungenlied* (J.R.R. Tolkien, *The Legend of Sigurd and Gudrún*, ed. by Christopher Tolkien (London: HarperCollins, 2009)).

²⁰ Adelbert von Chamisso, *Peter Schlemihl: The Man Who Sold His Shadow*, trans. by Peter Wortsman (New York: Fromm International, 1993), p.38. The story has been illustrated by, for example, George Cruikshank in 1824 (fig. 1.5).

²¹ Amongst other places, the story's influence is evident: in Nathaniel Hawthorne's 1844 story 'The Intelligence Office', where one of many visitors needing assistance from the Intelligencer is described as 'Peter Schlemihl, [inquiring] for his lost shadow' (Nathaniel Hawthorne, 'The Intelligence Office', *Tales and Sketches* (New York: Literary Classics of the United States, 1982), pp.873–886 (p.873)); when Karl Marx, in describing in 1852 the 'contradictions' that followed the 1848 Revolution in France, states that: 'Men and events appear as reverse Schlemihls, as shadows that have lost their bodies' (Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte*, <<http://www.marxists.org/archive/marx/works/1852/18th-brumaire/ch03.htm>> [accessed 27 August 2013] (para. 4 of 26)); in E.T.A. Hoffmann's 1814 reworking of Chamisso's story, 'Die Abenteuer der Silvester-Nacht' ['The Adventures of New Year's Eve'], which would be developed operatically in Jacques Offenbach's 1881 *The Tales of Hoffmann*, and cinematically in *Der Student von Prag* [*The Student of Prague*] (Stellan Rye and Paul Wegener, 1913), in which the unfortunate protagonist sells not his shadow but his reflection.

description of Schlemihl's encounter with a passing shadow that is seemingly bodiless:

I found myself on a sandy plain on which the sun shone brightly. [...] I saw no one: and yet, on the sunny stretch of sand, a human shadow came ambling by, a shadow not unlike my own, a shadow strolling all alone, which appeared to have lost its master.²²

Attempting to claim the shadow for his own, Schlemihl 'struck unexpectedly against physical resistance. From no visible source I received the most violent jabs in the ribs that ever a man endured'.²³ Unlike Schlemihl's own disembodied shadow, this shadow belongs to an 'unseen presence', an invisible body that collapses under Schlemihl's assault and from which he takes 'the magic invisible bird's nest, the one that renders invisible whoever happens to be holding it, but not his shadow'.²⁴ The similarity between these passages and the shadow sequence in Siegfried suggests a direct influence between the two.

In adaptations of *Das Nibelungenlied*, the potency of shadow is vaguely suggested. Friedrich Hebbel's 1860–62 play *Die Nibelungen* describes Hagen, when pressing Kriemhild for further details of Siegfried's vulnerable spot, exhibiting mock concern about Siegfried being 'grazed by a shadow of danger';²⁵ as the play moves towards its nihilistic conclusion, Hagen speaks of wrapping himself in the 'deepest shadows' of death.²⁶ The shadow motif forms part of the visual scheme of invisibility articulated by Arthur Rackham in his 1910–11 series of illustrations to accompany the libretto for parts of Richard Wagner's *Ring Cycle*.²⁷ One of Rackham's images shows the dwarf Alberich as he puts on the cloak of invisibility and disappears into a cloud of smoke, leaving behind his shadow on the wall; the scene is rendered with delicate

²² Chamisso, *Peter Schlemihl*, p.50.

²³ Chamisso, *Peter Schlemihl*, p.50.

²⁴ Chamisso, *Peter Schlemihl*, pp.50–51.

²⁵ Friedrich Hebbel, *Die Nibelungen: Ein Deutsches Trauerspiel in Drei Abtheilungen*, 2 vols (Hamburg: Hoffmann und Campe, 1862), I, p.152. My translation, from 'ein Schatten von Gefahr ihn streifte'.

²⁶ Hebbel, *Die Nibelungen*, II, p.146. My translation, from 'Der Tod steht aufgerichtet hinter uns, / Ich wickle mich in seinen tiefsten Schatten'.

²⁷ Rackham's illustrations were published in England and Germany as Richard Wagner, *The Ring of the Nibelung: A Trilogy with a Prelude*, trans. by Margaret Armour, illus. by Arthur Rackham, 2 vols (London: Heinemann, 1910–11), and Richard Wagner, *Der Ring des Nibelungen. Ein Bühnenfestspiel für drei Tage und einen Vorabend. Das Rheingold & Die Walküre. Siegfried & Die Götterdämmerung*, illus. by Arthur Rackham, 2 vols (Frankfurt: Rütten & Loening, 1911).

skill by the artist and mass-reproduced in a manner only possible with the recent developments in photo-zinc and halftone printing (fig. 1.6).²⁸

The 1924 appearance of Siegfried's shadow, as dramatic introduction to his invisible form, thus operates amidst a wider cultural climate in which shadows of the body carry potent soulful and psychological undertones whilst also speaking for difficulties of representation. Such conceptions of the shadow had pervaded proto-cinematic modes of representation. Hans-Georg von Arburg connects the shadows of Lavater with those of the phantasmagoria, centring their kinship around the 'unmentionable' matter of absence in his assertion that they 'provide hints' of material presence:

The shadow, however – and particularly a shadow detached from its owner, like the silhouette – *is* the perfect hint: the pure presence of someone who is unreachable and now absent.²⁹

Remarking on the illusionism of both Athanasius Kircher's seventeenth-century magic lantern shows and Etienne-Gaspard Robertson's nineteenth-century phantasmagoria, Warner describes the proto-cinematic shadow as one of the 'materials of the imaginative soul [...] media for producing and rendering the operations of fantasy' that 'reproduced the perceived activity of the imagination itself'.³⁰ As a key constituent of photographic imagery,³¹ the shadow occupies a

²⁸ James Spero, 'Introduction', in Arthur Rackham, *Rackham's Color Illustrations for Wagner's 'Ring'* (Mineola, NY: Dover Publications, 1979), pp.iii–vi.

²⁹ Hans-Georg von Arburg, 'Shadows on the Threshold of Mechanical Reproducibility: Lavater's Physiognomy and Robertson's Phantasmagoria', *La Sombra* (Madrid: Museo Thyssen-Bornemisza, 2008), pp.296–302 (p.297).

³⁰ Warner, *Phantasmagoria*, pp.141–42, 143.

³¹ Describing his recent discoveries, the photographer William Henry Fox Talbot would remark, at a meeting at the Royal Society in 1839, that the 'most transitory of things – a shadow – the proverbial emblem of all that is fleeting and momentary – may be fettered by the spells of our "natural magic", and may be fixed for ever in the position which it seemed only destined for a single instant to occupy' (William Henry Fox Talbot, 'Some Account of the Art of Photogenic Drawing; Or, the process by which Natural Objects may be made to delineate themselves, without the aid of the Artist's Pencil', <http://royalsociety.org/uploadedFiles/Photogenic_Drawing.pdf> [accessed 13 September 2013] (para. 42 of 92)). In his journal on 28 February 1835, Fox Talbot had referred to his process as the 'Sciagraphic process'. Larry J. Schaaf has suggested that Fox Talbot 'drew inspiration for his term of *sciagraphy* from a 1635 statement', published in the introduction to John Wells's *Sciagraphia, or the Art of Shadowes*, by Henry Gellibrand: 'Neither stands this *Art of Shadowes* in any *darke* or *inferiour* place; for by them we are led on to many *rare and sublime speculations*... To these [shadows] are our best *Painters* indebted for the Life and Grace of their choisest *Pieces*. In a word, it is this *Art of Shadowes* which rectifieth our *Account of Time*... What is more invaluable than *Time*? We have nought to boast of but only its possession, and that more momentary than the fleeting Shadow it selfe...' (Henry Gellibrand, qtd in Larry J. Schaaf, 'Introduction: William Henry Fox Talbot's notebooks *P* & *Q*', in William Henry Fox Talbot, *Records of the Dawn of Photography: Talbot's Notebooks P & Q*, ed. by Larry J. Schaaf (Cambridge: Cambridge University Press, 1996), pp.viii–xxxii (p.xxix, n.17)).

privileged role in the medium of cinema, where, when embedded in monochrome schemes, it often seems to seep out from its natural boundaries, pervading the *mise-en-scène*. Similarly, Maxim Gorky's 1896 description of cinema as 'the kingdom of shadows [...] not life but the shadow of life [...] not movement but the soundless shadow of movement' underscores the shadow's problematic relationship with representation and authenticity.³² From around 1915, the term 'shadow stage' was a popular English expression referring to motion pictures,³³ and the role of the shadow as an expressive cinematic tool undeniably grew with the evolution of German Expressionist filmmaking, the milieu in which *Siegfried* was produced.

The film critic and Lang's biographer Lotte H. Eisner, writing in her 1952 book *The Haunted Screen*, claims the shadow in post-First World War German cinema to be 'at once concrete and unreal', asserting that the 'shadow becomes an image of Destiny'.³⁴ Eisner makes direct reference to *Siegfried* in observing that at 'the entrance to the chamber where Siegfried's body lies, Hagen is preceded by his shadow, which betrays him as the killer' (fig. 1.7).³⁵ Eisner's reflections on shadow culminate in a deeper investigation of *Schatten* [*Warning Shadows*] (Arthur Robison, 1923), whose ambiguous shadows she describes as having 'a Freudian inspiration'.³⁶ Such notions pervade the distended shadows of 1920s German cinema; the work of Lang and Von Harbou, both before and after *Siegfried*, makes exaggerated use of the body's shadow as representative of a dark and enigmatic psychological force, as can be seen in tense moments in both *Dr. Mabuse, der Spieler* (1922) and *M* (1931) (figs 1.8 and 1.9).³⁷

³² Maxim Gorky, 'The Lumière Cinematograph', in *The Film Factory: Russian and Soviet Cinema in Documents 1896–1939*, ed. by Richard Taylor and Ian Christie (Abingdon and New York: Routledge, 1988), pp.25–26 (p.25).

³³ 'The Shadow Stage' was the name of the reviews section of the popular Chicago film magazine *Photoplay* from November 1915 until at least 1945. The term was often used in contrast to 'the board stage' of theatre.

³⁴ Lotte H. Eisner, *The Haunted Screen: Expressionism in the German Cinema and the Influence of Max Reinhardt*, trans. by Roger Greaves (London: Thames & Hudson, 1969), pp.17, 130. To support her argument, Eisner lists sequences from *Das Cabinet des Dr Caligari* (Robert Wiene, 1920), *Nosferatu* (F.W. Murnau, 1922), *The Student of Prague* (Henrik Galeen, 1926), *Tabu* (F.W. Murnau, 1931), and *The Four Devils* (F.W. Murnau, 1928) (pp.129–137). Eisner's biography of Lang is Lotte H. Eisner, *Fritz Lang*, trans. by Gertrud Mander (London: Secker and Warburg, 1976).

³⁵ Eisner, *The Haunted Screen*, p.131.

³⁶ Eisner, *The Haunted Screen*, p.136.

³⁷ The English subtitles used in the 2003 Eureka DVD edition of *M* have the troubled protagonist describing his feeling of acting outside of himself in terms of shadow, with the German expression 'verfolgt mich' ['pursues/haunts me'] translated as 'I shadow myself'.

Also manipulating the expressive capacity of the shadow is the contemporary work of German animators such as Lotte Reiniger (fig. 1.10) and Walter Ruttmann (fig. 1.11), both of whom collaborated upon the stark dream sequence in *Siegfried* in which the protagonist's death is portended (fig. 1.12).³⁸ As Eisner emphasises in her book, the English subtitle of which is *Expressionism in the German Cinema and the Influence of Max Reinhardt*, this range of screen material has a reciprocal relationship with a wider visual language of Expressionism. This includes the influential theatre of Max Reinhardt but also the painting of German artists such as Christian Schad (fig. 1.13) and, later, Felix Nussbaum (fig. 1.14). In these examples, intensified shadows contribute to the expression of interiority: the shadow silently intimating and authenticating a vision of internal psychology and identity, illustrating, for example, the psychoanalyst Carl Jung's 1923 equation of the shadow with 'the unconscious'.³⁹ More recently, Akira Lippit emphasises such a correlation between the shadow and the subsisting presence of that which is secret and hidden, when he refers to the practice of psychoanalysis as a 'virtual science, perhaps, of the shadow, a shadow science'.⁴⁰

The capacity of the shadow to speak for the complexities of the mind seems well established, then, though the nature of such a shadow language can range between the revelatory psychological 'truths' of Lavater, the sense of representational inauthenticity described by Gorky, and the kind of troubled interiority probed in psychoanalysis. Through reflection also upon Lang's contention, according to Siegfried Kracauer, that *Siegfried* and its sequel 'might be considered a true manifestation of the German mind',⁴¹ *Siegfried's* shadow can be understood as

³⁸ The shapes of darkness and light were animated by Ruttmann using models constructed by Reiniger, and depict a privileged visualisation of interiority. Reiniger had produced silhouette titles and credits for Ufa's *Der Rattenfänger von Hameln* [*The Pied Piper of Hamlyn*] in 1918 and for *Der fremde Fürst* [*The Foreign Prince*] in the same year. Her *Die benteuer des Prinzen Achmed* [*The Adventures of Prince Achmed*] was released by Ufa in 1926.

³⁹ As Jung proclaims, it is 'a good thing to detach the man from his shadow, the unconscious' (Carl Gustav Jung, *Psychological Types; Or, the Psychology of Individuation*, trans. by Helton Godwin Baynes (London: Routledge and Kegan Paul, 1923), p.203). The notion that a shadow reveals an authentic though hidden identity is a visual tactic that remains prevalent today and can be seen in promotional materials for a number of popular films, largely from the fantasy genre and depicting male bodies, such as *Star Wars Episode I: The Phantom Menace* (George Lucas, 1999) (fig. 1.15) and *The Amazing Spider-Man* (Marc Webb, 2012) (fig. 1.16).

⁴⁰ Akira Mizuta Lippit, *Atomic Light (Shadow Optics)* (Minneapolis and London: University of Minnesota Press, 2005), p.13.

⁴¹ Kracauer, *From Caligari to Hitler*, p.92. Kracauer cites Lang's 'Worauf es beim Nibelungen-film ankam' (reprinted in Gehler and Kasten, *Fritz Lang*, p.170). This is the programme [Programmbroschüre] that accompanied the film's original release.

expressive of both the psyche and of the potential for the cinematic mode to operate as a conduit to and from the imagination. However, as the film's brief shadow sequence suggests, the shadow is never entirely rid of the body. The shadow enacts that which any cinematic image of the body can be thought to do: in representing the body, it offers up an alternative to the body, as part of a subtle new body of film, light, shade and screen. As I have shown, Siegfried's shadow can be understood to announce this relationship between the body and its cinematic equivalent: a coming together of the visible and the invisible that seems to leave an 'attenuated remnant; a form from which the substance has departed'.⁴²

Whilst resonating with discourses of light and shadow of its period, Siegfried's invisible body surely relates also to another collection of contemporary cinematic representations of unconventional bodies: bodies that share a characteristic tension between visibility, psychology, materiality and embodiment. Such figures, primarily male, include: the clay automaton of *Der Golem, wie er in die Welt kam* [*The Golem: How He Came Into the World*] (Carl Boese and Paul Wegener, 1920); the title character of *Der Student von Prag* [*The Student of Prague*] (Henrik Galeen, 1926), which closely relates to *Peter Schlemihl*, though with the reflection taking the role of the shadow; Paul Orlac, the pianist whose newly transplanted hands seem to have a mind of their own in *Orlacs Hände* [*The Hands of Orlac*] (Robert Wiene, 1924); and the vampire Count Orlok in *Nosferatu* (F.W. Murnau, 1922). The latter film's potent imagery of the disembodied shadow is used to convey something of what Bram Stoker refers to in the film's 1897 source novel *Dracula* as the vampiric ability to 'at times vanish and come unknown'.⁴³ At the climax of the film, the vampire's seemingly bodiless shadow advances up a staircase, enters a doorway, intent on molesting its prey (fig. 1.17), whose walls are hung with silhouette portraits that mimic the vampire's bearing.⁴⁴ The apparent immateriality of this shadow presence, its status as an 'attenuated remnant', is confirmed only as the morning

⁴² *Oxford English Dictionary*.

⁴³ Bram Stoker, *Dracula* (London: Penguin Books, 1993), p.305.

⁴⁴ Anton Kaes, for example, has remarked upon the 'image of Nosferatu as an harbinger of death who dwells in the subconscious', observing the vampire's shadow manifestation to be 'associated with film as well as occultism'. Kaes invokes Gorky when he asserts that 'Nosferatu [...] rules in the kingdom of shadows, which is none other than the kingdom of film'. (Anton Kaes, *Shell Shock Cinema: Weimar Culture and the Wounds of War* (Princeton and Oxford: Princeton University Press, 2009), pp.123, 125.) Stoker's novel notably insists that the vampire 'shows no shadow' and that 'he make in the mirror no reflect' (*Dracula*, p.307). This lack of reflection, a fairly recurrent attribute in vampire fiction, seems to compound the figure's perverse corporeal identity, testifying further to a tense relationship with representation.

sunlight fades it out of existence, a lap dissolve combining with a cut to replace the paling outline with a puff of smoke (fig. 1.18). The visual dissolve here expresses exactly the disintegrated condition of the vampire, his manipulation of shadow one of a range of unnatural powers that mingle presence with absence, uncomfortably shifting between the embodied and the immaterial, his power manifesting as the blowing open of a curtain, or as his body divides into a plague of rats.⁴⁵

By contrast, Siegfried's shadow, though itself pregnant with morbid foreboding, speaks more quietly of both immateriality and absence. The story it tells is that of a persistent, present body, firmly located in time and space, with a stable relationship with both light and the environment in which the body is immersed. Here, the invisible body acts as a discreet agent of interruption – coming between light and shadow, between foreground and background, between vision and representation – and the shot itself interrupts a concentrated depiction of the act of looking (fig. 1.19). As the moment unfolds, the shadow passes across the cinema screen, but also across the retina of the spectator, who might feel themselves blinking as their eyes dart about the image to make sense of this special effect. Before the five seconds have passed, the viewer will have accepted the integrity of Siegfried's body and understood his distinct, bounded presence in both time and space. This shadow testifies that the invisibility of this body, though magically invoked, is grounded, if not entirely in the optics, then in the material physics of the natural world. It is this undermining of Siegfried's supernatural and irrational attributes that contributes to the understanding – by viewers both within and without the diegesis – that Siegfried's ostensibly invincible body remains a mortal one.

In announcing the invisible body, Siegfried's shadow thus insists upon a relationship between thinking and the body. It intimates both interiority and corporeality, expressing the cognitive operations of the intellect as it enacts an understanding of this body's materiality. The sight of Siegfried's shadow, and knowledge of his corporeal presence, is received visually by Hagen and Gunther, and this scopic discernment of Siegfried's invisibility is indicative of the rationality of those characters, whose banal pretensions towards civilised superiority are expressed throughout via an exaggerated sense of visual order that incorporates pattern and

⁴⁵ In Stoker's novel, the vampire is repeatedly referred to as emerging from, disappearing into, or wholly becoming, a mist. The vampire's associations with the elements are discreetly visualised in Murnau's film: the blowing open of a pair of curtains; the sails of a ship filling in opposition to the direction of the wind.

visual symmetry. Such tendencies are clearly pitched in opposition to Siegfried, who initially emerges from the irrational world of magic and the supernatural only to find himself increasingly incorporated into the rational and civilised world of court and state that is exemplified by the royal court at Worms.⁴⁶ Amidst the ordered ranks of soldiers that assemble behind Hagen and Gunther as Siegfried becomes invisible, the glaring sun illuminates the scene, suggesting Hagen and Gunther as emissaries of the rational enlightenment (fig. 1.20). In common with the enlightened ambitions of Lavater's work, the profile shadow in *Siegfried* communicates a transfer of knowledge, exemplifying a strategy of intellectual illumination. And though the production of Siegfried's shadow serves to illustrate a passage of intellectual understanding, its darkness can equally be read as a blind spot: a dark patch that assumes a fixed vantage point, restricted as it is to a singular source of illumination.

The seemingly assured knowledge of Hagen and Gunther, the clear antagonists of the piece, is thus in some way incomplete. Although they see the shadow, they do not see the full picture: the trajectory of fate that will engulf them. Consequently, the shadow – and so invisibility – can be considered in terms of a gap in knowledge, in the same way as it presents a gap in vision. Walter Benjamin uses the imagery of the shadow as part of a meditation on thinking in a short passage headed 'Short Shadows' (1929). He writes:

Toward noon, shadows are no more than the sharp, black edges at the feet of things, preparing to retreat silently, unnoticed, into their burrow, their secret being. Then, in its compressed, cowering fullness, comes the hour of Zarathustra – the thinker in 'the noon of life,' in 'the summer garden.' For it is knowledge that gives things their sharpest outline, like the sun at its zenith.⁴⁷

⁴⁶ Joyce Tally Lionarons notes the enmeshing within the source poem of a 'real' historically conceived society and an 'Otherworld' in which '[n]ot all its inhabitants are human, and those who are seem preternaturally strong, with knowledge and power far surpassing the denizens of the "real" world' (Joyce Tally Lionarons, 'The Otherworld and its Inhabitants in the *Nibelungenlied*', in *A Companion to the Nibelungenlied*, ed. by Winder McConnell (Columbia, SC: Camden House, 1998), pp.153–71 (p.153)). Lionarons argues that the depiction of this 'Otherworld' in the poem 'repeatedly sounds a somber and somewhat disturbing note in suggestions that the Otherworld may in fact be a manifestation of the Underworld, the land of the dead' (p.153). Such a sentiment confers a sense of deathliness upon the invisibility of Siegfried's body. That Siegfried's status as a supernatural being can be read not as heroic but as a threat to a stable, rational society has been asserted in works such as D.G. Mowatt and Hugh Sacker, *The Nibelungenlied: An Interpretative Commentary* (Toronto: University of Toronto Press, 1967) and Neil Thomas, *Reading the Nibelungenlied* (Durham: University of Durham, 1995).

⁴⁷ Walter Benjamin, 'Short Shadows (I)', *Selected Writings. Volume 2: 1927–1934*, ed. by Michael W. Jennings, Howard Eiland and Gary Smith, trans. by Rodney Livingstone (Cambridge, MA and London: Harvard University Press, 1999), pp.268–272 (p.272).

For Benjamin, the shadow serves as a key ingredient in the visualisation of thinking.⁴⁸ In relation to this piece, the scholar Gerhard Richter has written of Benjamin's interest in 'cognition' over 'understanding', and so how:

For Benjamin, what is significant about thinking is not its teleological progression from one certain fact of knowledge to the next, the progressive movement of covering the terrain that is to be fully thought, but rather an appreciation of the leap or crack, the blind spot without which conceptual thinking cannot occur.⁴⁹

The shadow of Siegfried's invisible body expresses just such a blind spot: a moment in which vision and thought collide in an incomplete way; a sight of the unseen through which can be understood the difficulties and deficiencies of absolute knowledge.⁵⁰

It is at the end of this sequence that Siegfried begins to turn, breaking completely the Lavaterian profile and further promoting this shadow presence as that of a three-dimensional body: a solid, rotating mass that enlivens this doubly flattened scheme with a sense of the depth of the cinematic z axis, as the body executes a subtly dizzying turn (fig. 1.21). Their witnessing of this moment casts Hagen and Gunther as film spectators, and the sight of this image – through which the immaterial and the material coincide – can be understood to stimulate all such spectators towards a thoughtful phase of reflection upon the sensual experience of embodied invisibility, imagining the functioning and fleshy constitution of Siegfried's invisible frame. The shadows of the two, slightly off centre, also resemble those of the director and camera operator of the shot; even Hagen's one good eye speaks of the single aperture of the cine-camera, while the grain of the film base seems hard to distinguish from the

⁴⁸ In a later variation on this piece, published in 1933, Benjamin also writes of 'distance and images', remarking upon the intimate, complex phenomena that one may feel when at close quarters to things in the world around, noting that 'all this he must forget, so he can surrender to the images' seen at a distance, where vision is the sole stimulated sense. (Walter Benjamin, 'Short Shadows (II)', *Selected Writings. Volume 2: 1927–1934*, ed. by Michael W. Jennings, Howard Eiland and Gary Smith, trans. by Rodney Livingstone (Cambridge, MA and London: Harvard University Press, 1999), pp.699–702 (pp.700–701).)

⁴⁹ Gerhard Richter, *Thought-images: Frankfurt School Writers' Reflections from Damaged Life* (Stanford, CA: Stanford University Press, 2007), p.63.

⁵⁰ With reference to the foretelling of the future, Benjamin speaks of a sense of fear that accompanies the desire to believe in prophecy, writing that 'we hasten all the more to confirm [the prophet's] predictions, the more thirstily we feel the shadows of the lives we never lived welling up within us' (Benjamin, 'Short Shadows (I)', p.272). In the same piece, Benjamin refers to the Nibelungen story when discussing 'how to recognize your strengths'. As he writes, we may do so 'with a series of defeats, in which we learn all the tricks of survival and bathe in shame as if it were dragon's blood' (p.270).

coarse terrain it represents.⁵¹ As received in the screening room, the cinematic body has no choice but to exist as a somewhat insubstantial form of light and shade, projected from a fixed point in space onto a flat surface, the screen. It is just such a projection that the viewer receives of Siegfried's shadow: on screen, it might appear as if cast from a light source in the auditorium; it passes across the screen, turning at the last as though belonging to an audience member finding their seat. It is a projection within a projection and, produced as it is by a cinematic superimposition, it is a doubling that compensates for Siegfried's momentary lack of a proper body image. In this way it speaks for a multiplicity of views being directed at the focal point of the invisible body. Such a complex intersection prompts reflection upon Lippit's suggestion that the 'cinema screen separates space, establishes orders and relations between phenomenal and existential, if not metaphysical space: the space between life and its shadow, but also between discrete orders of life, movement and animation. The screen is a deep surface that brings together two velocities in an imminent collision.'⁵² Such a depth is well in evidence here.

Siegfried's shadow is both a symbol of his invisible body, as well as the product of the dense materiality of that form. From the angle at which it appears, it is notable that this shadow itself is only visible thanks to the invisibility of the body, which would otherwise have obscured it. This shadow stands as a qualification of the visual sense, and the invisible body to which it is bound serves as a site at which the stuff of both psyche and cinema are materialised, the body's visual absence enabling a reconfiguration of thinking about presence. In this prosaic shadow, the psychological will not be divested from the corporeal, nor from the sensual: it implicates the body in schemes of both perception and thought that resonate with some phenomenological writings of the period, to which I will turn in Part three. For now, I am reminded of Friedrich Nietzsche's characterisation of thoughts as 'the shadows of our sensations – always darker, emptier, simpler than they',⁵³ thus characterising thought as a

⁵¹ Levin has remarked that it is as if 'Siegfried is the actor under Hagen's direction' (Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, p.111). Such a reading of Hagen and Gunther, as the ersatz director and camera operator, opens up the striking visual correspondences between these images and contemporary photographs that feature the shadow of the photographer, such as Lewis Hine's *Self-Portrait with Newsboy* (1908) (fig. 1.22), and particularly Alfred Stieglitz's *Shadows in Lake* (1916) (fig. 1.23).

⁵² Lippit, *Atomic Light (Shadow Optics)*, p.69.

⁵³ Friedrich Nietzsche, *Gay Science* (New York: Vintage Books, 1974), p.203. For the original German, see *Die Fröhliche Wissenschaft* (Frankfurt: Insel Verlag, 1982), p.158: 'Gedanken sind die Schatten unserer Empfindungen – immer dunkler, leerer, einfacher als diese.' David Michael Kleinberg-Levin

condition of and in deference to the senses, which I will go on to explore further in this chapter.

*

This initial part has begun to unpack an understanding of the invisible body as an agent of thought, thinking, interiority and the intellect, and so serves as an important introduction to the main movements of this chapter. Falling before Siegfried's invisible body, the image of his shadow literally foreshadows a fuller explication of his invisible form. It speaks of the materiality and mortality of that body, and portends an understanding of the nature and culture of this invisible form, but also begins to express a relationship between invisibility, thinking and the body. In the dark spot of vision that this shadow brings can be found the beginnings of a system of thinking for which a kind of embodied invisibility is an essential component. Part two will move beyond this shadow in order to explore in detail the succeeding eight-minute sequence in which Siegfried's invisible body is fully visualised and its constitution further elaborated. As has been shown, in cinema, shadow is a necessary darkness: the medium of invisibility that enables the visual to be reproduced and represented. If this tension between light and shadow can be thought of as a defining medium of the visual sense, such tension in Siegfried's shadow invites its viewers into a phase of meditation upon the invisible body in which invisible form is made distinctly visible, and through which the nature of the senses themselves, and of their relationship with cinema, might begin to be interrogated. Part two will thus take some time to question the nature and identity of this body, before bringing in again the matter of its invisibility.

remarks that: 'It is not until Nietzsche that the presence of shadows, adumbrations, and foreshadowings will be received with an appropriate regard for the subversive truth they announce.' (David Michael Kleinberg-Levin, *The Philosopher's Gaze: Modernity in the Shadows of Enlightenment* (Berkeley, CA: University of California Press, 1999), p.414.)

Two: The Constitution of the Invisible Body

With the matter of Siegfried's invisible body thus approached via a dark vision of shadow, the film's viewer is encouraged to scrutinise what can be understood as an underside of vision, and in doing so to understand something more of the body that will not be seen. Eisner's forceful contention that '[n]othing in Lang is façade; everything is three-dimensional and spatial' suggests an exploration beyond the shadow on the ground, to flesh out the invisible body, its materialities and physicalities. I shall begin such an exploration here through interrogating that which the shadow brings. As indicated earlier, Siegfried's invisibility is employed to assist Gunther as the king meets Brunhild's challenge, in which, as she informs him, he must triumph three times in order to capture her: 'in the stone hurl, in the distance jump, in the spear throw!'⁵⁴ Confident, in light of the sight of the shadow, of Siegfried's assistance, the emboldened Gunther makes a fist, the thrown shadow of which deepens gradually upon Brunhild's shield, aligning absolutely Gunther's pretence of might with the presence of Siegfried's shadow (fig. 1.24). The contest begins: Brunhild immediately demonstrates great strength and agility as she throws a huge rock an incredible distance, before leaping through the air to cover the same ground, standing triumphantly as her people, all women, surround her. As the watching Gunther glowers, in the darkness behind him the face of the still invisible Siegfried emerges into view. Siegfried's strange visibility here operates in sympathy with his speech, as he whispers into the king's ear to 'stay strong', telling him that 'I shall sling the stone for you! I shall carry you in the jump!' (fig. 1.25).⁵⁵ When Gunther then leans forward to collect a giant rock, it seems to rise miraculously from the ground; strong arms momentarily fade into view, showing Siegfried secretly lifting the rock on the king's behalf, before besting the distance of Brunhild's throw (fig. 1.26). For the second challenge, the full body of Siegfried appears, still brightly lit and semi-transparent to confirm his invisibility, as he bends to lift Gunther, carrying him in a giant leap (fig. 1.27). With this done, the final contest begins, and a

⁵⁴ When quoting from the film's intertitles, I refer to the English translation used in the 2012 DVD release by Eureka. The original German intertitle reads: 'Dreimal muß Du mich besiegen, König: im Steinstoß, im Weitsprung, im Speerwurf!'

⁵⁵ The original German intertitle reads: 'Sei guten Mutes, König! Ich schleudre für Dich den Stein! Im Sprunge trage ich Dich!'

disturbed Brunhild takes up her shield and spear, which she prepares to launch. As Gunther defensively holds up Hagen's shield, Siegfried again fades into view, his lips once more whispering into Gunther's ear as he braces the shield with his powerful arms (fig. 1.28). With Siegfried's invisible assistance, Brunhild's spear is harmlessly deflected (fig. 1.29). As Gunther readies himself to throw the spear back at his opponent, a cut introduces a close view of his dark, gloved hand grasping the weapon's shaft. Siegfried's rising hand then fades into view, bare and dazzlingly bright (fig. 1.30), to take hold of the spear and launch it into Brunhild's shield, which is split in two; the deceived Queen is left on her knees, broken and distraught, as a fade out signals the end of this sequence (fig. 1.31). In this section, I will further probe the flesh of the invisible body, both by more closely examining its apparent material properties and by enfleshing the chapter's opening themes in a more particular historical and cultural context.

The relatively dark palette of this sequence provides one indication that the arena of the shadow has been entered into; the dark tones are also necessary to properly accommodate the bright appearances of Siegfried's diegetically invisible body. To make this effect a legible one, this body has been necessarily overexposed, and this exaggerated non-diegetic lighting reveals something of the studio setting, and the film's wider reliance upon artificial and electric spotlighting, itself innovative for the time.⁵⁶ Siegfried's initial introduction at the outset of the film makes use of similarly dazzling light in an ostentatious depiction of his powerful upper torso – naked until he enters the civilised, clothed society of Worms – that is strongly lit from beneath to emphasise his physicality as he powerfully forges his sword, Gram, in the smithy, while his weak supervisor Mime cowers in the corner of the room (fig. 1.32).⁵⁷ This performance of forging is also suggestive of the particular construction of Siegfried's body, its corporeal frame thus infused with attributes of iron or steel. As Sabine Kienitz has observed, many Germans hoped that the First World War would serve as a 'steel bath' [*Stahlbad*] that 'would discipline and transform the man

⁵⁶ For more on lighting in 1920s German cinema, see Frances Guerin, *A Culture of Light: Cinema and Technology in 1920s Germany* (Minneapolis and London: University of Minnesota Press, 2005).

⁵⁷ Levin describes well the numerous binary oppositions between Siegfried and Mime in this opening scene: 'Mime functions as an implicit visual foil to the strapping hero: Siegfried is tall, Mime is a dwarf; Siegfried occupies the center of the screen, Mime and his assistant occupy its margins; Siegfried laughs, Mime scowls; Siegfried strides, Mime shuffles; Siegfried is trusting, Mime is a schemer; Siegfried is strong, Mime is weak; Siegfried has flowing blond hair, Mime's hair is wild and dark. Here, then, is a good object of identification – offset, presumably to underscore his appeal, by a bad object.' (Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, pp.102–103.)

softened by civilian society into a soldier hard as metal', a notion of hard masculinity further popularised by Ernst Jünger in his 1920 book *Storm of Steel*.⁵⁸ While the poem *Das Nibelungenlied* describes the Tarnkappe as endowing Siegfried with 'the strength of twelve beyond that of his own powerful frame',⁵⁹ here, in *Siegfried*, the character's immense strength appears more natural than supernatural, with the actor Paul Richter's physical presence demonstrating something of the enthusiasm for strong, athletic bodies in 1920s Germany. Anton Kaes has argued that Richter's body in this role is employed with the task of performing the German nation: its sculptural qualities and the poses it enacts combine in a statuesque body 'harking back to Greek art and foreshadowing the Nazis' appropriation of it'.⁶⁰

This sense of Siegfried's material integrity is repeatedly presented in stark contrast to a visual lexicon of dissolution in which he is shrouded by visible vapours of one kind or another, an effect that also contributes to his aura of the supernatural. He is shown surrounded by steam when working in the smithy (fig. 1.33), riding through the misty Odenwald forest (fig. 1.34) and the dense fog of the Nibelung realm (fig. 1.35),⁶¹ standing near the spray of a waterfall (fig. 1.36) and contending with the smoke that issues from a dragon's maw (fig. 1.37). His corporeal attributes of density, strength and power are only exacerbated when Siegfried slays the dragon and bathes in its blood and so becomes almost entirely invincible (fig. 1.38). In these early scenes the vital presence of Siegfried's body is exaggerated in sympathy with the audience's probable familiarity with its tragic vulnerability. This tension between invincibility

⁵⁸ Sabine Kienitz, 'Body Damage: War Disability and Constructions of Masculinity in Weimar Germany', in *Home/Front: The Military, War and Gender in Twentieth Century Germany*, ed. by Karen Hagemann and Stefanie Schüler-Springorum (Oxford and New York, 2002), pp.181–203 (p.181). Kienitz goes on to explore the multiple ways in which 'the male body of the soldier [...] stood at the convergence of the threats of war technology' and how 'its psychic and physical destruction – that is to say, the perception, processing and remembrance of it, particularly with regard to contemporary constructions of masculinity – has only just begun to be studied' (p.183). Kienitz continues to say that: 'Even if the body does not produce and present gender from within itself, it does represent a key medium of social communication through which the objectivity of the symbolic order of the sexes is constructed. [...] The materiality of the body has a highly symbolic quality, through which among other things gender, gender difference and gender identity are constructed in social action.' (pp.185–186.)

⁵⁹ *The Nibelungenlied*, trans. by A.T. Hatto, revised edn (London: Penguin Books, 1969), p.54.

⁶⁰ Anton Kaes, 'Siegfried – A German Film Star Performing the Nation in Lang's *Nibelungen* Film', in *The German Cinema Book*, ed. by Tim Bergfelder, Erica Carter and Deniz Göktürk (London: British Film Institute, 2002), pp.63–70 (p.63). Paul Richter's physique as Siegfried is also discussed in Karin Bruns, *Kinomythen 1920–1945: Die Filmentwürfe der Thea von Harbou* (Stuttgart: Metzler, 1995).

⁶¹ According to Eisner, this 'dense mist [...] was produced by the use of fire extinguishers. Since it was a hot spring day, the wan sunbeams pouring through the glass walls and roof [at the Neubabelsberg studio] gave the suspended vapour and [sic] eerie atmospheric affect [sic]. Lang attempted to repeat the effect, but at the next try the fog simply dispersed about the studio.' (Eisner, *Fritz Lang*, p.75.)

and corporeal fragility can be read in relation to the post-war context from which the film emerges. The vaporous atmospheres of the smithy that swirl about Siegfried's bare body indicate an intense thermodynamic regime and imbue the film's fantasy, pseudo-historical milieu with properties of the industrial age; although endowed with magical properties, Siegfried's body is clearly enlivened by this industrial context.⁶² It speaks for the First World War's violent intensification of interactions between body and environment: a climax of industrial accident, in which the integrity and fragility of the human body must be rethought. The crystallisation of such a philosophical process finds apt expression in the powerful yet tragically mortal figure of Siegfried. The inescapable drawing of the naive, rural Siegfried into the machinations of politics and war, with fatal consequences for his seemingly invincible body, resonated with many audiences around Europe, but particularly in the film's native Germany, where the cost of war – with over two million military deaths and over four million military wounded – had been so high.⁶³ That the physicality of Siegfried's body is manipulated by the scheming political minds of Gunther and Hagen, before being fatally discarded, connects him securely with many ordinary soldiers whose enthusiastic commitment to fight in the First World War was to serve opaque political ends.⁶⁴

In its passage from the statuesque towards decay, Siegfried's body can thus be thought of as a hysterically dissolving, dematerialising one, and it is through its invisibility that these tensions can most potently be expressed. Petra Rau describes 1920s Germany as 'the site of a sceptical discourse about what modernity does to the body', noting the nation to be 'increasingly seen as an aggressive and hyperbolic manifestation' of 'this "bad" modernity of the mechanistic age'; she also emphasises the role of 'German counter-impulses, which, from the 1890s onwards, demanded the liberation of the body from industrial instrumentalization through the life reform movement, *Freikörperkultur*, physical culture and the *Wandervogel* youth

⁶² Writing about the effect of the First World War on German cinema, Kaes remarks upon the '[glaring] contradiction between modern industrialized war and the irrational, illogical, and fantastic within it', referring to Ernst Jünger's 1920 description of combat experience as 'like a ghostly manifestation in broad daylight', and to Eric Leed's 1979 assertion that the war 'created the setting for irrational thoughts and unbidden associations' (Kaes, *Shell Shock Cinema*, p.122).

⁶³ Lang himself had been wounded during the First World War.

⁶⁴ Indeed, Kaes devotes a chapter of his book *Shell Shock Cinema*, entitled 'Myth, Murder, and Revenge', to an exegesis of Lang and Von Harbou's *Die Nibelungen*, in which he notes that the films' 'postwar popularity' suggests they were 'part of a widespread discourse that sought to work through the traumatic experience of war and national defeat' (Kaes, *Shell Shock Cinema*, pp.131–166 (p.146)). Dieter Dürrenmatt also describes the films as a challenge to aspects of the Versailles Treaty (Dieter Dürrenmatt, *Fritz Lang: Lenen und Werk* (Basel: Museum des Films, 1982)).

movement’, citing this as a ‘genuinely popular, organized mass phenomena that would characterize German corporeal modernity in the 1920s, reaching across classes and political affiliations’. *Siegfried* thus evokes this climate that, Rau argues, indicated for some contemporary observers ‘Germany’s wholesome *return* to an old, more organic way of life, mythical in its corporeal power’.⁶⁵ It is such a scheme of oppositional tendencies and corporeal uncertainties that *Siegfried* bridges and articulates, constructing its paradoxical depiction of a body both invincible and fatally vulnerable, and that is visibly invisible.⁶⁶

Most strikingly contrasted with Siegfried’s frame is that of the ineffectual King Gunther, and it is through the intricacies of their physical relationship that a further interrogation can proceed: of the operations of the invisible body as part of a performance of uncertain and overdetermined masculinity, the kind of attempted ‘remasculinisation’ that, as a number of recent works have suggested, was a pervasive method of accommodating the emasculations of the male First World War experience. Such emasculations went beyond the exposure to wounding, corresponding with the evolving women’s movement and the changing roles for women at this time.⁶⁷ Typical of this is the evolving 1920s characterisation of the ‘new man’, the

⁶⁵ Petra Rau, *English Modernism, National Identity and the Germans, 1890–1950* (Farnham: Ashgate, 2009), pp.121–122. Rau here refers primarily to the work of D.H. Lawrence, including his story ‘The Captain’s Doll’, published in 1923 and set in Austria and Germany. In that work, Lawrence writes of ‘the crowds of strapping, powerful fellows who bathed all day long, magnificent blond flesh of men and women. No wonder the old Romans stood in astonishment before the huge blond limbs of the savage Germana. [...] Everything so physical. Such magnificent naked limbs and naked bodies, and in the streets, in the hotels, everywhere, bare, white arms of women and bare, brown, powerful knees and thighs of men. The sense of flesh everywhere, and the endless ache of flesh. Even in the peasants who rowed across the lake, standing and rowing with a slow, heavy, gondolier motion at the one curved oar, there was the same endless ache of physical yearning.’ Rau emphasises ‘the context of a nostalgic return to a pastoral, non-mechanistic age that is a reaction to the cataclysm of war (that other symptom of disastrous modernity)’ (p.122).

⁶⁶ Some other works that discuss German and European bodies in the early twentieth century include: Harold B. Segel, *Body Ascendant: Modernism and the Physical Imperative* (Baltimore: Johns Hopkins University Press, 1998); Michael Hau, *The Cult of Health and Beauty in Germany: A Social History, 1890–1930* (Chicago: University of Chicago Press, 2003); Chad Ross, *Naked Germany: Health, Race and the Nation* (Oxford and New York: Berg, 2005); Christopher Wilk, ‘The Healthy Body Culture’, *Modernism: Designing a New World, 1914–1939* (London: V&A Publications, 2006), pp.249–295. On male bodies in the period, see Joanna Bourke, *Dismembering the Male: Men’s Bodies, Britain and the Great War* (London: Reaktion Books, 1996).

⁶⁷ Fintan Walsh has observed that ‘recent studies have revealed how throughout the twentieth century, national crises and trauma (translated as emasculating) have been quickly followed by periods of remasculinization’, giving one example as the work of George L. Mosse, who ‘identifies the rise of Fascism in 1920s Germany as the assertion of a fanatical, militaristic masculinity in response to national humiliation at the Treaty of Versailles following the First World War’. (Fintan Walsh, *Male Trouble: Masculinity and the Performance of Crisis* (Basingstoke: Palgrave Macmillan, 2010), p.9; George L. Mosse, *The Image of Man: The Creation of Modern Masculinity* (New York and Oxford: Oxford University Press, 1996).)

fashionable figure that Susan Laikin Funkenstein describes as a ‘rational and matter-of-fact figure’, who is known ‘for his style and embodiment of a modern, mechanized, and capitalist society’ and ‘associated with Fordist efficiency, clarity of vision, and precision of movement’.⁶⁸ Funkenstein refers to Siegfried Kracauer’s 1925 summary of the new man in terms of a ‘[c]leanly shaved face, whose cool features, apart from being characterized by intellect, renounce any individual meaning’, and whose ‘conditioned sportsman’s body’ effected ‘controlled movements’ and ‘inconspicuous behaviour’,⁶⁹ also citing Rudolf Kayser’s 1925 understanding of the new man’s appearance as ‘beardless with a sharp profile, a resolute look in the eyes, and a steely, thin body’.⁷⁰ These descriptions resonate strongly with that of Siegfried, though with some significant inconsistencies. While it would be too much of a stretch to describe the naive Siegfried as ‘characterized by intellect’, it can instead be observed how his invisible presence operates as a medium of interiority and the intellectual: its strange visualisation enabling the viewing of an act of embodied thinking. Similarly, Siegfried’s magical, mythological invisibility can be thought of as undermining the strong sense of rationality that drives many conceptions of the new man, though this deft handling of magic and propensity for invisibility can also be framed in terms of a fluency of technological expression in which are found traces not of magic but of the vicissitudes of the cinematic apparatus. But where the figure of Siegfried comes closest to the new man is in his corporeal negotiation of both visibility and the inconspicuous: well expressed in the visible invisibility of his sculpted body.

Similar tendencies can also be observed in the other high-profile case of invisible presence in 1924: that of the American film *The Thief of Bagdad* (Raoul Walsh).⁷¹ Late in the film, the eponymous thief demonstrates acuity as he intuitively

⁶⁸ Susan Laikin Funkenstein, ‘A Man’s Place in a Woman’s World: Otto Dix, Social Dancing, and Constructions of Masculinity in Weimar Germany’, in *Women in German Yearbook: Feminist Studies in German Literature and Culture (Volume 21)*, ed. by Marjorie Gelus and Helga Kraft (Lincoln, NE: University of Nebraska, 2005), pp.163–191 (p.170).

⁶⁹ Siegfried Kracauer, *Der Detektiv-Roman: Ein philosophischer Traktat* (Frankfurt: Suhrkamp, 1971), p.53 (qtd and trans. in Janet Ward, *Weimar Surfaces: Urban Visual Culture in 1920s Germany* (Berkeley: University of California Press, 2001), p.60). Kracauer refers to the figure of the detective as an exemplar of the ‘new man’.

⁷⁰ Rudolph Kayser, ‘Americanism’ (1925) (republished in *The Weimar Republic Sourcebook*, ed. and trans. by Anton Kaes, Martin Jay, and Edward Dimendberg (Berkeley: University of California Press, 1994), pp.395–397 (p.395)). (Funkenstein, ‘A Man’s Place in a Woman’s World’, p.171.) Funkenstein goes on to say: ‘More than his physicality or his attitude, the Weimar New Man symbolized the United States [...] [and exemplified a desire] to associate oneself with American economic and cultural traits (such as efficiency, technology, freedom, and youth)’ (p.171).

⁷¹ *The Thief of Bagdad* was first shown at the Liberty Theater in New York on 18 March 1924, less than one month after *Siegfried* had premiered at the Ufa Palast am Zoo cinema in Berlin on 24

uncovers a ‘magic chest’ concealed beneath a ‘cloak of invisibility’ (fig. 1.39). When the thief comes to use the cloak, his disappeared form is that of a cyclonic force that breaks through ranks of soldiers to enter an impenetrable palace, through which the vaguely shimmering distortion of his powerful invisible form swiftly whirls, defeating many guards before carrying away the imprisoned princess, removing the cloak only for the two to share a sensual kiss (fig. 1.40). These moments of bodily invisibility emphasise the physical might of the invisible body, which operates as an elemental, cyclonic force, extending the thief’s already dynamic masculine physicality – as played by the film’s producer Douglas Fairbanks, he is acrobatic, shirtless and white – to a new level. Indeed, along with actors such as Fairbanks, Rudolph Valentino and Ramon Novarro, the figure of Paul Richter can be considered in relation to George L. Mosse’s contention that ‘the middle and late 1920s saw the rise of the male film star as a sex symbol’.⁷² Of such male stars, Mosse writes that: ‘He was immeasurably strong, wise, and subtle; his body would become more harmonious, his movements more rhythmic, his voice more musical’.⁷³ In their invisible forms, both Fairbanks and Richter can be understood to exemplify the kind of American athleticism and ingenuity that, when exported to Europe, strongly informed conceptions of the Weimar new man, such as in Kayser’s assertion, in defining the new man, that it is ‘altogether fitting to the method of Americanism that it expresses itself very strongly in the corporal, that it possesses body-soul’ and that it ‘has a strong and exact relation not only to the exactness of a machine, organization, economy, but also to nature’.⁷⁴

Siegfried’s visually unstable body, whose vacillation between visibility and invisibility frames it as a *parainvisible* object and resonates with its further vacillations between vitality and frailty, can be persuasively read as symptomatic of what has been described as ‘Weimar masculinity in crisis’.⁷⁵ The sequence I am interrogating, in which a somewhat anxious and intermingling confusion of

February. Both films have been understood as important to the fantasy genre in cinema, both are adapted from influential literary sources (*One Thousand and One Nights* and *Das Nibelungenlied* respectively), and both had been similarly expensive to produce; apparently *The Thief of Bagdad* cost \$1,135,654.65 (Jeffrey Vance and Tony Maietta, *Douglas Fairbanks* (Berkeley, CA: University of California Press, 2008), p.153).

⁷² Mosse, *The Image of Man*, p.146.

⁷³ Mosse, *The Image of Man*, p.127.

⁷⁴ Kayser, ‘Americanism’, pp.395, 396.

⁷⁵ This term is used in relation to the cinematic expression of this phenomenon in, for example, Thomas Elsaesser, *Weimar Cinema and After: Germany’s Historical Imaginary* (Abingdon and New York: Routledge, 2000), p.170. Further discussion of this theme can be found in Klaus Theweleit, *Male Fantasies*, trans. by Erica Carter, Stephen Conway and Chris Turner, 2 vols (Minneapolis: University of Minnesota Press, 1987–1989).

masculinities are faced off against an army of women led by the powerful Brunhild, locates fluxing masculine identity in relation to a particular kind of female role, which, in a context in which German women were first able to vote at a national level the day after the First World War had ended,⁷⁶ itself communicates something of the post-war shifts in traditional female roles in German and European society. This is a context of social change that involves shifting gender identities and roles, and in which an invisible male body stands against a vision of wholly emancipated woman – the ‘new woman’ – the representative of what has been called ‘first-wave feminism’. Brunhild’s defeat thus reflects Barbara D. Wright’s suggestion that ‘the conceptual framework of which the “new man” was a part literally demanded as his complementary opposite an “eternal” – or in our view, a very traditional – kind of woman. In other words, the “new man” simply cannot be adequately understood without “woman.”’⁷⁷

When, in *Siegfried*, Gunther again enlists Siegfried’s assistance in overpowering Brunhild, to whom he is now married and who resists his sexual advances, it is a restatement of the earlier event. That the smashing of Brunhild’s shield can be understood as symbolic of her rape is confirmed when Siegfried, having used the Tarnkappe not to become invisible but to take the form of Gunther, forces Brunhild to submit in the king’s bedchamber, so cementing the king’s illegitimate domination over her.⁷⁸ As Siegfried’s body metamorphoses, affecting the weakened,

⁷⁶ In a surprise move, women’s suffrage had been granted by the Council of People’s Deputies [Rat der Volksbeauftragten] on 12 November 1918; women voters would participate in elections in the following January. See, for example, Kathleen Canning, *Gender History in Practice: Historical Perspectives on Bodies, Class, and Citizenship* (New York: Cornell University Press, 2006), p.218.

⁷⁷ Barbara D. Wright, “New Man”, *Eternal Woman: Expressionist Responses to German Feminism*, *The German Quarterly*, 60.4 (Autumn 1987), 582–599 (p.583). If the strong and independent Brunhild embodies, in some ways, the ‘new woman’, she also disturbs the conservative status quo, and the philosophies of the 1920s German right. As Rüdiger Graf writes, ‘publicists of the political right tended, in general, to confine women to their traditional female roles and tasks. Only an orientation of women toward their alleged “nature”, to the home and the family, was supposed to contribute to Germany’s re-emergence. To the realization of the new man and a new time. In the end, many authors of the right claimed that the “new man” demanded of the woman, above all, to be a mother. While there was space for women in distinctly female occupations, “new women”, economically independent, unmarried, and unwilling to have children, posed a serious threat toward this right-wing vision of national renewal. Rather than anticipating Germany’s future, they were attacked as embodiments of its possible future decline and destruction’. (Rüdiger Graf, ‘Anticipating the Future in the Present: “New Women” and Other Beings of the Future in Weimar Germany’, *Central European History*, 42.4 (December 2009), 647–673 (p.670).) The figure of Brunhild clearly fits this profile of the ‘new woman’: ‘economically independent, unmarried, and unwilling to have children’.

⁷⁸ In *Das Nibelungenlied*, having told Gunther that ‘I shall enter your room in my magic cloak so secretly that none shall see through my wiles’, Siegfried extinguishes the lights and in his invisible form forces Brunhild to submit, before Gunther takes his place and Siegfried thus departs (*The Nibelungenlied*, p.90). This English prose translation is based primarily upon Manuscript B, in which

ineffectual frame of Gunther, its instability performs a vacillation between alternative masculinities (fig. 1.41). Siegfried's disguise again accompanies a self-conscious and hysterical performance in which sexual potency and impotence coincide. The earlier sequence of invisible combat is discussed in psychoanalytical terms by David Levin, who reads this sequence as 'a graphic account of the threat of castration', and the scheme as 'one that renders the phallus covert'.⁷⁹ As Levin explains:

When Siegfried (dis-)appears as Gunther's invisible aide, the film prefigures the literal terms of Lacan's famous claim that the phallus can only play its role when veiled. Here the phallic claim is issued in its withdrawal: it would appear that Gunther is powerless, but the phallus – in its new, improved, invisible form – is with him. And that is the problem, for although the phallus is with him, it is not his to wield. In thus gaining Brunhild for Gunther, Siegfried rescues phallic authority, both in the particular (and particularly emasculated) form of King Gunther, but also in the more general sense of regaining the phallus for men. Despite Gunther's apparent victory – or because it is merely apparent – the king's claims to Brunhild and his authority over her are hardly legitimate: she will challenge them soon enough.⁸⁰

The key function of Siegfried's invisibility is its facilitation of a masquerade of power: Siegfried's invisible presence disguises the visible weakness of King Gunther to effect an undeserved and improbable victory over Brunhild, who is thence subjected to both rape and imperialism. It is this maintenance of a conservative order of gender relations that makes this invisible body so appropriate as representative of the qualities of the new man: as a force for conservatism that operates behind and beneath its pretensions towards newness. Just as they are expressed, however, these achievements are undermined by the double image that is seen, which makes explicit the construction and artifice of this deceit through which Brunhild is reduced to an 'eternal woman', the forever enfeebled female counterpart to the dynamic new man.

The construction of this strong white body is observed in tandem with its invisible performance as part of King Gunther's conquest of Queen Brunhild and her lands, and such a confluence connects with Richard Dyer's understanding of how constructions of whiteness in western culture – what he describes as the 'invisibility of whiteness' – propagate repressive and difficult to identify schemes of power. With

no instance of metamorphosis is described, though in some later variations on the story the Tarnkappe (or its equivalent device) does perform this function. Sometimes, as in the *Völsungasaga*, the cause of the transformation is a spell or potion.

⁷⁹ Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, p.110.

⁸⁰ Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, p.110.

specific reference to *Siegfried*, Dyer's contention that 'the built body and the imperial enterprise are analogous' carries particular weight.⁸¹ As he continues:

The built body sees the body as submitted to and glorified by the planning and ambition of the mind; colonial worlds are likewise represented as inchoate terrain needing the skill, sense and vision of the coloniser to be brought to order. The muscle hero has landscaped his body with muscles and he controls them superbly and sagely; the lands of the muscle film are enfeebled or raw bodies requiring discipline. The built white male body and colonial enterprise act as mirrors of each other, and both, even as they display the white man's magnificent corporeality, tell of the spirit within.⁸²

This passage could easily serve as description for the defeat of Brunhild, amidst the 'inchoate terrain' of Iceland, while the queen's absolute ignorance of Siegfried's empowering presence only seems to exacerbate Dyer's point.⁸³

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As has been shown, the cinematic body of Siegfried, and its propensity for invisibility, can be understood as having been stimulated in relation to a collection of cultural concerns in and around 1920s Germany, although the particular constitution of this body complicates any attempt to produce a stable and absolute interpretation. With these cultural contexts of corporeality in mind, it is time to draw closer in an exploration of precisely how the peculiarities of this invisible body are manifested on screen, accommodating in this venture some pertinent theoretical components from contemporary writings on both film and philosophy. Part three will thus move towards a closer understanding of the sensual experience in which this particular body is engaged. If the visualisation of Siegfried's invisibility can be considered as a hysterical exhibition of unstable and insecure identity – of both masculine identity and corporeal identity – then its presentation can also be considered in terms of unstable sensory identity. In the paradoxical site at which visibility and invisibility coincide, in

⁸¹ Richard Dyer, *White* (London and New York: Routledge, 1997), pp.3, 165.

⁸² Dyer, *White*, p.165.

⁸³ John Tercier invokes Dyer when he writes that: 'In Western culture, the fact that whiteness is the norm cloaks it with invisibility. It allows the white man to attain the Enlightenment intellectual ideal, the observing subject without properties – that is to say an object. [...] But there is a price to be paid for this cloak of invisibility; underneath it lurks [in Dyer's words] the "desolate suspicion of non-existence", the erasure of subjectivity – death.' (John Tercier, 'Introduction', in *Room 5*, 1.1 [Whiteness] (London: Lawrence and Wishart, 2000), 16–21 (p.20).)

which the invisible body is firmly located, is there instituted a sensual language – a language of sensuality – that can be interrogated and so comprehended? Part three will ask: To what extent is this vision of Siegfried’s body to be understood in extra-visual terms, as a *feeling* for the body, a *hearing* of the body, or a *thinking* with the body? How, indeed, can such an understanding assist in an address of the paradoxes inherent in this visible–invisible, vulnerable–invulnerable form, thus producing a critical penetration that recognises Siegfried’s apparently superhuman body as an exemplary human one?

Three: Invisibilities, Sensualities

One way of approaching the intimacies of Siegfried’s invisible body is to consider the method through which its invisibility is generated. To enter into invisibility, Siegfried operates the Tarnkappe, and does so privately.⁸⁴ The poem *Das Nibelungenlied* describes how this device allows its user to become ‘invisible to all’ and so move ‘secretly and unseen’, and it is such a concealing garment, with ‘kappe’ signifying cloak or hood, that facilitates Siegfried’s invisibility in most versions of the story.⁸⁵ The particularly ragged, webbed design of this textile in *Siegfried* serves to emphasise the tactility of the object.⁸⁶ Siegfried wins the Tarnkappe after being attacked in the mist by the dwarf Alberich; Siegfried’s agility and strength are too much for the dwarf, whose invisibility is ineffective as Siegfried deftly places his hands on his

⁸⁴ Each of the three times the Tarnkappe is used in the film, the user puts it on in secrecy, in an unobserved place: Alberich in the hollow of a tree; Siegfried outside the Icelandic castle door; and, finally, Siegfried outside Brunhild’s quarters. The poem itself relates how the Tarnkappe is fetched ‘from its hiding place’, and after being used it is noted that Siegfried ‘had the prudence to take his magic cloak and stow it away again’ (*The Nibelungenlied*, pp.64, 68).

⁸⁵ *The Nibelungenlied*, p.64. The Tarnkappe is one of a number of magical objects, in Germanic, and other, mythological traditions, that have the power of bestowing invisibility upon their wearer. Other similar items include, in Germanic mythology, the *Wunschkapen* [wishing cloak], the *Vogelnest* [bird’s nest], the *Wishing Hat*, and from other traditions, the *uddehatt* [cape hat], the *Ring of Gyges* and *Arthur’s Mantle*. Michael Haldane notes that devices like the Tarnkappe promote ‘a moral anxiety as to how the individual would handle the freedom of being unseen, and the fear of active invisibility. Wearing Gyges’s ring or the Wishing-Hat may also entail corruption, conferring the liberty to fulfil dark, suppressed desires; and humankind may find it easier to avoid temptation than to take the test and resist.’ (Michael Haldane, ‘From Plato to Pullman – The Circle of Invisibility and Parallel Worlds: *Fortunatus*, Mercury and the Wishing-Hat, Part II’, *Folklore*, 117.3 (December 2006), 261–278 (p.267)).

⁸⁶ The imagery of the film might be contrasted with alternative visualisations of this scenario, such as Eugen Neureuther’s illustration for an 1843 edition of the story (fig. 1.42) (*Der Nibelungen Noth* (Stuttgart: J.G. Cotta, 1843), p.85).

assailant, nimbly using his fingers in place of his eyes (fig. 1.43). The dynamic motion of Siegfried's body is intensified as Richter mimes the presence of Alberich's invisible body, before stretching out his fingers in space as a cut shows Siegfried to have seized the Tarnkappe from Alberich's head (fig. 1.44). This sensory conjunction of sight and touch is important. As a hand-held device that maps to the contours of the head, the Tarnkappe's contact with both fingers and face engages the senses at the moment it makes the body invisible: covering the eyes, but also the brain, the ostensible location of thinking.⁸⁷ Further to this, it is Siegfried's fingering of the Tarnkappe, prior to defeating Brunhild, that reveals the beginning of Siegfried's idea as to how he might defeat her (fig. 1.45); it is a thinking through touch: a tactile meditation upon invisibility. Siegfried may be a naive viewer, as is expressed well by commentators such as Frances Guerin and David Levin, but, as is seen here, he does much of his thinking not with his eyes but with his fingers.⁸⁸ The Tarnkappe's ability to enable Siegfried 'to take on any form', as the film states, correlates his invisibility with a sense of deeper corporeal instability, and the application of the invisibility device can thus be understood to associate unconventional modes of thought – thinking with the fingers – with a reconfiguration of sensory conventions.

It is notable that different adaptations describe the Tarnkappe in alternative ways, providing it with different functions. Hebbel's play *Die Nibelungen* (1860–1862) describes it as the Nebelkappe, meaning 'mist cloak', so conferring an indistinct, elemental invisibility,⁸⁹ while in Richard Wagner's opera *Der Ring des Nibelungen* (1848–1874) it is called the Tarnhelm, a magical helmet for which invisibility is a secondary function to metamorphosis and also teleportation.⁹⁰

⁸⁷ Haldane writes that the type of garment implied by 'kappe' also suggests travel: a disappearance in one place or space that may result in an appearance in another (Haldane, 'From Plato to Pullman', p.262); Haldane also argues that: 'The purpose of travel is to gain experience and knowledge, and as travel enriches the mind, it is perfectly natural that an object that facilitates travel should be one that covers the head' (Michael Haldane, 'The Translation of the Unseen Self: *Fortunatus*, Mercury and the Wishing-Hat', *Folklore*, 117.2 (August 2006), 171–189 (p.185)).

⁸⁸ See, for example: Guerin, *A Culture of Light*, pp.137–141; Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, pp.84–138. Levin refers to Siegfried's inefficient looking as a form of 'naive spectatorship' (p.9).

⁸⁹ As Haldane states: 'Following the etymology of the word, a *Nibelung* is someone surrounded by mist; and the cloak that confers invisibility, the *Tarnkappe*, is also called a *Nebelkappe* ("mist-cloak") in Middle High German' (Haldane, 'From Plato to Pullman', p.262).

⁹⁰ In Wagner's libretto, Alberich puts on the Tarnhelm and says 'Night annul me. / Nought be seen!' and then 'He vanishes, and a column of smoke takes his place.' (Richard Wagner, *Das Rheingold. Vorspiel zu der Trilogie: Der Ring des Nibelungen*, trans. by H. Corder and F. Corder (Mainz and London: Schott, 1882), p.41.) More emphatically emphasised is the Tarnhelm's power 'to turn thee to any shape; / or long'st thou for far-off lands, / in a flash, flight canst thou wing.' (Richard Wagner,

Interrogating the sources available to Von Harbou and Lang reveals that many versions of the story dispense altogether with the dimension of invisibility,⁹¹ such as the 1912 Italian film production, *Sigfrido [Siegfried]* (Mario Caserini), possibly the earliest screen adaptation of the story.⁹² If invisibility has been a relatively flexible and disposable attribute of the figure of Siegfried, then its central import for Von Harbou and Lang is remarkable, though this was not initially the case; both the screenplay of the film and the set designer Erich Kettelhut's memoirs describe the intention for Siegfried to appear as Gunther in the contest sequence, having used the Tarnkappe's powers for metamorphosis, not invisibility.⁹³ In describing this visually complex dimension of the story, the filmmakers were clearly keen to extend the possibilities of the cinematic medium, diverting from the screenplay in order to experiment with trick effects.⁹⁴ Located in the Tarnkappe are currents both of archaic magic and contemporary technology – the term itself would be adopted by the German military of the inter-war period to describe a small camouflage garment that was issued to soldiers –⁹⁵ and Siegfried's use of this device locates him in a category of cinematic beings whose supernatural abilities equate to the filmmakers' technological capacity to effect the impossible.⁹⁶ The conjunction emphasised in this Tarnkappe of invisibility and metamorphosis also brings out notions of alchemical

Götterdämmerung. Dritter Tag aus der Trilogie: Der Ring des Nibelungen, trans. by H. Corder and F. Corder (Mainz and London: Schott, 1876), p.22.)

⁹¹ In some adaptations of *Das Nibelungenlied*, the omission of Siegfried's invisibility is due to the incorporation of elements from the related Icelandic *Völsungasaga*, in which the phenomenon does not feature, and that itself had been popularly retold by William Morris in 1876. (William Morris, *The Story of Sigurd the Volsung and the Fall of the Niblungs* (London: Ellis and White, 1876).)

⁹² Although this film is now considered lost, its invisibility-less plot is described in detail in the following contemporary review: "'Siegfried': A Magnificent Three Reel Special from the German Hero Story by Ambrosio", *Moving Picture World*, 14.6 (19 November 1912), 545.

⁹³ Erich Kettelhut, *Der Schatten des Architekten* (München: Belleville, 2009). See, also, Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, p.110. Levin describes in detail some of the key differences between the screenplay and the completed film.

⁹⁴ As Guerin notes with reference to this film and others of the period, 'the recurrence of extraordinary special effects to represent magical forces strongly suggests that these myths and legends presented the challenge and opportunity to explore the technological capacities specific to the medium. Magical transformations were ideal for foregrounding the wonders of cinema.' (Guerin, *A Culture of Light*, p.113.)

⁹⁵ The military issue *Tarnkappe* was also called the *Zeltbahn*. See, for example, Jean-Denis G.G. Lepage, *Hitler Youth, 1922–1945: An Illustrated History* (Jefferson, NC and London: McFarland, 2009), pp.144–145.

⁹⁶ Guerin has described supernatural figures such as Count Orlok (in Murnau's *Nosferatu*) and Mephistopheles (in Murnau's *Faust*) to be 'the perfect vehicles for the display of the cinema at its most adventurous. They are proxy diegetic figures who enable a filmic representation of that which is most magical about the cinema. They perform magical tricks that transgress the logic of earthly time and space. And they revel in the special effects of the cinema to make these transgressions' (Guerin, *A Culture of Light*, p.121).

change, and it is in these reorganisations of body and image that the magical–industrial effects of the Tarnkappe express the nature of ‘trick’ effects of the time.⁹⁷

When Siegfried becomes invisible, pulling the Tarnkappe over his face, the gradual, steady disappearance is conveyed through a dissolve effect, a cinematic technique derived from magic lantern shows (fig. 1.46). This dissolve connects Siegfried’s disappearance with the latent dissolution of his body, and this sense of disintegration proceeds further in the succeeding sequence, as the impermeable unity of Siegfried’s body is undermined in its invisible form as it is visualised as fragmented body parts that fade into view through precise lighting effects (fig. 1.47). Again, these visual effects derive from a nineteenth-century imaging technique: the stage illusion popularised in 1862 as ‘Pepper’s Ghost’,⁹⁸ in which a sheet of reflective

⁹⁷ Many contemporary reviews singled out the special visual effects of *Siegfried* for especial praise. Following the film’s US release, the New York *Herald Tribune* noted that ‘the tricks of photography and the splendid effects for which the German films are famed appear in Siegfried’ (*Herald Tribune*, qtd in ‘“Siegfried” Surprises’, *The Film Daily*, 33.48 (25 August 1925) 1, 8 (p.8)), while Chicago’s *Photoplay* magazine remarked upon ‘[a] colossal and amazing achievement in film stagecraft and a triumph for the German magicians who work their arts at the Ufa studio’ (‘The Shadow Stage: A Review of the New Pictures’, *Photoplay Magazine*, 29.3 (August 1925) 50–53, 102–103 (p.50)), and Mordaunt Hall of the *New York Times* wrote of the film thus: ‘In a measure it is produced with a technique that belongs to old legends, and on this ground its failings may be overlooked. It matters not whether the characters are sufficiently convincing, as there is so much that is weird throughout this pictorial effort. But to take it as a narrative there are some entrancing incidents which are unfolded with a certain grace, aided greatly by the wizardry of the camera. [...] One wonders what will be the outcome of King Gunther’s journey, and, therefore, the assistance rendered him by Siegfried’s ability to cause himself to disappear is welcome to the viewer. This stretch is well filmed with double exposure of effects; these same photographic tricks enable other feats to be presented.’ (Mordaunt Hall, ‘Die Nibelungen: Siegfried (1924)’, *New York Times*, 24 August 1925 <<http://www.nytimes.com/1925/08/24/movies/104280480.html>> [accessed 14 April 2012] (paras. 2, 6 of 33)). The London journal *Pictures and the Picturegoer* wrote thus: ‘That the screen excels every other medium for the presentation of fantasy and legend this remarkable achievement clearly shows’ (‘Siegfried the Dragon Slayer: A Masterpiece of Artistic Production’, *Pictures and the Picturegoer*, 7.41 (May 1924), 12–13 (p.12)). The same magazine would later describe the film as ‘[a]n unusual and beautiful picturisation of the Siegfried myth, with fine trick effects’ (*Pictures and the Picturegoer*, 8.48 (December 1924), 95 (p.95)). Of those directly involved with the camerawork – Carl Hoffman, Gunther Rittau, Eugen Schüfftan and Walter Ruttmann – it is likely that Rittau was chiefly responsible for organising the invisibility and metamorphosis effects of dissolve and superimposition. Klaus Kreimeier notes that Rittau is somewhat guarded in discussing the effects used in *Metropolis* in interviews from the late 1920s, so suggesting that the retention of mystery concerning cinematic illusion may have been the policy of the film’s production company Ufa (Klaus Kreimeier, *The Ufa Story: A History of Germany’s Greatest Film Company, 1918–1945*, trans. by Robert and Rita Kimber (Berkeley, CA and London: University of California Press, 1999), p.155).

⁹⁸ Developed by Henry Dircks and John Henry Pepper, ‘Pepper’s Ghost’ was named after the latter, who first used the technique to depict the spectral double of the protagonist in a December 1862 stage production of Charles Dickens’s 1848 novella *The Haunted Man and the Ghost’s Bargain*. (See Helen Groth, ‘Reading Victorian Illusions: Dickens’s *Haunted Man* and Dr. Pepper’s “Ghost”’, *Victorian Studies*, 50.1 (Autumn 2007), 43–65.) Tom Gunning reflects that the case of Pepper’s Ghost allows us to understand that ‘as arts employing virtual images, cinema and magic move toward an intersection’ (Tom Gunning, ‘“We are Here and Not Here”: Late Nineteenth-Century Stage Magic and the Roots of Cinema in the Appearance (and Disappearance) of the Virtual Image’, in *A Companion to Early Cinema*, ed. by André Gaudreault, Nicolas Dulac and Santiago Hidalgo (Malden, MA: Wiley-

glass is angled in such a way between scene and viewer that it can present a bright but transparent reflection of an offstage figure within a comparably dark onstage environment. The transposition of this technique into screen media makes similar use of strong lighting and mirrored surfaces to bring into the frame elements of the off screen that would otherwise be invisible, and so introducing something of the off-screen conditions of the film's production. The dark environment against which Siegfried is seen to stand is occupied by the figure of Gunther. An enveloping darkness is essential to the success of the Pepper's Ghost illusion, but in *Siegfried* it also indicates an entry into the shadow of the invisible body, in which is found an alternative source of invisible, intellectual illumination: access to an alternative way of thinking about the body. Siegfried's supernatural attributes are well expressed through the bright superimposition that occurs, incorporating along the way attributes of double-exposure spirit photography, such as that perfected by William Mumler in the 1860s (fig. 1.48), and it is in this fusion of theatrical and photographic tradition that Siegfried's invisible body operates. The integration of Pepper's Ghost into the context of cinematic production fosters some particular shifts, however; Tom Gunning remarks that, in its stage incarnation, the illusion 'superimposed the world of the virtual image on the recognizable world of flesh and blood', producing a 'transparent phantom' that 'hovered over real actors, moving among them, visible yet immaterial, allowing sword thrusts to pass through its body and seeming to pass through walls and to dissolve into air'.⁹⁹ With this process refigured in the context of cinematic projection, it can be noted that the reflection of Siegfried's image renders it no less material than that of Gunther: it belongs to a body for which sword thrusts, as will be seen at the film's climax, pose a very real threat. And, yet, the immateriality of the 'phantom' expresses best its function as a psychological event – through which haunting can be associated with processes of memory and trauma – and, despite the physicality of the superimposed image of the invisible Siegfried, where the two processes come together is in their depiction of a psychological vision.¹⁰⁰ I will now

Blackwell, 2012), pp.52–63 (p.56)). A history of the Pepper's Ghost illusion is described in detail by John Henry Pepper in *The True History of Pepper's Ghost* (London: Cassell & Company, 1890).

⁹⁹ Gunning, "We are Here and Not Here", p.57.

¹⁰⁰ In Paul Rotha's study of cinema, first published in 1930 before being revised and enlarged, the author remarks upon the use of the mirror 'for the brilliant representation of a man's subconscious thoughts', noting a sequence in Ernö Metzner's 1928 short *Polizeibericht Überfall* [*Accident*], in which the reflections are grossly distorted, to demonstrate this technique 'at its best' (Paul Rotha, *The Film Till Now: A Survey of the Cinema* (New York: Twayne, 1960), pp.275–276).

consider the ways in which Siegfried's invisible presence provides a distinct phenomenon of both objective materiality and subjective interiority.

As with the symbol of the shadow, the cinematic description of invisible form in this sequence provides an opportunity to express something of the relationship between the cinematic apparatus and the apparatus of the mind. At the outset of his 1924 book *Visible Man*, the Hungarian film theorist Béla Balázs defines 'the cinematograph' as 'a technology for the multiplication and dissemination of the products of the human mind'.¹⁰¹ Siegfried's initial fading out, along with the subtle fades that occur throughout the sequence, can equally be considered in relation to Balázs's later thoughts, published in 1930 as part of his book *The Spirit of Film*, on such transitional visual effects: 'the fade elevates the image, as it were, out of natural space and the natural lapse of time, creating as it does the effect of *something thought rather than something seen*'.¹⁰² Balázs continues, asserting that, along with montage, 'the dissolve and trick photography – all devices of the absolute film – have made it possible to depict thoughts and symbols'.¹⁰³ A later section is entitled 'Optical Camera Technique':

The camera makes use of numerous purely optical devices to transform the concrete materiality of objects into a subjective vision. Dissolves, slow motion, time lapse, soft focus, fog filters, distortion, trick photography, etc., and all the wonders of the Schüfftan process. Such trick images show not just the object but also its transformation in our minds. Not just what happens to the object but also what happens simultaneously in us.

Our entire psychic apparatus is revealed in these transformations. If we could dissolve, distort, duplicate and superimpose a particular image, if, in other words, we could let the cinematic technology run on empty, as it were, then the technology 'in itself' would depict mind in itself.¹⁰⁴

Following Balázs's suggestion, I will approach the portrayal, in *Siegfried*, of the invisible body, as a depiction of 'mind in itself': an interiority that is dependent upon the actions and interactions of the body and that is expressed most insistently as its viewers strain themselves to observe this invisible figure and its constitution.

The trick effects of *Siegfried* impute associations that would be familiar to viewers of Lang and Von Harbou's previous film, 1922's two-part *Dr. Mabuse, der*

¹⁰¹ Béla Balázs, 'Visible Man', *Early Film Theory: Visible Man and The Spirit of Film*, ed. by Erica Carter, trans. by Rodney Livingstone (New York and Oxford: Berghahn Books, 2010), pp.1–90 (p.9).

¹⁰² Béla Balázs, 'The Spirit of Film', *Early Film Theory*, pp.91–230 (p.132).

¹⁰³ Balázs, 'The Spirit of Film', p.144.

¹⁰⁴ Balázs, 'The Spirit of Film', p.169.

Spieler, in which similar high-contrast superimpositions are used in a number of key moments to depict the ostensibly invisible stuff of cognition. One sequence shows documents secreted inside a closed briefcase, enabling the viewer to *see* what a character *knows* (fig. 1.49); later the technique is employed to signify Edgar Hull's (Paul Richter again) act of remembrance, when he 'sees' a suddenly recalled business card, his act of thinking manifesting as a superimposition over his head (fig. 1.50); a final sequence has the superimposed images of those killed by Mabuse appear to psychically torment him (fig. 1.51).¹⁰⁵ These instances code the technique of superimposition as part of a visual grammar to describe the invisible objects of the mind's eye, so resonating with Balázs's insistence on such effects as '*something thought rather than something seen*'.¹⁰⁶ Consequently, what is seen of the superimposed Siegfried represents more than a cinematically mediated vision of invisible matter. The idiosyncrasies of the sequence persuade the audience to share in privileged knowledge of Siegfried's invisible body; but whose knowledge is this? As I will demonstrate, the manner of these appearances suggest a privileged access to something of Gunther's consciousness, and that this vision of thinking is dependent upon the extra-visual stimulus experienced by that character: the senses of hearing and touch, and also of gravity, heat and balance.

With Brunhild identified as the figure for whom Siegfried's invisibility is so problematic, it is clear that part of this tension comes from Brunhild's attuned capacity for sight. She is first introduced, atop her castle that sits amidst the dazzling northern lights, in the midst of an intense and concentrated act of looking, and is thereafter shown frequently narrowing her eyes as she exercises an intent gaze (fig. 1.52).¹⁰⁷ And, yet, the potency of this gaze is thwarted by Siegfried's invisibility. Reflecting upon her presentation as a more than capable viewer, the nature of Brunhild's exclusion from the regime of invisibility can also come into question.

¹⁰⁵ It should be noted that the instances of superimposition in *Dr. Mabuse, der Spieler* are produced in a different way to those in *Siegfried*, with the strip of film being exposed on two separate occasions, rather than one. Although the technique is different, the result is very similar.

¹⁰⁶ Balázs, 'The Spirit of Film', p.132. Emphasis in original. In its depiction of psychoanalytical method, *Geheimnisse einer Seele* [*Secrets of a Soul*] (Georg Wilhelm Pabst, 1926) makes deft use of photographic superimposition (along with other processes, such as the dissolve) throughout a section entitled 'The Dream', in which the content of a character's dream is depicted in nightmarish detail, in a sequence that incorporates numerous distended shadows and silhouettes, and which is later decoded by a psychoanalyst who also necessarily operates as a shrewd film theorist. Perhaps a key difference, when considering these moments alongside similar superimpositions in *Siegfried*, is that, in the latter film, the images are both mental and material.

¹⁰⁷ Lang describes the realisation of this northern lights imagery as '[w]hat happens when mathematics, technology and imagination combine' (Lang, qtd in Eisner, *Fritz Lang*, p.76).

Brunhild's optical acuity can be understood to correlate with that of the cinematic spectator. But whereas the clear limitations of Brunhild's perceptual engagement are defined by her exclusion from the transgressive imagery of the invisible body, the cinematic spectator is instead invited to imagine sensual experiences beyond vision, through the unfolding of a scheme of extra-visual sense perception. If Siegfried's invisibility is a circumlocution of the visual, Brunhild's exclusion encompasses a range of additional sensory modalities, whose effects are just as invisible as their production. As described earlier, the invisible body produces an indelicate and public display of violence against Brunhild, the results of which are evident to all. Less evident, and less public, are the simultaneous interactions between the invisible Siegfried and the visible Gunther, and it is amidst this dynamic of sensual understanding that the viewer finds themselves intensely situated. In contrast to the forcefulness through which Siegfried's invisibility is expressed in dealing with Brunhild, which, in the smashing of her shield, effects a maximum visual return, the sensory arena in which Siegfried and Gunther invisibly communicate is founded upon subtlety and delicacy.¹⁰⁸ It is here, in these sensitive interactions, that the film's audience proceeds beyond the hard, forged exterior of Siegfried's body, and so to encounter his softness, as if entering into his exceptional weak spot. The close relationship between these two bodies is here centred upon a disruption of visibility through which extra-visual modalities – such as those of the tactile and aural senses – are, for the film's audience at least, made extraordinarily visual. I will now examine these interactions more closely.

The invisible Siegfried is cinematically shown as the image of his head fades into view with the blinking of his eyelids, and his lips visibly announce his presence with a soft whispering into Gunther's ear, announcing his invisible intentions (fig. 1.53). At the sound of this the king's head is turned and he holds his hand to his chest, turning to see no visible sign of his comrade (fig. 1.54). The invisible Siegfried is then shown: to lift the rock on Gunther's behalf, and that his hands and forearms are visible to the cinematic viewer alone is confirmed by a shot from Brunhild's perspective of Gunther holding the rock aloft (fig. 1.55); to carefully enfold himself around Gunther's body and support him in a giant leap through the air (fig. 1.56); and to stand alongside the king, whispering again as he holds the shield firmly in place

¹⁰⁸ The subsequent rape of Brunhild only exacerbates the character's exclusion from the experience of delicate, sympathetic sensuality.

against Brunhild's spear (fig. 1.57). In these actions, Siegfried handles his invisible body with poise and power, and his precise navigation of space and time in these undertakings is testament to a highly functioning sensorium. It is here that this invisible body, the wholeness of which was first expressed so succinctly in its adherence to the boundaries of its shadow, is refigured as a thing of fragmentation, the sense of which is exacerbated according to the relative brevity of these shots. These fragments, in which can be seen most prominently the isolated head and mouth, and the isolated hands and fingers, can be understood according to sensory distinctions; a consideration of aspects of this scheme once again benefits in relation to the contemporary writings of Balázs. The preface to *Visible Man* begins his treatise with a bold statement: 'I have to tell you that film is a new art [...]. Film is a fundamentally new revelation of humanity'.¹⁰⁹ He extends this assertion by contending that 'every art signifies a special relationship between human beings and the world, a specific dimension of the soul'.¹¹⁰ Further to this, 'this new art', Balázs suggests, 'would be like a new sensory organ'.¹¹¹ In these words, written as production on *Siegfried* proceeds, Balázs describes a condition that resonates strongly with that film's invisibility sequence: if film can represent anew the experience of a human being, 'like a new sensory organ', then *Siegfried* provides a climate in which to speculate upon such a relationship, through which the sensory organs and the cinema are enlivened through their contact with each other, the agent of which being the invisible body.

Siegfried's invisible reassurance of Gunther is developed in Von Harbou's *Das Nibelungenbuch*, a prose version of the story, published in late 1923 to herald the films' release in 1924.¹¹² Von Harbou writes that 'Brunhild, however, did not know that Siegfried stood, covered by the Tarnhelm and so invisible, at Gunther's side, clinging his hand to the king's hand fraternally. This strong hand, the warmth of

¹⁰⁹ Balázs, 'Visible Man', p.5.

¹¹⁰ Balázs, 'Visible Man', p.5.

¹¹¹ Balázs, 'Visible Man', p.5.

¹¹² Thea von Harbou, *Das Nibelungenbuch* (Munich: Drei Masken Verlag, 1924). Although illustrated with images from the film, this text features further descriptions of Siegfried's invisible body that have no precise equivalents in the film itself. Von Harbou and Lang's unpublished screenplay (which similarly features significant differences from the finished film) can be found at the Stiftung Deutsche Kinemathek, Berlin. It is notable that, as a young actor, Von Harbou had appeared in a production of Hebbel's *Die Nibelungen*, taking the role of Kriemhild (Kaes, 'Siegfried', p.65).

which was as if it had played with the sun, gave King Gunther a smile.¹¹³ The text emphasises Siegfried's tangibility and capacity as a tactile agent, calling forth a potent thermodynamics of the invisible body. Although, in relation to *Siegfried*, Von Harbou's book might serve as what Gerard Genette refers to as a *paratext*,¹¹⁴ it combines with the film sequence to extend an understanding of this invisible form, whose 'clinging' celestial touch stimulates the thermal receptors in Gunther's hand and aligns it with the sun that produces its shadow.¹¹⁵ This sense of potent tactility, which is also present in the source poem, finds full cinematic expression as Siegfried finally takes hold of Gunther's javelin, communicated through a fragmented close up of Siegfried's hand, fading smoothly into apprehension as it rises to languidly accept the weight of the spear (fig. 1.58).¹¹⁶ The closeness of the framing here supplements the proximity of these fingers, emphasising the tactile delicacy of this exchange. In a film lauded widely for its expansive settings, this is amongst its most intimate close ups, and this gentle grasping of the shaft of Gunther's spear is arguably the most erotic moment in the film. Amidst the intense feeling of intimacy in these close sensual relations, the dexterity of these fingers also speaks of the manual precision and delicacy that are often key to the practice of special visual effects, which tends to involve minute, concentrated, exacting work: a partly tactile undertaking that works primarily for the field of vision.¹¹⁷ Where the onstage Pepper's Ghost is traditionally a visual experience of vagueness, its cinematic equivalent, especially in this close-up

¹¹³ 'Das freilich wußte Brunhild nicht, daß unsichtbar, vom Tarnhelm gedeckt, an Gunthers Seite Siegfried stand, die brüderliche Hand um die Hand des Königs schmiegend. Diese warme, starke Hand, die immer war, als hätte sie mit der Sonne gespielt, gab König Gunther ein Lächeln.' (Von Harbou, *Das Nibelungenbuch*, p.62 (my English translation).) Apparently this book was written after the film's main phase of production (E. Ann Kaplan, *Fritz Lang: A Guide to References and Resources* (Boston, MA: G.K. Hall, 1981), p.137).

¹¹⁴ Gerard Genette, *Paratexts: Thresholds of Interpretation*, trans. by Jane E. Lewin (Cambridge: Cambridge University Press, 1997).

¹¹⁵ This emphasis on thermodynamics is reminiscent also of the tangibility of the shadow, for, in addition to its optical effect, contact with a shadow may serve as a similarly potent site for thermal stimulus.

¹¹⁶ The trope of invisible assistance in combat reflects Homer's *The Iliad*, where, for example, Athene puts 'on the helm of Death, that stark Ares might not discern her' (*The Iliad*, v, 844–845), and also invisibly aids the Greeks, for example through holding their hands and guiding their spears in battle (*The Iliad*, iv, 541–542). Siegfried, invincible but for a solitary weakness, might be thought of as part of a lineage of such bodies that includes *The Iliad*'s Achilles, a similarly transgressive figure who, like some characterisations of Siegfried, is identified as somewhere between divine and human (*The Iliad of Homer*, trans. by Richmond Lattimore (Chicago and London: University of Chicago Press, 1951)).

¹¹⁷ Discussing the special visual effects for which Günther Rittau was largely responsible, Eisner remarks that the superimpositions were 'done directly inside the camera by a footage and frame count, since the German cinema did not yet have special effects departments like the Americans. Even the ghostly effects of the silhouette of Siegfried made invisible by the Tarnhelm, while assisting Gunther to defeat Brunhild in the contest, were achieved in this way by superimposition in the camera'. (Eisner, *Fritz Lang*, p.76.)

appearance, is, in its onscreen reconfiguration, more exact for a greater number of viewers: there is no poor vantage point.

Much of the writing on Lang has focused on the potency of scopic regimes in his films, and though Gunning also describes the eye to be Lang's organ of choice, he also relates Lang's claim that the director's hand was intercut as a close up in each of his films.¹¹⁸ Lang's own 1924 lecture defended the 'sensation film',¹¹⁹ the mode with which much of his early work can be identified, and the term itself, as Gunning points out, referred 'to the direct visceral effect the scenes were designed to have on their viewers', who were conceived of 'in a materialist manner: as a bundle of sensations to be played upon, [...] pummelled and shocked, directly shaken by the events portrayed.'¹²⁰ Although Gunning notes that this 'distinctly modern dramaturgy of shock' was 'aimed at physical excitement rather than mental engagement',¹²¹ Siegfried's invisible interference can be understood to embody an engagement in which the physical and the mental are excited by one another.

This interaction of two bodies – in which one acts for the other with subtle kinaesthetic control, delicately taking its weight – is a careful interference, and these cinematic superimpositions, through which two images are collided on a single strip of celluloid, convey this close mingling of Siegfried and Gunther as a simultaneous occupation of cinematic space and time. This intermingling of two embodied subjectivities evokes the notion of 'intersubjectivity' expounded by the German philosopher Edmund Husserl in the late 1920s:¹²² what he describes as 'the theme of a *transcendental theory of experiencing someone else*, a transcendental theory of so-

¹¹⁸ Gunning remarks that 'Lang's hand was filmed and intercut as a close-up, he claimed, in each of his films [...] in close-ups of hands, standing in for actors playing characters in his films' (Gunning, *The Films of Fritz Lang*, pp.xii, 2). For more on tactility and the role of the hand in Lang's films, see Joe McElhaney, 'The Artist and the Killer: Fritz Lang's Cinema of the Hand', *16:9*, 4.17 (June 2006) <http://www.16-9.dk/2006-06/side11_inenglish.htm> [accessed 12 January 2014].

¹¹⁹ Fritz Lang, 'Kitsch, Sensation–Kultur und Film'. Lang's lecture was delivered in Vienna before being printed in *Das Kulturfilmbuch*, ed. by Edgar Beyfuss and Alex Kossowsky (Berlin: Carl P. Chryselius, 1924), pp.28–31.

¹²⁰ Gunning, *The Films of Fritz Lang*, p.89.

¹²¹ Gunning, *The Films of Fritz Lang*, p.89.

¹²² This theme was explored as part of two lectures presented by Husserl in the Amphithéâtre Descartes at the Sorbonne on 23 February and 25 February 1929, which were then developed and published as *Cartesian Meditations* in 1931. The subject of 'intersubjectivity' is dealt with in the section 'Fifth Meditation: Uncovering of the Sphere of Transcendental being as Monadological Intersubjectivity' (Edmund Husserl, *Cartesian Meditations: An Introduction to Phenomenology*, trans. by Dorion Cairns (The Hague: Martinus Nijhoff, 1970), pp.89–151).

called “empathy”¹²³. Husserl’s description of the experience of the world as an ‘intersubjective world’ begins as follows:

In changeable harmonious multiplicities of experience I experience others as actually existing and, on the one hand, as world Objects – not as mere physical things belonging to Nature, though indeed as such things in respect of one side of them. They are in fact experienced also as *governing psychically* in their respective natural organisms. Thus peculiarly involved with animate organisms, as ‘psychophysical’ Objects, they are *‘in’ the world*. On the other hand, I experience them at the same time as *subjects for this world*, as experiencing it (this same world that I experience) and, in so doing, experiencing me too, even as I experience the world and others in it.¹²⁴

He continues:

I *experience* the world (including others) – and, according to its experiential sense, *not* as (so to speak) my *private* synthetic formation but as other than mine alone, as an *intersubjective* world, actually there for everyone, accessible in respect of its Objects to everyone. And yet each has his experiences, his appearances and appearance-unities, his world-phenomenon; whereas the experienced world exists in itself, over against all experiencing subjects and their world phenomena.¹²⁵

The mirroring of Siegfried and Gunther, each of whom in some ways represents the other, reflects Husserl’s contention that ‘the other is a “mirroring” of my own self and yet not a mirroring proper, an analogue of my own self and yet again not an analogue in the usual sense’.¹²⁶ It is also notable that, among the ‘*fields of sensation*’ that Husserl implicates in the comprehension of the other is ‘the understanding of the members as hands groping or functioning in pushing, as feet functioning in walking, as eyes functioning in seeing, and so forth.’¹²⁷

Discussing this conception of intersubjectivity, and the problem of how ‘subjective experience enable[s] us to recognize the reality of other selves, other experiencing beings’, David Abram notes that Husserl’s ‘solution seemed to implicate the body – one’s own as well as that of the other – as a singularly important structure within the phenomenal field.’ As Abram continues:

¹²³ Husserl, *Cartesian Meditations*, p.92.

¹²⁴ Husserl, *Cartesian Meditations*, p.91.

¹²⁵ Husserl, *Cartesian Meditations*, p.91.

¹²⁶ Husserl, *Cartesian Meditations*, p.94.

¹²⁷ Husserl, *Cartesian Meditations*, pp.97, 119.

The body is that mysterious and multifaceted phenomenon that seems always to accompany one's awareness and indeed to be the very location of one's awareness within the field of appearances. Yet the phenomenal field also contains many *other* bodies, other forms that move and gesture in a fashion similar to one's own. While one's own body is experienced, as it were, only from within, these other bodies are experienced from outside; one can vary one's distance from these bodies and can move around them, while this is impossible in relation to one's own body.¹²⁸

It is such an experience that unfolds as the visibly invisible Siegfried engages with the body of Gunther, connecting with it and manipulating its parts, each sensing and understanding the other as a 'psychophysical' object, and Siegfried's invisible body serving as exemplary of such a category. Indeed, it is in relation to the concept of intersubjectivity that the metamorphosis that is the Tarnkappe's second function can be better understood: as a rich sensory entanglement between two bodies and two minds through which both individuals encounter and understand the objectivity and subjectivity of each other – an intermingling in which the cinema audience, as thoughtful, embodied spectators, are also implicated.

Gunther's feeling for the invisibilities of Siegfried's body is extended at the latter's death, as the king appears to keenly feel the sensations of Siegfried's pain in his own body. As Hagen's spear pierces Siegfried's vulnerable spot it can itself be understood to be the product of Hagen's piercing gaze and persistent privileging of vision, thus performing a sensorial transgression as it enters into Siegfried's body (fig. 1.59). It is, however, the unsighted Gunther who appears to let out a great cry, on Siegfried's behalf, that resounds across the wood, and it is Gunther who clutches at his own body, looking down at its parts, as he empathetically imagines – just as the film's audience might – the painful experience of another (fig. 1.60). In the wake of his intimate engagement with the invisible body, Gunther demonstrates a revised understanding of the sensualities of the body: he screams as Siegfried is pierced and is both psychically and physically affected by Siegfried's agonised and chaotic spasmodics.¹²⁹ Siegfried's limp body is stood up by Gunther's brothers, who whisper

¹²⁸ David Abram, *The Spell of the Sensuous* (New York: Vintage Books, 1996), p.37.

¹²⁹ Pertinent to Siegfried's fatal penetration is Husserl's equating of the 'understanding of someone else' in terms of a deep penetration through which we can recognise the operations of the intersubjective realm: 'If, with my understanding of someone else, I penetrate more deeply into him, into his horizon of ownness, I shall soon run into the fact that, just as his animate bodily organism lies in my field of perception, so my animate organism lies in his field of perception and that, in general, he experiences me forthwith as an Other for him, just as I experience him as *my* Other' (Husserl, *Cartesian Meditations*, pp.129–130).

into his ear and place fingers to the wound at Siegfried's heart, doubting Thomases palpating the invisible interiority of Siegfried's flesh. In a final impulse, Siegfried opens his eyes to see Hagen and Gunther; enraged, he charges at them, but collapses on the ground. At the last, Siegfried blinks and tries to speak, and finally his eyes widen as he points into off-screen space; he begins to speak, but instead dies, slumping. That which he has seen is never shown (fig. 1.61).

*

The strange image of Siegfried's invisible body as he assists Gunther is a mingling through which can be understood something of both the invisible body and of the intellectual vision of Gunther, whom Siegfried so sensitively manipulates. This visual depiction of extra-visual apprehension thus begins to engage with a scheme in which speech, audition, tactility and thermodynamics come together, enabling the invisible to speak for a range of intersecting sensory material. It is the cinematic image that facilitates this sensory data, promoting a sensual mode of understanding. Making visible the invisible body here means making visible the stuff of interiority and of the activities of the sensorium. If superimpositions serve to show the mind, and also the cinematic mechanism, then in *Siegfried* can be found a clear expression of cinema as a way of thinking about thinking, an expression for which the invisible body serves as an ideal embodiment. These tendencies exemplify Akira Lippit's understanding of cinema as offering 'extreme, even excessive modes of visibility that came to be seen, paradoxically, as modes of invisibility, or unseeability, challenging the notion of interiority, of envisioning and probing interiority, but also the condition of visibility as such.'¹³⁰ Impossibly hard, Siegfried's body first seems to be the antithesis of the airy stuff of thought; the way it is initially opposed to a range of ethereal atmospheres testifies to this. Yet, it is through the visualisation of its invisibility that is seen the softness, the mindfulness and the sensuality of this body. Implicated in the unfolding of apprehension and comprehension, the invisible body speaks of some of the difficulties of thinking about thinking. It is the body that thinks.

¹³⁰ Lippit, *Atomic Light (Shadow Optics)*, p.30.

Conclusion

It seems appropriate to question, here, at the end of Chapter One, the extent to which this thesis will interrogate a cinematic language or lexicon of invisibility, and the nature of its expression through the body. *Siegfried* speaks of such a language, doing so in clear terms as Siegfried's invisible presence is literally annunciated: a self-speaking through which the deft and versatile linguist Siegfried – whose taste of dragon's blood has enabled him to speak the language of beasts – announces his invisible presence, whispering into Gunther's ear from behind the king, the content of his utterance manifesting in the accompanying intertitle as an ornate gothic inscription (fig. 1.62).¹³¹ Siegfried's linguistic annunciation here is a small but significant alteration from the text of *Das Nibelungenlied*, in which a tactile invisibility is emphasised as 'Siegfried went up to [Gunther] unseen and touched his hand, startling him with his magic powers'.¹³² On screen, it is not initially the touch but the sound of Siegfried's voice that is so startling to Gunther, and this is the first indication that Siegfried persists, in his invisibility, as an audible aural presence (diegetically audible, that is, even if unheard by the film's listeners). This moment can be considered as a visual expression of the story's adaptation, derived as it is from a verbal tradition, with much of its narrative related as tales within the tale, sung or otherwise spoken by multiple voices.¹³³ In announcing his intended invisible actions – tactile, kinaesthetic, vestibular – Siegfried expresses the process of sensory translation, and the cinematic silence of Siegfried's speech further expresses something of the sensory paradoxes of a cinematic condition in which he is both silently speaking and visibly invisible.¹³⁴

Tensions between cinema and language are central, too, to Balázs's *Visible Man*, which spends much time defining the role of cinema as a distinct alternative to

¹³¹ That dragon's blood cannot only, through its application, render the body invulnerable but also imbue its taster with an understanding of the language of birds, is also present in related Scandinavian tales, such as *Völsungasaga* and *Þiðrekssaga*.

¹³² *The Nibelungenlied*, p.66.

¹³³ This filmed version retains certain aspects of these origins as a spoken or sung piece, structured as it is as 'Gesänge', or 'Cantos', labelled as such with gothic intertitles. The popular success of Wagner's opera had also extended the role and potency of the voice in the story.

¹³⁴ In this strange circumstance, in which the invisible is partially visualised in sympathy with a silent speaking, we might think of Wittgenstein's suggestion, which concludes his 1921 *Tractatus Logico-Philosophicus* that '[w]hat we cannot speak about we must pass over in silence' (Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. by D.F. Pears and B.F. McGuinness (London: Routledge and Kegan Paul, 1961), p.151).

language. In a section entitled ‘Visible Speech’, Balázs refers to the silent impression of speech that this moment in *Siegfried* seems to exaggerate:

the moment we see a mouth shaping words, and become aware therefore of an acoustic dimension, then the performance loses its effect; for this is when we notice that we haven’t heard the actor’s words, and we come to see him as a deaf mute straining grotesquely to make himself understood. A good film actor thus speaks quite differently from a good stage actor. He speaks plainly, to our eyes, not our ears.¹³⁵

This characterisation of filmed speech in silent cinema as ‘grotesque’ is part of Balázs’s attempt to distinguish between language and cinema. For Balázs, cinema in 1924, in stimulating a ‘new sensory organ’, seems to enforce a synaesthetic intersection in which alternative modes of expression and sensation collide, and Siegfried’s visibly invisible speech clearly exacerbates such a climate. Amidst the movements towards emptiness and absence that pervade the film, the question of silence – and Siegfried’s engagement with silence, in particular – is potent. For both filmmakers and commentators alike, Siegfried’s difficult relationship with silence is significant; even as late as 1966, Lang continued to insist that ‘it is quite unforgivable that he cannot keep his mouth shut’, referring to Siegfried’s naive confession to Kriemhild of his invisible role in Gunther and Hagen’s schemes,¹³⁶ while Levin too suggests that, along with Siegfried’s lack of ‘control of his appearance’, he ‘cannot control his hands [...] or his mouth’.¹³⁷ However, it can also be observed that, in his invisible state, Siegfried’s control over his hands and his mouth is instead intensified. The ‘grotesque’ silence of Siegfried’s speech comes as laboured movements of the mouth take precedence over its whispered words, overemphasising not the sound of the voice but the musculature of the face, as the lips are drawn back and the cheeks and jawbone move. It is a delicate sensory exchange that thus emerges from this close attention to the processes of speaking and listening, and the intricacies of these

¹³⁵ Balázs, ‘Visible Man’, p.25.

¹³⁶ It is Siegfried’s powers of speech, rather than those of invisibility, that Lang remained preoccupied with. As he remarked in 1966: ‘It is easy to be a hero when you make yourself invisible with the help of the tarhelm [sic]. And though it may perhaps be forgivable that Siegfried gets the Virgin Queen Brunhild into the connubial bed of his weak King Günther of Burgund by trickery, it is quite unforgivable that he cannot keep his mouth shut, and brags to his wife Kriemhild about his deeds. The final destruction of the Nibelungen has its origins in this bragging.’ (Fritz Lang, qtd in Eisner, *Fritz Lang*, p.79.)

¹³⁷ Levin argues that ‘more important than the notion that Siegfried cannot control his hands (when he “subdues” Brunhild) or his mouth (when he tells Kriemhild) is the recognition that Siegfried relinquished control of his appearance before he ever entered the bedroom’ (Levin, *Richard Wagner, Fritz Lang and the Nibelungen*, p.114).

complex sensory entanglements emerge from the difficulties of both visuality and language.

The precise visualisation of invisible mouths and fingers – as discretely fragmented components of a psychophysical being – prefigures the philosopher Martin Heidegger's 1954 intermingling of the acts of speech, thought and touch, through his assertion that '[o]nly a being who can speak, that is, think, can have hands'. As Heidegger explains:

The hand does not only grasp and catch, or push and pull. The hand reaches and extends, receives and welcomes – and not just things: the hand extends itself, and receives its own welcome in the hands of others. The hand holds. The hand carries. The hand designs and signs, presumably because man is a sign. Two hands fold into one, a gesture meant to carry man into the great oneness. [...] But the hand's gestures run everywhere through language, in their most perfect purity precisely when man speaks by being silent. And only when man speaks, does he think – not the other way round, as metaphysics still believes. Every motion of the hand in every one of its works carries itself through the element of thinking, every bearing of the hand bears itself in that element. All the work of the hand is rooted in thinking.¹³⁸

Siegfried's invisible body, then, invites its viewers into proximity with a mode of thinking whose relationship with visual experience is challenging, and whose strange visualisation in cinema complicates any simple sensory distinctions. The sight of this invisible mouth, speaking, and this invisible hand, touching, work to upset assumptions of the primacy and potency of vision and the visual experience, primarily distal, promoting instead the value of a more proximal exchange. These are themes to which I will return in subsequent chapters, as manifestations of invisible form in cinema continue to coincide with both linguistic breakdown and a tendency towards tactility, insisting upon the comprehension of a revised language of the senses that follows in the wake of the invisible body.

*

This first chapter has begun to describe an invisibility that is of the body, and that is of the sensual experience of the body: of one's body and of the bodies of others. It has begun to ask: How are the senses *made sense of*, and how do cinematic depictions of

¹³⁸ Martin Heidegger, 'What Calls for Thinking?', *Basic Writings*, ed. by David Farrell Krell (London and New York: Routledge, 1993), pp.365–391 (pp.380–381).

invisible bodies assist in such an undertaking? Many of the themes addressed in this chapter, I argue, can be traced onwards through the history of invisible bodies on screen. As succeeding chapters will explore, such sensual intersections unfold amidst significant and specific cultural and social contexts. Although this chapter has largely explored its key themes through the lens of a single film, Chapter Two will explore a number of films, from the 1930s to the 1950s, in which the invisible body is domesticated as it accrues layers of prosthetic supplements – gloves, bandages, sunglasses, false noses – that continue to ask questions of the sensorium and its configuration. Looking forwards from here, then, the following chapters will explore the extent to which a history of invisible bodies coincides with a history of the senses, extra-visual and otherwise, and will address the role of cinema amidst such a sensual atmosphere.



Fig. 1.1, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

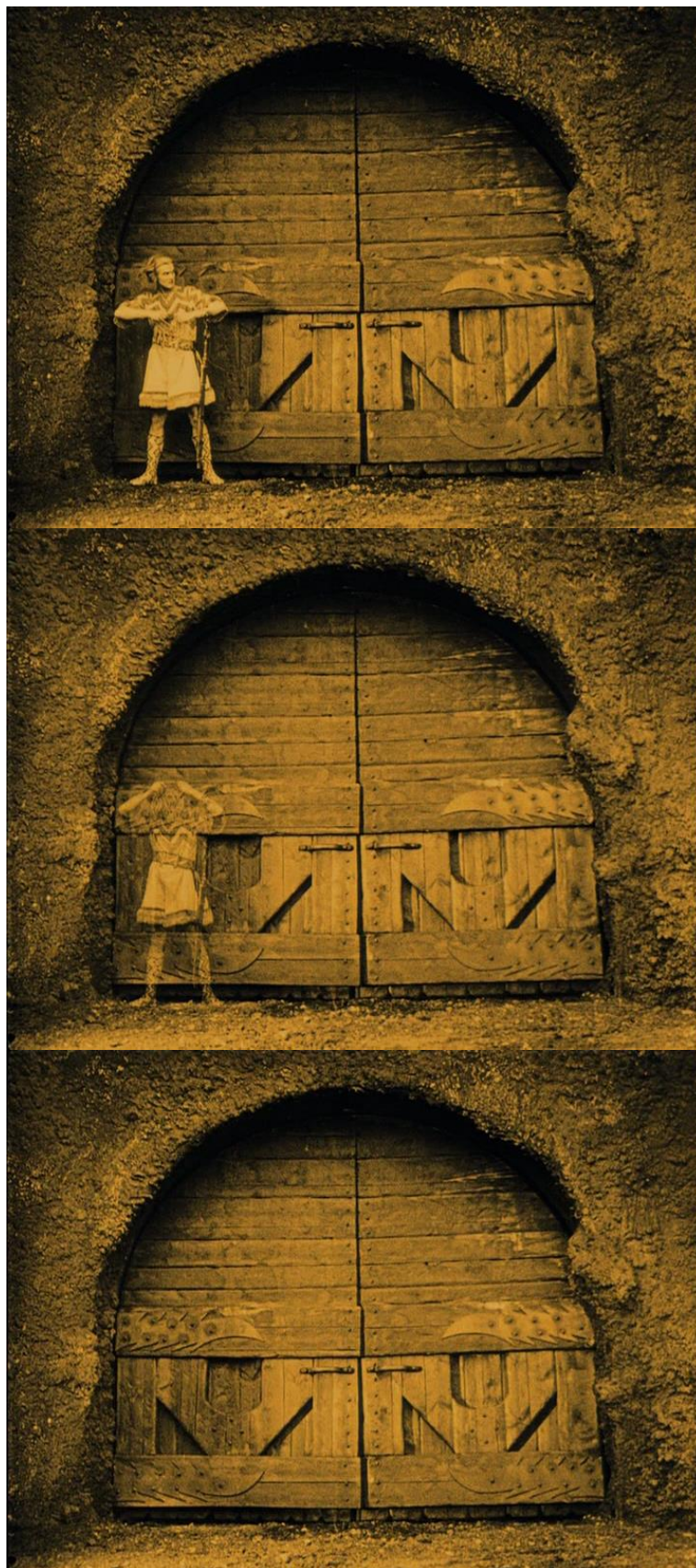


Fig. 1.2, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.3, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

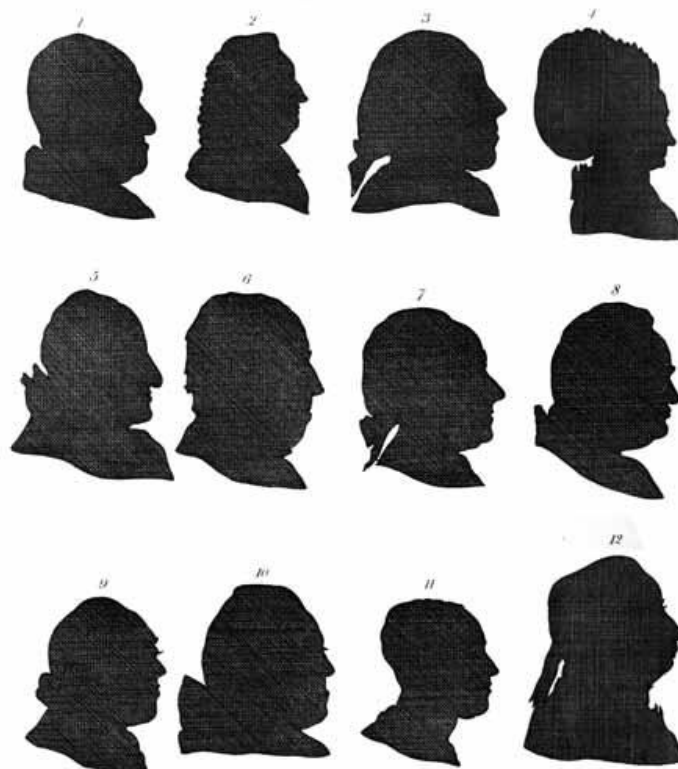


Fig. 1.4, Johann Kaspar Lavater



Fig. 1.5, *Peter Schlemihl* (George Cruikshank, 1824)



Fig. 1.6, Arthur Rackham, 1910–11



Fig. 1.7, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.8, *Dr. Mabuse, der Spieler* (Fritz Lang, 1922)



Fig. 1.9, *M* (Fritz Lang, 1931)



Fig. 1.10, *Die Abenteuer des Prinzen Achmed* (Lotte Reiniger, 1926)



Fig. 1.11, *Lichtspiel: Opus I* (Walter Ruttmann, 1921)



Fig. 1.12, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.13, *Portrait of Dr Haustein* (Christian Schad, 1928)



Fig. 1.14, *A Group of Three* (Felix Nussbaum, 1944)

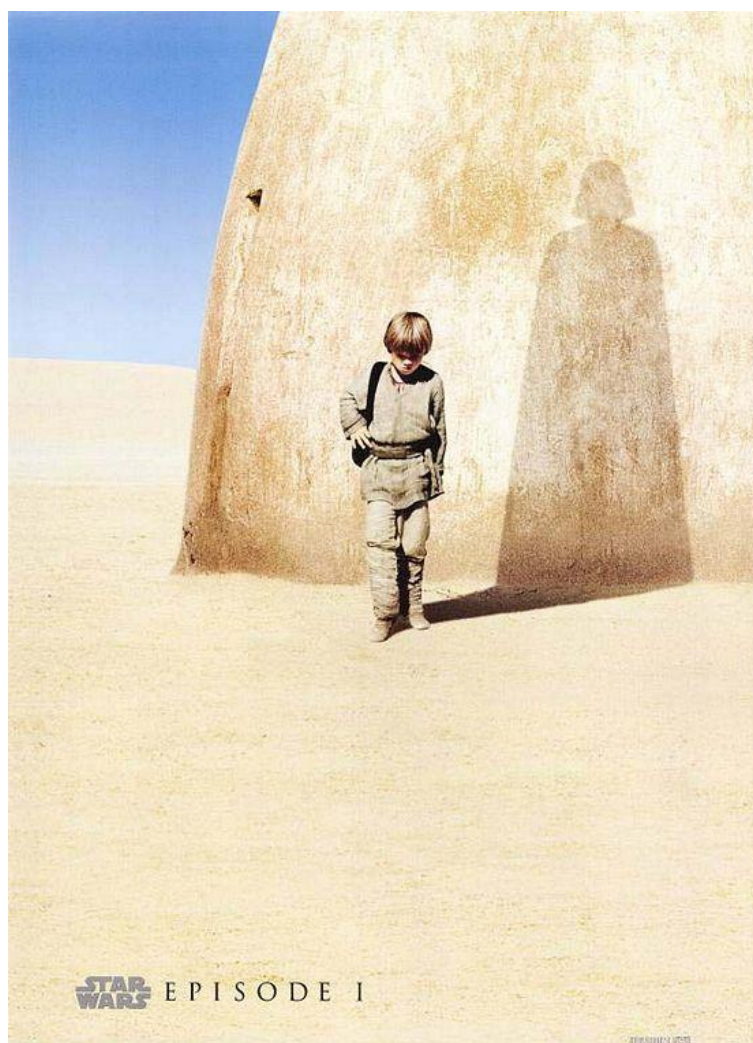


Fig. 1.15, *Star Wars Episode I: The Phantom Menace* (George Lucas, 1999)



Fig. 1.16, *The Amazing Spider-Man* (Marc Webb, 2012)



Fig. 1.17, *Nosferatu* (F.W. Murnau, 1922)



Fig. 1.18, *Nosferatu* (F.W. Murnau, 1922)

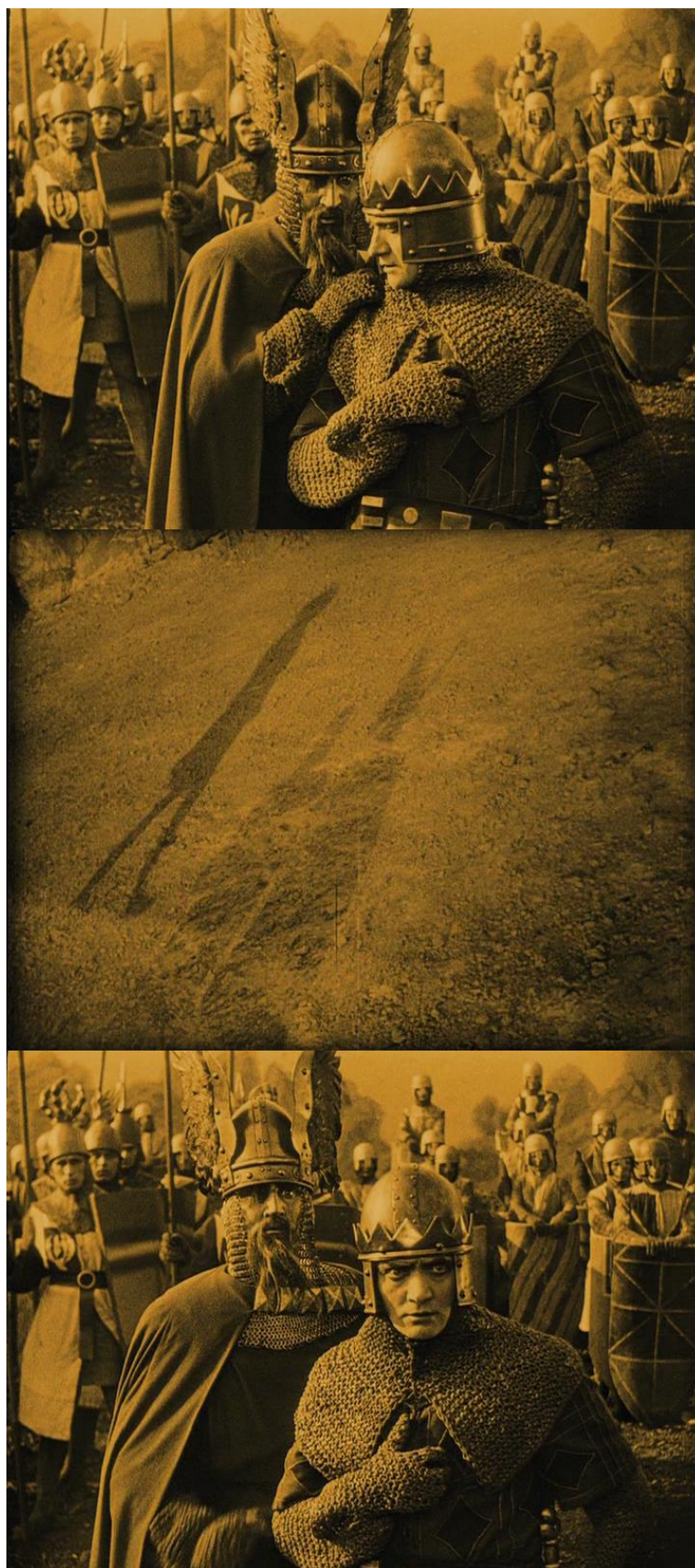


Fig. 1.19, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.20, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

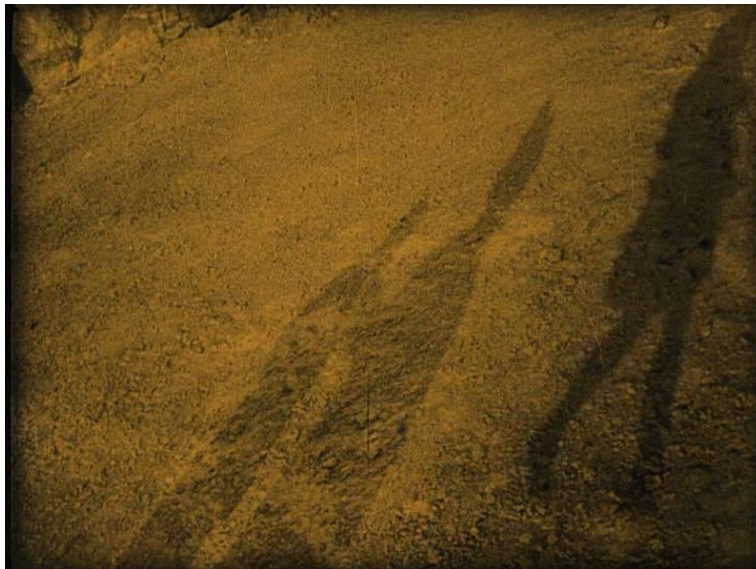


Fig. 1.21, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.22, *Self-Portrait with Newsboy* (Lewis Hine, 1908)



Fig. 1.23, *Shadows in Lake* (Alfred Stieglitz, 1916)



Fig. 1.24, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.25, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

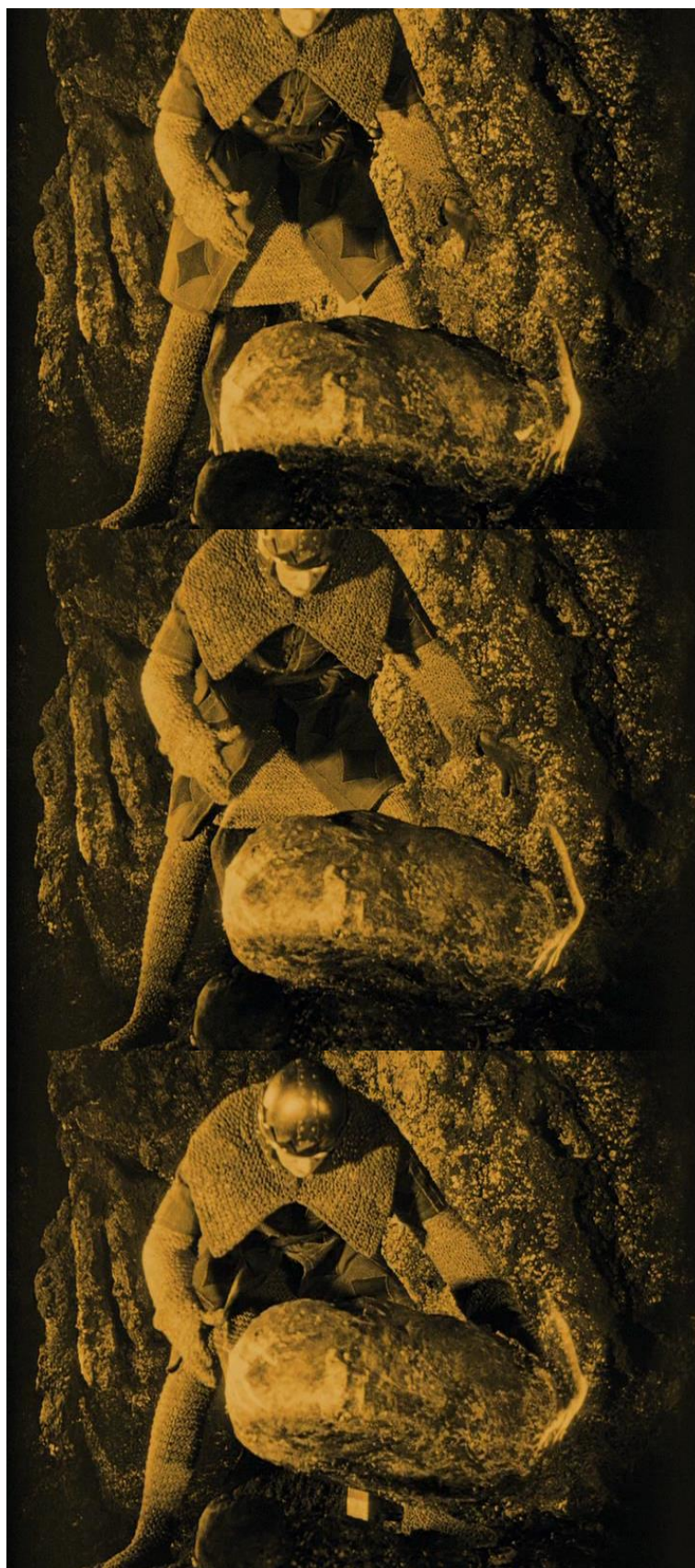


Fig. 1.26, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.27, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.28, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.29, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.30, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

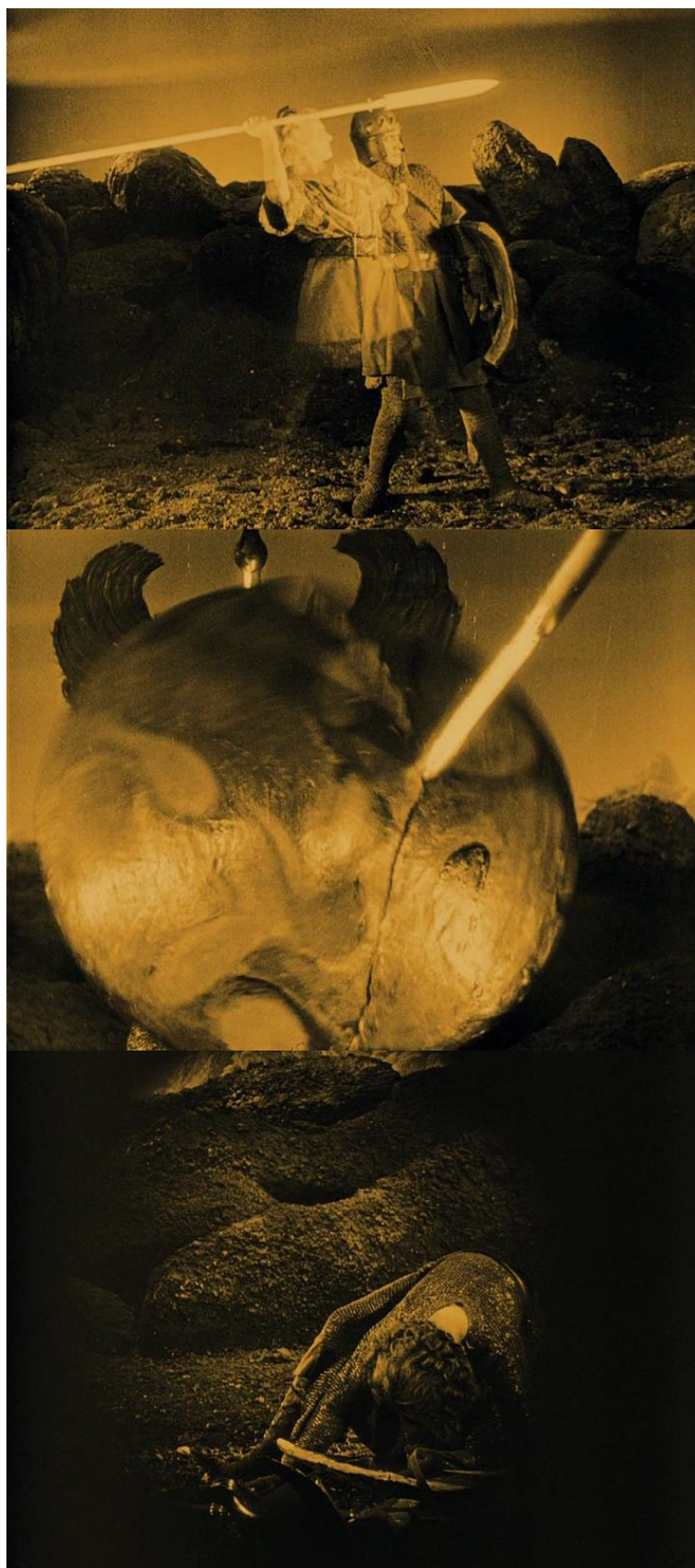


Fig. 1.31, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.32, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.33, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

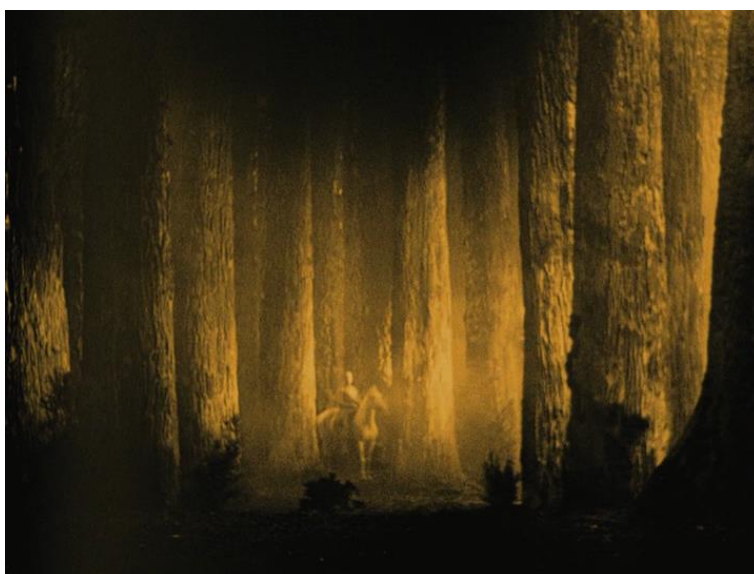


Fig. 1.34, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.35, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

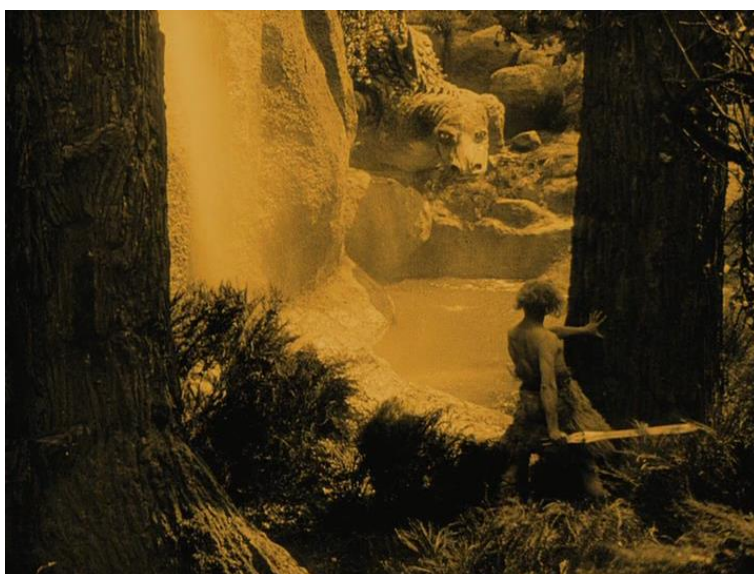


Fig. 1.36, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.37, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

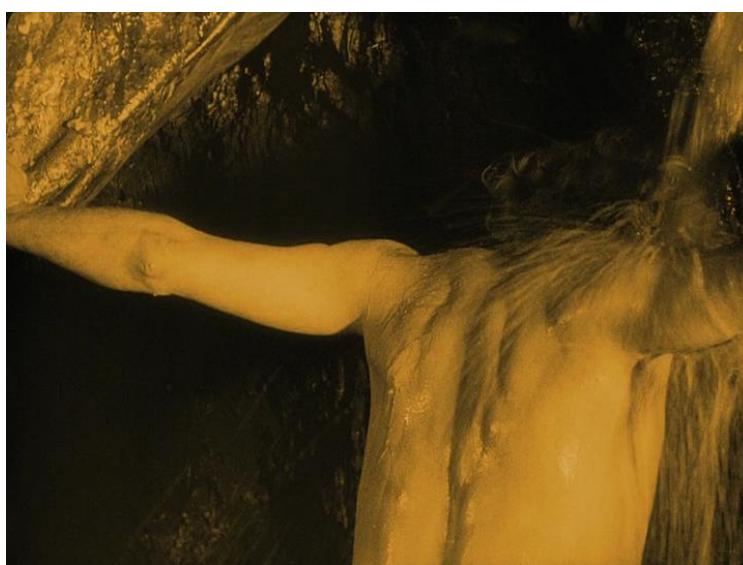


Fig. 1.38, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.39, *The Thief of Bagdad* (Raoul Walsh, 1924)



Fig. 1.40, *The Thief of Bagdad* (Raoul Walsh, 1924)

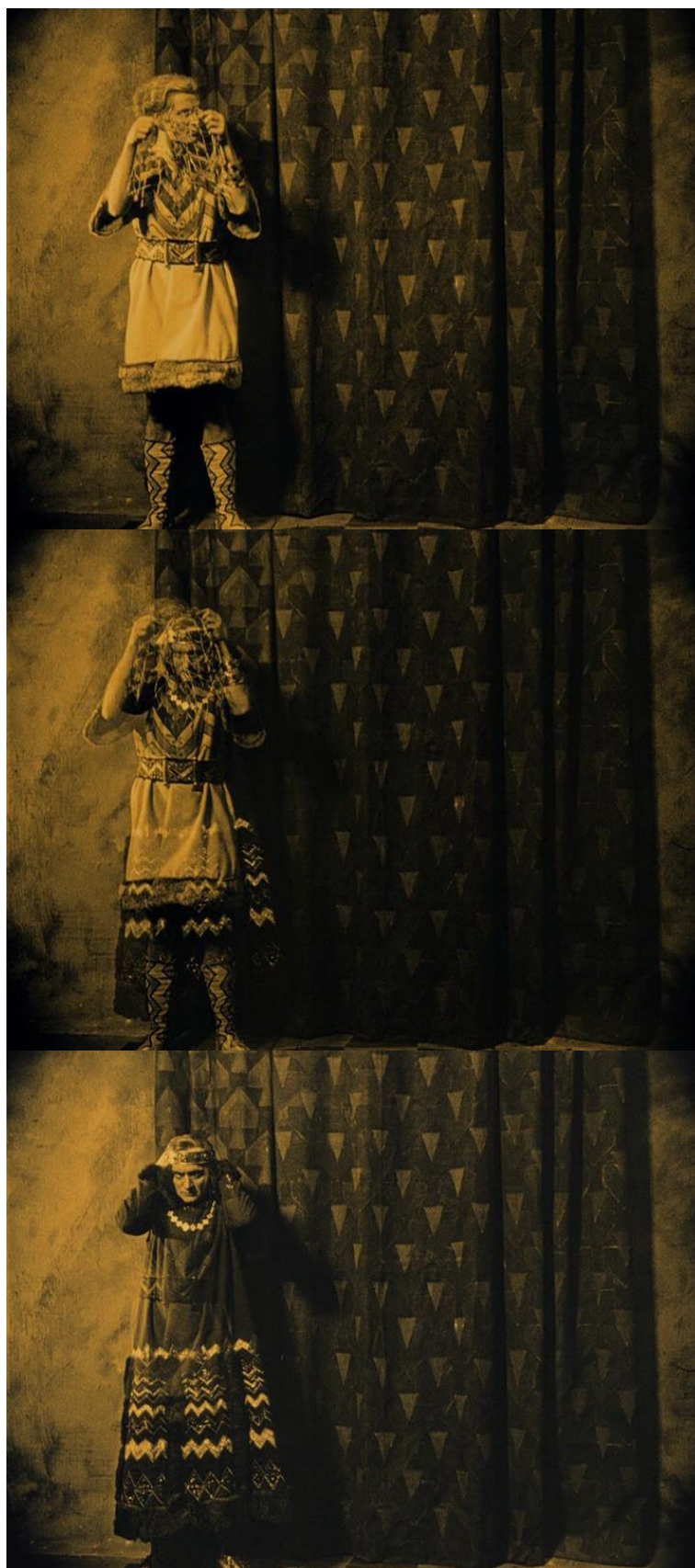


Fig. 1.41, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

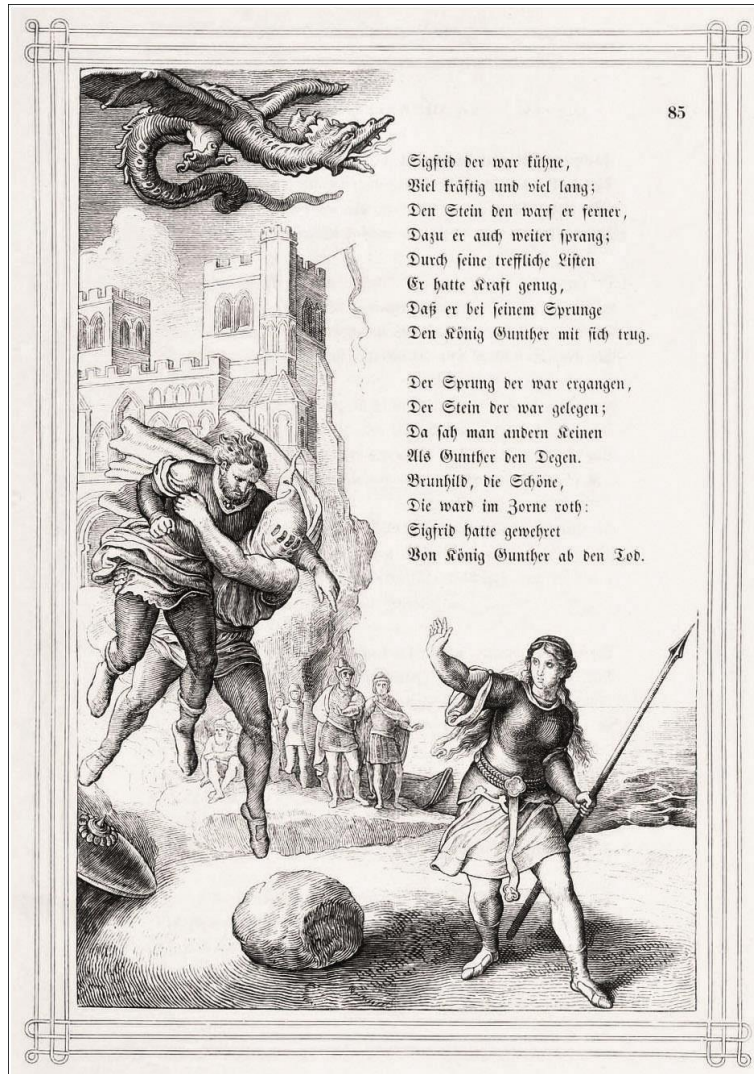


Fig. 1.42, *Der Nibelungen Noth* (Eugen Neureuther, 1843)



Fig. 1.43, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.44, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.45, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

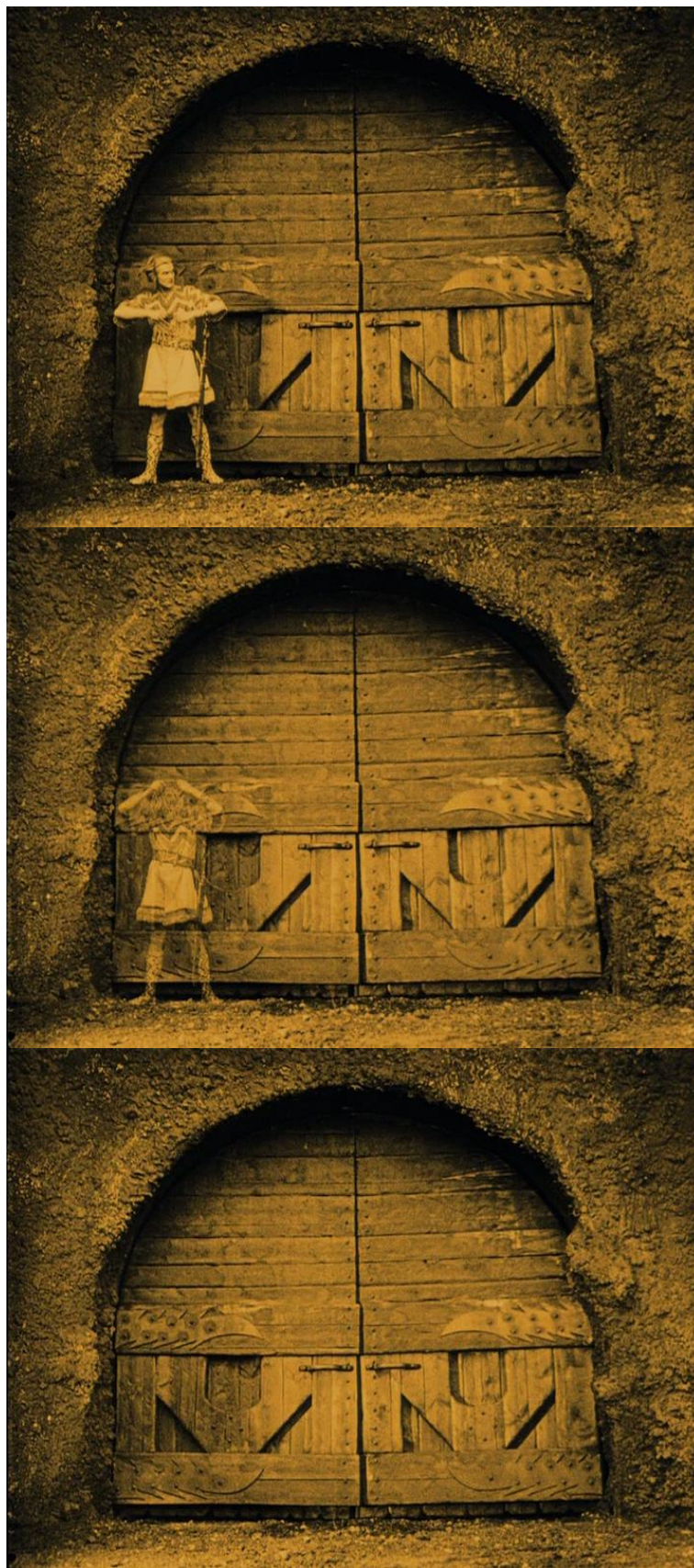


Fig. 1.46, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

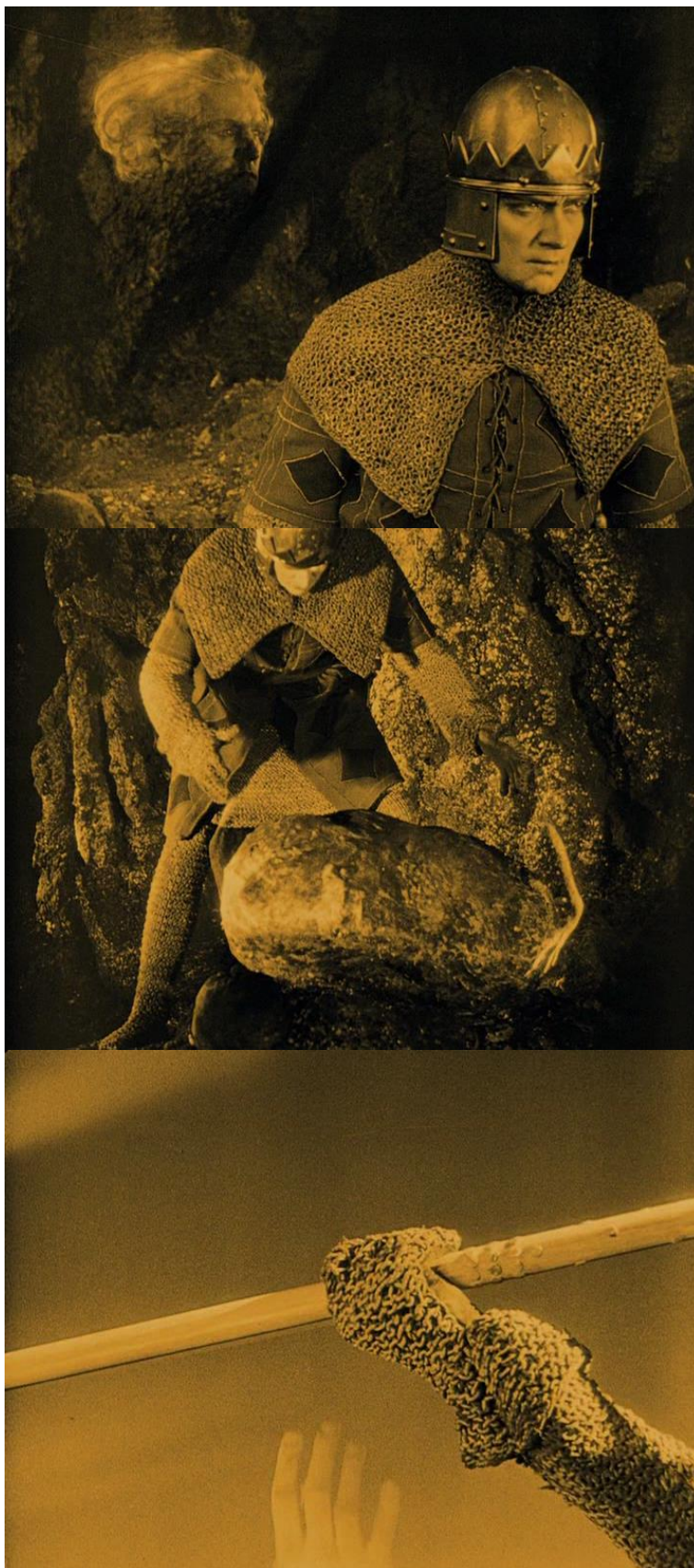


Fig. 1.47, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.48, *Master Herrod in a Trance: His Spiritual Body Withdrawn and Appears Behind* (William Mumler, 1868)

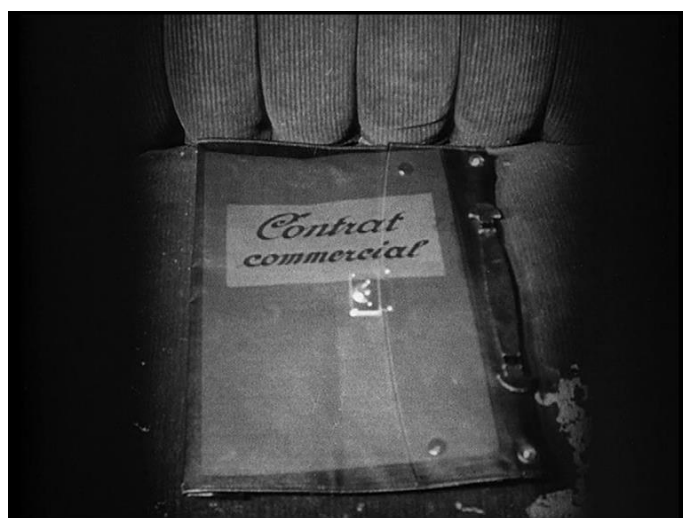


Fig. 1.49, *Dr. Mabuse, der Spieler* (Fritz Lang, 1922)

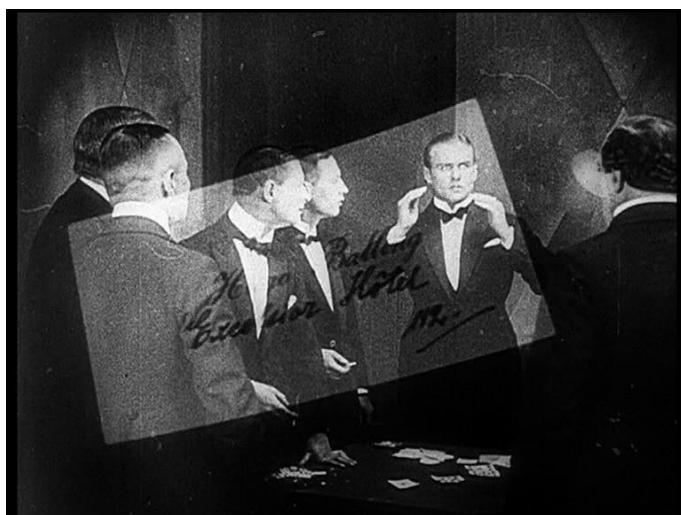


Fig. 1.50, *Dr. Mabuse, der Spieler* (Fritz Lang, 1922)



Fig. 1.51, *Dr. Mabuse, der Spieler* (Fritz Lang, 1922)



Fig. 1.52, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.53, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.54, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.55, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.56, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

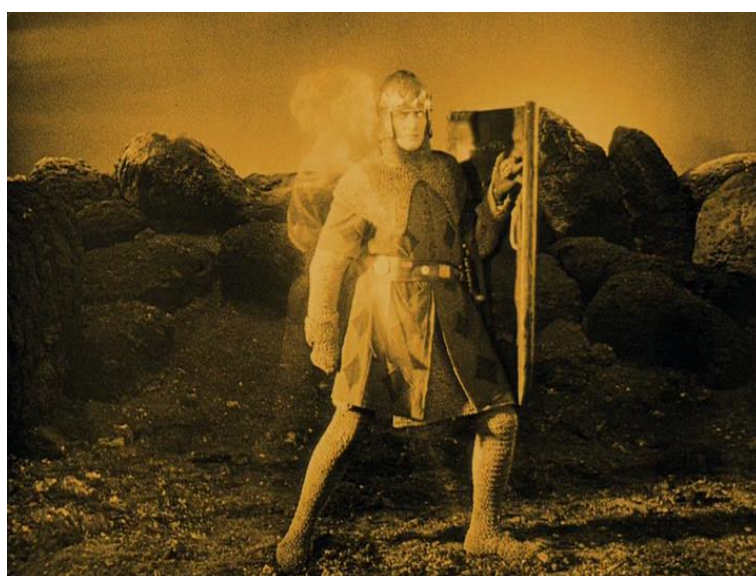


Fig. 1.57, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.58, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.59, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.60, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 1.61, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

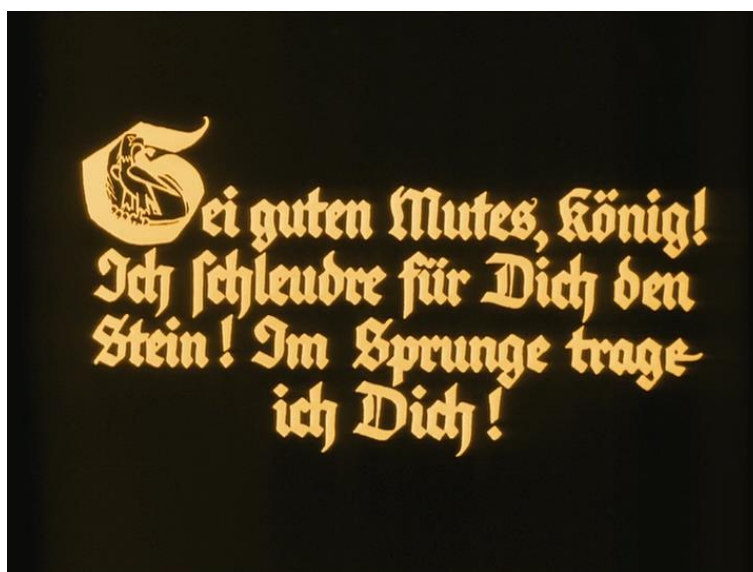


Fig. 1.62, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)

Chapter Two

Disordering the Sensorium in the *Invisible Man* Cycle (1933–1951)

Introduction: A Substantial Breeze

A door opens and with it a gust of wind blows into a room, disturbing numerous objects on a mantelpiece (fig. 2.1). As a radio broadcast announces its report of sightings of an invisible man in a nearby village, the device's dial is switched – another effect of the breeze? – to 'off' (fig. 2.2). The nature of the situation is made clearer as the report continues, in a fashion, albeit with a different voice sarcastically mimicking the announcement. The listener, Kemp, whose home this is, is frozen in place, beginning to understand – just as the film's audience already knows by now – that there is indeed an invisible body at large, and that it is present in this room, having opened the door and entered in tandem with the wind. Kemp shuffles awkwardly out of his seat as the vacant chair opposite receives a substantial impression: neither meteorological disturbance nor aural hallucination, but the signs of a weighty, tangible force (fig. 2.3). Sitting by the fireplace, the invisible man, Griffin, an acquaintance and colleague of Kemp, builds up the fire, complaining of cold as he adds another log from the pile. As Kemp sits dumbstruck at these jarring traces of invisible form, Griffin demands a cigarette, which is lit and begins to issue smoke as he also requests 'a good long surgical bandage', 'a pair of dark glasses', 'a dressing gown, and pyjamas, and a pair of gloves', suggesting that 'you'll feel better if you can see me, won't you?' (fig. 2.4). As the assertion circulates, it can be felt to also directly address the film's audience, especially with respect to the voice's aggressive insistence – three times – that its listener 'SIT DOWN'. After a brief interlude in which the invisible man dresses, he returns to his seat – again instructing Kemp to 'sit down' – where he details something of his entry into invisibility, though his condition is now hidden beneath bandages, pyjamas, smoking jacket and dark glasses with sidelights (fig. 2.5). With hands tightly gloved, thus intensifying the force of his precise gesticulations in space, the invisible man proceeds to outline his plans for 'a reign of terror' (fig. 2.6). After Kemp has left the room, the scene ends with a

disturbing momentary vision of the invisible man removing his bandages, with segmented zones identifying invisible eyes, nose and mouth (fig. 2.7).

A number of potent themes can be identified in this sequence from the 1933 film *The Invisible Man*, an adaptation of H.G. Wells's 1897 novel of the same name. The slight yet forceful gust of wind that doubles Griffin's entry into the room imbues the invisible presence with a sense of delicate immateriality, such effects being exacerbated by the weightless, upward trajectory of cigarette smoke that confers a gravitational disorientation. These symptoms, however, are at odds with the embodied weightiness of the invisible figure, whose depression in the chair might be felt in sympathy with members of the film's audience, reactivating an awareness of their own seated posteriors and combating their experience of 'chair paralysis', a common complaint of the 1933 cinemagoer.¹ In the sequence can be keenly perceived the actions of a body that performs the sensorium: dominating the visual, the aural, the tactile, and, in the act of smoking, exercising itself, too, in the arena of taste and smell. The thermal dynamics of the scene – Griffin describes being 'frozen with cold' before adding to the fire – also extends an awareness of the extent of the senses, suggesting consideration too of the sense of temperature. Above all, the motivating tensions of the sequence are driven by the presence of the invisible mouth, the voice of which is so neatly juxtaposed against the voice of the radio – the latter's disembodied reproduction of human speech contrasting with the former's absolutely embodied nature, emanating as it is from the larynx and voicebox of the invisible Griffin. And, yet, there is more to this mouth than its capacity for speech, as it enters casually into an uncanny act of smoking, an everyday act made peculiar and disturbing and that complicates the airy attributes with which the invisible body has already been associated. It is in this strange invisible mouth that are found the beginnings of this chapter: a particularly potent site that serves as nexus and port of exchange of intersecting themes of sound, taste, consumption and breath.

*

¹ This term is used in a 1933 advert for the 'American Seating Company', whose goal was to install more comfortable seating for cinema audiences. See, for example: *The Film Daily*, 64.36 (13 November 1933), 12.

As has been seen in Chapter One, a modern conception of the invisible body predates both Wells's *The Invisible Man* and the development of cinema, as can be found in some of the principal sources that fed into the production of *Siegfried*. It is, however, important to emphasise the role of Wells's text towards an evolving cinematic conception of invisible form.² A number of short films in the early 1900s had been inspired by *The Invisible Man*,³ and, in 1933, Wells's novel was adapted and produced as a feature film, written by R.C. Sherriff, directed by James Whale and produced by Carl Laemmle Jnr for Universal Pictures.⁴ Following a long gestation period in which numerous writers were employed in producing numerous aborted screenplays – many of which bore only the vaguest resemblance to the source – the completed film remains relatively faithful to the events of the first half of the book.⁵ The film shows the invisible man as a heavily disguised and secretive figure who is striving to find a way of undoing his permanent condition and coming to terrorise society in his frustration. Griffin (Claude Rains) is given a first name, Jack, and the aspects of his history that make up most of the second half of the novel are either altered or omitted entirely. Despite these changes, the film comes to end in a similar manner to its source material, with the invisible man returning to visibility at the moment of his death, after being hunted and attacked.

The Invisible Man was produced in the United States and released nine years after *Siegfried*. Its popularity spawned a body of sequels and clear derivatives over the succeeding two decades. As my opening sequence description suggests, this chapter is preoccupied with the depiction of an invisible body in *The Invisible Man*, but it is also concerned with the reach of the film's influence and in how certain tropes develop in the sequence of 'invisible man' films that follow in its wake.⁶ These include such

² Keith Williams has written about H.G. Wells's intersection with the vocabularies of cinema, paying some attention to the 1933 film adaptation of *The Invisible Man* (Keith Williams, *H.G. Wells, Modernity and the Movies* (Liverpool: Liverpool University Press, 2007), esp. pp.49–72).

³ For example, the short film *Le Voleur invisible [The Invisible Thief]* (Segundo de Chomón. 1909) depicts a character attaining an invisible body, having first read Wells's book and gleaned from it a chemical formula to induce this condition. I have discussed some of these films in the Introduction to this thesis.

⁴ *The Invisible Man* was first released on 13 November 1933.

⁵ Before Sherriff's final screenplay appeared, a dozen or more drafts had been worked on by individuals such as Garrett Fort, John L. Balderston (who would write 1932's *The Mummy*), Preston Sturges and the film's director James Whale (Tom Weaver, Michael Brunas and John Brunas, *Universal Horrors: The Studio's Classic Films, 1931–1946*, rev. edn (Jefferson, NC: McFarland & Co., 2007), pp.78–79). As part of the terms of his contract, Wells was given final script approval.

⁶ Although this chapter is mainly focused on the recurrence of such tropes in the 1933–1951 period, it is notable that such tropes recur in many later films, including some that I discuss in Chapter Four of this thesis.

‘official’ sequels as *The Invisible Man Returns* (Joe May, 1940),⁷ *Invisible Agent* (Edwin L. Marin, 1942),⁸ and *The Invisible Man’s Revenge* (Ford Beebe, 1944),⁹ all of which were produced by Universal Pictures, give credit to Wells,¹⁰ and include special visual effects created by a team led by John P. Fulton.¹¹ These sequels re-enact a similar range of themes to the first film, each featuring a principal character named Griffin, though their relationship with the character of that name in both the 1897 novel and 1933 film is convoluted and sometimes entirely unknown.¹² Of interest also are Universal’s own parodies of the above films – in which the now firmly established visual tropes of embodied invisibility are repeated as farce – such as *The Invisible Woman* (A. Edward Sutherland, 1940),¹³ *Abbott and Costello Meet Frankenstein* (Charles T. Barton, 1948)¹⁴ and *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951).¹⁵ These popular sequels and derivatives of the 1933 film form a cycle that clearly belongs to the same paradigm, though the ways in which they extend the tendencies instituted in the 1933 film – tendencies that, in their repetition, are extended and intensified – have been underexplored.¹⁶ Taken together, these films form a network of interrelated objects and experiences through which particular modes of invisible form were popularised in the mid-twentieth century. In their

⁷ *The Invisible Man Returns* was first released on 12 January 1940.

⁸ *Invisible Agent* was first released on 31 July 1942.

⁹ *The Invisible Man’s Revenge* was first released on 9 June 1944.

¹⁰ Though deviating from the plot of his novel, the production of these later films was connected with Wells’s contract with Universal.

¹¹ All of these three sequels feature special visual effects produced by Fulton with David S. Horsley. Fulton, who worked on a number of films directed by Whale, had trained with Frank Williams, a pioneer of composite photography who, in 1916, had invented the travelling matte technique of film superimposition, and who was also involved with the visual effects of *The Invisible Man*. Arthur Edson, cinematographer on *The Thief of Bagdad*, fulfilled the same role on *The Invisible Man*.

¹² *The Invisible Man Returns* is listed in its opening credits sequence as ‘A Sequel to H.G. Wells’s “The Invisible Man”’, while both *Invisible Agent* and *the Invisible Man’s Revenge* are noted as ‘Suggested by H.G. Wells’s “The Invisible Man”’.

¹³ *The Invisible Woman* was first released on 27 December 1940.

¹⁴ *Abbott and Costello Meet Frankenstein* was first released on 15 June 1948.

¹⁵ *Abbott and Costello Meet the Invisible Man* was first released on 7 March 1951, having began as *The Invisible Man Strikes Back* (a ‘sequel’ to *The Invisible Man’s Revenge*) before being developed into a vehicle for comic duo Bud Abbott and Lou Costello (Howard Maxford, *The A–Z of Horror Films* (London: Batsford, 1996), p.14). Assisted by Horsley, Fulton produced special visual effects for *The Invisible Woman*, while those for *Abbott and Costello Meet Frankenstein* and *Abbott and Costello Meet the Invisible Man* were supervised by Horsley. There is information about the working relationship between Fulton and Horsley in Paul Mandell, ‘Making Miracles The Hard Way: John P. Fulton, ASC’, *American Cinematographer*, 12 (December 1983), 42–52.

¹⁶ Also of note are derivatives such as Universal’s *The Vanishing Shadow* (Louis Friedlander, 1934), Warner Bros.’ *The Body Disappears* (D. Ross Lederman, 1941), Republic Pictures’ *The Invisible Monster* (Fred C. Brannon, 1950), Miller-Consolidated Pictures’ *The Amazing Transparent Man* (Edgar G. Ulmer, 1960), and the UK television series *The Invisible Man* (1958–1960).

depiction of an invisible body, these films are connected thematically but also stylistically and I consider the cycle as a particular category of invisible body cinema.

This chapter proceeds to explore three of the principal qualities that most characterise the invisible body's depiction in the 1933–1951 cycle of films. Following this introduction, the first part continues the chapter's opening preoccupation with the invisible mouth, finding tensions between invisible bodies and language as I address the nature of the mouth as a multifunctional organ – equally adept at speaking, eating, tasting and smoking – and as a model for a multifunctional sensorium. Part two will explore the invisible body's styling in terms of mummification, a characterisation that locates invisible form at the intersection of a number of bodily debates for which ruin, preservation and representation figure large, and that speaks of a morbid sense of dislocation from the world. Part three investigates the invisible body's propensity for the adoption and rejection of a range of prosthetic parts, interpreting this in terms of sensory disorder. In each case I centre upon a reading of these motifs in which I ask the wider question of this thesis: What kind of history of the senses can be found in the onscreen invisible body? In doing so, this chapter will thus come towards a film theory of the senses that asks what the mid-twentieth century depiction of the invisible body – itself a cultural construction that has no direct equivalent in nature – brings to a cultural understanding of the modern sensorium.

One: The Invisible Mouth

The vocal mouth

There are points in H.G. Wells's *The Invisible Man* where the title figure is referred to simply as 'The Voice', and the acousmatic voice of the invisible body – a looked-for voice whose difficult-to-determine source disorientates the listener – is a potent force throughout the cycle of films that derive from this text. To a 1933 audience, and even today, the voice of the invisible mouth might seem as if it is a voice in the listener's head, mistaken for an interior monologue.¹⁷ As it mordantly mimics the

¹⁷ The neurologist Oliver Sacks has written about such silent, interior voices, often experienced by the 'postlingually deaf', as 'phantasmal voices' (Oliver Sacks, *Seeing Voices: A Journey into the World of the Deaf* (New York: HarperCollins, 1990), pp.5–6, 6, n.13). Isabelle Raynauld refers to Sacks's term when noting that, in early sound cinema, the 'actors' voices were rarely as seductive as the imaginary

technologically reproduced voice of the radio in the sequence described above, this vocal presence intimidates the disturbed Kemp into acting as the invisible body's visible surrogate, 'a visible partner' who will passively perform as ventriloquist's dummy. For Kemp, a listener whose immobility mimics that of the seated cinema spectator as his eyes dart around the room, it is the locomotion of the invisible mouth that distinguishes its speech from that of the fixed radio speaker, though its voice borrows much from such technologies of vocal reproduction. This 1933 film demonstrates a sensitive use of the synchronised sound process, only recently commercialised in the late 1920s. However, for his provision of vocals for moments at which his physical presence is invisible, the actor Claude Rains recorded dialogue separate from the cinematography.¹⁸ Explicitly connected with the aural technologies of radio, the loud and domineering voice of the invisible mouth, which sounds aloof and separate from the other voices within the film, thrives amidst the nuanced sensory landscapes of infant sound cinema, self-consciously addressing an augmented cinematic mode and experience in which both speaking and listening figure significantly.¹⁹

The Invisible Man's director James Whale's first encounter with filmmaking, after working in the theatre for a decade, was as director of dialogue sequences for the 1929 film *The Love Doctor* (Melville W. Brown), before undertaking similar duties on Howard Hughes's 1930 *Hell's Angels*, after its mid-production change from a silent to a talkie. Though not among this first wave of widely released sound films, *The Invisible Man* was significant in playing with the growing prevalence of

voices [...] each spectator had formed in his/her mind' (Isabelle Raynauld, 'Dialogues in Early Silent Sound Screenplays: What Actors Really Said', in *The Sounds of Early Cinema*, ed. by Richard Abel and Rick Altman (Bloomington and Indianapolis: Indiana University Press, 2001), pp.69–78 (p.72)).

¹⁸ According to film historian Rudy Behlmer, 'much of Rains' dialogue throughout the film was either pre- or post-recorded' (Rudy Behlmer, 'Audio Commentary', *The Invisible Man*, dir. by James Whale (Universal Pictures, 2004) [on DVD]). It is notable that the very first scene of the film depicts a character miming the playing of an automated player-piano.

¹⁹ Discussing the presence of radio in 1933, Lutz Peter Koepnick notes that 'considering the fact that film practitioners at the same time were at pains to articulate voice and body into persuasive harmony, radio must have had something uncanny [about it] [...]. Radio, in the views of early commentators, destabilized space and unhinged temporal coordinates. It severed voice from body, split sounds and sights, fragmented the audience's perception'. The forcefulness with which the invisible man's voice of terror propagates its ideology, associated as it is with radio broadcast, can be connected with the election, in January 1933, of Adolf Hitler as chancellor of Germany. Koepnick contends that: 'Radio was surely instrumental in elevating the Nazi movement to power. In the electorate of 1932 Goebbels's voice entered more than four million households through radio loudspeakers. Unlike the speeches of the democratic leaders, Goebbels and Hitler mesmerized their listeners with vocative resolve, visionary appeal, and fierce emotionalism.' (Lutz Peter Koepnick, *The Dark Mirror: German Cinema between Hitler and Hollywood* (Berkeley and Los Angeles, CA: University of California Press, 2002), p.61.)

audiovisual cinema as part of its own sensational effects. As the film's writer R.C. Sherriff would reflect, the film 'was the first talkie to let itself go on trick photography',²⁰ and it is this fusion of composited sound and composited image – which I shall discuss in more detail in part two – that is most of note; a contemporary review emphasised how Whale had employed 'principally Camera Effects and A Voice with sensational, eerie, spine-tingling reactions on the beholder'.²¹ The film utilised the recently developed 'Western Electric Noiseless Recording Sound System', which, as publicity from the time states, 'eliminates all extraneous sounds, hissing and scratching noises';²² this system allowed a starker contrast between the invisible body's voice and its silence, so emphasising both. Rains's exaggerated and pointed vocal performance was widely celebrated,²³ and these skills were attributed to the vocal therapy he had received in overcoming a youthful speech impediment, along with his recovery from a First World War gas attack in which his 'vocal chords were paralyzed', his voice subsequently more abrasive.²⁴

With no visible source, the dominant oral character of this voice reverses the tendency observed in Walter J. Ong's 1982 reflection that 'the shift from oral to written speech [that developed around the sixteenth century] is essentially a shift from sound to visual space', as 'print replaced the lingering hearing-dominance in the world of thought and expression with the sight-dominance which had its beginnings with writing'.²⁵ Ong argues that, '[t]hough words are grounded in oral speech, writing tyrannically locks them into a visual field forever. A literate person [...] cannot fully recover a sense of what the word is to purely oral people.'²⁶ The invisible mouth stimulates the shock of such a recovery as it enacts absolute linguistic invisibility:

²⁰ R.C. Sherriff, *No Leading Lady: An Autobiography* (London: Gollancz, 1968), p.287. Sherriff also spends part of this volume discussing the adaptation of novel into screenplay.

²¹ Phil M. Daly, 'Along the Rialto', *The Film Daily*, 64.36 (13 November 1933), 10.

²² See, for example: 'Noiseless Recording Marks New Era in Talking Films', *The Florence Times-News*, 8 (14 February 1931), 6.

²³ Reflecting in 2010, Ronald L. Smith asserts that: 'In terms of vocal flexibility, Rains' performance is probably the finest in horror film history' (Ronald L. Smith, *Horror Stars on Radio: The Broadcast Histories of 29 Chilling Hollywood Voices* (Jefferson, NC: McFarland, 2010), p.171). Smith goes on to detail the extensive voice work that Rains performed on radio (pp.171–181).

²⁴ David J. Skal and Jessica Rains, *Claude Rains: An Actor's Voice* (Lexington: University Press of Kentucky, 2008), p.35. Rains would extend his association with perverse sound and language, stating in a 1935 interview, when asked how he learns his lines, that 'I analyze the lines, see what's behind them, rip them apart, toss them up in the air a few times, then kick them around the room!' (Claude Rains, qtd in Joe Mackey, 'Laughing Enigma', *Picture Play*, 42.6 (August 1935), 36, 78 (p.78).)

²⁵ Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London and New York: Routledge, 2002), pp.115, 119.

²⁶ Ong, *Orality and Literacy*, pp.11–12.

words *unlocked* from the visual field. Ong asserts that, ‘with telephone, radio, television and various kinds of sound tape, electronic technology has brought us into the age of “secondary orality”’, which is ‘essentially a more deliberate and self-conscious orality’ than that of pre-literate culture.²⁷ The adhesion of the invisible body to such a range of aural technologies – the telephone, which, like radio, had been popularised through the 1920s, features particularly strongly throughout the cycle (fig. 2.8) – marks the invisible body as an agent of ‘secondary orality’.²⁸ The breakdown of written language is ripe in the title sequences of these films – normally the place in cinema where language is at its most visual. The title cards of both *The Invisible Man* and its 1940 sequel *The Invisible Man Returns* display unstable written text – words formed from unfocused and unstable marks – that echoes both the visual aberrance and uncertain materiality of the invisible body, marking the invisible as unstable and illegible (fig. 2.10).

Such tensions between language, invisibility and the body connect well with the concerns of philosopher Michel Serres’s 1985 work *The Five Senses*, to which I will return a number of times throughout this chapter. For Serres, ‘language replaces experience’, not ‘as an equivalence’ but as ‘an abuse and a violence’, as ‘the tongue that talks annuls the tongue that tastes or the one that receives and gives a kiss’.²⁹ Jennifer Lea summarises Serres ‘central argument’ as being ‘that for too long language has separated the western subject from the senses and the body’ and that it ‘is only by leaving language behind that the flesh is “freed” and it is possible to “get back” to the senses’.³⁰ The ending of *The Invisible Man* – which I shall discuss in more detail in part two – hints at such a liberation from the domination of language, depicting the invisible body’s return to visibility, and entry into death, to coincide with the invisible man’s absolute *silence*, an unspoken word that is printed in large letters on Griffin’s hospital door (fig. 2.11).

²⁷ Ong, *Orality and Literacy*, p.133.

²⁸ In *The Invisible Man* it is Kemp’s telephone, a device that Griffin views with some suspicion, which is the source of Griffin’s betrayal to the police (fig. 2.9).

²⁹ Michel Serres with Bruno Latour, *Conversations on Science, Culture, and Time*, trans. by Roxanne Lapidus (Ann Arbor: University of Michigan Press, 1995), p.132.

³⁰ Jennifer Lea, ‘Negotiating Therapeutic Touch: Encountering Massage Through the “Mixed Bodies” of Michel Serres’, in *Touching Space, Placing Touch*, ed. by Mark Paterson and Martin Dodge (Farnham: Ashgate, 2012), pp.29–45 (p.36).

The multifunctional mouth

Prior to this quietude, however, the vocal excesses of this mouth disguise further tensions in the cavity: the deeper the gaze into its invisibility, the more keenly can it be recognised as something more than an instrument of vocalisation alone. Upon its entry into the narrative, the mouth is muffled, covered by a scarf that remains in place as Griffin organises a private room for himself at the Lion's Head inn; it is only exposed when Griffin's furtive act of eating is subsequently interrupted by his landlady (fig. 2.12). Mrs Hall's interruption is an entrance through which she, and the film's audience, enter into a prohibited visual encounter with the invisible: two shots of Mrs Hall's response frame the momentary image of the invisible mouth; on the soundtrack a delicately textured wind is heard, a soundscape punctuated with the percussive stroke of Griffin's dropping hand against the table, a beat that coincides with this vision of mouth as glaring void (fig. 2.13). The moment comes and goes so quickly that the film frame can be thought of as a mouth, opening as it passes over the projector lamp, its lips the surrounding black border, as perforations interlace with sprocket teeth. This sight, which, on a conventional viewing of the film, does not permit close scrutiny, produces a disturbing interpretation of what Wells describes as a 'vast and incredible mouth that swallowed the whole of the lower portion of his face' (*IM* 11).³¹ Such an apprehension offers, in both novel and film, a first point of entry into the invisible body, depicting a terrifying consumption wherein the maw, ready to consume the food before it, appears instead as a gaping black hole that seems to consume itself (fig. 2.14).

This interruption, a repression of the gustatorial mouth, serves to exemplify the recurring circumstance contrived by Wells in which Griffin's consumption of food is impeded; when he does manage to eat, the process of consumption is loaded with anxiety. As Griffin remarks, 'to eat, to fill myself with unassimilated matter, would be to become grotesquely visible again', visible food only gradually being digested into invisibility (*IM* 114). As he explains that 'it's not quite assimilated into the system', an observer notes the appearance of half-digested bread and cheese in 'the apparently empty space' to be 'Sort of ghostly' (*IM* 47). This interpretation resonates sharply with a passage from Charles Dickens's 1843 *A Christmas Carol* where Ebenezer Scrooge refuses to believe in the audiovisual presence before him of the ghost of his

³¹ H.G. Wells, *The Invisible Man*, ed. by Patrick Parrinder (London and New York: Penguin, 2005), p.11. Hereafter referred to in the main text as *IM*.

long-dead partner Jacob Marley. When the ghost asks, ‘Why do you doubt your senses?’, Scrooge argues that ‘A slight disorder of the stomach makes them cheats. You may be an undigested bit of beef, a blot of mustard, a crumb of cheese, a fragment of an underdone potato.’³² Wells extends Scrooge’s wary sensory analysis, and in doing so ratifies the sensualities of the stomach as a valid mode of worldly encounter.³³ Sherriff and Whale’s film adaptation similarly have their Griffin, whilst eating, state that ‘I must always remain in hiding for an hour after meals: the food is visible inside me until it is digested’, but they extend the stomach’s centrality in changing Griffin’s role as a ‘student of molecular physics’ (*IM* 89) to a lab assistant working with gastric phenomena. At one point, Kemp states that Griffin’s employer, Dr Cranley, has ‘discovered more about preserving food than any man living [...]. It’s a plain, straightforward job; it’s not romantic but it saves hundreds of deaths and thousands of stomach aches.’ The tasting mouth is in evidence throughout the subsequent cycle of films, forming a defining motif of embodied invisible presence (fig. 2.15).

The potent but problematic gustatoriality of the invisible mouth, then, announces tensions between the mouth as seemingly disembodied agent of speech and of wholly embodied mechanism of taste and ingestion; most interpretations of the invisible mouth in *The Invisible Man* have concentrated on the former while ignoring the latter. Serres identifies such a hierarchical duality in the cultural understanding of the mouth firstly as vocal mechanism and secondly as port of consumption – the latter neatly summarised by David Howes as ‘the subordinate, tasting mouth’.³⁴ Serres’s *The Five Senses* ends with the observation that:

Each time an organ – or function – is liberated from an old duty, it invents. [...] [F]reed by our verticality from the vital necessity to grasp, the mouth, jaw or maw begins to speak words. [...] And to what new use our regenerated language will be put.³⁵

³² Charles Dickens, ‘A Christmas Carol’, *A Christmas Carol and Other Christmas Books*, ed. by Robert Douglas-Fairhurst (Oxford: Oxford University Press, 2006), pp.5–83 (p.21).

³³ In his 2010 book *Food in the Movies*, Steve Zimmerman characterises this sequence from *The Invisible Man* amongst his list of cinematic ‘food scenes that defy characterization’ (Steve Zimmerman, *Food in the Movies*, rev. edn (Jefferson, NC: McFarland, 2010), p.331).

³⁴ David Howes, ‘Introduction: Empires of the Senses’, *Empire of the Senses: The Sensual Culture Reader* (Oxford and New York: Berg, 2005), pp.1–17 (p.2).

³⁵ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, trans. by Margaret Sankey and Peter Cowley (London and New York: Continuum, 2008), p.344.

For all of its involvement with language, the invisible mouth, as depicted in *The Invisible Man*, is a multifunctional organ that serves as a potent site of sensation, articulating invisibility as a multisensory mode of embodiment: one involved with the body as much as with the intellect.

An atmosphere of synaesthesia

In its disruption of conventional schemes of sensation, the invisible body bears a compelling relationship with synaesthesia, the neurological phenomenon that Richard Cytowic has referred to as ‘a union of the senses’,³⁶ and one form of which concerns unconventional conjunctions between language and taste: *lexical-gustatory synesthesia*, which ‘involves tasting the flavors of food in response to heard, read, or thought words’.³⁷ The *Oxford English Dictionary* provides one definition of synaesthesia as the ‘relationship between speech sounds and the sensory experiences that they represent’;³⁸ the smoke that I have described as emanating from the invisible mouth expresses such a relationship, in which mingles both linguistic and sensorial peculiarity. In the midst of this smoking the voice is not only *heard* but is also *seen*: not as text, but as something other, something altogether less programmatic: a kind of atmosphere, a kind of breath.³⁹ Relevant here and symptomatic of an understanding of the mouth as a multifunctional, synaesthetic organ are Steven Connor’s observance of the term *ventriloquism* to relate to both the Latin ‘ventri’, meaning belly, and the French ‘vent’, meaning air.⁴⁰ Such a mix evokes well the fusion of materiality and immateriality expressed in the voice of the invisible body.

In *The Invisible Man*, Griffin is twice shown smoking, both when nakedly invisible and visibly clothed, the repetition emphasising the cigarette and cloud of smoke as a potent signifier of the invisible body (fig. 2.16). Such an ethereal aesthetic

³⁶ Richard E. Cytowic, *Synesthesia: A Union of the Senses* (New York and London: Springer-Verlag, 1989), p.1.

³⁷ Edward M. Hubbard, ‘Synesthesia and Functional Imaging’, in *Oxford Handbook of Synesthesia*, ed. by Julia Simner and Edward M. Hubbard (Oxford: Oxford University Press, 2013), pp.475–499 (p.490).

³⁸ *Oxford English Dictionary*.

³⁹ Asking what distinguishes the voice ‘against the vast ocean of sounds and noises, [...] among the infinite array of acoustic phenomena’, Mladen Dolar writes that ‘the voice is an opening toward meaning. [...] Only the voice implies a subjectivity which “expresses itself” and itself inhabits the means of expression.’ However, Dolar proceeds to liken the voice to ‘the vanishing mediator’, noting that ‘it makes the utterance possible, but it disappears in it, it *goes up in smoke* in the meaning being produced’ [emphasis mine]. (Mladen Dolar, *A Voice and Nothing More* (Cambridge, MA: MIT Press, 2006), pp.14–15.)

⁴⁰ Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), pp.193–195.

is motivated in the dense blizzard from which Griffin first emerges, an atmosphere exacerbated as he evades the storm only to enter into the smoke-filled interior of the Lion's Head; at the climax, he is similarly smoked out of a burning barn (fig. 2.17). I have already referred to the opening credits sequence, in which pale text is defocused against a backdrop of vague ethereal swirls; the film's original poster likewise sees visage and text emerge from the smoke of a test tube (fig. 2.18). *The Invisible Man Returns* is similarly pervaded with such atmospheres; bookended with a glide over a desolate smoky landscape, the action takes place in four principal locations: an isolated farmhouse encompassed in swirling mist; a colliery that pollutes the air with the smog and dust of industry; a hazy wood; a fog-bound mansion whose interiors become polluted with smoke intended to reveal the invisible body (figs 2.19 and 2.20). The titular *Invisible Agent* first becomes invisible whilst parachuting through cloud cover, *The Invisible Man's Revenge* also opens and closes with credits against a background of fiercely billowing smoke, while *Abbott and Costello Meet the Invisible Man* shows its invisible body to be outlined in steam (fig. 2.21). Such atmospheres confer attributes of both illegibility and infernality upon these invisible figures, but also come to settle upon more embodied matters of the air.

In explaining becoming invisible as a process through which the body's 'refractive index could be made the same as that of air' (*IM* 91), Wells deploys air as a key, though unstable, metaphor of invisible materiality. For air, two senses of lightness – paleness and weightlessness – compete as sense is made of the matter of invisibility, and to this mix Wells adds the light, airy nature of the intellect, as Griffin describes his inspiration as a moment of genius in which 'light came through one of the meshes suddenly – blindingly!' (*IM* 89).⁴¹ For Marina Warner, matters of the imagination similarly speak the language of the air; she notes that

⁴¹ For Wells, the impetus for Griffin's transformation centres upon light: 'Light – fascinated me. [...] Either a body absorbs light, or it reflects or refracts it, or it does all these things. If it neither reflects nor refracts nor absorbs light, it cannot of itself be visible', the reduction in the invisible body's reflective, refractive and absorbent properties allowing it to move amongst light unchallenged (*IM* 89, 90). A character in *The Invisible Man's Revenge*, Dr Drury, repeats this hypothesis, which he associates with 'optical density' and 'molecular physics', explaining thus: 'A body either absorbs light, or it reflects it, or it refracts it. If it does none of these things, if its refractive index is sufficiently lowered, it cannot of itself be visible', before invoking air, glass and water as in some ways analogous with the invisible body. As Drury continues: 'The problem was to find a formula, a geometric expression involving four dimensions, for use on tissue, bone, blood'.

an airy physics [that] passed from antiquity to early Christian thought, composed of breath, vapour, liquor, and cloud, governs the composition of beings imagined to exist beyond the apprehensible physical universe.⁴²

Warner observes in divine bodies multiple modes of ‘lightness’:

Light, as both radiance and weightlessness, buoys the angelic body, an impossible body, incorporated but not enfleshed; light clothes it and renders it at once palpable and insubstantial: the lightness of being not so much unbearable as transcendent.⁴³

In contrast, the onscreen invisible body’s evasion of light comes to rest upon a sense of heaviness; in its refutation of the visual, invisibility fuses the lightness of being with earthen weight, as can be seen in Griffin’s disturbing depression in the empty chair. *Invisible Agent* extends such correspondences in an impressively constructed bubble-bath sequence – the figure bathing in order to cleanse away the atmospheric filth that might increase the body’s ‘refractive index’ – in which the invisible body is surrounded by, and contrasted with, the visible airy matter that defines its boundaries (fig. 2.22).

The ‘airy physics’ of the invisible body – as exemplified in Griffin’s entry into Kemp’s study, which issues forth a sympathetic breeze that moves about the room – abounds throughout the film cycle, extending Wells’s suggestion that such a body’s invisible movement can be sensed by others as a ‘little breeze’ that ‘seemed to ripple over the grass’ (*IM* 137). The presence of the invisible body is frequently announced by the animation and displacement of grass, leaves and shrubs, while doors and curtains open as if stirred by a gust (fig. 2.23). These effects rely upon the body’s interaction with the natural environment and propel a rethinking of the materialities of the air – so often considered a non-presence – thus connecting with Connor’s observation that, like ‘rippling grass and quivering leaves, smoke discloses the miraculous musculature of the air’s mobile body’.⁴⁴ Rather than adopting the perceived immateriality of the air, the invisible body instead betrays the substantiality

⁴² Marina Warner, *Phantasmagoria: Spirit Visions, Metaphors and Media into the Twenty-first Century* (Oxford: Oxford University Press, 2006), pp.61–62.

⁴³ Warner, *Phantasmagoria*, p.63.

⁴⁴ Steven Connor, ‘On the Air’, <<http://www.stevenconnor.com/onair>> [accessed 17 September 2009] (para. 13 of 26). Connor comments on certain properties of the air in relation to the loss of the body: ‘To breathe is to be levitated, granted some of the air’s own lightness. We know that we are not made of air, but seem convinced that the part of ourselves that is most essentially us, and is most likely to persist after the dissolution of our bodies, is airy rather than substantial. The ghost in the machine is a gas.’ (para. 6 of 26).

of the gaseous. It is with reference to Merleau-Ponty that Connor has also observed that '[v]ision and the invisible together form an atmosphere, which guarantees their contact without itself ever becoming visible, just as one sees by means of light without being able to see light itself'.⁴⁵ Such an atmosphere, in which vision and the invisible make contact, swirls around the invisible body, reminding that, for Serres, the air is 'the medium for every signal that reaches our senses':

The air, an indistinct mixture, light, subtle, unstable, promotes combinations: as vector of everything, it blocks nothing. Medium of the sensorium, general excipient of mixtures: principal chamber of the confused clepsydra.⁴⁶

Serres describes the wind in similar terms, likening it to the soul:

The wind. The movement of the light, subtle, vaporous, turbulent air, rhythmic, almost periodic, chaotic; mixture and carrier of mixtures, confused, the medium of every signal that reaches our senses, penetrating body, nose, mouth, ears, throat and lungs, surrounding the skin. Base line of the senses, carrier to all of them.⁴⁷

Of these persistent atmospheric associations, the specific act of smoking expresses most about the sensory identities of the invisible body. Such imagery takes its cue from an evocative description by Wells, who writes that, when smoking, the invisible man's 'mouth and throat, pharynx and nares, became visible as a sort of whirling smoke cast' (*IM* 82), the mouth marked as a toxic location that channels between inside and outside, and between body and world. Like the billowing smoke from a distress flare, cigarette smoke similarly expresses the alarming presence of the invisible body in *The Invisible Woman*, *Invisible Agent*, *Abbott and Costello Meet Frankenstein* and *Abbott and Costello Meet the Invisible Man* (figs 2.24 and 2.25). If, in *The Invisible Man*, Griffin seems to require a cigarette in order to express his plans for a 'reign of terror', such gaseous environments also serve as atmospheres of introspection, the practice of smoking speaking, silently, of the process of thought: the act of internal rumination in which the solitary smoker is so often engaged. That the technique of matte double-exposure is often used to convey the smoking invisible presence serves a Balázsian understanding of cinematic effects and psychic apparatus (as outlined in Chapter One). When, in the main visual innovation of *The Invisible*

⁴⁵ Steven Connor, *The Book of Skin* (London: Reaktion Books, 2004), p.275.

⁴⁶ Serres, *The Five Senses*, p.169.

⁴⁷ Serres, *The Five Senses*, p.172.

Man Returns, the eponymous figure appears suddenly outlined in the traces of his pursuer Inspector Sampson's cigar smoke (fig. 2.26), which throws the density of the body into sharp relief, this appearance is simultaneously a manifestation of Sampson's intellectual powers of deduction. As he seeks the invisible man, the detective's incessant blowing of smoke everywhere he looks expresses well his seeking of inspiration from the otherwise invisible traces around him.⁴⁸ The startling appearance stimulates a shock in the spectator; truly a breathtaking moment, but one also in which the exhalation of smoke is seen to speak of an intensified breathing process: a process that itself is normally invisible. In this way, the 'Voice' speaks of an embodied air: the breathy stuff of the body. If smoke is a making visible of the stuff of the mouth, then this invisible mouth that speaks and smokes produces a synaesthetic atmosphere in which to *hear* air and *see* sound, and so challenging the audiovisualities of the cinematic medium, even in their apparent infancy.

The breathing voice

For Aristotle, writing in *De Anima* [*On the Soul*], the voice 'is a kind of sound characteristic of what has soul in it' as well as 'a certain movement of air'.⁴⁹ But, more than this, the voice is an embodied expression of the intellect:

Voice then is the impact of the inbreathed air against the 'windpipe', and the agent that produces the impact is the soul resident in these parts of the body. Not every sound, as we said, made by an animal is voice (even with the tongue we may merely make a sound which is not voice, or without the tongue as in coughing); what produces the impact must have soul in it and must be accompanied by an act of imagination, for voice is a sound with a meaning, and is not merely the result of any impact of the breath as in coughing; in voice the breath in the windpipe is used as an instrument to knock with against the walls of the windpipe.⁵⁰

As Aristotle recognises the diversity of the complex relationships between the air and the body, he does so with particular reference to the multifunctional mouth, noting that once 'air is inbreathed, Nature uses it for two different purposes, as the tongue is

⁴⁸ Correspondences between the activities of smoking and thinking are rich in the literature and film of this period – perhaps most exemplified in the figure of Sherlock Holmes, for whom the pipe and smoking jacket are the essential attributes of intellectual activity. Although not as dynamic as Sampson, the detectives of *The Invisible Man* themselves smoke furiously as they conspire to capture Griffin.

⁴⁹ Aristotle, *De Anima*, trans. by J.A. Smith (Oxford: Clarendon Press, 1931), pp.54, 55.

⁵⁰ Aristotle, *De Anima*, p.56.

used both for tasting and for articulating; [...] Nature employs the breath both as an indispensable means to the regulation of the inner temperature of the living body and also as the matter of articulate voice'.⁵¹ Such comments certify the multifunctional character of the mouth – a potent site of soulful expression – whilst testifying to the embodied invisibility of breathy vocal presence.

More recently, these notions have been extended in the writing of Frances Dyson, who touches upon the range of extra-aural effects that sound may stimulate. She observes that:

Sound surrounds. Its phenomenal characteristics – the fact that it is invisible, intangible, ephemeral, and vibrational – coordinate with the physiology of the ears, to create a perceptual experience profoundly different from the dominant sense of sight. [...] Immersed in sound, the subject loses its self, and, in many ways, loses its sense. Because hearing is not a discrete sense, to hear is also to be touched, both physically and emotionally. We feel low sound vibrate in our stomachs and start to panic, sharp sudden sound makes us flinch involuntarily, a high pitched scream is emotionally wrenching: sound has immediate and obvious physical effects. In listening, one is engaged in a synergy with the world and the senses, a hearing/touch that is the essence of what we mean by gut reaction – a response that is simultaneously physiological and psychological, body and mind.⁵²

Dyson continues, likening the 'abstracted' understanding of sound to that of 'atmosphere': 'like a dense fog, it disappears when approached, falling beyond discourse as it settles within the skin. As sound rides the cultural divisions between language and babble, music and noise, voice and the body's abject effusions, it resists theorization'.⁵³ She notes that:

Traditionally, the voice grounds the subject in presence, and here 'presence' signifies both the temporal present and the 'presentation to the senses,' which Western ontology demands to attribute existence. Projected from the inside to outside, heard at the moment of utterance, the voice establishes a circuit between perception and intellection, between the thinking mind and the speaking body, between the interior and the exterior, and between the subject and the object.⁵⁴

⁵¹ Aristotle, *De Anima*, p.55.

⁵² Frances Dyson, *Sounding New Media: Immersion and Embodiment in the Arts and Culture* (Berkeley and Los Angeles, CA: University of California Press, 2009), p.4.

⁵³ Dyson, *Sounding New Media*, p.4.

⁵⁴ Dyson, *Sounding New Media*, pp.95–96.

Such a circuit is richly in evidence throughout the cinematic cycle with which this chapter is preoccupied, in which the invisible mouth speaks its mind even as its smoking – a certain stimulant of mind, body and nervous system – signals both the elementary stuff of cognition and the breathy stuff of corporeality. In this smoky envisioning of air is shown something of respiration, the invisible smoker's lungs throwing into relief the usually unseen stuff of the breathing process. The general invisibility of breath can be understood to obscure the body's constant and essential interaction with the world around it; the largely unseen presence of oxygen and of air resembles the invisible body in its registration via extra-visual sensation: in terms of sound, smell and tactility, but also through temperature and force. Though partly focused upon the internal operations of the body, this particular visual trace of airy particles actually emphasises the everyday economy of exchange that occurs as the body processes the air in which it is embedded: breathing is central to the concept of *enworldment* and the invisible body's breath thus serves as a potent motif of this notion.⁵⁵ As *The Invisible Man* draws to a climax, it is the fugitive Griffin's heavy breathing whilst asleep that ultimately betrays his location to the police, so leading to his death by shooting. Although the fatal bullet is trained upon the space above the footprints in the snow, its trajectory 'through both [of Griffin's] lungs' is significant.⁵⁶ The discreet activities of breathing are further emphasised through the careful construction, by Fulton and his team, of a dummy torso that, as Fulton describes, features 'a chest ingeniously contrived to move as though breathing', animated to convey the flux and pulse of the living organism.⁵⁷ As Griffin lies in the hospital bed, his invisible chest gently disturbs the sheets as it rises and falls. Finally, this invisible body expires, breathing its final breath just as it returns to visibility (fig. 2.27).

The act of breathing is adopted by Jennifer M. Barker as a process through which an embodied relationship with cinema can be understood. Barker concludes her 2009 book *The Tactile Eye* with reference to breath as a 'literal, embodied act of inspiration', which, she describes,

⁵⁵ As Peter Koestenbaum writes, *enworldment* extends from embodiment in describing an encounter in which 'one experiences not only a connection with the body but with the environing world' (Peter Koestenbaum, *The New Image of the Person: The Theory and Practice of Clinical Philosophy* (Westport, CT: Greenwood Press, 1978), p.183). I will be discussing this concept in depth in Chapter Five.

⁵⁶ As the attending doctor states: 'The bullet passed through both lungs. It's impossible to treat the wound.'

⁵⁷ John P. Fulton, 'How We Made the Invisible Man', *American Cinematographer*, 15.9 (September 1934), 200–201, 214 (p.201).

begins at the surface (we encounter a breeze on our skin, breathe it in through lips or nose) and proceeds through the muscles (throat, chest, and stomach expand as we draw it in) into the depths (our lungs, ventricles, and even the bloodstream fill up with oxygen). It reverses direction as well, to be exhaled through lips and nose again and to appear as vigor or lassitude in the muscles and perhaps a blush on the cheek. Thus, inspiration is transitive (both objective and subjective, inward- and outward-moving), and it is pervasive and diffuse (involving the surface, middle, and depth of the body). It vacillates in the space between immanent and transcendent: it is embodied by a single subject, but at the same time it constitutes the bond between that subject and all others, as well as that subject's immersion in a world of materiality.⁵⁸

Barker persuasively maps this analysis of breathing onto the experience of cinema:

The cinema in-spires us, literally and metaphorically; the hyphen may help to maintain both these senses of the word as well as the reversibility of the act itself. When a film has captured our attention completely, we are drawn in (in-spired) by it. Its body opens onto ours and invites, even inhales, us; we might even feel its pulse and breath as our own. The film takes in our forms of being-in-the-world, and at the same time fills us up and animates us with sensations and attitudes. Not only does the film 'breathe in' distinct tactile behaviors, [...] it also breathes in styles of sensitivity to the world around us.

A 'breath-taking' film not only makes us gasp in astonishment at what we're watching; it also takes our breath in and gives it back to us in cinematic form. We take in its color, light, movement, drama, music, violence, eroticism, grandeur, intimacy, or immensity, for example. At the same time and in the same, bi-directional movement, we express these qualities back to the film in our own human form, and the film draws these things from us. [...] We take in the film's vitality and the style of its experience of the world, and we adopt and express those things back to it. We in-spire in both directions at once, infusing the film with our own particularly human version of those qualities.⁵⁹

This system of cinematic encounter, in which film and viewer rhythmically and reciprocally exist, is in sympathy with the further unfolding of this chapter, as I interrogate the ways in which the imagery of the invisible body in this cycle of films can respond to questions about relationships between the cinematic mode and the philosophy of the senses, and how the experience of the invisible body connects with a sensual experience of the world.

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⁵⁸ Jennifer M. Barker, *The Tactile Eye: Touch and the Cinematic Experience* (Berkeley and Los Angeles, CA and London: University of California Press, 2009), p.146.

⁵⁹ Barker, *The Tactile Eye*, p.147.

If *The Invisible Man* occupies a powerfully self-reflexive position as representative of sound cinema, then it can also be understood to speak for the further functions of the mouth and as a key point at which to enter into the meanings of the invisible body. As Dyson has stated:

The word ‘aural,’ from the Latin *auris*: pertaining to the ear, derives from ‘aura,’ originally Greek for ‘air’ and adopted by Latin as ‘a subtle, usually invisible exhalation or emanation.’ Like the voice, the breath straddles the internal and external; the autonomic reflex that is beyond control, and the signifying expression – such as the well-timed sigh – that is not yet language but has meaning nonetheless.⁶⁰

As a multifunctional, synaesthetic organ, it is appropriate that the invisible mouth should now open out onto the main themes of this chapter, which concern the relationship between the onscreen invisible body and the cultural construction, and reconstruction, of the senses. As has been seen, the invisible mouth is an agent of the sensorium in which the fraught matter of the senses – problems of individuating the sense organs and of reconciling sensory experience with language – is well expressed, and that, in its connection with the everyday processes of digestion and breathing, can be thought to encapsulate something of the sensorialities of cinema, not to say the cinemacities of the sensorium.

Two: The Skin of the Invisible Body

The malfunctioning invisible body

Just as the materialised invisible body of *Siegfried* pursues a powerful relationship with death and dissolution, such also holds true for *The Invisible Man*, the climax of which synchronises the body’s reappearance and death, corporeal demise stimulating the resettling of the visual order.⁶¹ In a hospital bed, Griffin’s mortified reappearance

⁶⁰ Dyson, *Sounding New Media*, p.14.

⁶¹ As the presiding doctor states: ‘The effect of the drugs will die with him. His body will become visible as life goes.’ This moment has been signalled in a striking juxtaposition halfway through the film, in which Griffin, wearing pyjamas, climbs into bed, drawing over bedding to cover his semi-invisible form in full relief. This shot cuts to a sheet drawn over the prone body of a policeman murdered by Griffin earlier that night, a matching cut that makes explicit the invisible man’s latent

unfolds from the inside out, cinematically orchestrated as a dissolving succession of still frames that expresses the finality of a passage towards stillness (figs 2.29 and 2.30). The stilled body's visualisation is an arresting sight that provokes the resumption of normal motion – that of 24 frames per second – and so allows the film to end: the mobile camera retreats and the image fades to a final black, darkness preferred in lieu of a continued vision of rigor mortis and decay (fig. 2.31). Fulton explains the creation of this closure:

First, we showed the bed, occupied by its invisible patient; the pillow, indentation and all, was made of plaster, and the blankets and sheets of papier-mache [sic]. A long, slow lap-dissolve revealed the skeleton (a real one, by the way); another lap-dissolve replaced the skeleton with a roughly-sculptured dummy, which suggested the contours of the actor; and a further series of dissolves, each time using a slightly more finished dummy, brought us to the real actor, himself [...] and a final fade-out ended the picture.⁶²

This labour works to visualise Wells's corresponding description in which the transition from invisibility to visibility is described in terms of a 'faint and transparent [...] outline' that 'grew clouded and opaque', giving way to 'a hazy grey sketch' that begins as 'a faint fogginess' before 'growing rapidly dense and opaque' until the final, fixed image of Griffin's rigid, staring body is revealed in all its detail.⁶³ Fulton's use of a real skeleton underlines the connection between Wells's prose and the penetrative process of X-ray imaging, and the film's collision of still images with the moving-image technique of lap dissolve further evokes the graduated passage into frozen legibility of photographic processing. It is notable too that the fading into apprehension of the invisible body segues into a dense black: an unexposed measure of film whose emulsion is undisturbed by any reflection. Although the viewer could blink and miss this nakedly visible body, its long-awaited revelation is all the more

status as a corpse, aligning him with the shrouded body of his first victim, the revelation of whose remains is prohibited (fig. 2.28).

⁶² Fulton, 'How We Made the Invisible Man', p.214.

⁶³ Relationships between image-making, death, penetration and materiality emerge vividly at the close of Wells's novel, when the invisible man is hounded by a crowd who beat, kick and strike him with a spade until he stops breathing and his heart fails. For Wells, the invisible man's visible corpse is a pitiful and stark image of death, one that is marked as repulsive and profane as a member of the crowd cries, 'For Gawd's sake, cover that face!', Griffin's immediate covering with a sheet thus denying the obscene exposure of his lifeless frame (*IM* 147).

potent for the absence elsewhere in the film of any privileged extra-diegetic visualisation of the invisible body, such as those imparted to the viewer of *Siegfried*.⁶⁴

This sequence shows the reappearance of the invisible body as inseparable from its death, an entanglement in which the embedding of still images into the motion-picture context recalls Annette Michelson's suggestion that, when used in film,

the still photograph cuts into time [...] it inserts, within our experience of lived time, the extratemporality of death. [...] Within the flow of cinematic representation, that semblance of temporality itself, we can insert this arrest that figures the perpetual freezing of the image as a kind of posthumous life within the flow of the film.⁶⁵

If the return of its image equates to the death of this body, so does its absolute visibility undo the unique and vital embodiment of this singular figure. The still images themselves show diverse sculptural forms, the varied materiality of which maintains the fragile image of embodied invisibility as it is exposed and undone. Numerous plaster reproductions of Rains's features, shown in diminishing states of disrepair, recompose the actor prior to the decomposition of his character, and the actor recalled the process – in which he himself was immobilised before being reproduced in multiple – with some horror:

They smeared me with Vaseline and then stood off and threw plaster at my head. I thought I was going to die. It was a most alarming operation. Really, I'm afraid I behaved very badly. I went back the next day and saw masks and half-masks of my head all over the place.⁶⁶

⁶⁴ This reappearance of the wounded invisible body when close to death is a potent expression throughout the film series. *The Invisible Man Returns*, *Invisible Agent* and *Abbott and Costello Meet the Invisible Man* all end with the injured invisible body returning to visibility in a hospital bed; although in all three cases death is ultimately averted. *The Invisible Man's Revenge* climaxes as the title figure is killed whilst vacillating between visible and invisible states. With respect to sequelisation, it can also be observed that, despite its death, the final reappearance of the invisible body in *The Invisible Man* also serves to disavow finality, portending as it does the reappearance of 'the invisible man' in the subsequent series.

⁶⁵ Annette Michelson, 'The Kinetic Icon in the Work of Mourning: Prolegomena to the Analysis of a Textual System', *October*, 52 (Spring 1990), 16–39 (pp.31–32). Further material concerning the incorporation of still images within the medium of the moving image can be found in Laura Mulvey, *Death 24x a Second: Stillness and the Moving Image* (London: Reaktion Books, 2006).

⁶⁶ Claude Rains, qtd in James Curtis, *James Whale: A New World of Gods and Monsters* (London: Faber and Faber, 1998), pp.203–204. According to Jessica Rains, the actor's daughter, her father told her the process 'triggered flashbacks to his war injuries in the trenches and his subsequent hospitalization' (Skal and Rains, *Claude Rains*, p.75).

This cinematic collision of still photography with plaster casts connects with André Bazin's 1945 remarks on indexicality, in which he likens photographic image-making to 'the molding of death masks'.⁶⁷ Such tensions between stillness and motion, stasis and flux, death and life, absence and presence, and visibility and invisibility, all present in the source text, are extended strikingly in the cinematic mode, from which emerges a body whose relationship with its image is multiply fraught.⁶⁸

For Wells, a trajectory towards death underwrites the invisible body, its becoming invisible shadowed closely by multiple woundings. Griffin's narration of his first steps outside as an invisible man reveal the speed, congestion and technologies of 1890s metropolitan life to do violence against the invisible body, an unrecognisable body whose modernity is expressed as enhanced vulnerability:

I [...] was hit violently behind, [...] the blow had really hurt me, [...] extending fingers took me with excruciating violence under the ear [...] my heels were being trodden upon [...] the shaft of a crawling hansom dug me forcibly under the shoulder blade, reminding me that I was already bruised severely. [...] My back had now become very stiff and sore, my tonsils were painful from the cabman's fingers, and the skin of my neck had been scratched by his nails; my feet hurt exceedingly and I was lame from a little cut on my foot. (*IM* 103, 104, 106–107)⁶⁹

A later bullet wound compels a transition towards visibility, the ensuing heavy bleeding becoming 'visible as it coagulates' (*IM* 81). In this bleeding mingle multiple transitions from invisible to visible, from inside to outside, and from liquid to solid. These first traces of the body's reappearance, pointedly characterised as 'filthy' (*IM* 81), initially manifest only as 'a dark spot on the linoleum [...] the stickiness and colour of drying blood' (*IM* 77), a visible residue that confirms Griffin's uninvited presence in Kemp's house. Inside a darkened bedroom, Kemp observes 'a mess of blood [...] the sheet had been torn [...] the bedclothes were depressed as if someone

⁶⁷ André Bazin, 'The Ontology of the Photographic Image', trans. by Hugh Gray, *Film Quarterly*, 13.4 (Summer 1960), 4–9 (p.7). As Bazin writes: 'One might consider photography, in this sense as a molding, the taking of an impression, by the manipulation of light'.

⁶⁸ It is notable that still photographic images of Rains's face are shown briefly in both *The Invisible Man Returns* and *Abbott and Costello Meet the Invisible Man*, moments that work to provide some substantial contact, and sense of authenticity, between the later works and the original.

⁶⁹ Similarly, in Wells's short story 'Under the Knife', first published in *New Review* in January 1896, the main character, anticipating his own death in an upcoming operation, relates that, having 'lost myself again in a shifting maze of thoughts about death [...] I had the narrowest escape from the shaft of a cab, and went on my way with a palpitating heart and a bruised shoulder. It struck me that it would have been curious if my meditations on my death on the morrow had led to my death that day.' (H.G. Wells, 'Under the Knife', *The Country of the Blind and Other Selected Stories* (London: Penguin, 2007), pp.67–80 (p.69).)

had been recently sitting there' (*IM* 77). Perplexed by 'tumbled sheets' on the 'disordered and bloodstained bed', an aghast Kemp comes face to face with the invisible body as he perceives 'a coiled and bloodstained bandage of linen rag hanging in mid-air, [...] an empty bandage, a bandage properly tied but quite empty' (*IM* 78).⁷⁰

As Patrick Parrinder notes, Wells's 1887 diagnosis with 'consumption' profoundly affected his early writings,⁷¹ and Wells would later describe the appearance of blood in his urine due to a crushed kidney to be 'the most dismaying moment in my life'.⁷² His physical condition was to decline further:

I discovered that my lungs were imitating my kidney and that the handkerchief into which I coughed was streaked with blood [...] I can remember as though it happened only last night, the little tickle and trickle of blood in the lungs that preceded a real hæmorrhage.⁷³

This appearance of blood, a streaking onto bare cloth, is echoed as Griffin's blood appears as if from nowhere, beginning a wounded passage towards both visibility and death. Wells's communication of the appearance of blood on a clean field of cloth mimics the appearance of a wound on the surface of the body: an interruption of the skin's totalising membrane that reveals what lies beneath and allows it to issue forth. Wells would describe his diagnosis, in a short essay entitled 'How I Died', published in the same year as *The Invisible Man*, as a 'death warrant' that marked him a 'Doomed Man', following which he emerged frailly from his house, 'carefully wrapped [...] to look once more – perhaps for the last time – on sky and earth'.⁷⁴ Highlighting the young Wells's sickliness, John Reed observes that:

⁷⁰ These first signs of the invisible man's earthly substance accompany his naming in the text as 'Griffin' (*IM* 79) when he reintroduces himself to his old college acquaintance Kemp and begins to detail the circumstances of his condition. For Wells, it is when the invisible man is granted both a name and an organic visible component that the history of this figure is henceforth provided, his prior lack of both word and image ending at this first indication of visceral presence. It is upon Griffin speaking his own name that we first receive a physical description of his proper visual appearance, as he states: 'Griffin, [...] a younger student than you were, almost an albino, six feet high, and broad, with a pink and white face and red eyes' (*IM* 79).

⁷¹ Patrick Parrinder, *Shadows of the Future: H.G. Wells, Science Fiction and Prophecy* (Liverpool: Liverpool University Press, 1995), p.24.

⁷² H.G. Wells, *Experiment in Autobiography: Discoveries and Conclusions of a Very Ordinary Brain (Since 1866)* (London: Victor Gollancz and The Cresset Press, 1934), p.297.

⁷³ Wells, *Experiment in Autobiography*, pp.298, 301.

⁷⁴ H.G. Wells, 'How I Died', *Certain Personal Matters: A Collection of Material, Mainly Autobiographical* (London: Lawrence & Bullen, 1898), pp.274–278 (pp.274, 278).

In his early tales, [...] during the time his body continually reminded him of his frailty, nakedness was fearful not joyous. [...] All of *The Invisible Man* (1897) exploits the common dread of exposure. There is no shame in this nakedness, only endless vulnerability.⁷⁵

The fragile corporeality imparted by Wells into the scheme of invisible form clashes with Griffin's initial anticipation – in both book and film – of the benefits offered by an invisible body; in the film, Griffin's confession that 'suddenly I realised the power I held... the power to rule... to make the world grovel at my feet' demonstrates such pretensions towards omnipotence. These tensions reflect Elaine Scarry's observation of oppositions between 'the power and perfection of the divine and the imperfection and vulnerability of the human [...] differentiated by the immunity of the one and the woundability of the other'.⁷⁶ Scarry draws particular attention to the biblical second commandment, wherein God 'forbids all forms of materially representing him, prohibits all attempts to endow him (and other aspects of the invisible world) with a body':⁷⁷

the scriptures systematically ensure that the Omnipotent will be materially unrepresented and that the comparatively powerless humanity will be materially represented by their own deep embodiment. [...] [T]o have no body is to have no limits on one's extension out into the world; conversely, to have a body, a body made emphatic by being continually altered through various forms of creation [...] and wounding, is to have one's sphere of extension contracted down to the small circle of one's immediate physical presence.⁷⁸

It is the expression of 'the small circle of one's immediate physical presence' that *The Invisible Man* seeks to represent, as it constructs – first in text, then in film – a body whose aspirations towards immateriality are qualified by adherence to earthly principles and whose capacity for ruin is intensified towards a fragility that belies any pretension towards omnipotence. In common with *Siegfried*, in which similarly Christlike tensions are apparent, *The Invisible Man* presents a study of an invisible body whose stigmata is pregnant with the deleterious industrial experiences of the First World War; the susceptibility of this body to wounding also reminds that Whale, Sherriff and Rains had all served in that conflict, where the former was a prisoner of

⁷⁵ John R. Reed, *The Natural History of H.G. Wells* (Athens, OH: Ohio University Press, 1982), p.69.

⁷⁶ Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World* (Oxford: Oxford University Press, 1985), p.183.

⁷⁷ Scarry, *The Body in Pain*, p.206.

⁷⁸ Scarry, *The Body in Pain*, p.207.

war and the latter two were badly injured.⁷⁹ Such a pervasive and traumatic sense of naked vulnerability, a damning affirmation of the body's infirmity, provokes the need of the invisible body of Griffin for a shield of visibility behind which its wounds might heal – a second skin that might make this body whole – and it is here that text and film begin to deviate from each other.

The mummified invisible body

While Wells's Griffin visits a 'theatrical costumier' to become 'a muffled but acceptable figure' (*IM* 115, 109), the character's onscreen incarnation extends the sense of corporeal vulnerability through a costume consisting predominantly of closely wound bandages (fig. 2.32).⁸⁰ Despite the resonance of these bandages with the emphatic themes of wounding and frailty with which Wells is preoccupied, this idiosyncratic disguise is absent from his novel, in which two linen strips cover only the forehead and ears, the bulk of Griffin's costume consisting of 'wig, mask, spectacles' along with 'calico dominoes and some white cashmere scarves' and 'a bushy side-whisker over his coat-collar that completely hid his cheeks and face' (*IM* 115, 120, 6). This disguise enables Griffin to 'go into the world, perhaps a grotesque but still a credible figure' (*IM* 115). It is the film adaptation, therefore, through which the symbolic capacity of these two strips of bandage is intensified to become all-encompassing. Swathing his entire face in bandages, Sherriff and Whale reconstruct their invisible man in terms of mummification, reframing the matter of invisibility to exacerbate their preoccupation with both the material and temporal conditions of invisible form. The persistence of the mummy motif in the succeeding cinema of the invisible body testifies to mummification as a peculiarly cinematic intervention into

⁷⁹ Whale and Sherriff had earlier collaborated when Whale directed the successful first run of Sherriff's 1928 play *Journey's End*, both in the West End and on Broadway, before also directing the 1930 film adaptation. *Journey's End* depicted the traumatic experiences of First World War trench warfare, and it is not too difficult to imagine *The Invisible Man*, in its focus on the vulnerable body, to be a sequel of sorts to that work. Themes of war would continue in Whale and Sherriff's next collaboration, the 1937 film *The Road Back*, a sequel to *All Quiet on the Western Front*, the source novels of both being written by Erich Maria Remarque. Regarding Rains's experiences in the war, Ronald L. Smith writes: 'During World War I service [...] a gas attack choked Rains, adding an edgy rasp to his voice. It also left him legally blind in his right eye, something he didn't mention to even some of his close friends.' (Smith, *Horror Stars on Radio*, p.172.)

⁸⁰ Thus begins an ultimately frustrated movement towards visual acceptance, in which Griffin attempts to conceal the fact of his bodily invisibility, to disavow it with an excess of both visibility and materiality. The covering of the invisible body is particular to Wells's story and its referents. Siegfried, for example, only conceals himself, with his cloak of invisibility, when he wishes to disappear his body, whereas 'the invisible man' conceals himself when he wishes to disappear his invisibility, thus producing a double disappearance.

the schema of embodied invisibility: *The Invisible Man Returns*, *The Invisible Man's Revenge* and *Abbott and Costello Meet the Invisible Man* all depict their invisible figures in this way (fig. 2.33), while the 1959 UK television series *H.G. Wells's Invisible Man* – which, despite its licensing by the Wells estate, is connected to the novel only in its central conceit – regularly shows its invisible protagonist Brady in bandages. If the visible corpse provides one means of making visible the invisible body, the mummy provides another.

A key to Whale's visual schema can be observed in his contemporaneous *Frankenstein* films (1931 and 1935), which show bound and bandaged bodies to subsist somewhere between life and death: dormant bodies momentarily mummified before being imbued with vital energies (figs 2.34 and 2.35). These bandages collect together disparate body parts, providing fragments with unity and integrity in anticipation of impending reanimation. In *The Invisible Man* such notions recur through the depiction of the invisible body in similar terms, affirming the unity, integrity and corporeal centrality of invisible presence. Whale's exaggerated scheme of mummification rejects the invisible as dissolute, instead probing its capacity for dismemberment – quite a different scheme of disintegration.

The western appetite for the figure of the mummy in this period had been inspired by continuing excavations in Egypt throughout the nineteenth century and was further stimulated by Howard Carter and his team's discovery of Tutankhamen's tomb in November 1922.⁸¹ The proliferation of early 1930s cinematic depictions of mummies also continued to draw from a host of earlier fictions by writers such as Edgar Allan Poe, Bram Stoker and Arthur Conan Doyle;⁸² the latter's 1890 short story 'The Ring of Thoth' was directly adapted into a feature film in 1932, called simply *The Mummy* (Karl Freund), which, like *The Invisible Man*, was also produced by

⁸¹ Particular media attention was paid to the June 1881 excavations at Deir el Bahri, Egypt. Since the late 1890s, archaeologists have used X-ray to inspect the hidden centres of mummies without disturbing the screen of bandages that keeps sound their integrity (James Hamilton-Paterson and Carol Andrews, *Mummies: Death and Life in Ancient Egypt* (London: Collins, 1978), p.52).

⁸² Edgar Allan Poe, 'Some Words with a Mummy' (1845); Bram Stoker, *The Jewel of the Seven Stars* (1903). The first few years of the 1930s alone saw feature films such as: *The Mask of Fu Manchu* (Charles Brabin, 1932), in which agents of Fu Manchu dress as mummies in order to enact a kidnap in the British Museum; *The Ghoul* (T. Hayes Huner, 1933), in which an Egyptologist who desires eternal life is reanimated and rises from his sarcophagus (both of which star Boris Karloff); serial *The Perils of Pauline* (1933), Chapter 9 of which, 'The Mummy Walks', features a character covered in wet plaster who, staggering amongst Egyptian artefacts in a museum, is mistaken for a reanimated mummy; and cartoons such as Disney's *Egyptian Melodies* (Wilfred Jackson, Disney, 1931), *Betty Boop's Museum* (Dave Fleischer, 1932), *Tom & Jerry in Magic Mummy* (John Foster and Vernon Stallings, 1933) and *The Shriek* (Walter Lantz and William Nolan, 1933), which feature, respectively, dancing mummies, a smoking mummy, a reanimated mummy, and multiple mummy un wrappings.

Laemmle for Universal Pictures.⁸³ It is the mummy of this film that Whale's invisible man, when fully bandaged, most resembles (fig. 2.36), and the refashioning of the invisible body in this way would forge a defining image of embodied invisibility.⁸⁴

It is with reference to *The Mummy* that Garrett Stewart declares both photography and death to be associated 'with an absolute halt to human time', observing that:

The Mummy [...] showed Boris Karloff, having escaped from the cerements of a millennial coffin in the opening scene, being handed a photograph image of himself as preserved mummy: in every sense an *arresting* redundancy. One then asks to what extent the film itself – as in some sense the reanimated 'mummy' its name denotes, and yet standing in this way for all film – might partake in the status of its own protagonist: an instance of death in motion, a chemical burial and its fleeting resuscitation, frame upon (rather than after) frame.⁸⁵

As Stewart notes, the coincidence, in the mummified body, of peculiar conditions of temporality, materiality and mortality – of the impulse towards preservation – connects with Bazin, for whom cinematic representation was analogous to the body's embalming. For Bazin, in cinema, 'the image of things is likewise the image of their duration, change mummified as it were'.⁸⁶ The cinematic description of the invisible body mobilises a temporal representation of the body that coincides with that of the mummy, though it is one in which, beneath the bandages of preservation, a latent potential for visual revelation is complicated by the unshowable nature of the invisible body's fleshly particulars, thus exacerbating the strange relationships between visuality, motion and stasis that animate the cinematic mode.

Eric G. Wilson describes the mummy as a 'blend of inorganic stasis and vital energy [...] an eternal corpse' that

⁸³ Conan Doyle's 'The Ring of Thoth' was first published in *Cornhill Magazine* in January 1890. *The Mummy* has Boris Karloff portray a figure who has been mummified alive (described in the film as 'the nameless death' and which necessitates the burial of his body within 'a nameless grave'), which is reminiscent of a body, sometimes referred to as 'the unknown mummy', found in the 1881 Deir el Bahri cache (Christine El Mahdy, *Mummies: Myth and Magic in Ancient Egypt* (London: Thames and Hudson, 1989), p.66). Following this role, and after collaborating with Whale on *Frankenstein*, Karloff had been considered for the title role in *The Invisible Man*.

⁸⁴ The image of a mummy with contemporary accoutrements – especially one wearing goggles or dark glasses – continues to connote, in western visual culture, the presence of an invisible body beneath the disguise.

⁸⁵ Garrett Stewart, *Between Film and Screen: Modernism's Photo Synthesis* (Chicago: University of Chicago Press, 1999), p.36.

⁸⁶ Bazin, 'The Ontology of the Photographic Image', p.8.

suggests striking reversals: the inorganic corpse, normally loathed as the termination of life, becomes a vehicle for the ever-living soul, a machine bearing undying animation; the organic body, generally loved as the pinnacle of living, turns into an inadequate vessel for eternal breath, a ruinous anatomy doomed to annihilation. These inversions breed awkward conditions: dead matter propped up by living spirit; impalpable soul dependent upon tactile body; eternity shackled to time; the temporal unable to escape from the eternal. The mummy, though a miraculous machine of the divine, is also a monstrous blurring of categories.⁸⁷

It is such ‘monstrous blurring’ – the term reflecting appropriately unstable visuality – that sustains the mummy as a multifunctional metaphor and that is key to its role in the depiction of the invisible body. Fixed in time and place, the invisible body’s mummification is a temporal retardation of the lived body, necessitated by its vulnerable corporeality and limited capacity for re-inhabiting the social order. As this body persists in a process of stunted mortification, it exists in parallel with the all-consuming invisible mouth, the mouth that cannot consume. Such a body abdicates its emplacement within a temporal order that dictates the flux of growth and decay in favour of the extratemporal inhabitation of invisibility, embalmed beneath bandages intended to deny the corrupting elements that would surround and invade it. Grafton Elliot Smith’s influential 1919 book *The Evolution of the Dragon* described procedures for the animation of a mummy, noting that ‘the most important incident in the ceremony was the “opening of the mouth,” which was regarded as giving it the breath of life.’⁸⁸ Despite the soulful centrality of the ‘eternal breath’ for which the mummified corpse is made a receptacle, the reclaimed mummies of modernity speak more of stale air. The invisible body wears not the raiments of recuperation, but rather those that figure the body as a waste object; in mummification, the invisible body is not inspired by breath but pregnant with pollution, tainted with a sense of melancholy. As Stoker’s 1903 novel *The Jewel of the Seven Stars* contends, ‘You may put a mummy in a glass case and hermetically seal it so that no corroding air can get within;

⁸⁷ Eric G. Wilson, *The Melancholy Android: On the Psychology of Sacred Machines* (Albany, New York: State University of New York Press, 2006), p.34. Wilson sees the mummy as an ‘android figure’ that ‘continues to manifest this enervating split between the brittle machine eternally vital and the supple organ flowing toward death’, the condition of ‘the temporal unable to escape from the eternal’. He argues that: ‘When matter, meant to decay, stands above ruin, it loses what made it attractive in the first place – its supple grace. A temporal shape designed to behave like an eternal phenomenon, the mummy suffers this weary paradox.’ (pp.34, 35.)

⁸⁸ Grafton Elliot Smith, *The Evolution of the Dragon* (Manchester: The University Press, 1919), p.41. The ‘breath of life’ can be related to the *ka*, or the soul (pp.41–44).

but all the same it will exhale its odour'.⁸⁹ This notion communicates a sense of the shell of a mummy as a semi-permeable membrane through which the body, no longer subject to external interference, nevertheless continues to pollute the world about it.

If the sense of breath – the 'impalpable soul' – thus draws together the invisible body and the mummy, then what binds them is the sense of touch. For Geoffrey Batchen, indexicality 'is a major source of photography's privileged status within modern culture' as, 'unlike other systems of representation, the camera does more than just see the world; it is also touched by it.'⁹⁰ Similarly, Laura U. Marks describes Bazin's discussion of indexicality to refer to

the fetishlike/fossil-like quality that is at work in cinema: it is the trace another material object leaves on the surface of the film [...]. This fact is what gives film its representational power, just as fetish (in the religious sense) obtains its power by carrying the trace of another material object.⁹¹

Though the unreal invisible body's engagement with cinematic indexicality is necessarily complex, questions concerning the relationship between indexicality and visual representation recur throughout the cycle, as where the impression of invisible feet is seen to appear in the snow and when the invisible body is identified by the fingerprints it leaves on a transparent pane of glass (fig. 2.37).⁹² A 1947 article in *International Projectionist* magazine reports on some Kodak research of the time in which vision and touch are interrelated, noting that the 'human eye detects graininess in photographic enlargements of small negatives in much the same way that a fingertip feels the roughness of a textured fabric', the rapid vibrations of the eye 'over small fields of the object being viewed [...] is much like a finger which feels little while resting on rough cloth but senses texture when moved over the surface.'⁹³ The

⁸⁹ Bram Stoker, 'The Jewel of the Seven Stars', *Return from the Dead*, ed. by David Stuart Davies (Ware: Wordsworth, 2004), pp.1–187 (p.25).

⁹⁰ Geoffrey Batchen, 'Ere the Substance Fade: Photography and Hair Jewellery', in *Photographs Objects Histories: On the Materiality of Images*, ed. by Elizabeth Edwards and Janice Hart (New York and London: Routledge, 2004), pp.32–47 (p.40).

⁹¹ Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham and London: Duke University Press, 2000), pp.92–93. Marks goes on to claim that by 'understanding the indexicality of cinema as a fetishlike or fossil-like quality, I mean to emphasize that this trace of the real in cinema is embalmed in layers of historical use and interpretation, which obscure and ultimately transform any original meaning the object might have had' (p.93).

⁹² It is notable, too, with respect to the invisible processes of *The Invisible Man*'s production, that the mummy bands reveal something of the plaster casting through which Rains's head was sculpturally reproduced.

⁹³ 'Eye Views Photo Graininess Through "Fingertip" Touch', *International Projectionist*, 22.11 (November 1947), 34.

enlarged cinematic projections of the invisible body, wrapped in ‘rough cloth’ – whose evasive visuality insists upon the viewer’s close, wide-eyed concentration – exemplify such interminglings of vision and touch. Though such wrappings protect the invisible skin from being touched, they represent a second skin: the mummy is not just touching subject, touching time, but a touched object, touched by time, and touched by the fingers of those at unwrapping ceremonies, popular museum events where excited visitors would touch the body inside the mummy bands.⁹⁴ In its guise as mummy, the invisible body is embraced by a new skin for which the sensory modality of touch is key, its indexicality rich with the synaesthetic: the touch of light – the medium of vision – on the tactile skin of the film.

The undressing and flaying of the invisible body

In seeking to recuperate the body and assuage its infirmities, however, the bandages that surround the invisible form – binding it in a defence against absolute disappearance and dissolution – deny the organic, sensuous processes of decay, reminding that the enforced and ineffective stasis of mummification is itself actively corrupting. If, as was explored in the first part of this chapter, the invisible body’s disappearance and mingling with that which surrounds and supports it – its breathy inhabitation of the air – is an expression of enworldment, then the second skin is a dead skin that tends to isolate the body from the world. As such, it must be loosed, and that it is removed on three separate occasions in the course of *The Invisible Man* – while the wrapping up is never shown – demonstrates the significance of this act. First, Griffin removes his bandages in public at the inn; then, he takes them off alone in Kemp’s living room after explaining his plans; finally, a moment of self-reflection unfolds as he slowly undresses his bandages in front of the mirror. These removals, compelling exposures of the invisible, serve to reverse the mummification process: the recuperation of the body from a state of unnatural stasis and into the temporal and sensual flux of the corporeal world.

The third undressing is a particularly private moment. The smoking Griffin, dressed in dark glasses, robe, bandages, gloves and pyjamas, and having secured his

⁹⁴ It is notable that the British Museum, for example, now practise what they call ‘virtual unwrapping’, using ‘modern non-invasive imaging techniques [...] to look inside a mummy without disturbing the wrappings in any way’ (‘Mummy: The Inside Story’, <https://www.britishmuseum.org/explore/online_tours/egypt/mummy_the_inside_story/mummy_the_inside_story.aspx> [accessed 1 May 2014] (para. 2 of 4).

bedroom door after bidding Kemp goodnight, stands before a mirror (fig. 2.38). Carefully removing his glasses, he undoes his robe, while a nearby bell chimes. As a dog in the night begins to bark, the shot moves to a vantage point behind Griffin's right arm; from beyond his body can be seen the reflection of the front of his head and torso (fig. 2.39). He begins to unfurl the wrappings; a close up emphasises the gradual exposure of the invisible head, as the audience is invited to join in Griffin's own act of scrutinising his lack of reflection, watching him as he watches himself and sees nothing (fig. 2.40). The sounding of bell and dog are the only counterpoint to the deep silence of the invisible body. When the bandages have been removed entirely, the gloves too are dropped onto the dresser and Griffin quietly turns away from the mirror, his head, hands and feet noticeably invisible, the remainder of his invisibility concealed by striped pyjamas. As the lamp is extinguished, the room falls dark, and it is a nocturnal light – moonlight, perhaps – issuing from the uncovered windows, that darkly illuminates the scene, as Griffin pulls back the blankets of the bed and sinks into its surface, yawning as the covers are pulled up to his neck.

This visually complex sequence employed a technique that combined elements from four different shots, as Fulton describes:

The shot had to show the man himself (from the rear) and his reflection in the mirror. [...] This required the making of four separate 'takes,' which were combined [...] into a single picture. First, there was the shot of the wall and the mirror, with the mirror itself masked out by black velvet; next, a separate shot of the opposite wall of the room, as reflected in the mirror; thirdly, the shot of the invisible man, from the rear, unwrapping his bandages; and lastly, the reflection of him, from the front, doing the same act. All of these had to be perfectly coordinated.⁹⁵

This construction frames the invisible body's exposure as a non-exposure, utilising a mirror that reflects nothing to project a space on to the surface of the film: a two-dimensional zone of erasure into which the body can vanish, leaving behind nothing but its shape and the shape of its invisibility. These techniques of erasure deny the visual exposure of the body, repressing visual presence as they rely on the body's blending into darkness to become one with the under- or unexposed parts of the negative. The filmmakers built up the surface of the film in order to reduce it, and, in doing so, have fragmented the image in order to seamlessly reconstruct it. What

⁹⁵ Fulton, 'How We Made the Invisible Man', p.214.

results is manifested as a juxtaposition of image fragments, visually asserting the body's invisibility by virtue of a montage that takes place on the very skin of the film negative, areas of which are cropped or masked as part of a collision of space and time in which the vanished body is always centre-frame.⁹⁶ These sequences confirm Scott Bukatman's maintenance of 'cinema's unique blend of spatiotemporal solidity and metamorphic fluidity',⁹⁷ the technique demonstrating the spatiotemporal plasticity of the cinematic mode, and, in its formation of the invisible man's image, introducing such plasticity into the constitution of the invisible body.

This systematic revelation of invisible form through the unwrapping of bandages performs just such an intense role in all of the subsequent films in which bandages feature: precisely such a moment occurs in *The Invisible Man Returns* (which makes similar use of a mirror), *The Invisible Man's Revenge* and *Abbott and Costello Meet the Invisible Man* (fig. 2.41).⁹⁸ These layers of bandages express the layering and removal of multiple exposures of which the scenes are constituted and so attest to the condition of the film strip as a skin in which multiple grafts mingle and merge. Just as the mummified invisible body is rich with the complexities of the sensation of touch, so these methods for its illustration necessitate the intimate touch of the film's surface.

Despite the innovation and success of these special visual effects, defects are evident throughout the cycle: aberrant traces of onscreen invisibility. The visual schemes that convey illusions of invisible presence themselves leave visible, material traces on the surface of the film. In some cases, animating wires, though discreet, are evident, channelling out of the frame to reveal the source of this material manipulation, the bodies of crew members beyond the scope of the lens. Elsewhere, vague traces of light, left apparent through an inadequate matteing process, reveal a discernable patchwork of aberrant marks: a network of traces that provide a palimpsest of layering and erasure (fig. 2.42). These visual anomalies are by-products of the body's presence before the camera and promote an unintended breakdown in both illusionism and the image. Such problems were identified by Whale when

⁹⁶ As Norman M. Klein suggests, '*special effects are fundamentally the art of compositing. They are layers superimposed in space, or in time*' (Norman M. Klein, *The Vatican to Vegas: A History of Special Effects* (New York: The New Press, 2004), p.215, emphasis in original).

⁹⁷ Scott Bukatman, 'The Artificial Infinite: On Special Effects and the Sublime', in *Alien Zone II: The Spaces of Science-Fiction Cinema*, ed. by Annette Kuhn (London: Verso, 1999), pp.249–275 (p.253).

⁹⁸ The important role of the mirror to the sensations and cinema of the invisible body will be discussed in detail in Chapter Four.

filming *The Invisible Man*: unintended visual traces of the body were noticeable in some matte multiple-exposure sequences, accidents upon which Whale would reflect that ‘I began to consider whether it would not be effective to portray him in this form all through, but I discarded that idea’.⁹⁹ However, the later films are not as successful in minimising such peculiarities and, for their illusion to be entirely effective, the viewer is required to ignore such residual traces of the visible invisible; to engage in the practice of a selective scotomisation, a negative hallucination in which the observing mind renders invisible these marks: a final and internal unmaking of the image that completes an already convoluted process. Though unwanted, or perhaps precisely because of this, these traces themselves evoke the unwitting traces left by the invisible body in its surroundings, most particularly the footprints that stimulate the wounding and death of Griffin in *The Invisible Man*, footprints described by Wells as ‘[l]ike what you makes in mud’ (*IM* 105). In both its inhabitation of space and its cinematic production, the invisible body accrues a crust of filth about its limits: the waste of the world impinging on its threshold; surplus matter that draws it ever towards the spectrum of visibility. This encrustation of feculence, the body’s ‘outline sketched in splashes of mud’ (*IM* 106), stands as yet another ghastly skin from which the invisible body desires its release.

The layer by layer unwrappings of the invisible body prompt speculation upon the qualities of the invisible body’s surface, bringing to mind depictions of St Bartholomew (such as the 1562 statue at Duomo di Milano by Marco d’Agrate),¹⁰⁰ with the unpeeling of the linen mirroring the flaying of the skin. Such correspondence was not lost on Wells, who describes Griffin’s anxiety following ‘the rip of his

⁹⁹ James Whale, qtd in Curtis, *James Whale*, p.210. Curtis describes these results as producing ‘a ghost image rather than full invisibility’. Fulton describes reducing such traces by ‘retouching the film – frame by frame – with a brush and opaque dye’, estimating that ‘approximately 64,000 frames [...] were individually retouched in this manner’ (Fulton, ‘How We Made the Invisible Man’, p.201), while Whale described how ‘[m]en with tiny brushes worked through microscopes, adding touches to every single picture in the thousands of feet of film, and eliminating details which even the cameramen had not been able to overcome. This work cost hundreds of pounds and demanded such close application that the men could not work at it for more than about two hours at a time.’ (Whale, qtd in Curtis, *James Whale*, p.210.)

¹⁰⁰ After seeing this statue in 1867, Mark Twain wrote: ‘It was a hideous thing, and yet there was a fascination about it some where. I am very sorry I saw it, because I shall always see it, now. I shall dream of it, sometimes. I shall dream that it is resting its corded arms on the bed’s head and looking down on me with its dead eyes; I shall dream that it is stretched between the sheets with me and touching me with its exposed muscles and its stringy cold legs. It is hard to forget repulsive things’ (Mark Twain, *The Innocents Abroad, or The New Pilgrims’ Progress* (Hartford, CT: American Publishing Company, 1870), p.175). Images of St Bartholomew were often used to aid the study of the anatomy; conversely, the depiction of the invisible body in this way perhaps expresses some of the difficulties of knowing the body, and something of the mystique of one’s sensual relationship with it.

trousering' (*IM* 16) in an attack by a dog who senses his unnatural constitution; even as Griffin assures onlookers that it '[n]ever broke the skin' (*IM* 18), he immediately exits in order to attend to his damaged uniform with a fresh dressing. The unwrapping, splitting and tearing of the invisible body's unstable second skin confirms it as a flawed vehicle for re-entry into the conventional order of visibility.¹⁰¹ The flayed epidermis that visibly borders the invisible body is a rag-like wrapping: dead matter that factors the skin as a hide, a static integument beneath which the body is hidden and protected. Connor aligns the mummy and the invisible man as both being 'held together by the cerements that they themselves hold up', and Griffin's cloaked appearance clearly demonstrates Connor's assertion that '[o]nce scoured away from the body, the human or animal skin becomes simply a hide, deader than a corpse, a corpse's remnant, the corpse of a corpse'.¹⁰² Figured as a waste object, the invisible body becomes subject to a damning temporality, itself visible only in death, as that which has outlived its usefulness. The necessary removal of this skin recalls Connor's contention that the 'skinned body is less a body even than a skeleton [...]. The skin always takes the body with it. The skin is, so to speak, the body's face, the face of its bodiliness. The skinned body is formless, faceless, its face having been taken off with its skin.'¹⁰³ If the body's becoming invisible has done violence to the senses, this unwrapping is a flaying that further deforms the sensorium, even whilst affording strange access to the sensualities of the bare body that hides beneath. The removal of the bandages is a flaying of the skin that unfurls the touch organ. Serres describes 'the secret of the five or six subtle senses' in similar terms:

The skin hangs from the wall as if it were a flayed man: turn over the remains, you will touch the nerve threads and knots, a whole uprooted hanging jungle, like the inside wiring of an automaton. The five or six senses are entwined and attached, above and below the fabric that they form by weaving or splicing, plaits, balls, joints, planes, loops and bindings, slip or fixed knots. The skin comprehends, explicates, exhibits, implicates the senses, island by island, on its background. [...] The senses haunt the skin, pass beneath it and are visible

¹⁰¹ Upon giving the invisible man a cursory examination, a doctor observes that his arm is 'just an empty sleeve. Lord! I thought, that's a deformity! Got a cork arm, I suppose, and has taken it off. Then, I thought, there's something odd in that. What the devil keeps that sleeve open, if there's nothing in it? There was nothing in it, I tell you. Nothing down it, right down to the joint. I could see right down it to the elbow, and there was a glimmer of light shining through a tear of the cloth.' (*IM* 25.)

¹⁰² Connor, *The Book of Skin*, pp.32–33, 11.

¹⁰³ Connor, *The Book of Skin*, p.29.

on its surface [...]; they cross the epidermis and penetrate its most subtle secrets.¹⁰⁴

The skin of bandages entwines the senses in its fragmentation of the body: emphasis is placed upon the framed space in which the eyes reside, and, as the strips unfurl, further zones are framed as if to exaggerate their potential for localised sensory exchange. The unfurling bandages expose the sensitivity of this body, bare flesh – in its invisibility – communicating something of soft interior space, exposed sections ripe for penetration and interference with probing fingers, instruments, stimuli.¹⁰⁵ The gloves that cover the invisible fingers extend this emphasis upon touch, which proceeds throughout the cycle: in *The Invisible Man*, Griffin demonstrates a malign tactility when describing his powers, extending his gloved fingers to simulate ‘these fingers round a signalman’s throat’, a choking touch designed to disrupt the breathing of another (fig. 2.43);¹⁰⁶ in *The Invisible Man Returns*, the protagonist becomes particularly anxious about his relationship with the world after removing his glove, while the unseen textures of his own skin are exaggerated as his fiancé strokes his coarse, unshaven features (fig. 2.44); in *Invisible Agent* it is the threat of the fingers’ amputation, in the film’s opening scene, that propels Frank Griffin towards invisibility, while in the prolonged sequences in which his body is gradually reappeared, it is always fingers first (fig. 2.45); similarly, in *Abbott and Costello Meet the Invisible Man*, it is when shaking hands with a jittery Lou Costello that the character first becomes invisible (fig. 2.46).

In the shedding of these bandages, this corollary with the skin, and with the organ of touch, is instructive, showing also an unpicking of the sensory organs more generally. The sense of touch has long been interrelated with the operations of the

¹⁰⁴ Serres, *The Five Senses*, p.60. Serres produces this description of the senses from his analysis of the ‘underside of the canvas’ of the Cluny tapestry.

¹⁰⁵ In so inviting exploring fingers, the invisible zones of this body remind of the dark space in Christ’s torso into which Thomas probes; as depicted, for example, in Caravaggio’s 1601–1602 painting *The Incredulity of Saint Thomas* (Sanssouci, Potsdam).

¹⁰⁶ As Griffin also warns Kemp in the film: ‘If you raise a finger against me you’re a dead man. I’m strong, and I’ll strangle you. Understand?’ He is also anxious that ‘dirt between my fingernails would give me away’. Likewise, in Wells’s book, the invisible fingers retain something of their relationship with the visible world, with his Griffin recalling how, on first becoming invisible, ‘[a]t last only the dead tips of the fingernails remained, pallid and white, and the brown stain of some acid upon my fingers.’ (*IM* 100.)

other senses;¹⁰⁷ more recently, the architect and philosopher Juhani Pallasmaa asserts that:

All the senses, including vision, are extensions of the tactile sense; the senses are specialisations of skin tissue, and all sensory experiences are modes of touching and thus related to tactility. Our contact with the world takes place at the boundary line of the self through specialised parts of our enveloping membrane.¹⁰⁸

The skin is the most noticeable place the body mingles with the world; though not the most visual, touch is the most visible sense.

*

The mummy's fixing of death at best preserves the post-mortem appearance of the body and at worst introduces further distress through the imperfections of the embalming process. Designed to repel corruption, the mummified body's posthumous vanishing may merely obscure decay, perverting the process of putrefaction into a prolonged measure, communicating farther into futurity a transmission of arrested decrepitude. Indeed, early mummification relied on bandages alone, the absence of embalming meaning that if 'such a body is unwrapped today it is inevitably found to consist of nothing but a jumble of bones inside a hollow shell of bandages. What has been preserved is a full-sized mould of the body; but the body itself has long since disappeared.'¹⁰⁹ Such failed passage into eternity reflects the instability at the centre of the invisible body's mummification; inside the invisible body can be found such a jumble: not the perfectly preserved, uniform body but a thing of disintegration, the mummy bands a chrysalis through which a sensory metamorphosis occurs. The invisible body's restricted visuality motivates not merely reconsideration, in its viewers, of the potency of the extra-visual senses, but also a revised conceptualisation of the configuration of those senses: a deranging of the sensorium. As a jumble of

¹⁰⁷ For example, Aristotle, in *De Sensu*, interprets 'Democritus and most of the natural philosophers who treat of sense-perception' to believe that 'each of the other senses is a mode of Touch', though he himself adds that 'one can see at a glance that this is impossible'.

¹⁰⁸ Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: John Wiley & Sons, 2005), pp.10–11.

¹⁰⁹ Hamilton-Paterson and Andrews, *Mummies*, p.35. This description is also redolent of the cavities formed by decomposed bodies found at Pompeii, which itself can be understood – via Roberto Rossellini's Bazinian 1954 film *Viaggio in Italia* – as a site of cinematic self-reflection.

fragments, the mummified invisible body can thus be understood as a jumble of fragmented sensory modalities, and its unwrapping ‘a destructive and irreversible process’ through which the senses are reconfigured.¹¹⁰ As the final part of this chapter shall explore, it is in the casting off of the bandages that access is granted to this new organism, this new sensorium.

Three: Reorganising the Sensorium

Body parts

I have touched upon the principal objects with which these invisible bodies tend to engage, being the cigarette, the telephone, the mirror, and glass. Taken together, this collection can be thought of as *multisensory* objects: objects that each hold distinctive relationships with individual senses and so are crucial to the fostering of a sensory identity for the invisible individual. Such relations not only work to stabilise such an identity within the bounds of each film, but confer a certain continuity upon these characters across a tenuously linked cycle of films. Such a list, however, which explores the onscreen invisible body in terms of its proximate object relations, would not be complete without taking into account the discrete body prostheses that form such a dramatic intervention into the visual schema of these invisible bodies: the spectacles, wigs, masks and false noses adopted as a means of staging an uncanny reappearance. It is as if to recognise a certain deficiency inherent in the invisible body that these figures forge prosthetic substitutes – material presences designed to overcome visual absence – that act as visible equivalents as they surmount and double the invisible parts of the invisible body. Such prostheses draw from Wells’s descriptions of the ‘wig, mask, spectacles, and costume’ and ‘pink and shining’ nose (*IM* 115, 36) that are gathered around the invisible body, a new coating that seems hollow as it hangs hesitantly on the extremities of the invisible body, always threatening to reveal what lies beneath. If the relatively featureless bandages stand as the invisible body’s private costume, worn in the close company of bedroom and sitting room, the coalescent patchwork of supplemental parts – nose, glasses, scarf, wig – in which the invisible body is publicly outfitted – its public ‘face’ – express a desired return towards social existence (fig. 2.47).

¹¹⁰ ‘Mummy: The Inside Story’, para. 2 of 4.

At the heart of *The Invisible Man* is a shocking and obscene public undressing in which this accumulation of prostheses is cast off and dispersed. When his desperate experiments to return to a visible state are once more interrupted ('A whole day's work ruined!'), the fully costumed Griffin wrings gloved hands as he pleads with his landlord, insisting that 'it's vital – it's life and death – that I should be left alone. You don't understand' (fig. 2.48). Making excuses for his bandaged and goggled appearance, Griffin tells Mr Hall that 'I've had a very serious accident. It's disfigured me... affected my eyes'; but when told he must leave, Griffin hits his landlord with a book and throws him down the stairs. In the ensuing commotion ('He's a raving lunatic!' [...] 'It's the stranger with the goggles... he's gone mad!'), a party of villagers march upon the room, led by the local police officer, Jaffers, who requests that Griffin 'come quietly' and be arrested for assault. When Jaffers suggests that he 'put the handcuffs on', the incensed Griffin launches into a tirade against the public mob:

Griffin: All right you fools. You've brought it on yourselves. Everything would have come right if you'd only left me alone. You've driven me near madness with your peering through the keyholes and gaping through the curtains, and now you'll suffer for it. You're crazy to know who I am, aren't you? All right, I'll show you!

At this, Griffin amputates his plastic nose, tossing it towards the massed villagers, exclaiming 'there's a souvenir for you...' as the nose lands on a table and is scrutinised by the crowd, a subsequent close up communicating its unnatural textures (figs 2.49 and 2.50). Griffin pulls off his goggles and throws them into the grasp of a villager ('and one for you'), who looks upon the lenses in his hands with horror (fig. 2.51). As Griffin declares that 'I'll show you who I am... and *what* I am!', he laughs maniacally, unfurling his bandages from the top down, pulling off his wig as he goes (fig. 2.52). He casts the bandages at the men, who disperse in terror as the stringy linen cascades down upon them (fig. 2.53).

As Griffin sheds his grotesque outer layer, the perceived exposure of the emptiness at the heart of his adopted disguise is a moment of horror for those present and is depicted as a ritual movement in which his apparent formlessness is gradually and publicly revealed, one invisible body part at a time. Griffin enacts this erasure in

order to explain ‘who I am... and *what* I am’, though in his entry into invisibility becomes less identifiable, and the physical nature of the invisible body is immediately called into question as the authoritative Jaffers points his finger and attests ‘look – ‘e’s all eaten away!’, an exclamation that insists upon a conflation of penetrative vision and ravaging consumption at the centre of this rotting cavity of invisibility, and that obliquely addresses the fluid sensory identity of this mouth.¹¹¹ After coolly diagnosing that ‘he’s invisible, that’s what’s the matter with him’, Jaffers returns to again insist that the jabbering Griffin ‘come along quietly’, only to be choked by the now completely invisible man (‘you must be made to understand what I *can* do’), who exercises nimble unseen fingers as he affirms a tactile mastery of air and of breath (fig. 2.54). The removal of this assortment of visible addendums – these bandages, these prostheses – constitutes a shedding of his second skin that is misunderstood by its observers to coincide revelation with disembodiment, an error echoed by some viewers of the film, with one contemporary reviewer arguing the ‘invisible man really is that, a disembodied being who moves as freely as air’.¹¹² This undressing underlines the invisible man’s irreconcilable position outside of the social order and begins his disappearance back into the invisibility from which he will only properly reappear as a cadaver.¹¹³

It is a range of visual effects that are employed in this illusion, sophisticated in both diversity and confluence, rendering vivid Wells’s stark visual descriptions of invisible presence, as where ‘he put his open palm over his face and withdrew it. The centre of his face became a black cavity’ (*IM* 36). In addition to the intense and unusual audio effects, symbolic costume of bandages and prostheses, and specifically cinematic techniques of multiple exposure described earlier, in order to convey the impression of a gradually appearing invisible body the special effects comprised wires, off-screen stagehands and the performance of pantomime. In reproducing the

¹¹¹ It is notable that, after exposing his invisibility in this scene, the now entirely invisible Griffin descends the staircase violently, smashing the grandfather clock at the bottom of the stairs, yet another signal of the invisible body’s fraught relationship with time. The destruction of this clock reflects the Victorian mourning custom of stopping all the clocks in a house at the moment of an inhabitant’s death.

¹¹² Norbert Lusk, ‘The Screen in Review’, *Picture Play*, 39.6 (February 1934), 40–41, 51, 53, 56, 60, 64–65 (p.56).

¹¹³ Wells connects invisibility with disfigurement and incoherence, as he has an onlooker exclaim ‘that’s not a man at all. It’s just empty clothes’ (*IM* 39), while others observe the undressing to be ‘worse than anything [...] they were prepared for scars, disfigurements, tangible horrors, but *nothing!* The bandages and false hair flew across the passage [...] the man who stood there shouting some incoherent explanation was a solid gesticulating figure up to the coat-collar of him, and then – nothingness, no visible thing at all!’ (*IM* 37.)

dramatic sequence of public disrobing, Fulton and his team employed a hollow mannequin surmounted by false body parts in order to describe the partly concealed invisible body. Describing the moment that initiates this passage of public exposure, in which the invisible man removes his prosthetic nose to reveal the ‘black cavity’ at the centre of his face, Fulton explains that ‘the player had to be shown [...] pulling off a false nose, revealing the absolute emptiness of the head-swathings, the back of which showed through when the nose was removed. This [...] scene was made by using a dummy, an exact replica of the player’s makeup’.¹¹⁴ The removal of these prosthetic body parts, which Griffin excitedly identifies as ‘souvenirs’, affirms their status as redundant duplications of the body; an unsatisfactory means of reproduction that is ultimately discarded in favour of Griffin’s invisible representation.

Individuated senses

If bandages connote skin, and so touch, this divided range of prosthetic objects can also be understood, in their distinctive reproduction of certain localised physiognomic areas, to represent organised and individuated sensory organs: a sensory array comprised of goggles that form the seeing eyes, an olfactorial nose, gloves that further express a probing tactility, and these prostheses complemented by the multifunctional mouth, agent of taste and sound; five senses, more or less. Onscreen, and against the blank ground of bandages, these physiognomic components are emphasised as overtly unnatural and their individuation suggests a divided system of sensation. Referring to these bits and pieces, Keith Williams describes the invisible man to be ‘literally, an absent presence, an empty signifier of a being, created from things that humans have manufactured.’¹¹⁵ This sense of artifice and manufacture seems to promote, too, an understanding of the anatomised sensorium as a cultural construction, as that which ‘humans have manufactured’. As Anthony Synnott observes, ‘each new school of thought seems to construct new paradigms of the sensorium’,¹¹⁶ noting also Karl

¹¹⁴ Fulton, ‘How We Made the Invisible Man’, p.201.

¹¹⁵ As Keith Williams writes: ‘in both Wells’s novella and Whale’s film, the most philosophically vertiginous conceit is that nothing is being concealed at all except for vacancy itself. The clothed protagonist hides the fact that, as a subject (in both social and literary senses), he isn’t there – he is, literally, an absent presence, an empty signifier of a being, created from things that humans have manufactured.’ (Williams, *H.G. Wells, Modernity and the Movies*, p.54.)

¹¹⁶ Anthony Synnott, ‘Puzzling over the Senses: From Plato to Marx’, in *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*, ed. by David Howes (Toronto and London: University of Toronto Press, 1991), pp.61–76 (p.74). As Synnott writes: ‘In contrast to the

Marx's suggestion that 'the *forming* of the five senses is a labor of the entire history of the world down to the present'.¹¹⁷ It is my contention that, through the invisibility and exposure of this body, with all its complex sensualities, such labour is itself exposed. If the mummy bands promote something of the integration of the invisible body, then the removal of these bandages and their associated parts constitutes a disintegration that works to deform the senses. The sense of vulnerability that the invisible body carries with it, then, communicates something of the instability in the sensory order of this body: its invisibility is thus the beginning of a scheme of sensory disorder, which itself reflects and is subjected to what Jennifer Lea refers to as 'the disordering effect of sensation'.¹¹⁸

Such disorder resonates with interwar narratives of disfigurement for which amputation and prosthetic replacement figure strongly, as can be observed in Horace Nicholls's First World War photograph captioned *Repairing War's Ravages: Renovating Facial Injuries* (fig. 2.55), in which a display of synthetic prostheses – mostly intended to supplement the eyes, ears and nose – are arranged. Such material alternatives to the corporeal were much in evidence throughout the period.¹¹⁹ Though these prostheses represent idealised, superhuman, incorruptible sensory organs, their relative rigidity is without the supple flow of the organic and they are notably absent of actual sensory reception, unlike some more recent developments in the field.¹²⁰ As with the examples in Nicholls's photograph, it can be imagined that Griffin's prostheses are found to be in some ways inadequate: the nose does not smell, the darkened goggles effect a dimmed or blinded spectatorship; these prostheses do not augment but impede, and so must be cast off.¹²¹ But perhaps it is the very

entire Western tradition from Plato to Hegel, Marx argues that: "Man is affirmed in the objective world not only in the act of thinking but with *all* his senses." (p.73.)

¹¹⁷ Karl Marx, *Economic and Philosophic Manuscripts* (1844), qtd in Synnott, 'Puzzling over the Senses', p.74.

¹¹⁸ Lea, 'Negotiating Therapeutic Touch', p.33.

¹¹⁹ Nicholls's photographs from this series also document the sculptor Francis Derwent Wood's work for The London General Hospital's Masks for Facial Disfigurement Department.

¹²⁰ See, for example, the 2014 case of Dennis Sorensen, whose experience represents, according to Silvestro Micera, 'the first time in neuroprosthetics that sensory feedback has been restored and used by an amputee in real-time to control an artificial limb'. ('Man Gets Bionic Hand with Sense of Touch Nine Years after Accident', *The Guardian*, 5 February 2014, <<http://www.theguardian.com/science/2014/feb/05/bionic-hand-limb-sense-touch-artificial>> [accessed 10 April 2014].)

¹²¹ This invisible man is evidently not an expert viewer: in his evasion of the vision of others, he also has problems exercising his own optical faculty. As well as Griffin's inadequate eyewear, this can be seen in Wells's characterisation of Griffin as a weak-sighted albino, and in his inability to close his eyes, which dazzles him. In retrospect, the casting of Rains – with his own limited vision, a detail kept private from most – adds further weight to an analysis of this particular invisible man as a poor viewer. Such a conclusion might, then, prompt the question: What is the extent of this idiosyncratically

individuation of the senses in relation to these physiognomic zones – their distinct organ-isation – that impedes the invisible man’s desire to flow more subtly in his connection with the world. The invisible body’s prosthetic impulse, and the visual demarcation of the senses that it seems to ape, acts not to augment but to interrupt its sensory entanglement with the world. Griffin describes himself as ‘disfigured’, and his condition can be considered as a disfigurement of the senses that complements a sensorium disturbed by the disordering effects of modernity.¹²²

While a certain distinction between the body’s principal nodes of sensation was implicit in the fragmented visualisation of Siegfried’s invisible body, here the individuation of the senses takes centre stage as part of a performance in which the sensorium is laid bare. For its onlookers, the invisible man’s casting away of his prosthetic sense organs exercises a terrifying display in which the separated senses – and so assumptions about the nature of the sensorium – are ejected from the body, leaving this centralised seat of the senses, in its invisibility, as an infinitely more indefinite proposition. The ritualistic public disrobing and reorganisation that constitutes this sequence is reworked numerous times across the cycle to form a potent trope of the invisible body,¹²³ and this stripping down also communicates something of the capacity of the visual mode of cinema for merging and mingling the senses, as suggested by Lynda Nead:

It is no accident that the word ‘strip’ refers both to the first ribbons of perforated film and to the ritual performance of staged nudity. There is a compelling synergy between these two meanings. What better demonstration of the power of the movies than to take those climactic moments of transformation from clothed to unclothed and make them move, to project them to an audience hungry for spectacle, for whom looking was a proleptic experience of touch, taste and smell?¹²⁴

invisible individual’s sensory skills? As this chapter contends, a compelling answer is that the invisible man’s power lies in his capacity to upset, or provoke the rethinking of, sensory conventions. Writing about glasses in cinema, Hannah McGill notes that spectacles ‘indicate the triumph of human ingenuity over nature’s defects – a step towards cyborg living – but also the vulnerability of the human creature unable to function effectively without a fragile manmade device to improve his or her chances.’ (Hannah McGill, ‘Object Lesson: Dramatic Spectacles’, *Sight and Sound*, 23.10 (October 2013), 10–11 (pp.10–11).)

¹²² Similarly, a number of times in Wells’s novel the invisible body is assumed by bemused onlookers to be ‘deformed’ or ‘disfigured’ (*IM* 8, 37, 121).

¹²³ The sequence is spoofed in ‘The Son of the Invisible Man’ (Carl Gottlieb, 1987), a segment of *Amazon Women on the Moon*, in which a careful homage to the original sequence is complicated by the eponymous character’s obliviousness to his inability to disappear.

¹²⁴ Lynda Nead, *The Haunted Gallery: Painting, Photography, Film c.1900* (New Haven and London: Yale University Press, 2007), p.186.

Nead is referring to early cinema, but her meaning also resonates here. The stripping of the invisible body frustrates the perceived ocularcentric bias of cinematic representation, and complicates relations between the senses.

As has been seen, the invisible body fosters associations with all of the elements, repeatedly embedded amidst airy atmospheres, but also immersed in fire, water and earth. Invisibility itself also breeds connections with *quintessence*, ‘a fifth essence existing in addition to the four elements, supposed to be the substance of which the celestial bodies were composed’.¹²⁵ Such environmental immersions speak of the invisible body’s enworldment, but also of traditional relationships between the elements and the senses, recalling in particular the influential five-sense model that is often attributed to Aristotle, in which each distinct sense is equated with an equally distinctive element. The potency of such schemes of individuated sensory modalities is exacerbated, according to Jonathan Crary, in his 1990 ‘delineation of a modernization and reevaluation of vision’, who argues that the nineteenth century saw a ‘dissociation of touch from sight’ as part of ‘a pervasive “separation of the senses” and industrial remapping of the body’ in that period.¹²⁶ Crary writes of the ‘loss of touch as a conceptual component of vision’ to be an ‘autonomization of sight, [...] a historical condition for the rebuilding of an observer fitted for the tasks of “spectacular” consumption’.¹²⁷ If this is so, then what is being seen in *The Invisible Man* and its derivatives is something akin to an undoing of such ‘separation of the senses’: a violent rejection of absolute sensory individuation in sympathy with David Howes’s suggestion that, in the modern age, ‘we have been blinded to sensory diversity by an overexposure to the now-standard five-fold arrangement of the sensorium, which can be found everywhere from children’s books on “The Five Senses” to the compartmentalization of the senses in and by the discipline of psychology’.¹²⁸ In expressing discontent with existent sensory orders, the stripping of the invisible body’s prostheses rejects the powerful influence of such Aristotelian configurations of the sensorium. Divested of its disguise, the invisible body favours

¹²⁵ *Oxford English Dictionary*.

¹²⁶ Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA and London: MIT Press, 1990), p.19.

¹²⁷ Crary, *Techniques of the Observer*, p.19.

¹²⁸ David Howes, ‘Introduction: The Revolving Sensorium’, *The Sixth Sense Reader* (Oxford and New York: Berg, 2009), pp.1–52 (p.3). Howes argues that ‘disciplining our children’s sensoria by subjecting them to such literature [...] prevents them from developing a talent for synaesthesia’ (p.37, n.4).

the exhibition of a network that is more difficult to visually compartmentalise, thus expressing a contemporary cultural derangement of the senses.

That Wells's original character's name of 'Griffin' persists throughout the cycle – despite the tenuous links between the figures of that name – may owe something to the terms of Wells's contract with Universal, but also testifies to the desire to forge a specific category of invisible body. Another effect of such repetition infuses the name with a greater sense of significance. The word 'Griffin', described in the *Oxford English Dictionary* as a 'fabulous animal usually represented as having the head and wings of an eagle and the body and hind quarters of a lion', in *The Invisible Man* connotes rarity, hybridisation and the mutated, and so singles out the invisible body as an agent of what can be understood as a hybridised scheme of sensations. The term speaks for the characteristic hybridity of the sensorium, in which seemingly distinct parts nevertheless come together to form a system in which the precise boundaries between the components may be impossible to fathom. The invisible body is the body wherein visual sensory individuation – the senses categorised largely according to their visibility on the body's surface – is less distinct: where the scopic tendency to separate and categorise is replaced with an idea of the body for which the very notion of division – the internal divisions that distinguish and categorise the senses, and which might separate mind from body, and external divisions such as those through which the individual can be isolated from the world – is less secure.

Sensory breakdown: a madness

In the invisible body's manic rejection of recognisable sensory components, the neatly individuated sensorium is therefore superseded by a more deranged model. Like the multifunctional properties of the invisible mouth, the senses of the multifunctional sensorium fold in on each other, mingling and merging: occasionally inseparable in their suggestion of synaesthesia. Beginning by challenging, with its invisibility, the sensory modality of vision, the exhibition of the invisible body proceeds in a rethinking of the constitution of the sensorium as a whole: the invisible man's public display of madness is an exquisite expression of the derangement of the senses. Whereas, as has been seen, moments of quietude and reflection tend to take place in private, it is in public that these invisible figures begin to lose their bearings, enacting a breakdown of both body and mind whilst incoherently proclaiming the problems of invisibility. This madness is a perceptual derangement on the part of both the invisible

man and his viewers: it is a public sensory insanity – in a public house, no less – that is thus marked as both cultural and social disorder, and in which, stripped of his divisions, Griffin, spouting non-sense, can be thought to be *out of his senses*.

It is no surprise, then, that such a movement towards madness serves, across the cycle of films, as a key identifier of this type of invisible body, the connection between invisible embodiment and insanity intensified in each incarnation, the character's madness tending to manifest as a megalomaniacal lust for power.¹²⁹ In producing their invisibility, the films differ from Wells in avoiding an external, machine-induced process of 'dynamos', 'radiating centres' and 'ethereal vibration' (*IM* 95), in favour of an internal, chemical-biological transformation that employs an intravenously administered and mind-altering serum, the side-effect of which is insanity, and that in *The Invisible Man* is called 'monocaine'. Griffin reflects that the 'drugs I took seemed to light up my brain', though monocaine is described by Griffin's employer as 'a terrible drug' that 'draws colour from everything it touches. Years ago they tried it for bleaching cloth. They gave it up because it destroyed the material. [...] It was tried out on some poor animal, a dog I believe. It was injected under the skin, and it turned the dog dead white, like a marble statue [...] and it also sent it raving mad'. Indeed, when informed (by Flora, his fiancée) of the likelihood of his condition to inspire madness, it is in sensory terms that Griffin is told that monocaine 'alters you... changes you... makes you *feel* differently'. This madness has been written about primarily with reference to the imbalanced scheme of power and social recognition that the invisible man is immersed in, but such a derangement can also be interpreted as a potent expression of the disordering of the sensorium; the symptoms of insanity owing something to the difficult project of conceptualising and comprehending one's own sensorium.

Writing in 1961, Michel Foucault suggests that by 'a strange paradox, what is born from the strangest delirium was already hidden, like a secret, like an inaccessible truth, in the bowels of the earth'.¹³⁰ For Foucault:

In madness, the totality of soul and body is parceled out: not according to the elements which constitute that totality metaphysically; but according to

¹²⁹ The 1958 UK television series seems to bring about a hiatus in the invisible body's tendencies towards insanity, and it is not until later in the century that invisible individuals are again seen to struggle with this kind of problem, as I will explore in Chapter Four.

¹³⁰ Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, trans. by Richard Howard (Abingdon: Routledge, 1989), p.20.

figures, images which envelop segments of the body and ideas of the soul in a kind of absurd unity. Fragments which isolate man from himself, but above all from reality; fragments which, by detaching themselves, have formed the unreal unity of a hallucination, and by very virtue of this autonomy impose it upon truth.¹³¹

Foucault refers to madness as ‘no more than the derangement of the imagination’, and this image of ‘[f]ragments which isolate man from himself’ exemplifies the unsettled constitution of the invisible body.¹³² As has been seen, it is a thoughtful and imaginative derangement of the sensorium that most emerges from the cinematic language instilled and extended in this particular cycle of invisible body cinema.

Conclusion

While *The Invisible Man* was in pre-production in 1932, Aldous Huxley’s *Brave New World* was published. In that book, Huxley responded to the growing popularity of the ‘talkies’ by imagining the ‘feelies’: an extension of the cinematic mode through which the senses of touch (‘the most amazing tactual effects’), taste and smell are directly stimulated in the audience member, who, ‘[s]unk in their pneumatic stalls, [...] sniffed and listened’ before the stimulation, too, of their ‘eyes and skin’: ‘AN ALL-SUPER-SINGING, SYNTHETIC-TALKING, COLOURED, STEREOSCOPIC FEELY. WITH SYNCHRONIZED SCENT-ORGAN ACCOMPANIMENT’.¹³³ Although *The Invisible Man* and its sequels, as audiovisual media, do not pursue such a model, they instead offer a vision, and a sounding, of a multifunctional sensorium in which is nevertheless sought an escape from the visual individuation of the senses and the associated limitations of a five-sense sensorium.¹³⁴ In Wells’s 1897 novel, an

¹³¹ Foucault, *Madness and Civilization*, p.87.

¹³² Foucault, *Madness and Civilization*, p.87. Foucault continues, describing madness as ‘an intense movement in the rational unity of soul and body; this is the level of *unreason*; but this intense movement quickly escapes the reason of the mechanism and becomes, in its violences, its stupors, its senseless propagations, an *irrational* movement; and it is then that, escaping truth and its constraints, the Unreal appears’ (pp.87–88).

¹³³ Aldous Huxley, *Brave New World* (New York: Harper, 1998), pp.35, 167.

¹³⁴ The films suggest a range of candidates for entry into a revised sensory canon: the sense of temperature (Griffin: ‘It’s cold outside when you have to go about *naked*’); the kinaesthesia of the mobile invisible body, and kinaesthetic geotropic sense of balance; the acute sense of proprioception that this figure has had to learn (Griffin: ‘It is difficult at first to walk down stairs, we are so accustomed to watching our feet’).

introspective Griffin himself observes that, in invisibility, the ‘spectacular quality of my sensations was curious and novel’ (*IM* 116); as I have shown, this cycle of films demonstrates with some force such a ‘curious and novel’ manner in which sensations, though mediated in a largely visual medium, in their invisibility are made less ‘spectacular’.

In Chapter Two’s exploration of the 1930s–1950s cinema of invisibility, the invisible body is understood as a cinematic expression of the disordering of the sensorium in which one sense is implicated in the expression of another. This argument serves to pre-empt my exploration of the evolution of such bodies as part of a late twentieth-century climate of technologised sensory innovation and augmentation. It is such themes that Chapter Three shall explore, as I move to analyse a range of cinematic depictions of invisible alien bodies, prevalent from the 1960s to the 1980s, in which the sensorium, in its further extension, reconfiguration and technologisation, is made even less familiar.



Fig. 2.1, *The Invisible Man* (James Whale, 1933)

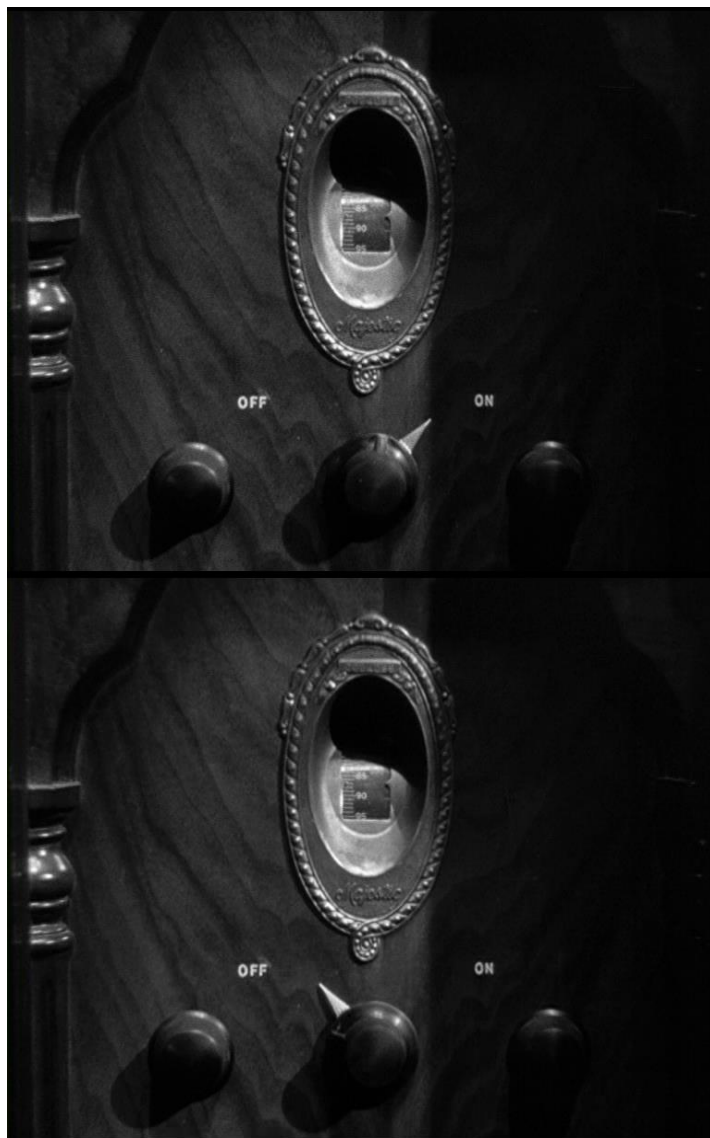


Fig. 2.2, *The Invisible Man* (James Whale, 1933)



Fig. 2.3, *The Invisible Man* (James Whale, 1933)



Fig. 2.4, *The Invisible Man* (James Whale, 1933)



Fig. 2.5, *The Invisible Man* (James Whale, 1933)



Fig. 2.6, *The Invisible Man* (James Whale, 1933)



Fig. 2.7, *The Invisible Man* (James Whale, 1933)



Fig. 2.8, *The Invisible Man Returns* (Joe May, 1940); *Invisible Agent* (Edwin L. Marin, 1942)



Fig. 2.9, *The Invisible Man* (James Whale, 1933)

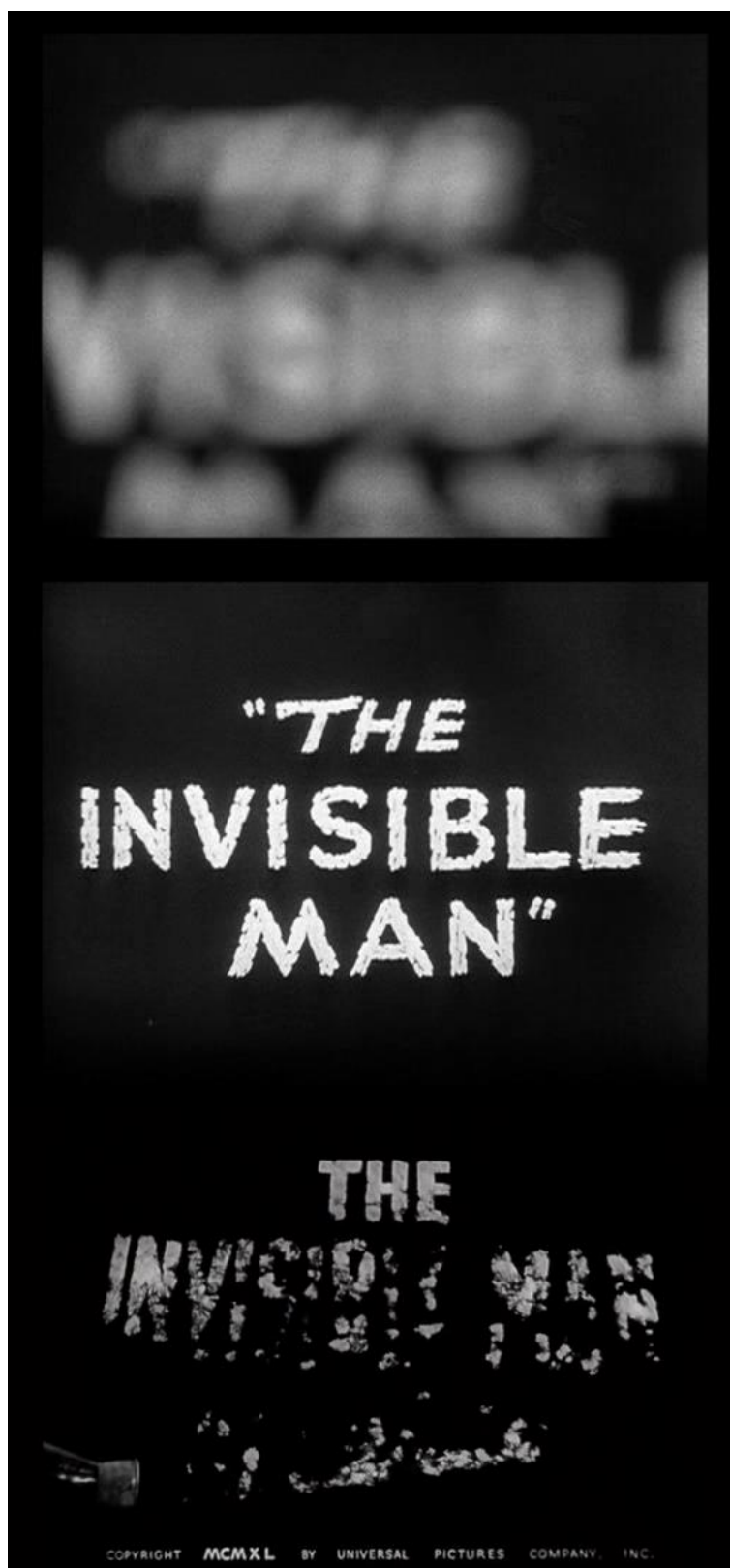


Fig. 2.10, *The Invisible Man* (James Whale, 1933); *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.11, *The Invisible Man* (James Whale, 1933)



Fig. 2.12, *The Invisible Man* (James Whale, 1933)



Fig. 2.13, *The Invisible Man* (James Whale, 1933)



Fig. 2.14, *The Invisible Man* (James Whale, 1933)



Fig. 2.15, *The Invisible Man Returns* (Joe May, 1940); *The Invisible Woman* (A. Edward Sutherland, 1940); *Invisible Agent* (Edwin L. Marin, 1942)



Fig. 2.16, *The Invisible Man* (James Whale, 1933)



Fig. 2.17, *The Invisible Man* (James Whale, 1933)

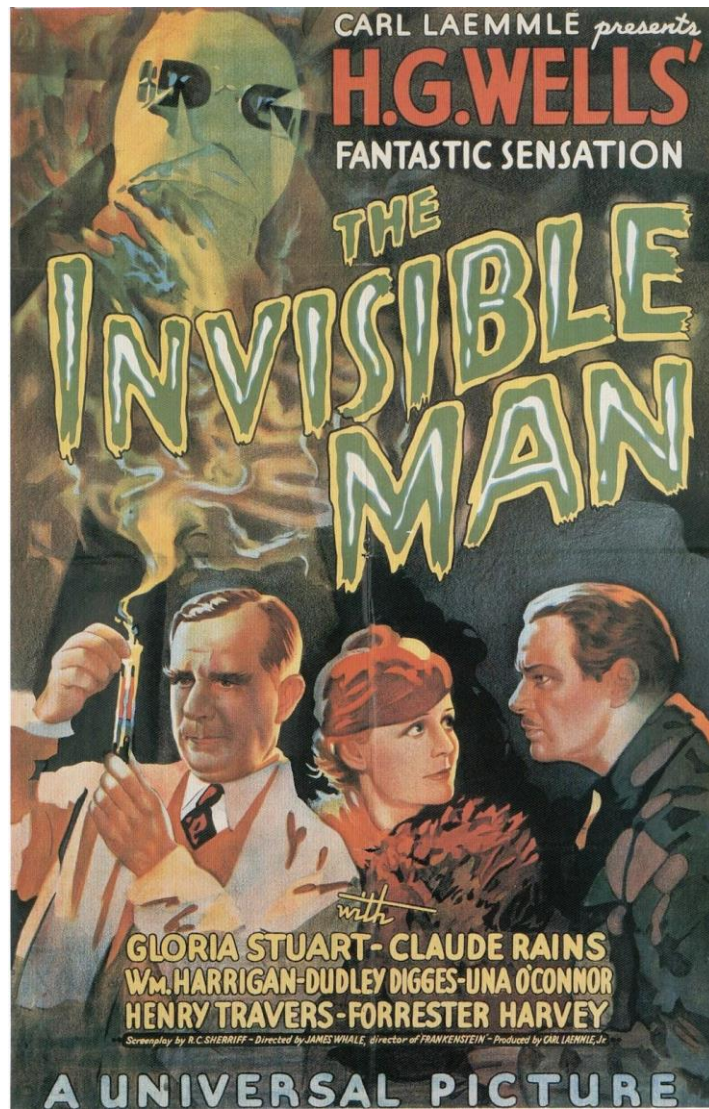


Fig. 2.18, *The Invisible Man* (James Whale, 1933)

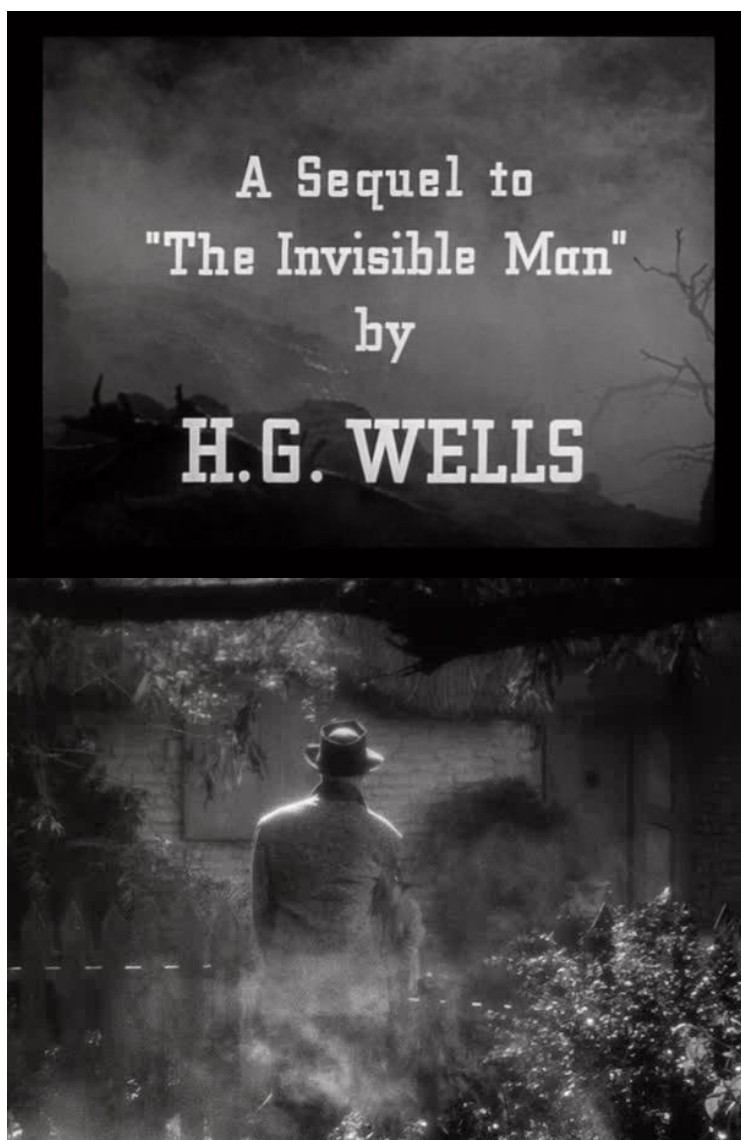


Fig. 2.19, *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.20, *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.21, *Invisible Agent* (Edwin L. Marin, 1942); *The Invisible Man's Revenge* (Ford Beebe, 1944); *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951)



Fig. 2.22, *Invisible Agent* (Edwin L. Marin, 1942)



Fig. 2.23, *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.24, *The Invisible Woman* (A. Edward Sutherland, 1940); *Invisible Agent* (Edwin L. Marin, 1942)



Fig. 2.25, *Abbott and Costello Meet Frankenstein* (Charles T. Barton, 1948); *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951)



Fig. 2.26, *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.27, *The Invisible Man* (James Whale, 1933)



Fig. 2.28, *The Invisible Man* (James Whale, 1933)



Fig. 2.29, *The Invisible Man* (James Whale, 1933)



Fig. 2.30, *The Invisible Man* (James Whale, 1933)



Fig. 2.31, *The Invisible Man* (James Whale, 1933)



Fig. 2.32, *The Invisible Man* (James Whale, 1933)



Fig. 2.33, *The Invisible Man Returns* (Joe May, 1940); *The Invisible Man's Revenge* (Ford Beebe, 1944); *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951)



Fig. 2.34, *Frankenstein* (James Whale, 1931)



Fig. 2.35, *Bride of Frankenstein* (James Whale, 1935)



Fig. 2.36
The Mummy. Directed by Karl Freund. 1932.

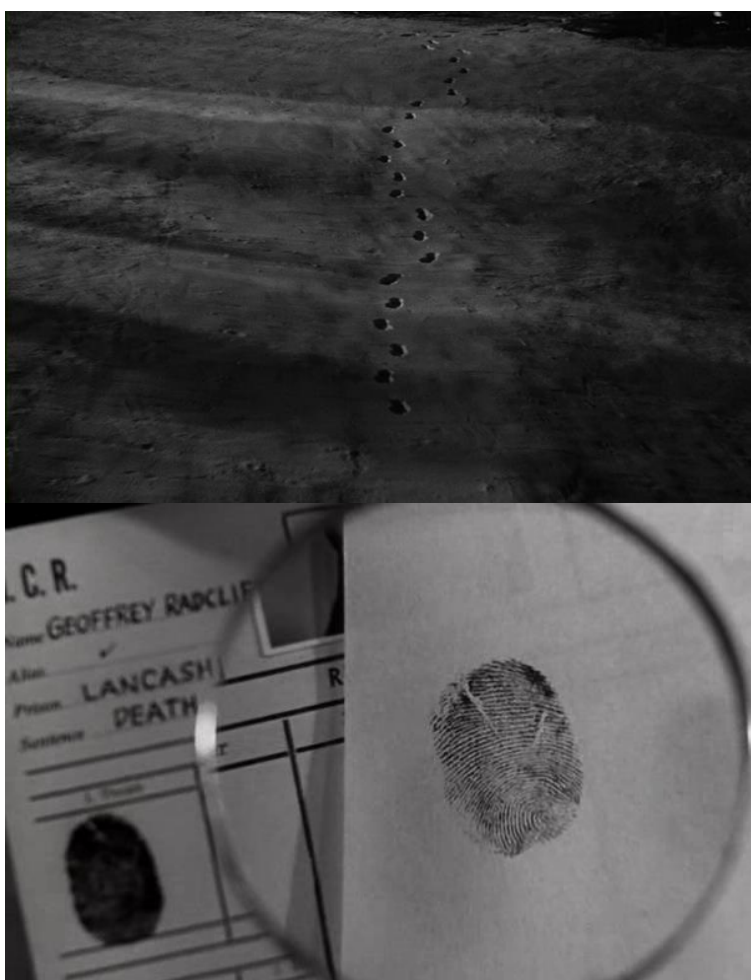


Fig. 2.37, *The Invisible Man* (James Whale, 1933); *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.38, *The Invisible Man* (James Whale, 1933)



Fig. 2.39, *The Invisible Man* (James Whale, 1933)



Fig. 2.40, *The Invisible Man* (James Whale, 1933)



Fig. 2.41, *The Invisible Man Returns* (Joe May, 1940); *The Invisible Man's Revenge* (Ford Beebe, 1944); *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951)



Fig. 2.42, *Invisible Agent* (Edwin L. Marin, 1942); *The Invisible Man's Revenge* (Ford Beebe, 1944)



Fig. 2.43, *The Invisible Man* (James Whale, 1933)



Fig. 2.44, *The Invisible Man Returns* (Joe May, 1940)



Fig. 2.45, *Invisible Agent* (Edwin L. Marin, 1942)

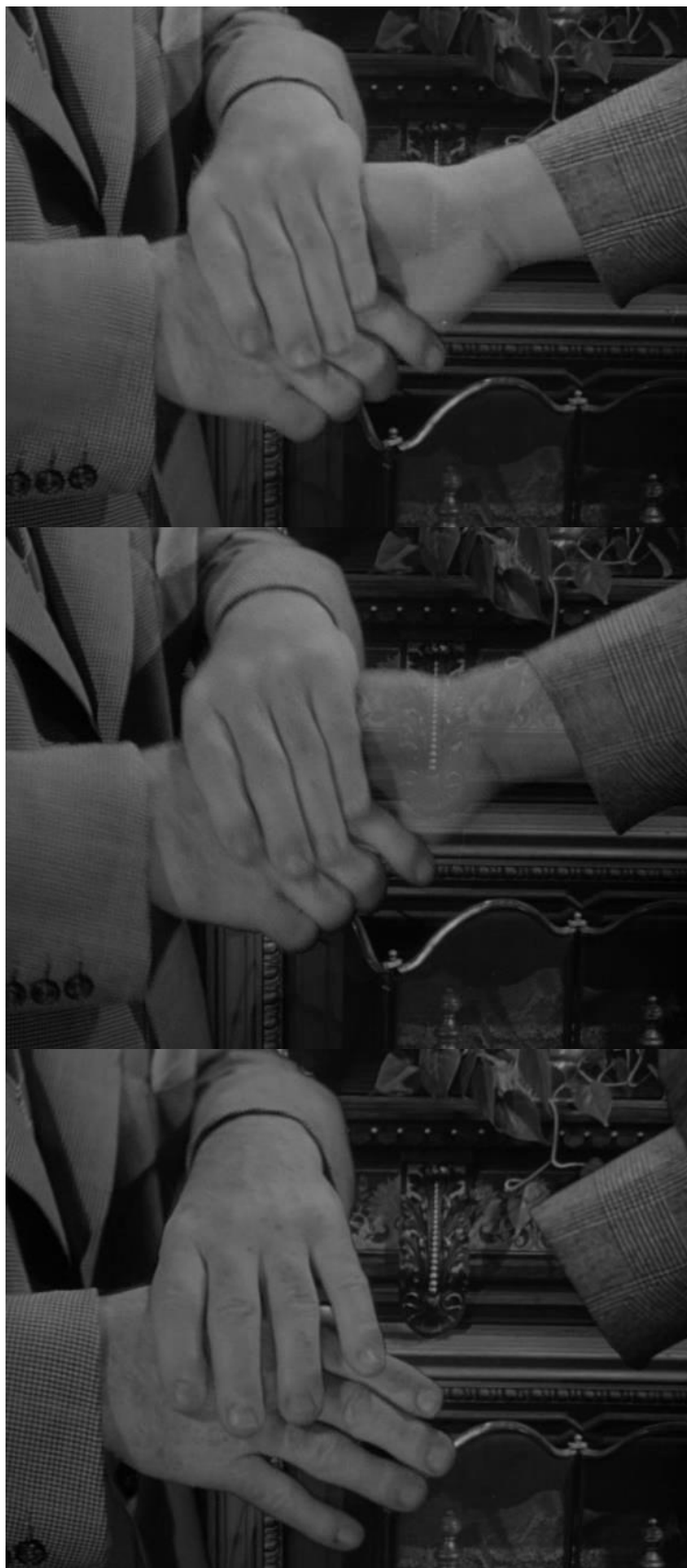


Fig. 2.46, *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951)



Fig. 2.47, *The Invisible Man* (James Whale, 1933)



Fig. 2.48, *The Invisible Man* (James Whale, 1933)



Fig. 2.49, *The Invisible Man* (James Whale, 1933)



Fig. 2.50, *The Invisible Man* (James Whale, 1933)



Fig. 2.51, *The Invisible Man* (James Whale, 1933)



Fig. 2.52, *The Invisible Man* (James Whale, 1933)



Fig. 2.53, *The Invisible Man* (James Whale, 1933)



Fig. 2.54, *The Invisible Man* (James Whale, 1933)



Fig. 2.55, *Repairing War's Ravages: Renovating Facial Injuries* (Horace Nicholls, c.1918)

Chapter Three

Sensory Technologies and the Alien Invisible in *Star Trek* (1966–1986) and *Predator* (1987)

Introduction: ‘There...! That distortion, see it?’

In deep space in the twenty-third century, two spacecraft are locked in battle. One, an alien craft crewed by extraterrestrial ‘Klingons’, is invisible. Two human officers aboard the visible USS *Enterprise*, Admiral James T. Kirk (William Shatner) and Commander Hikaru Sulu (George Takei), scrutinise a large ‘viewing screen’ for signs of the presence of their unseen counterpart, though with some difficulty (fig. 3.1). To effect its disappearance, the invisible spacecraft utilises a ‘cloaking system’, a technological means by which its normally visible state can be made to evade both the naked eye and a range of extra-visual sensory technologies aboard *Enterprise*, so perverting its capacity as an object of apprehension. On board *Enterprise*, a shot of Kirk and Sulu engaged in an intense and careful act of looking cuts to show their viewing screen filling the frame of the cinematic frame, and the film’s audience are thus invited to join in this search (fig. 3.2). Against the otherwise empty field of stars, a slight optical ripple becomes discernible. Another cut presents a view of the screen from behind Kirk and Sulu. Kirk – a gifted viewer – points his left arm and index finger, exclaiming, ‘There...! That distortion, see it?’ (fig. 3.3). Guessing that the invisible vessel will need to become visible in order to fire its weapons, the crew of *Enterprise* wait for such a visual re-emergence. At the moment that the craft begins to reappear, they focus the gaze of their weapons and fire, so disabling their opponent (fig. 3.4).

In this scene from *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984), in which an invisible object passes across the frame of a cinema-like screen, it is through a doubling of the screen on which the film itself is projected that visual engagement with an ostensibly imperceptible object is mediated. Kirk’s extension of index finger towards this onscreen visual ‘distortion’ enacts a conflation of the visual sense – already identified as problematic – and the tactile faculty: a sensory fusion

that some twentieth-century writers have described as the *haptic* (which I will describe in detail in Part Three of this chapter). This sense of ‘distortion’ is a particular focus of this chapter, which interprets the invisible alien body as representative of a late twentieth-century human sensorium that has been made unfamiliar through technologisation. For Caroline A. Jones, however, ‘[o]ur bodies do not allow us to “escape” from technological mediation – they are themselves mediating apparatuses, without which there can be no knowledge of the world’.¹ Consequently, this chapter interrogates the ways in which anxiety over the reconstitution of the human sensorium is expressed through anxious representation of technologised and alien sensoria.

Star Trek III’s plot principally concerns the reunification of the divorced body and soul of the character Spock (Leonard Nimoy), a reunification that is partly stimulated through the effects of the film’s ‘MacGuffin’:² the ‘Genesis’ torpedo, a powerful terraforming technology whose creative production of ‘life from lifelessness’ is, paradoxically, delivered through ‘the most powerful destructive force ever created’, and so can be interpreted easily in relation to contemporary discourse surrounding nuclear power and weaponry. That this Genesis ‘doomsday weapon’ holds ‘great power, to control... dominate’ is noted by the Soviet-like Klingons, aboard their invisible vessel, as they view a computer simulation of its destructive capabilities on a video monitor. It is in the coming together of themes of sensory conflation and intermediality, amidst an anxious technological climate, that the invisibilities of Chapter Three are manifested.

*

Part One of this chapter addresses invisible objects in the *Star Trek* television series and films, examining the perceptual technologies of the period – including both radar and cinema – to be potent modes of sensory and screen mediation through which the invisible is made visible, while connecting the metaphor of invisibility with a contemporary backdrop of repressive nuclear anxiety. Part Two follows this by

¹ Caroline A. Jones, ‘Introduction’, *Sensorium: Embodied Experience, Technology, and Contemporary Art* (Cambridge, MA: MIT Press, 2006), pp.1–4 (p.2).

² Alfred Hitchcock describes the MacGuffin as the ‘device, the gimmick, if you will’ that drives the plot, but ‘is actually nothing at all’ of consequence to the narrative (qtd in François Truffaut with the collaboration of Helen G. Scott, *Hitchcock*, rev. edn (London: Simon and Schuster, 1984), p.138).

describing the depiction of an invisible alien body in *Predator* (John McTiernan, 1987) to be a particular expression of optical distortion through which themes of technological anxiety, misapprehension and incomprehension are further developed. Staying with *Predator*, Part Three addresses the scheme of surveillance that represents the sensorium of that film's invisible antagonist, a technologised and thermographic sensory scheme in which intersensorial and intermedial minglings occur, most particularly those pertaining to a haptic sensibility.

Writing in 1986, Ashley Montagu argues that:

We in the Western world are beginning to discover our neglected senses. This growing awareness represents something of an overdue insurgency against the painful deprivation of sensory experience we have suffered in our technologised world.³

The invisibilities I discuss in Chapter Three, in their embodiment as alien and other, exemplify such negative technological effects, whilst simultaneously opening out into the arena of unfamiliar or otherwise 'neglected senses' that might undermine a restrictive sensory hierarchy. This chapter is thus particularly concerned with matters of sensory augmentation, as expressed through prosthetic, technological and cinematic media. Through the television and film sequences I have chosen to examine, and in this chapter's concern with the alien invisible and the othering of the sensorium through the depiction of variations on conventional sensory experience, I continue this thesis' agenda of interrogating the onscreen invisible body in relation to a rethinking of the sensorium in the long twentieth century. The invisible bodies of this chapter evidence technologised sensoria, and demonstrate significant anxieties concerning technology – particularly with respect to nuclear anxiety – and the relation of media technologies to the sensorium.

In the invisible bodies of these television and film sequences can be identified the humanoid body as a chaotic blend of the bestial and the technological. Its complexion recalls Sigmund Freud's 1930 assertion that contemporary embodiment is the expression of 'an ideal conception of omnipotence and omniscience', a system of 'cultural ideals' through which '[m]an has, as it were, become a kind of prosthetic God'. As Freud writes:

³ Ashley Montagu, *Touching: The Human Significance of the Skin* (New York: Harper & Row, 1986), p.xiii.

When he puts on all his auxiliary organs he is truly magnificent; but those organs have not grown on to him and they still give him much trouble at times. [...] Future ages will bring with them new and probably unimaginably great advances in this field of civilization and will increase man's likeness to God still more. But [...] we will not forget that present-day man does not feel happy in his Godlike character.⁴

In Chapter Three, I explore the extent to which the techno-organic bodies of the *Star Trek* and *Predator* series evoke just such an awkward transcendence, encumbered with sensory prostheses at once natural, cultural and technological, ratifying Marshall McLuhan's 1964 characterisation of media to be 'any extension of ourselves'.⁵ In this chapter I therefore ask: In the context of the onscreen alien invisible, what kinds of distortion to the human sensorium are expressed through recourse to media technologies of sensation?

The previous chapter's exploration of the 1930s–1950s cinema of invisibility has understood the invisible body as a cinematic expression of the disordering of the sensorium in which one sense is implicated in another. In Chapter Three, I extend this notion by exploring the further development of such bodies as part of a late twentieth-century climate of technologised sensory innovation and augmentation. Chapter Three thus analyses a range of cinematic depictions of invisible alien bodies, onscreen from the 1960s to the 1980s, in which the sensorium, in its further extension, reconfiguration, augmentation and technologisation, is made even less familiar, and in which cinema and the senses are anxiously interrelated with respect to astrophysical, military and medical developments in viewing, set in a Cold War context of global weapons research, defence programmes and space exploration. As will be explored, in these cinematic depictions of military invisibilities can be found affirmations of Paul Virilio's contention, expressed in his 1984 book *War and Cinema: The Logistics of Perception*, that, in the twentieth century, 'the soldier's obscene gaze [...] is not just an ominous voyeurism but from the first imposes a long-term patterning on the chaos of vision'.⁶ In this chapter, it is something of 'the chaos of vision' that I address,

⁴ Sigmund Freud, 'Civilization and Its Discontents', *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, ed. by James Strachey, trans. by Joan Riviere, 24 vols (London: Hogarth Press, 1953–75), XXI (1961), pp.64–145 (pp.91–92).

⁵ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1994), p.22.

⁶ Paul Virilio, *War and Cinema: The Logistics of Perception*, trans. by Patrick Camiller (London and New York: Verso, 1989), p.49.

identifying some of the new ways of seeing that the invisible body stimulates in the Cold War period.

One: Invisible Weaponry, Technologised Senses and Screen Mediation in *Star Trek*

‘Balance of Terror’

It is in the 1966 *Star Trek* television episode ‘Balance of Terror’ that the series’ concept of a ‘cloaking system’ is first introduced.⁷ When *Enterprise* responds to a distress call from an Earth colony, the outpost’s commander reports that they are ‘under attack’ from ‘a space vessel, identity unknown’ that fires ‘some form of high-energy plasma... fantastic power’ before vanishing, apprehensible only by a fugitive sensory reading (‘it’s out there somewhere, our sensors show that much’). As *Enterprise* prepares to investigate, the invisible craft becomes briefly visible in order to destroy the outpost completely (fig. 3.5). After reverting to its invisible state, the alien vessel is tentatively tracked by the *Enterprise* crew, who cannot properly locate it. As *Enterprise* fires ‘blind’, the invisible craft is damaged by numerous lucky strikes, and, incapacitated but still invisible, retaliates by releasing an ‘old-style nuclear warhead’ that explodes close to *Enterprise*, which weathers the blast. With all strategies exhausted, the enemy vessel becomes visible in order to self-destruct, disappearing in a final nuclear blast that leaves nothing but a panorama of empty space (fig. 3.6). Much of the episode’s fifty-minute running time is concerned with the problems of observation, and imperceptible threat, that this invisible object presents.

This story’s discussion of technological invisibility sees the techno-fetishism that runs throughout the *Star Trek* television and film series problematised by an anxious response to escalating weapons technologies. As science officer Spock

⁷ The teleplay for ‘Balance of Terror’ was developed between 14 April and 25 July 1966. The episode was filmed from 20–28 July of that year, and first screened on 15 December 1966, the 14th of 79 episodes across three series in 1966–1968 (‘Balance of Terror’, <[http://en.memory-alpha.org/wiki/Balance_of_Terror_\(episode\)](http://en.memory-alpha.org/wiki/Balance_of_Terror_(episode))> [accessed 23 September 2014]). The *Star Trek* television series was followed by an animated television series in 1973–1974, and a series of feature films from 1979.

contextualises the unfolding crisis for the benefit of both *Enterprise* crew and viewer, he refers to a historic war, ‘the Earth–Romulan conflict of over a century ago’, that utilised ‘primitive atomic weapons’. This distant past firmly refers to the viewer’s atomic present of 1966, and its possible imminent and catastrophic future. The title of the episode, ‘Balance of Terror’, which appears on screen at the outset, would itself have been a term familiar to many audience members, having been first used by Canadian Minister Lester Pearson in 1955,⁸ and subsequently by US President John F. Kennedy in 1961,⁹ to describe how the new dynamics of global political power in the nuclear age were centred upon a mutual fear of technological annihilation. The allegory is clear, and the episode is one of a number of *Star Trek* storylines to explicitly embed Cold War concerns in its twenty-third-century context.¹⁰

The ‘primitive’ past cited by Spock defines the nuclear age as both a prehistoric time and a progenitive period prefiguring the technological future depicted in *Star Trek*. Widespread understanding of nuclear weapons from 1945 onwards stimulated a paradigmatic shift in human consciousness, with the growing awareness

⁸ Pearson, then Secretary of State for External Affairs of Canada and later Prime Minister of that country, was specifically referring to the advent of the hydrogen bomb when he used (and possibly coined) the term in a speech in San Francisco on 24 June 1955, at the tenth anniversary of the signing of the UN charter: ‘The hydrogen bomb [...] was not created for peace; it was the product of a desperate anxiety not to be left at an impossible defence disadvantage at a time of fear and crisis. But now, because of this weapon, there stands [...] the prospect of mutual annihilation. The balance of terror has replaced the balance of power, and that is not a comfortable or strong or permanent foundation for security. Peace rests uneasily on one, even less easily on two, hydrogen bombs. [...] As we look back, let us hope that the need to avoid collective and nuclear suicide will help us to remove these fears and misunderstandings which now haunt and harry us.’ (Lester Pearson, qtd in ‘Seventh Meeting of Representatives of Members’, *Commemoration of the Tenth Anniversary of the Signing of the Charter of the United Nations in the City of San Francisco on 26 June 1945: The City of San Francisco, 20–26 June 1955* (New York: United Nations, 1955), pp.213–238 (pp.214–215).) There is more information in A.J.C. Edwards, *Nuclear Weapons: The Balance of Terror, the Quest for Peace* (London: Macmillan, 1986), p.238.

⁹ As Kennedy announced in his inaugural address in January 1961: ‘Finally, to those nations who would make themselves our adversary, we offer not a pledge but a request: that both sides begin anew the quest for peace, before the dark powers of destruction unleashed by science engulf all humanity in planned or accidental self-destruction. We dare not tempt them with weakness. For only when our arms are sufficient beyond doubt can we be certain beyond doubt that they will never be employed. But neither can two great and powerful groups of nations take comfort from our present course – both sides overburdened by the cost of modern weapons, both rightly alarmed by the steady spread of the deadly atom, yet both racing to alter the uncertain balance of terror that stays the hand of mankind’s final war.’ (John F. Kennedy, ‘President John F. Kennedy’s Inaugural Address’, in *Modern America: A Documentary History of the Nation Since 1945*, ed. by Gary Donaldson (London: M.E. Sharpe, 2007), pp.98–101 (p.100).)

¹⁰ More information about the relationship of specific *Star Trek* episodes to Cold War ideas and events can be found in Rick Worland, ‘Captain Kirk: Cold Warrior’, *Journal of Popular Film and Television*, 16 (1988), 109–117, one of the first texts to thoroughly position the programme in relation to its Cold War context. Ina Rae Hark asserts that ‘Cold War fears of nuclear annihilation are never far from the surface in *Star Trek*’, noting also that ‘[n]early half the episodes of *Star Trek* refer to mass annihilations of populations’ (Ina Rae Hark, *Star Trek* (Basingstoke: Palgrave Macmillan, 2008), pp.52, 53).

of the distinct possibility of humanity's annihilation. This shift was promoted with enthusiasm by the official reporter for the Manhattan Project, William L. Laurence, who insisted in 1945 that the bomb marked 'the birth of a new era on this planet'.¹¹ The inception of this new age is often marked as 6 August 1945, with the public detonation of an atomic bomb at Hiroshima, the second recorded use of such a device; the first atomic test, codenamed 'Trinity', had taken place somewhat more privately in the New Mexico desert on 16 July of the same year.¹² The devastating use of atomic weapons at Hiroshima, and at Nagasaki three days later, ushered a steep escalation in global arms research and development – the nuclear arms race – that underpinned Cold War hostilities in the wake of the Second World War's end. The burgeoning political atmosphere of latent aggression was exacerbated by the USSR's development of atomic resources in 1949, which in turn spurred the US to create the vastly more powerful hydrogen bomb in 1952.¹³ This escalation continued into the 1960s, encompassing the USSR's testing, just two months after the construction of the Berlin Wall, of what remains the largest nuclear weapon ever detonated, a hydrogen bomb known as the 'Tsar Bomba', in October 1961. With these developments, understandings of the possibility of nuclear annihilation evolved towards a sense of inevitability. It is anxiety surrounding the multi-state acquisition of the hydrogen bomb, and the continuing escalation of the power of such devices, that 'Balance of Terror' most seizes upon, with its Romulan super-weapon of 'enormous power' therefore coded as an extreme extrapolation of nuclear weaponry.¹⁴

¹¹ William L. Laurence, 'Atomic Factories Incredible Sight', *The New York Times*, 29 September 1945, p.6.

¹² The occurrence of the Trinity test remained classified until 6 August 1945. After witnessing the Trinity test, the atomic scientist J. Robert Oppenheimer exclaimed, 'I am become Death, the destroyer of worlds'; Oppenheimer later claimed to have chosen the name Trinity after reading John Donne's *Holy Sonnets* (1609–1610) 'which I happened to be reading at the time' (especially 'Batter my heart, three-personed God'). The religious connotations of Oppenheimer's conception of the Trinity test is explored in James A. Aho, "'I Am Death ... Who Shatters Worlds": The Emerging Nuclear Death Cult', in *A Shuddering Dawn: Religious Studies and the Nuclear Age*, ed. by Ira Chernus and Edward Tabor Linenthal (Albany: State University of New York Press, 1989), pp.49–68.

¹³ As Jane Pavitt states: 'By 1949, the knowledge that the Soviet Union possessed the same nuclear capabilities as the USA raised Western anxieties to fever pitch' (Jane Pavitt, 'The Bomb in the Brain', in *Cold War Modern: Design 1945–1970*, ed. by David Crowley and Jane Pavitt (London: V&A Publishing, 2008), pp.101–121 (p.101)). The USSR's first recorded detonation of an atomic device took place on 29 August 1949. The hydrogen bomb was first exploded by the US in 1952 on a small atoll in the South Pacific Ocean called Eniwetok.

¹⁴ As Hark has noted, 'many commentators have seen the relations between the Federation, the Klingons and the Romulans as a replica of Cold War tensions between the USA, the Soviet Union and China' (Hark, *Star Trek*, p.33), with the recurring antagonists in the *Star Trek* series constructed as analogues of contemporary states that rival the US as global superpowers. In the mapping of Cold War politics onto the *Star Trek* universe, *Enterprise*, as emissary for the future planet Earth under the

Following the 1962 Cuban Missile Crisis, which Kennedy characterised as having brought the world to the edge of ‘the abyss of destruction’,¹⁵ nuclear testing was widely restricted to underground sites through the terms of the Limited Test Ban Treaty.¹⁶ Although the disappearance of visible tests led to a sharp reduction in western media attention to the bomb,¹⁷ it would not be until the 1968 instigation of the Treaty on the Nonproliferation of Nuclear Weapons that the nuclear arms race would begin to decelerate, bringing this period of pervasive yet hidden nuclear activity to a close.¹⁸ It is this brief but critical phase in Cold War relations that forms the backdrop to the 1966 emergence of *Star Trek*’s invisible object, the relative invisibility of underground nuclear testing, at a period of widespread arms escalation, manifesting in the form of an invisible weapon of immense destructive power. As a totem of apocalypse, the invisibility of the object is a masking of its persistent presence, and communicates invisibility as scotomisation: a self-censoring repression of anxiety that cannot contain the escalated dangers presented by the nuclear arms race.¹⁹ In ‘Balance

umbrella of the ‘Federation’, has been understood to represent aspects of the contemporary western world, with Worland remarking that the ‘Federation’ is ‘akin to the Cold War conception of “the Free World,” with Starfleet [the military organisation that directly operates *Enterprise*] as its NATO’. Worland also observes that, ‘[I]ike the Soviet Union with regard to the United States, the Klingon Empire is a vast system roughly equivalent in power and influence to the Federation. Like China in the two decades following the communist revolution, the Romulons [sic] are a secondary but nonetheless formidable power. Its progressive humanism aside, *Star Trek* neatly duplicated the configuration of international Cold War politics of the 1960s’ (Worland, ‘Captain Kirk: Cold Warrior’, pp.110, 112). Lincoln Geraghty, too, affirms that, in *Star Trek*, ‘[f]uture America is a metaphorical representation of the present, with the Federation taking the place of the USA or the UN: in the 1960s, the Klingons were the Russians; the Romulans were the Chinese’ (Lincoln Geraghty, *Living With Star Trek: American Culture and the Star Trek Universe* (London and New York: I.B. Tauris, 2007), p.42). Under the terms of this equivalency, it is notable that China had tested its first atomic bomb on 16 October 1964, and would test a hydrogen bomb less than three years later on 17 June 1967, just six months after ‘Balance of Terror’ had been first broadcast. Widely perceived to be an alarmingly swift progression from fission to fusion, this context surely contributes to the atmosphere of unease reflected in ‘Balance of Terror’.

¹⁵ John F. Kennedy, ‘President John F. Kennedy Addresses the Nation on the Cuban Missile Crisis’, in *Modern America: A Documentary History of the Nation Since 1945*, ed. by Gary Donaldson (London: M.E. Sharpe, 2007), pp.104–108 (p.107).

¹⁶ Also known as The Treaty Banning Nuclear Weapon Tests In The Atmosphere, In Outer Space And Under Water, which came into force on 10 October 1963 (Robert C. Williams and Philip L. Cantelon, *The American Atom: A Documentary History of Nuclear Policies from the Discovery of Fission to the Present, 1939–1984* (Philadelphia: University of Pennsylvania Press, 1984), p.202).

¹⁷ As Spencer R. Weart notes: ‘Once the Limited Test Ban Treaty was signed, the space the [*New York Times*] gave to arms control abruptly dropped to less than a third of the peak level’ (Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, MA: Harvard University Press, 1989), p.261).

¹⁸ Williams and Cantelon, *The American Atom*, p.254. The treaty was opened for signatures in 1968, and put into effect in 1970.

¹⁹ In discussing the cultural visibility of nuclear threat in these years, Weart contends that: ‘In the few years after 1962 when published attention to nuclear war dropped to a quarter or even a tenth of its previous level, this was not because of any great change in the public’s beliefs and concerns. People still admitted their nuclear fear if asked about it, but they no longer brought it up spontaneously.’

of Terror’, notions of both invisibility and apocalypse revolve around the extraterrestrial vessel and its dual and intermingling technologies of disappearance and advanced weaponry. This economy of invisibility and apocalypse reflects the fearful mysteries of nuclear anxiety at this time, always propagated by a necessary fusion of strategic secrecy and paralysing propaganda.²⁰

In such a context, it is notable that *Star Trek*’s starship, USS *Enterprise* (NCC-1701), is named as part of the lineage of real US naval vessels that carry that name, the most contemporary incumbent being the USS *Enterprise* (CVN-65), which, after being commissioned on 25 November 1961 as the world’s first nuclear-powered aircraft carrier, participated in the US blockade of Cuba during the Cuban Missile Crisis in 1962, was used off the coast of Vietnam to supply aircraft for strikes in 1965 and 1966, and remains the longest naval vessel in the world.²¹ Notable also is the mediation of the image of pseudo-nuclear catastrophe by *Enterprise*’s ‘viewing screen’, the onscreen sight of the super-weapon’s blast being one from which the crew avert their eyes, before the blinding image shifts to show the alien craft becoming invisible amidst empty space (fig. 3.7).²² Here, screen media conflates the invisible and the apocalyptic into a visual expression of the abominable force of nuclear weapons, a vision that its viewers seek to unsee.²³ These images mark out screen

Brushing the issue aside was the easiest way of all to ward off cognitive dissonance.’ (Weart, *Nuclear Fear*, p.264.)

²⁰ In her cultural history of fear, Joanna Bourke refers to the title of a Campaign for Nuclear Disarmament (CND) publicity statement when noting that ‘[i]t was widely predicted that future historians (“if there are any”) would call the 1950s and 1960s the “Age of Fear”’; she also observes that, at this time, ‘[l]ong-range aeroplanes and nuclear warheads destroyed [many Americans]’ sense of security’. (Joanna Bourke, *Fear: A Cultural History* (London: Virago, 2005), pp.260, 261.)

²¹ Kit Bonner and Carolyn Bonner, *Modern Warships* (London: Zenith Press, 2007), p.46.

²² With respect to the repression of nuclear themes, it is notable that the published novelisation of this episode itself omits the sequence whereby a twentieth-century nuclear warhead is detonated (James Blish, *Star Trek* (New York: Bantam Books, 1967)).

²³ This covering of the eyes in the face of nuclear explosion reflects Weart’s assertion that ‘[s]ince the early 1950s acute observers had noted that many citizens were refusing to face the issue of nuclear war, and by the mid-1960s the defense mechanism was ubiquitous. It almost made sense to close one’s eyes, the way sensible children cover their faces in a horror movie. As a young adult said in 1965, “If we lived in fear of the bomb we couldn’t function.”’ (Weart, *Nuclear Fear*, p.266.) Echoing this theme, in a 1966 interview the filmmaker Stanley Kubrick, director of the 1964 satire of nuclear war *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb*, articulated his concerns that ‘by now, the bomb has almost no reality and has become a complete abstraction [...]. The longer the bomb is around without anything happening, the better the job that people do in psychologically denying its existence. It has become as abstract as the fact that we are all going to die someday [...] the longer a nuclear event is postponed, the greater becomes the illusion that we are constantly building up security, like interest at the bank. As time goes on, the danger increases, I believe, because the thing becomes more and more remote in people’s minds.’ (Stanley Kubrick, qtd in Jeremy Bernstein, ‘Profile: Stanley Kubrick’, *Stanley Kubrick: Interviews*, ed. by Gene D. Phillips (Jackson: University Press of Mississippi, 2001), pp.21–46 (p.29).)

media as a means through which audiences could safely encounter the potential catastrophe of nuclear apocalypse. As with much dystopian fiction of this period (and in common with the contemporary trend for ‘disaster movies’), the producers of these images express nuclear conflict and its consequences as part of an anxious image-making strategy designed to preclude such an event from its manifestation in actuality.²⁴ As I will show in the following sections, this economy of invisibility, technology and apocalypse also reflects a climate of unsettling sensory augmentation.

Cloaked vision

In addition to the episode’s addressing of contemporary 1960s concerns, ‘Balance of Terror’ infuses its depiction of twenty-third-century conflict with Second World War motifs, conflating past, present and future, and so contributing to a post-war trend for linking nuclear threat with a dislocating sense of time and history.²⁵ The screenplay, written by Paul Schneider, draws heavily from two late 1950s American films depicting submarine combat during the Second World War, *The Enemy Below* (Dick Powell, 1957) and *Run Silent, Run Deep* (Robert Wise, 1958). *The Enemy Below* shows a US surface destroyer closely mimicking the every move of a German submarine, provoking the U-boat’s crew to mistakenly believe the appearance of the trailing blip on their sonar screen to be ‘a false echo’ of their own presence. For ‘Balance of Terror’, Schneider borrows this detail exactly, with *Enterprise*’s strategy of mimicry similarly persuading the invisible vessel that the visual reading on their sensor screens is ‘a reflection... an echo’ of their own invisible presence. In both stories, this ‘echo’ expresses numerous parallels between opposing vessels: as in *The Enemy Below*, *Enterprise*’s Captain Kirk and his Romulan counterpart (Mark Lenard) mine a kind of psychic link, second-guessing each other at every turn, and each

²⁴ Fredric Jameson claims that science fiction’s ‘multiple mock futures serve the [...] function of transforming our own present into the determinate past of something yet to come’ (Fredric Jameson, ‘Progress Versus Utopia; or, Can We Imagine the Future?’, *Science Fiction Studies*, 27.9 (1982), 147–158 (p.152)).

²⁵ As Cyndy Hendershot writes, ‘[p]ostwar thinkers appeared to be periodizing the bomb as something unprecedented [while] they simultaneously attempted to take it and its implications out of historical time and place them in mythological and eschatological time. [...] Such ahistoricism constitutes a paranoiac response to the cultural trauma caused by the reality and threat of nuclear destruction.’ (Cyndy Hendershot, ‘From Trauma to Paranoia: Nuclear Weapons, Science Fiction, and History’, *Mosaic: A Journal for the Interdisciplinary Study of Literature*, 4.32 (December 1999), 73–90 (pp.73–74).)

acknowledging a mutual resemblance of both vessel and self.²⁶ When the Romulan commander feels that Kirk ‘reads the thoughts of my brain’, the notion again draws from *The Enemy Below*, in which the US Captain Murrell (Robert Mitchum) invokes a psychic dimension to the process of radar apprehension: ‘call it a sixth sense if you want to. I always seem to know when there’s a mind working on the other end of that radar beam’; the mind he senses is, of course, his invisible double, the German U-boat Captain (Curd Jürgens).

A sequence in which *Star Trek*’s invisible Romulan craft evacuates visible debris and a corpse from its torpedo tubes to provide false confirmation of its destruction is drawn directly from *Run Silent, Run Deep* in which a US submarine performs the same actions to fool a Japanese ship in the Bungo Channel. In drawing from these sources, Schneider casts *Enterprise* as a surface vessel in tense combat with a mysterious submarine. The latter role is taken by the literally invisible Romulan craft, the cramped set for which resembles the control room of a submarine, its chief viewing mechanism a futuristic periscope, and its weapon a ‘plasma torpedo’ (fig. 3.8). However, in this transposition from the recent past to *Star Trek*’s future environment, the substitution of outer space for the undersea shifts the visual constitution of the theatre of conflict. While the submarine narratives’ medium of invisibility is in the depth, darkness and density of the murky sea, *Star Trek*’s alien vessel operates amidst the open vistas and startling clarity of deep space, a sprawling site of omniscience in which little is obscured. These revised ambient conditions necessitate a diversion from the submarinal model, the object itself becoming producer of its own invisibility, made murky from the inside out by means of its scheme of advanced extraterrestrial technology.

Cinematic precedents showing such technologically invisible vehicles include, for example, *Buck Rogers* (Ford Beebe and Saul A. Goodkind, 1939). In this film serial, a craft, temporarily disappeared by ‘dissolvo-ray’, is assumed to have been destroyed until the ray’s inventor explains that ‘the ship is still there but you can’t see it [...]. Perfect as the ether itself.’ The ray is fired from Earth in order to allow undetected passage through a blockade in the planet’s outer atmosphere. This case

²⁶ The director of ‘Balance of Terror’, Vincent McEveety, recalled that ‘I had, incidentally, seen *The Enemy Below*, but I didn’t notice the similarity until later, when somebody told me about it. Obviously it’s the same story.’ (Vincent McEveety, qtd in Edward Gross and Mark A. Altman, *Captain’s Logs: The Complete Trek Voyages* (London: Boxtree, 1993), p.34.)

exemplifies a vogue for invisibility rays in 1930s fictions,²⁷ while the ship's capacity for strategic discretion reflects contemporary ideals of camouflage, as observed in the natural world and adopted for military craft and installations (such as the dazzle schemes produced by artists for the British Army's 'Camouflage Section' from the First World War onwards). Such schemes are intended to disrupt visible light, the dominant medium of military apprehension of that period. Perhaps most striking in *Buck Rogers* is the reconstitution of the visual signature of the ship as a dense, unnatural fog amidst the clarity of the ether, a phenomenon mediated on the small monitor screens of its pursuers (fig. 3.9). This obfuscating atmosphere of invisibility is characterised by an occupant of the ship as 'a strange sensation, being up here in a ship you couldn't see' (fig. 3.10).

No such atmospheric traces appear in 'Balance of Terror', in which the ship's 'cloaking system' is characterised to work through 'the selective bending of light', a materialisation of light that corrupts the fundamental medium of vision. Despite *Enterprise*'s vast array of advanced sensory equipment for observing beyond the visible spectrum, such facilities are useless in the tracking of the invisible object: its 'sensor probes' reveal 'nothing'. When a basic kinaesthetic signal of the invisible craft is identified through a 'blip on the motion sensor', the crew are frustrated when the invisible vessel turns off its engines and the signal stops. This quasi-radar technology of detection, the 'motion sensor', is another remnant of the Second World War sources with which 'Balance of Terror' is inscribed. The development of radar apprehension as an effective offensive and defensive tool – utilising wavelengths from the electromagnetic spectrum to enable the real-time awareness of a hostile object's presence, without recourse to conventional optical channels – had been crucial to the outcome of that conflict. A glance at some of the early published histories of radar is revealing in the language used to characterise the power of radar technology: writing in 1946, O.E. Dunlap, Jr., for example, describes radar as a 'super-weapon'.²⁸

²⁷ In cinema, such a trend is manifested in *The Invisible Ray* (Lambert Hillyer, 1936).

²⁸ Dunlap describes the role of 'the harnessing of microwaves, the development of radio pulses, and new electron tubes. Chief among the latter was perfection of the cathode-ray "eye" – the tube that had made electronic television possible. The emergency of war rushed the new super-weapon into service as an instantaneous method of detecting planes and ships – and determining their distance and the direction and speed of their movement – even when distance, darkness, fog, or clouds rendered them invisible.' (Orrin E. Dunlap, Jr., *Radar: What Radar Is and How It Works* (New York and London: Harper & Brothers, 1946), p.ix.)

Radar transmits invisible electromagnetic pulses that, upon encountering dense objects, reflect back to their source, appearing as distortions ('blips') in the data collected by the system. Radar can discern objects embedded in such problematic viewing contexts as the misty atmospherics of the sky or the enveloping darkness of night. In revealing presences beyond the range of unenhanced vision, radar procures the perception of the seemingly absent, or the yet-to-be present, thus reconfiguring the conventional temporal logistics of apprehension. Fundamental to the successful functioning of the radar system is the production of audiovisual results for interpretation by a seeing, hearing observer. In terms of visual results, the frequency detected by the radar receiver is converted for display on the screen of a cathode ray tube. While cathode rays are themselves invisible, when they strike the treated surface of the tube they emit a fluorescent glow, producing stark images for interpretation. This screen system thus converts otherwise inapprehensible data into a recognisable visual system for interpretation, providing a focal point for the reconfiguration and display of extra-visual data that has a reach beyond that of the naked eye in both spatial and temporal terms.

The advent of radar systems promoted increasing reliance on screen technology in modern warfare contexts. Describing the military application of radar in the second half of the twentieth century to be part of the 'electro-optical [...] "watching machine"', Virilio contends that '[s]eeing and foreseeing' have come to 'merge so closely that the actual can no longer be distinguished from the potential. Military actions take place "out of view", with radio-electrical images substituting in real time for a now failing optical vision.'²⁹ Between the Second World War and the 1960s context from which 'Balance of Terror' emerges, the tactical military use of radar grew with its incorporation into sophisticated detection systems, such as the computerised multiple-screen operations room configurations of the North American Aerospace Defense Command's (NORAD) Semi-Automatic Ground Environment (SAGE), principally designed to swiftly apprehend enemy bombers and automatically issue interception instructions. For Virilio, the superseding of the optical in the 'electro-optical' is exacerbated as beacons and watchtowers, telescopes and binoculars are replaced by such Combat Information Centre (CIC) environments: enclosed, windowless fora in which multiple results of electromagnetic apprehension

²⁹ Virilio, *War and Cinema*, p.3.

are conflated for visual interpretation. In *Star Trek*'s technologically advanced future, the array of multiple 'sensors' aboard *Enterprise* expresses an advanced SAGE-type installation, with the centralised 'bridge' environment as nexus of electro-sensory data collection. As I will explore in the following section, *Enterprise*'s key mechanism of perception is an advanced form of strategic imaging technology, but also an advanced media extension of the sensorium.

Screen mediation of the senses

For *Enterprise*, the screen mechanism for visualisation of ostensibly invisible objects is evolved from the radar screen to the 'viewing screen', the site at which sensory data – the 'reflections' and 'echoes' of worldly encounter – is displayed and interpreted by the vehicle's crew. The viewing screen mediates between the ship's external encounters and the viewing subjects on board, and serves as a screen-within-a-screen for the viewer at home. Often this screen functions as if it is an aperture on the vistas of space outside, frequently displaying an empty field of stars, such clear images of deep space anticipating space telescopes, the first of which was launched in 1968.³⁰ With its mandate 'to explore strange new worlds, to seek out new life and new civilizations' outlined at each episode's outset, *Enterprise* is effectively a populated space probe that performs the diverse imaging functions of probes such as NASA's *Pioneer 10*, in development from 1964 and launched in 1973.³¹

It is easy to understand the main character of *Star Trek* to be *Enterprise*, and to recognise its symbolic function as technologised analogue for a sensuous human body. Constituted of different sensory divisions and departments, *Enterprise* provides a model for the complexities of the human sensorium, extending basic sensory

³⁰ The first active space telescope was NASA's Orbiting Astronomical Observatory 2, which was launched in 1968. The initial conception of such platforms, allowing a relatively unrestricted vision of the Universe, unimpacted by the murky atmospherics and electromagnetic disruption of the Earth's atmosphere, is often attributed to the US astrophysicist Lyman Spitzer Jr in 1946. During the Second World War, Spitzer was part of the Yale University team that developed sonar, and in 1951 founded Project Matterhorn, which developed the first hydrogen bomb. (Joseph A. Angelo Jr, *Encyclopedia of Space and Astronomy* (New York: Infobase Publishing, 2006), pp.435, 581.) The opening shot of *Star Trek*'s title sequence is such an image of empty space (fig. 3.11).

³¹ Roger D. Launius, *Frontiers of Space Exploration*, 2nd edn (Westport, CT: Greenwood Press, 2004), p.36. It is notable that in *Star Trek V: The Final Frontier* (William Shatner, 1989), a cloaked twenty-third-century alien vessel is shown becoming visible, before using the drifting *Pioneer 10* for target practice, destroying the aged probe.

functions through technological augmentation.³² On board, crew members perform a diverse range of specified sensory tasks: communications officer Uhura (Nichelle Nichols) monitors all aural frequencies; the ‘logical’ science officer Spock intellectually decodes visual data through use of a private display; helmsman Sulu manages the ship’s kinaesthetic motion; navigators including Chekov (Walter Koenig) monitor proprioceptive and vestibular awareness; engineer Scotty (James Doohan) provides dynamic power to fuel all of these activities. In ‘Balance of Terror’, and across the entire run of *Star Trek*, it is *Enterprise*’s bridge environment in which this diverse range of sensory data is collated and conflated, mainly for visual display on the wide-format viewing screen. In this episode alone, the viewing screen performs as map and radar display, enables remote audiovisual communication, is able to access real-time footage from viewing screens in other locations, and shows the results of secret surveillance from within the invisible object itself (fig. 3.12). This viewing screen thus brings together multiple modes of viewing, translating the results of numerous extra-visual sensing sources for visual interpretation by Captain Kirk, a proficient viewer of screen media whose armchair is set diametrically opposite the screen (fig. 3.13). Kirk interprets and reviews this multisensory accumulation, demonstrating his instinctive facility for a ‘sixth’ or ‘common’ sense, through which all sensory inputs are entangled.³³

In ‘Balance of Terror’, a significant use of the viewing screen comes as *Enterprise* intercepts a signal emanating from the invisible ship: a ‘communication’ that ‘sounds like code’. The invisibility of the enemy vessel thus precipitates a reconfiguration of *Enterprise*’s sensory capacities, and so the human sensorium, in order to sense it, to decode it. Spock uses his console to ‘lock on it [and] get a picture of their bridge’, transforming *Enterprise*’s viewing screen display, of the seemingly empty space in which the invisible vessel hides, into a distorted image that gradually stabilises, like a television set ‘warming up’, to show the interior of the invisible vessel (fig. 3.14). Beginning with a relatively wide shot of the vessel’s bridge, the image is zoomed in to tightly frame the face of the Romulan commander (fig. 3.15). Although, in its invisible state, the viewing sensors of the invisible vessel are

³² This utopian characterisation of *Enterprise* as a technological sensorium can be contrasted with the dystopian characterisation of an all-seeing, all-knowing ship’s computer, HAL, in *2001: A Space Odyssey* (Stanley Kubrick, 1968).

³³ See David Howes, ‘Introduction: The Revolving Sensorium’, *The Sixth Sense Reader* (Oxford and New York: Berg, 2009), pp.1–52.

inoperative (and neither can the crew, it seems, even look out of a window), here *Enterprise's* viewing screen permits the production of a vision from within the invisible object, wherein the scene, and its visual construction, is played out according to televisual conventions. At such moments, the play of images on the viewing screen becomes indistinguishable from the structuring and presentation of images seen by the programme's viewer. *Star Trek's* screen setting thus conflates tactical viewing environment, multisensory platform and visual media site, mingling together the electronic spectator systems of television and war. In the viewing screen's visualisation of the interior of the invisible object, the diagnostic vision of Kirk – the exemplary viewing screen viewer, whose sight organs themselves are frequently illuminated (fig. 3.16) – mingles with the vision of the viewing audience, and it is notable that the cathode ray technology used in radar is the same technology that produces images from encoded signals on the screen of a television set, the medium for which 'Balance of Terror' was produced.

Although *Enterprise's* viewing screen conflates the multiple functions of strategic military installations and astronomical observatories, its panoramic format is clearly adopted from that of the cinema screen, deriving from the 1950s and 1960s development of numerous 'widescreen' processes for the photography and presentation of motion pictures, such as 'Cinerama', 'CinemaScope', 'Technirama' and 'Cinemiracle'. Such formats had emerged partly in response to the popularity of television itself (and of successful colour shows like *Star Trek*, in particular), and, along with stereoscopic formats of the period, demonstrate attempts to further synchronise the screen with the eyes, bringing the interrelated media formats of cinema and human vision into closer contact with each other.³⁴ The actual aspect ratio of *Star Trek's* viewing screen is around 16:9, similar to that produced with the 'VistaVision' process, developed by Paramount Pictures, who would become producers of *Star Trek* from 1967 onwards.³⁵ In the television series' 1979 adaptation for cinema, the resultant film, *Star Trek: The Motion Picture* (Robert Wise),

³⁴ Vivian Sobchack, 'The American Science Fiction Film: An Overview', in *A Companion to Science Fiction*, ed. by David Seed (Malden, MA and Oxford: Blackwell Publishing, 2005), pp.261–274 (pp.265–266).

³⁵ It is worth noting that, in the 1990s, the aspect ratio of 16:9 would be widely adopted by the television industry as its 'widescreen' standard. For more information about widescreen formats see, for example: Robert E. Carr and R.M. Hayes, *Wide Screen Movies: A History and Filmography of Wide Gauge Filmmaking* (Jefferson, NC and London: McFarland & Co., 1988); John Belton, *Widescreen Cinema* (Cambridge, MA and London: Harvard University Press, 1992).

repeatedly draws attention to the viewing screen as a cinematic analogue, framing it tightly within the confines of the ‘Panavision’ format with which the film itself had been produced, the proportions of the screen-within-a-screen enhanced to reflect this wider 2.40:1 format (fig. 3.17).

When invisible spacecraft re-enter the series’ narrative in 1984’s *Star Trek III*, as discussed in this chapter’s introduction, it is in tandem with matters of multisensory and multimedial screen technologies. The film’s opening shot comments explicitly upon the programme’s transition from television to cinema, with a recap of the climax of *Star Trek II: The Wrath of Khan* (Nicholas Meyer, 1982) slowly expanding from a monochrome and low-definition televisual format into a detailed widescreen cinema frame (figs 3.18 and 3.19).³⁶ With such preoccupations firmly established, it is perhaps no surprise, then, that the global catastrophe that begins *Star Trek IV: The Voyage Home* (Leonard Nimoy, 1986) is manifested through the depiction of a failing tactical screen site on Earth, the stabilisation of which provides the film’s happy ending (fig. 3.21).³⁷

Through their mediation of the alien invisible, in particular, *Star Trek*’s bridge environments provide a cinematic expression through which multisensoriality and multimediality intertwine. The alien invisible tests the capacities of the sensing media of the *Enterprise*, stimulating unconventional methods of mediating, and visualising, what is apparently extra-visual. Likewise, through utilising the viewing screen as mediator and manifesting the invisible via special visual effects, these sequences express the role of cinema in coming to terms with the complexities of the multisensorial. Part Two will explore further the ways in which the intersection of sensory technologisation and nuclear anxieties are connected to a contemporary sensorium in transition.

³⁶ This is made even more explicit when the same sequence is later replayed by Kirk on a television screen (fig. 3.20).

³⁷ The film’s time-travel plot, in which the crew of *Enterprise* travel – in a nuclear-powered invisible alien vessel – from the twenty-third century back to 1986, promotes a self-reflexive attitude towards the cultural context of the film’s production, which is described as a ‘primitive and paranoid culture’ engaging in a ‘dubious flirtation with nuclear fission reactors’. A prominently displayed newspaper headline states ‘NUCLEAR ARMS TALKS STALLED’, while part of the modern-day action takes place in the CIC of the nuclear-powered USS *Enterprise* aircraft carrier.

Two: Optical Anxiety, Incomprehensibility and Encryption in *Predator*

The anxiety of optical refraction

Star Trek's exploration of technologised sensory systems, through which conventional understandings of the human sensorium are extended, made alien and unfamiliar, is further evident in another popular US science-fiction film series of the period, one in which invisibility plays a key role. In the 1987 film *Predator*, a CIA-led US Special Forces rescue team, looking for diplomatic hostages in a Central American jungle region, are brutally picked off one by one by an alien enemy (Kevin Peter Hall), whose array of advanced weaponry includes the capacity to become almost entirely invisible, noticeable only by vague optical abnormalities.³⁸ At the film's conclusion, the alien is stripped of many of its technologised augmentations, becoming grotesquely visible to engage in hand-to-hand combat with the team's leader Dutch (Arnold Schwarzenegger), before self-destructing in an enormous blast. In Part Two, I begin by addressing the perverse optical nature of *Predator*'s extraterrestrial invisible body, exploring how it is observed by others within and without the diegesis, and interrogating its nature as an expression of lens-based media. As I will subsequently show, the film's mediation of this invisible body encompasses a linguistic scheme of incomprehension through which encounters with the invisible are expressed. In the film's detailed description of a hard-to-see alien presence unfolds the breakdown of conventional visual and semiotic systems, laying bare themes of misapprehension and miscommunication. As I shall explore, *Predator*'s idiosyncratic images of the invisible alien body draw from a pre-existing language of camouflage, mirage and refraction, all states of difficult visibility in which questions of illusion and identification are confused, and that, as in *Star Trek*, express an anxious response to the idea of nuclear apocalypse.

Predator's discourse of unconventional visibility is constituted of a number of alternative imaging regimes. The first to appear, eighteen minutes into the film, is a

³⁸ The US film *Predator* was released to cinemas on 12 June 1987, having been in production for over a year prior. The film was produced by Joel Silver for Twentieth Century Fox, and directed by John McTiernan from a screenplay by the brothers John and Jim Thomas, the first draft of which had been written in 1983. (Jim Thomas, qtd in Eric Lichtenfeld, 'Text Commentary', *Predator*, dir. by John McTiernan (Twentieth Century Fox Home Entertainment, 2002) [on DVD].)

scheme resembling electronic thermography that represents the malign sensory surveillance of the invisible alien. I shall discuss this particular scheme in detail in Part Three of this chapter. For now, it is the distinctive visual impression of the invisible body itself with which this section is concerned: a noticeably vague revelation that first emerges after forty minutes of the film has passed. The first appearance of this scheme is produced through the refraction of a pair of glasses, their wearer, Hawkins (Shane Black), witnessing the invisible body at the precise moment of his own death. Hawkins, the unit's radio operator, has been momentarily separated from his colleagues after stopping guerrilla hostage Anna (Elpidia Carrillo) from escaping. As Hawkins takes hold of Anna, a number of things happen at once that signal the impending visualisation of the invisible body. On the soundtrack, swelling strings mingle with an inhuman and indecipherable trill. As numerous quick cuts unfold, a view from close quarters displays the thermographic readings of Hawkins's and Anna's bodies, and Anna's eyes widen to centre on the camera lens (fig. 3.22). Finally, as Hawkins's head turns, his oversized spectacles generate the viewer's entry into a momentary vision of invisibility, their exaggerated refraction invoking the kaleidoscopic image of the invisible attacker (fig. 3.23). The audience shares in Hawkins's viewpoint of the last thing that he sees, as two point-of-view (POV) shots here abut: Hawkins's transgressive viewing of the invisible object, and that of the invisible subject, viewing a final thermal image of its victim in extreme close up (fig. 3.24). Here, two problematic gazes are turned in on each other, the frustrations and revelations of both revolving around the materiality of that which is both seeing and being seen. This is the last subjective thermographic shot to be shown for the next half an hour of the film's running time, a core section that abandons that mode of inference in preference of a more direct visual engagement with invisible matter through which defocused focal points express characteristics of optical refraction. The scheme of surveillance thus shifts from the alien's subversive infrared POV to the less irregular register of visible light, as mediated and decoded by the human eye, now suddenly aware of, and on the lookout for, the invisible.

In this frenzied moment of editorial splicing, a gush of vivid red blood, contrasting sharply with the lush green surroundings, erupts from off screen onto Anna's face, across her eyes, forcing them closed (fig. 3.25). The sudden appearance of blood here signals that an unseen violation of corporeal form has taken place. In a dialogue between interiority and exteriority, the insides of Hawkins's body are

brought outside, just as the image inside the borders of the intrusive invisible body has been replaced by that which lies outside: an internalised mapping of environmental visibility that here allows the invisible to become visible. Exacerbating this trajectory of revelation, and fundamental to the mode of cinema, is the shock, however slight, that is engendered by the cut: an instantaneous revelation of imagery that occurs in the blink of an eye, and through which one image is suddenly superseded by another.³⁹ In *Predator*, such interruptive revelations come primarily via cuts, instantly announcing the invisible through transitions unleavened by the fade or dissolve. The cinematic cut promotes the critical separation of a film object into constituent parts, but it is a division that is also a suture, a slice that is also a splice, and a coming together of images that each obscure the other. In this revelatory sequence in *Predator*, the physical cut is an act of violence that is averted from the spectator's eye by the editorial cut. This annunciation of invisible form thus demonstrates the capacity of the cut to effect the transgressive violation of both body and image, of the image of the body, and of the body of images.⁴⁰

Such segments, in which the alien's invisible form is explicitly shown, appear in short bursts of mainly less than three seconds, and all but one are single shots. The brevity of these isolated moments enables the evasion of scrutiny, an opportunity afforded by the flowing trajectory of filmic media.⁴¹ This regime of the instantaneous, of the blink-and-you-miss-it, is exacerbated by the sense of blurred defocus that these images instil. In *Predator*, what is seen of the invisible evokes the impression of visual defects, often resembling 'floaters' in the eye of the beholder: everyday entoptic phenomena whose identification demonstrates the visual observation and consideration of one's own optic faculty, whilst also conveying the sense of a touch

³⁹ Even feature films constituted of a single shot will feature a cut at the beginning and end, whereby a transition will occur between that considered to be part of the body of the film-object and that which is not: a severing and demarcation of the film body from the space and time in which it is received.

⁴⁰ Jonathan Sawday writes on the similarities between practices of autopsy and critical analysis, in which 'a dissection might denote not the delicate separation of constituent structures, but a more violent "reduction" into parts: a brutal dismemberment of people, things, or ideas'. Sawday notes that early modern culture initiated a 'cycle of texts which become bodies, and bodies which become texts', a critical tradition for which '[b]ooks were composed of parts that could be read and interpreted in the same way that bodies were made up of parts that exhibited signs of their health or decay to the skilled reader – the physician – who "interpreted" the signs of the body'. (Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (London and New York: Routledge, 1995), pp.1, 136.)

⁴¹ Today, the casual viewer is able to inspect these images more closely on DVD or similar media, by which means the flow of the film can easily be interrupted, and the most evasive images be opened out for a previously evasive temporal scrutiny. Such themes are discussed in Laura Mulvey, *Death 24x a Second: Stillness and the Moving Image* (London: Reaktion Books, 2006), pp.17–32 and pp.150–151.

on the eye's surface (fig. 3.26).⁴² At its most distinct, in *Predator*, this scheme is redolent of hard-edged refraction, at its most indistinct indicative of retinal imperfection writ large, or even a minor warping of the surface of either retina or cinema screen: an intrusive system of contours that threatens the membrane of the viewing plane, seeming to disrupt the two-dimensional illusion of three-dimensional matter. This imagery of advanced camouflage was initially conceived in a dream, an appropriately anoptic source. Co-screenwriter John Thomas provides interpretation of his brother Jim's subconscious experience:

In the dream, he was peering into an ovoid chrome room through a hole. Inside the room was a little man who was made out of chrome. You couldn't see him – he was reflected everywhere at once – until he moved. Then you saw this leading edge of his physical being, and that's all.⁴³

This notion of peering through an aperture to behold an invisible body's mobility seems appropriate for moving-image mediation: camouflage as a kinaesthetic coalition of foreground and background, and of object and environment; a material mirroring in which bodies and environments are anxiously interrelated.⁴⁴

Rather than the single 'edge' of chrome reflection, however, the finished film's fractured imagery more evokes the kind of multifaceted refraction found in kaleidoscopic viewing formats, bearing particular resemblance to the optical distortion of a Fresnel lens, the device first developed by Augustin-Jean Fresnel in 1823, and principally used to more powerfully focus a source of illumination, such as

⁴² Floaters occur within the transparent vitreous humour, discreet imperfections that produce minor observable refractions across the field of vision, or cast the softest of shadows onto the retina.

⁴³ John Thomas, qtd in Lichtenfeld, 'Text Commentary'.

⁴⁴ *Predator's* scheme of invisibility utilises aspects of conventional natural and military camouflage as its starting point. The principal characters wear camouflaged fatigues and body-paint, and an unused shot was made in which Anna looks thoughtfully at a chameleon, in an analogy that may have been deemed too blatant. The cultural application of camouflage derives from natural predatory schemes and primitive hunting practices, whereby hunters, wishing to pass undetected in close proximity to their prey, would envelop themselves in the animal's hide. Camouflage in the northern hemisphere, in both organic and synthesised schemes, has tended towards a blending of object with environment, owing principally to the overriding darkness of the terrain; brighter tropical regions, however, have seen the evolution of the 'disruptive pattern', whereby an object is not disappeared, but rather evidences an unexpected, befuddling image in the eyes of its observer. Tim Newark discusses these alternative strategies of camouflage in both *Brassey's Book of Camouflage* (London: Brassey's, 1996) and *Camouflage* (London: Thames and Hudson, 2007). Such disruption of the visuality of form, through which the viewer is confused into making erroneous assumptions about an object based upon the evidence of their flustered optical faculties, is key to an understanding of relationships between camouflage and invisibility. Although operating largely in conditions of visible light, such confusions are not simply concerned with the interplay between light and shade, but with materiality: the use of visual matter in the insinuation of false schemes of materiality that allow the status of an object to be contested.

the beam of a lighthouse.⁴⁵ Such correspondence confirms the intention for this moment of invisibility to be an indiscreet assault on the senses: a confrontational absence of expected image that is a paradoxically intense vision of vagueness. It draws the extra-diegetic eye of the viewer even as it baffles the intra-diegetic gaze that seeks it out. To communicate the invisible, these images mimic and subvert the effects of nineteenth-century optical augmentation, dictating a frustrated experience of viewing. In this illusory phenomenon, the gaze may be misled, with optical evidence providing misinformation about the relative positions of viewing subject and viewed object, and so destabilising perception. It is notable that, in Wells's *The Invisible Man*, the key to Griffin's invisibility is that the body's 'refractive index could be made the same as that of air' (*IM* 91). In *Predator*, the reproduction of surface phenomenon confirms the presence of a dense and disruptive surface at the site of invisibility, allowing for a collision of notions of transparency and solidity. This impression of refraction manifests the invisible body as an optically augmented expression of the lens. The invisible force, both source of surveillance and conveyer of mortality, is made analogous to the machinations of photographic media, an anxious depiction of lens-based media in which the camera sees itself.

Although mimicking strategies of disguise found in both nature and war, this camouflage could not be fully produced in front of the camera, but only with recourse to the extra-lens manipulation of cinematic media. As in 1933's *The Invisible Man*, to communicate the upsetting of optical media necessitated an extension of contemporary optical travelling matte processes. *Predator*'s visual effects coordinator Joel Hynek collaborated with visual effects artist Eugene Mamut, developing a variation on Mamut's 1981 'elastic effect', which enables a moving object to appear as if stretched and warped across the frame in a smooth distortion that unfolds over time with no such distortion occurring in the background image (fig. 3.27).⁴⁶ For

⁴⁵ The kaleidoscope was devised around 1815 by David Brewster (1781–1868), who also studied the diffraction of light and invented the lenticular stereoscopic viewer (c.1849). Brewster was also involved with the refraction of lighthouse beams, introducing the Fresnel lens to the British lighthouse network. The beam of the lighthouse functions both as an agent of surveillance and a certification of destruction: for a nearby vessel, its sighting too closely and too clearly surely spells disaster.

⁴⁶ Though used for a number of television commercials during the early 1980s, it was for *Predator* that Mamut's technique was first adapted for use in a feature film. In a 1988 profile of Mamut's work, Paul Mandell writes: 'This illusion (dubbed "the camouflage effect") was created with a series of concentric mattes that conformed to the Predator's travelling shape. The mattes were devised by supervisor Joel Hynek and created by Mamut, using a painstaking, multidirectional positioning process for the production of those mattes directly on the CompuQuad printer. Once they were done, various takes of the Predator's jungle environment were shot at different focal lengths and inserted into the character's

Predator, a performer, covered in red spandex, was filmed moving amidst the green jungle, before repeat shots were made of the same background using a diverse array of lenses, each of which was attached to a motion-controlled camera for identical passes that provided a succession of *almost* identical shots of the same figureless background.⁴⁷ In a complex printing process, these images were combined with multiple travelling mattes, each of which featured slightly different-sized measures of unexposed film, to produce the desired impression of multifaceted, concentric refraction.⁴⁸ The film's director John McTiernan observes that the effect 'didn't work at all [...] until they realised they needed to make flaws in it, they needed to have it repeat itself and they created a sort of illusion of three-dimensionality or roundness by having it repeat itself' as an 'image-within-an-image-within-an-image'.⁴⁹ This relative absence of image, then, is also an amassing of imagery. Like Étienne-Jules Marey's 1882 'chronophotographs' of the body in motion – described by Virilio, in the context of Marey placing chronophotography 'at the service of military research into movement', to be 'making the body disappear into a momentary agglomeration of

shape, concentrically.' (Paul Mandell, 'Elastic Effects – New Optical Wrinkle', *American Cinematographer: The International Journal of Film & Digital Production Techniques*, 69.10 (October 1988), 97–102 (p.102).) Mamut confirms that the use of '12 concentric mattes [...] created a distinctively contoured look and added more visually to the Predator's image', attesting to the necessity for communicating the three-dimensionality of the invisible being, as well as the desire to make the invisible as visible as possible. As Helfrich confirms: 'We chose the concentric configuration of warps as being the most interesting *and* the most visible. Because a lot of the shots would be really long shots, the creature would be really small. You'd have to have enough of an effect to see anything.' (Mark Helfrich, qtd in Lichtenfeld, 'Text Commentary'.) As Mamut states: 'At first we thought that a smooth Predator image would require 100 concentric moving mattes for each frame of film. This would've required tons of hi-con rolls, which was impractical. Joel Hynek decided to go with only 12 concentric mattes. This created a distinctively contoured look and added more visually to the Predator's image.' (Eugene Mamut, qtd in Mandell, 'Elastic Effects', p.102.)

⁴⁷ As visual effects coordinator Joel Hynek confirms: 'Everything was done optically in those days. We'd start with the photography of the red suit in the jungle. From that we'd pull a silhouette matte. Then from that we'd pull an opposite matte, where the Predator's clear. [...] Each shot would take as many as 15 passes. To create each inline required four passes. That's 60 passes. And if you made a mistake on one, you had to chuck the whole thing. It required a lot of discipline to put those shots together. And back then you couldn't see a shot as you were creating it. You'd have to visualise it as you went along.' (Joel Hynek, qtd in Lichtenfeld, 'Text Commentary'.)

⁴⁸ Discussing compositing in a 1997 interview, Hynek notes that the 'very definition of *visual effects*, which are images produced from separately created elements – as opposed to *special effects*, which are things created in front of the camera – means you have to concentrate on the smooth coordination of all the separate elements. These elements are usually from different cameras, locations or software platforms.' (Joel Hynek, qtd in Eric Rudolph, 'Points East: Creating Illusion in Seclusion', *American Cinematographer: The International Journal of Film & Digital Production Techniques*, 78.12 (December 1997), 124–125 (pp.124–125).)

⁴⁹ John McTiernan, 'Audio Commentary', *Predator*, dir. by John McTiernan (Twentieth Century Fox Home Entertainment, 2002) [on DVD].

sense-data' – the 'elastic' effect provides a way of isolating, in the invisibility of the body, the kinaesthetic properties of the body's encounter with space.⁵⁰

Predator's cinematic imagery of the invisible body, then, describes an unsettling encounter with the limits of opticality. The sequences I have thus far described do violence to the body's relationship with vision, both affirming the embodied nature of the visual sense, whilst also distorting visuality into something uncertain and unfamiliar. This body's aberrant visuality is redolent of the phenomenon of mirage or heat haze, whereby distant viewing in extreme temperatures is distorted through atmospheric refraction.⁵¹ In the film, such a correspondence is prominent at a moment when the hazy focal plane, representing another victim's searching gaze, shifts from foreground to background before centring on the distant camouflaged body as it gradually comes into view in a union of composite matting and lap dissolve (fig. 3.28). For Steven Connor, 'haze' is a peculiarly modern phenomenon, and one that he implicates heavily in modernist schemes of representation:

modernist haze was a phenomenon not just of ambivalence, but, more exactly, of interference, an accidental mixing of registers and channels. It is a kind of visual noise, which implicates the conditions of perception and registration in its nature. Where modernist painters and writers sought to capture the effects of haze, to make visible the forms and effects of indiscernibility and compromised vision, it was never clear what it would mean to get a fix on that shifting dimness [sic], to get the unfocused in perspective.⁵²

Connor may be thinking of images such as the kaleidoscopic 'vortographs' produced by Alvin Langdon Coburn in 1917–18, photographic images whose sense of fragmentation has seen them widely credited as early examples of a wholly abstract photography (fig. 3.29). Other veins of photographic imagery that the prismatic outlines of *Predator* invoke are those recording radioactive emissions taken by Berenice Abbott in the 1950s, whilst employed by the Physical Science Study Committee at MIT (fig. 3.30). All of these images evidence a close scrutiny of objects

⁵⁰ Virilio, *War and Cinema*, p.10.

⁵¹ Such viewing conditions can result from both evaporating moisture and the bending of light as it passes through zones of conflicting thermal values, and provide the key component of the phenomenon of mirage, in which the impression of vibrant topographies – pools of water or cityscapes – may appear on a barren horizon. The severest example of the mirage is referred to by the name 'fata morgana', so named after the shapeshifting, and sometimes invisible, Morgan le Fay from Arthurian legend.

⁵² Steven Connor, *The Matter of Air: Science and Art of the Ethereal* (London: Reaktion Books, 2010), pp.177–178.

and environments that tends towards the abstract, the ‘registers and channels’ mixed being those of visibility and invisibility, materiality and immateriality, reality and illusion. The delineation of composited components in *Predator* reveal the frame-upon-frame structure of the film itself, in a nauseating interruption of the persistence of vision that may upset the tenuous illusion of representation. The absence at the centre of the frame is filled with diminishing traces of that which frames the absence: a *trompe l’oeil* effect that is also a *mise en abyme*. The film’s distinctive signature of refractive visual distortion recalls *Star Trek*’s description of invisible form to be effected by ‘the selective bending of light’, and can thus be related to contemporary experiments in the development of metamaterials.⁵³ These mirage-like images combine the substantial and the insubstantial in the cinematic medium, itself neither as dense as a body nor as insubstantial as a haze, though which carries attributes of both.

The incomprehensible invisible body

The presence of *Predator*’s invisible body is made gradually apparent, to viewers within and without the diegesis, in successive stages of revelation through which a range of different levels of evidence are imparted. The first diegetic evidence comes with the discovery, depicted through the drawing back of a veil of green foliage with dramatic sonic accompaniment, of flayed corpses hanging high amidst the trees, corporeal evidence of the foul actions of the invisible body (fig. 3.31). Reflecting that the ‘mystery is in keeping Jaws underwater, in *Alien*, keeping the visual down to a bare minimum’, the film’s co-screenwriter Jim Thomas describes

layering the reveal of the Predator: First through his vision, then through camouflage, then by showing you what he actually looked like, then the final payoff was underneath the helmet that there was a living organic thing with a mind.⁵⁴

⁵³ ‘Metamaterials are man-made composites that interact with light and sound (and waves in general) in unconventional ways, resulting in exotic behavior that’s not found in nature. Now, researchers describing a new concept called “digital metamaterials” promise a simplified way of producing metamaterials – which are already being used to develop invisibility cloaks and hyperlenses that aren’t subject to the limitations of conventional materials.’ (Janet Fang, ‘Digital Metamaterials Get Us Closer to Invisibility Cloaks’ <<http://www.iflscience.com/technology/digital-metamaterials-get-us-closer-invisibility-cloaks>> [accessed 20 September 2014] (para. 1 of 7).) For more on metamaterials and invisibility, see Philip Ball, *Invisible: The Dangerous Allure of the Unseen* (London: Bodley Head, 2014), pp.255–268, 272–274.

⁵⁴ Jim Thomas, qtd in Lichtenfeld, ‘Text Commentary’. *Predator* includes a shot of the invisible being moving through water accompanied by a music cue quoting from John Williams’s familiar two-note expression from *Jaws* (Steven Spielberg, 1975).

The films to which Thomas refers depict hostile, inhuman bodies, whose agents of invisibility are dark oceans and industrial-biomorphic gloom, sites in which the antagonists' presence is keenly felt by protagonist and audience alike even when absent entirely. In cinema, the suspense narrative is often concerned with fostering a disjunction between that which is known and that which is shown, and of finding ways to perform visual acts of not telling. Such discordance between systems of knowledge and visuality effects an anxious imbalance that gives momentum to narratives of apprehensive crisis in which withheld information is promised to return for shocking impartation at a later time, where the reconciliation of this imbalance may effect a kind of closure. The cinematic trajectory of revelation is engendered by the revolving reel, and exacerbated by a linearity confirmed in the editing process, which filters multiple disordered fragments towards an orderly cinematic form.

It is in this way that *Predator* works through a range of suspense tropes. The brief opening shot, in which a spacecraft momentarily fills the screen before ejecting a pod into Earth's dark atmosphere, privileges the film's audience with information withheld from the film's protagonists, satisfying Alfred Hitchcock's contention that 'in the more regular form of suspense it is vital that the public know the elements involved'.⁵⁵ Fundamental to the construction of *Predator*'s suspense narrative is an ever-expanding regime of successive visual revelations, each of which contributes to a further materialisation of ostensibly invisible presence, stoking the spectator's desire for absolute optical exposure. In spite of such seduction, however, there is a repeated elision of full visual disclosure, the refractive imagery undermining the anticipated revelation by complicating the visual absence, rather than concluding it. As the film unfolds, the full nature and motivations of this invisible extraterrestrial being, and the nature of its invisibility, ultimately pass unexplained.

During the film's principal phase of shooting, the complex visual character of this invisible presence had yet to be finalised, and the actors were 'working against nothing'.⁵⁶ With no footage of the invisible body's interference with its surroundings,

⁵⁵ Alfred Hitchcock, qtd in 'Alfred Hitchcock and François Truffaut (Aug/1962)' <[https://the.hitchcock.zone/wiki/Alfred_Hitchcock_and_Fran%C3%A7ois_Truffaut_\(Aug/1962\)](https://the.hitchcock.zone/wiki/Alfred_Hitchcock_and_Fran%C3%A7ois_Truffaut_(Aug/1962))> [accessed 15 September 2014]. This phrase has also been reproduced to say that in 'the usual form of suspense it is indispensable that the public be made perfectly aware of all of the facts involved'. Hitchcock, qtd in Truffaut and Scott, *Hitchcock*, p.72.

⁵⁶ Though one costume for the visible creature had been produced it was deemed unsuitable, and McTiernan explains that 'these poor guys were working against nothing; there was just nothing there,

editor Mark Helfrich coped with this absence, when compiling early cuts, by characterising it as merely ‘an internal-pacing issue’, remarking that:

I think editors have to go with their gut. There are so many films nowadays where you’re cutting against nothing, against a blue screen, against a creature that will be added later. You just have to imagine what’s going to be. When Poncho is shot in the head, I just kept cutting to a tree branch, but that pacing is the same that’s in the movie now.⁵⁷

The shape of the film was thus constructed minus the composite shots that would show visual traces of invisible form, with images of bare jungle sites awaiting the insertion of a queer optic element. Although these jungle locations clearly reproduce a colonial sense of mystery, central to the film’s scheme of invisibility was the notion that the visual chaos of these backgrounds could perform the invisible body, with the repetitive camouflage effect mimicked throughout in the compound leaves of arecaceae palm fronds (fig. 3.32). As such, the environment performs for and with the invisible body, nature and technology synthesising disruptively as a challenge to the visual sense.

Behind-the-scenes uncertainty as to how this invisible body would be visualised is wedded to the diegetic uncertainty of the cloaked figure’s nature. *Predator*’s negotiation of invisible embodiment trades in syntactical disfigurement, articulating a language of invisibility for which the spoken word becomes ambiguous and ineffective. Encounters with the invisible body bring death to most witnesses, while the survivors are unable to verbally testify to what they have seen. This latter group includes Anna, whose encounter with the invisible body leaves her dumbstruck

there was no predator. [...] By about now they had seen the predator come out of the box, and they knew it was ridiculous looking, so... and we were just saying, “well, we’re gonna fix it”, so [...] they were completely working on...air. Oh, we described all sorts of stuff [...] but it was all talk because we weren’t really sure what we were gonna do.’ (McTiernan, ‘Audio Commentary’). This uncertainty surrounding the visualisation of both the visible and invisible being is evident in supplemental materials produced to accompany the film. Paul Monette’s novelisation, based on early drafts of the screenplay and published one month before the film was released, describes the camouflage capability as a molecular transformation through which the alien body assumes the physical properties of flora and fauna (Paul Monette, *Predator* (London: W.H. Allen, 1987)). The problem of how to realise the film’s central presence was only fully resolved during a six-month break in filming, during which time Stan Winston Studio was contracted to redesign the visible creature, while R/Greenberg were developing the complementary invisibility effects. Both of these companies were nominated for the 1988 Academy Award for ‘Best Effects, Visual Effects’ for their work on *Predator* (Joel Hynek, Robert M. Greenberg, Richard Greenberg, Stan Winston).

⁵⁷ Helfrich, qtd in Lichtenfeld, ‘Text Commentary’.

and insensible.⁵⁸ When able to speak, the bilingual Anna uses a mixture of Spanish and English to articulate that she does not know or is not sure what she saw, while other characters repeatedly assert that they ‘don’t know’ or ‘can’t say’ what they are dealing with, refusing to name the invisible form: the unseeable object of interrogation performing as the unnameable, the unspeakable.⁵⁹ Enigmatic remarks from Anna initiate a semantic argument that soon descends into a cacophony of incoherent babble:

- Anna: No se... yo no se... No se que fue! [...] No se, no estoy seguro, no se! [...] La selva... la selva se lo llevó. [I don't know... I don't know who it was! [...] I don't know, I'm not sure! [...] The jungle... the jungle took him.]
- Poncho: She says the jungle just came alive and took him.
- Dillon: Bullshit. That's not what she said. What she said doesn't make any sense.

This taxonomical breakdown after the act of witnessing the invisible deems no language adequate to cope with the indescribable invisible body. The ‘bullshit’ language of the invisible is coded and untranslatable: language as waste matter, just as the bodies with which the invisible being comes into contact are reduced to visceral heaps of nonsense matter – as with that of Hawkins, whose body is dragged off screen only to reappear as a steaming pile of internal organs that prompts a colleague to avert his eyes and heave as he struggles to identify his friend. The language of invisibility is incommunicable, or at best an expression of incommunicability, and so it is notable that the name of the film’s lead protagonist, Dutch, reminds of the term ‘double Dutch’, describing ‘a language that one does not understand, gibberish’.⁶⁰ As characters try repeatedly to describe the disruptive nature of what they see, *Predator* forms an exercise in modes of frustrated analysis – visual, material and linguistic – allowing each to further destabilise the other.

⁵⁸ The alien hunter of *Predator 2* also leaves as witness a petrified woman who is unable to properly communicate what she has seen, in Spanish, to her interpreter, who similarly concludes that ‘I don’t know, she’s not making any sense’.

⁵⁹ In a recent sequel, *Predators* (Nimrod Antal, 2010), one character, when referring directly to the events depicted in the 1987 film, remarks of the alien species that ‘we don’t have a name for them’.

⁶⁰ *Oxford English Dictionary*.

Themes of incomprehensibility and the indecipherable come to a head at the film's conclusion, as the now visible and wounded alien body, an uncategorisable form that I shall discuss more in Part Three, primes a thermonuclear charge for detonation. This act entails the operation of an arm-mounted console, on which appears indecipherable script that diminishes in the manner of a countdown, while the alien's coded explanation of its motivation uses a mere jumble of language repeated from elsewhere in the film, complicating the traditional confession of the defeated villain (fig. 3.33). That these ciphered expressions signify impending apocalypse is tacitly understood by Dutch, and by the film's audience.⁶¹ This invisible body's corporeal appearance is here shadowed by its death and entry into absolute invisibility, full visual disclosure compromised as it is atomised in the blast. Here, the expressions of incomprehensibility and inarticulacy that pervade the film are finally translated in terms of nuclear blast, an unmentionable sight to which a distant helicopter pilot – played by Hall, who also portrays the alien, though is here out of make-up – exclaims 'what the f-?', a self-censored verbal obscenity that stands as adequate response to the intense light of this climactic thermonuclear sight. The imagery of nuclear electromagnetic pulse is created using the same optical matting process as that used to visualise the invisible body, and at its culmination the image is bleached out, evoking a temperature overload in the film projector and the burning out of the celluloid cell (fig. 3.34). In this painful reception of imagery, the invisibility of nuclear trauma finally manifests as an assault on the optical. The film closes with a perplexed Dutch emerging from dense mist, covered in ash, having outrun the nuclear blast (fig. 3.35).⁶² Though subject to the blinding light, it is notable that Dutch is not blinded: his eyes remain open and unblinking. Rather, in the face of this aggressive visuality, he is rendered mute: a synaesthetic, cross-faculty trauma (fig. 3.37).

⁶¹ McTiernan reflects on having 'no difficulty ever having the audience understand that he had set off a nuclear bomb. It was just no problem. I mean it's a fairly complex idea, when you think about it, and they got it instantly.' (McTiernan, 'Audio Commentary'.)

⁶² Thick smoke is used in a number of shots that tilt upwards into the jungle canopy to indicate the invisible body's presence, coding it as an object of incomprehension (fig. 3.36). Similarly, smoke swirls around the baffled Dutch's head when he is most mystified, clearing only when he has an idea ('he's using the trees'), the abatement of the smoke signalling the unfolding of understanding, a movement towards comprehension of the inapprehensible.

Invisibility as encryption

That the weaponised invisible extraterrestrial body of *Predator* functions as an expression of Cold War anxieties is signalled as the protagonists discover their stated rescue mission to be ‘bullshit’, their actual purpose being to quell a Soviet-supported invasion ‘over the border’. Likewise, the film’s opening shot of a spacecraft in the Earth’s atmosphere lingers as an expression of Reagan’s 1984 ‘Strategic Defense Initiative’, a satellite-based nuclear deterrent more commonly known as the ‘Star Wars’ programme.⁶³ As in *Star Trek*, *Predator*’s mechanism of invisibility is a technological product of a disturbingly advanced alien culture, and the electromagnetic power source that facilitates the invisible similarly doubles as effective nuclear weapon. But these invisible agents of war also reflect contemporary developments in so-called ‘stealth weapons’. Writing in 1988 in *War and Cinema*, Virilio describes the ‘logistics of perception’ as a ‘war of pictures and sounds [that] is replacing the war of objects’, arguing that ‘the drive is on for a general system of illumination that will allow everything to be seen and known, at every moment and in every place’.⁶⁴ He contends that cinema’s ability to ‘create surprise’ brings it into ‘the category of weapons’,⁶⁵ which, for him,

are tools not just of destruction but also of perception – that is to say, stimulants that make themselves felt through chemical, neurological processes in the sense organs and the central nervous system, affecting human reactions and even the perceptual identification and differentiation of objects.⁶⁶

⁶³ Although set and filmed in Latin America rather than Southeast Asia, the jungle conditions and guerrilla warfare, presence of rebel forces with Soviet ‘advisors’, and anxious thermonuclear ending, all suggest a response to the recent US combat experience in Vietnam, part of a tendency towards re-enactment and recuperation evident in a spate of popular mainstream US films at this period, such as: *Missing in Action* (Joseph Zito, 1984); *Missing in Action 2: The Beginning* (Lance Hool, 1985); *Rambo: First Blood Part II* (George P. Cosmatos, 1985); *Platoon* (Oliver Stone, 1986); *The Hanoi Hilton* (Lionel Chetwynd, 1987); *Full Metal Jacket* (Stanley Kubrick, 1987); *Hamburger Hill* (John Irvin, 1987); *Good Morning, Vietnam* (Barry Levinson, 1987); *Born on the Fourth of July* (Oliver Stone, 1989); *Casualties of War* (Brian De Palma, 1989); *Braddock: Missing in Action III* (Aaron Norris, 1988). Remarking on *Predator*’s setting, Jim Thomas reflects that, ‘[a]t that particular time, there was so much stuff going on in Central America. If this had been before that, it would have been Vietnam. [...] I know [actor] Jesse Ventura was a Navy SEAL and did a couple of tours in Vietnam. [Actor] Richard Chaves had been there. He was with the 101st Airborne, so a lot of memories came flooding back. That definitely influenced the cast.’ (Jim Thomas, qtd in Lichtenfeld, ‘Text Commentary’.) Casting director Jackie Burch also confirms the importance of casting individuals who had experience of serving in Vietnam: ‘I’m brought in after they know they’re making the movie. All we had was Arnold. When I read the script, the first thing I evaluated was that I needed actors who had been Vietnam vets so they could survive in the jungle. At the time, there was a play out about Vietnam – that’s where I found Richard Chaves.’ (Jackie Burch, qtd in Lichtenfeld, ‘Text Commentary’.)

⁶⁴ Virilio, *War and Cinema*, p.4.

⁶⁵ Virilio, *War and Cinema*, pp.7–8.

⁶⁶ Virilio, *War and Cinema*, p.6.

For Virilio, *'the history of battle is primarily the history of radically changing fields of perception'*.⁶⁷ In such a context, Virilio observes stealth weapons, objects that disrupt electronic sensory signals, to distort the frameworks of military power constructed during the nuclear arms race. Observing that *'[s]tealth equipment can only function if its existence is clouded with uncertainty'*, Virilio conceives of an *'aesthetics of disappearance'* that, he argues, *'introduces a disturbing element of enigma into relations between the blocs, gradually calling into question the very nature of nuclear deterrence'*.⁶⁸ What might be the ramifications, then, of the *'aesthetics of disappearance'* for the onscreen invisible body? Functioning as a form of stealth weaponry in its radical disruption of fields of perception, the alien invisible body could be seen as a statement on the complication of Cold War nuclear hostilities following the introduction of such weaponry. *Predator's* use of cinematic *'surprise'*, constructed through disruptive visual reveals, might also generate a technologised aesthetics that sensorially affects *'human reactions and even the perceptual identification and differentiation of objects'* both within and even without the diegesis.

In such a context, the architectures of the weaponised alien invisible can also be understood in psychoanalytic terms, as encrypted visions evoking Jacques Derrida's conception of *'the crypt'*. For Derrida, the crypt is a cultural construct engineered to protect encoded contents from psychic comprehension:

What is a crypt? No crypt presents itself. The grounds [*lieux*] are so disposed as to disguise and to hide: something, always a body in some way. But also to disguise the act of hiding and to hide the disguise: the crypt hides as it holds. [...] Within this forum, a place where the free circulation and exchange of objects and speeches can occur, the crypt constructs another, more inward forum like a closed rostrum or speaker's box, a *safe*: sealed, and thus internal to itself, a secret interior within the public square, but, by the same token, outside it, external to the interior.⁶⁹

More than simply a partition within the crypt, the inner forum is *'a place comprehended within another but rigorously separate from it'*. As he explains:

⁶⁷ Virilio, *War and Cinema*, p.7. Emphasis in original.

⁶⁸ Virilio, *War and Cinema*, p.4.

⁶⁹ Jacques Derrida, *'Fors: The English Words of Nicolas Abraham and Maria Torok'*, trans. by Barbara Johnson, in Nicolas Abraham and Maria Torok, *The Wolf Man's Magic Word: A Cryptonymy* (Minneapolis: University of Minnesota Press, 2005), pp.xi–xlvi (p.xiv).

Whatever one might write upon them, the crypt's parietal surfaces do not simply separate an inner forum from an outer forum. The inner forum is (a) safe, an outcast outside inside the inside. That is the condition, and the stratagem, of the cryptic enclave's ability to isolate, to protect, to shelter from any penetration, from anything that can filter in from outside along with air, light, or sounds, along with the eye or the ear, the gesture or the spoken word.⁷⁰

Thus, in order for the crypt to be an effective means of repressing information, its inner forum is indecipherable to those who might enter the outer forum, and so keeps its secrets safe.

In delineating the visual and physical topography of this incomprehensible arena, Derrida describes a stifling zone that encrypts and encodes, allowing for the return of the repressed only through the production of ciphers: a cryptographic system that enables the contents of the crypt – which, Derrida describes, 'is *built* by violence' – to exist.⁷¹ In what ways might the alien invisible be understood as a cryptographic scheme, and so as part of a culturally constructed cryptonomy 'built by violence'? Culturally embedded within the cryptic schemes of invisible nuclear threat, the incomprehensible and nominally impossible technological regimes of the alien invisible within both *Predator* and *Star Trek* might be understood as totems of these far-reaching cultural repressions. In *Star Trek*, the seemingly empty *Enterprise* viewing screen, as it focuses upon the invisible, can be interpreted as both cinema screen and as censor bar, that media device used to repress and prohibit both image and language: a sanitised site at which, in spite of its promises to the contrary, full exposure and disclosure is prohibited.

In this way, the concept of the 'nonevent' is also intrinsic to the understanding of nuclear stalemate in the period, and so also for the alien invisible. For Mark Taylor, writing in 1990, after decades of nuclear stalemate, the 'explosion of the nuclear bomb harbors an event that is a nonevent – total nuclear war that ends in nuclear holocaust. This holocaust is the disaster that never has been or will be present. [...] the disaster is the 'reality' in whose shadow we are forever condemned to live.'⁷²

⁷⁰ Derrida, 'Fors', p.xiv.

⁷¹ Derrida, 'Fors', p.xv.

⁷² Mark C. Taylor, 'Nuclear Architecture or Fabulous Architecture or Tragic Architecture or Dionysian Architecture or...', *Assemblage*, 11 (April 1990), 6–21 (p.12).

Derrida also articulates a context wherein the nuclear age constructs a memorial to its own apocalypse:

‘Reality,’ let’s say the encompassing institution of the nuclear age, is constructed by the fable, on the basis of an event that has never happened [...] or which, rather, remains to be invented. An invention because it depends upon new technical mechanisms, to be sure, but an invention also because it does not exist.⁷³

Derrida’s invocation of the apocalypse suggests a desire to speak the unspeakable, to express the repressed in order to prevent its traumatic return in reality, and by doing so engenders catharsis through the cultural ‘invention’ of that which we most desire to circumvent. Describing the temporal conflation such threat creates, Maurice Blanchot states in *The Writing of the Disaster*:

We are on the edge of disaster without being able to situate it in the future: it is rather always already past, and yet we are on the edge or under the threat, all formations that would imply the future – that which is yet to come – if the disaster were not that which does not come, that which has put a stop to every arrival. To think the disaster [...] is to have no longer any future in which to think it.⁷⁴

It is striking that Hitchcock and Truffaut’s 1962 discussion in which they attempt to define cinematic suspense becomes preoccupied with the example of a bomb that is waiting to explode. Hitchcock imagines a bomb ‘underneath the table and the public knows it [...]. The public is *aware* that the bomb is going to explode at one o’clock and there is a clock in the decor. The public can see that it is a quarter to one. [...] The conclusion is that whenever possible the public must be informed.’⁷⁵ It can thus be imagined that the anticipation of nuclear annihilation marks the nuclear age as an age of suspense, and as an age of invisibility.

That both *Star Trek* and *Predator* incorporate nuclear themes into their schemes of invisibility demonstrates a troubled and repressive technological climate. But these invisible alien bodies also, I would argue, express an anxious relationship with a technologised sensorium in flux. Despite the reliance of both series on visual

⁷³ Jacques Derrida, ‘No Apocalypse, Not Now (Full Speed Ahead, Seven Missiles, Seven Missives)’, trans. by Catherine Porter and Philip Lewis, *Diacritics*, 2.14 (Summer 1984), 20–31 (pp.23–24).

⁷⁴ Maurice Blanchot, *The Writing of the Disaster*, trans. by Ann Smock (Lincoln, NB: University of Nebraska Press, 1995), p.1.

⁷⁵ Hitchcock, qtd in Truffaut and Scott, *Hitchcock*, p.72.

effects processes, and their producers' appetites for innovations in that field, a fraught relationship with such cinematic technologies is explicit, particularly in *Predator's* depiction of the abdication of the hi-tech in favour of the primitive. As with so many invisible men, the invisible being of that film methodically casts off its magnificent auxiliary organs, although this emasculatory ritual is also a performance of wilful technological amnesia that shortly returns as the repressed spectre of nuclear climax. The encrypted invisibilities of both *Predator* and *Star Trek* are testaments to the extended silences of Cold War anxieties, and resonate with Derrida's conception of a crypt in which 'what was kept safe was the monument of a catastrophe and the permanent possibility of its return'.⁷⁶ In Part Three, I will extend these themes with a final discussion of the sensory technologies depicted in these series.

Three: Extending the Senses: Invisibility, Hapticity, Multimediality

Thermographic viewing

As indicated at the beginning of Part Two, the refractive image of the invisible body in *Predator* is complemented by a second idiosyncratic visual scheme. Deployed to communicate the presence of the sensible, sensuous mechanism of the invisible body are intermittent and interruptive POV shots, short in duration but dominating the cinematic cell, that reveal the surveilling presence of the invisible sensorium. The first of these, coming around eighteen minutes into the film, is recognisable as a subjective viewpoint, through which two figures are tracked across a patch of terrain (fig. 3.38). The employment of POV in order to imply the presence of an unfriendly voyeur engaged in secret surveillance is a common cinematic convention, very evident in the horror genre, in which the POV shot often represents a murderous, uncanny or otherwise transgressive subjectivity. Such schemes may solicit the sadomasochistic identification of the cinematic spectator, but also unsettle by coding as unruly the repressed presence of the cinematic machinery, the industrial process through which

⁷⁶ Derrida, 'Fors', p.xlv.

cinematic images are forged.⁷⁷ In *Predator*, the lack of clarity and verisimilitude of these high-colour, high-contrast, low-resolution POV images evokes the mechanical failure of the cinematic apparatus. Likewise, while the awkward, vertiginous vantage points of the scheme might elsewhere in cinema indicate the disembodied subjectivity of an airy, spectral or otherwise insubstantial viewing presence, this secondary regime of perception is far from conventional, and erupts jarringly into the flow of the film as a complex expression of technological embodiment, confirming the disturbing operations of an unfamiliar sensorium. In the representation of the narrative's technologically enhanced corporeal viewing agent, this scheme of thermographic design evidences the invisible object as viewing subject, a participant in unconventional modes of viewing that complicate relationships between apprehension, mediation and invisibility, drawing the eye away from exclusive matters of vision.

The production of this thermographic footage – which was shot under the supervision of Dr Robert Madding, a practising infrared thermographer since 1972 – relies on part of the infrared range of the electromagnetic spectrum, longer in wavelength than visible light and invisible to the human optic faculty. Following early astronomical application, thermographic imaging was greatly advanced during the Second World War.⁷⁸ Electronic sensors allowed its utility in the tactical

⁷⁷ Extreme applications of the subjective POV scheme have come in films such as *Dark Passage* (Delmer Daves, 1947), most of the first third of which represents the protagonist's viewpoint (a scheme that ends only once the character undergoes a face transplant), *Peeping Tom* (Michael Powell, 1960), in which the subjective POV shot equally represents both killer and camera, and *The Lady in the Lake* (Robert Montgomery, 1947), almost the entirety of which is presented as a series of POV shots, a translation of its source novel's first-person narrative that allows the viewer to perform the gaze of the professional detective, detecting clues to impel the story as the lens lingers over criminal sites. In that film, the POV scheme embodies the gaze of lead actor Robert Montgomery, who was also the film's director: a perspective in which jostles the subjectivity of filmmaker, performer and character, all of which collide in the same body, the fragmented limbs of which are repeatedly inserted into the frame. See also, for example, *Halloween* (John Carpenter, 1978), which introduces its murderous antagonist by opening with a four-minute POV shot. Steve Neale writes a compelling account of the use of subjective camerawork in *Halloween*, a film which is constructed in a similar manner to *Predator*, also featuring an antagonist who methodically murders the majority of the characters, whose presence and potency is conveyed largely through the POV mechanism, and who is otherwise difficult to see. See Steve Neale, 'Halloween: Suspense, Aggression and the Look', in *Planks of Reason: Essays on the Horror Film*, ed. by Barry Keith Grant (Metuchen, NJ and London: Scarecrow Press, 1984), pp.331–345. Other useful writings on the use and implication of subjective POV in cinema include: Kaja Silverman, 'Masochism and Subjectivity', *Framework*, 5.12 (1980), 2–8; Edward Branigan, *Point of View in the Cinema: A Theory of Narration and Subjectivity in Classical Film* (New York: Mouton, 1984); David Bordwell, *Narration in the Fiction Film* (London: Methuen, 1985), pp.9–12.

⁷⁸ The fundamentals of thermographic imaging had been initially explored in the nineteenth century, with the astronomer and photographer John Herschel (son of infrared wave discoverer William Herschel) producing a 'thermogram' in 1840, the first known harnessing of infrared values, a thermal mode of inscription.

apprehension of covert troop movements and camouflaged weapons platforms, reading the distinct heat signatures of warm objects amidst cooler environments. The integration of such a system into the sensorium of *Predator*'s extraterrestrial warrior capitalises on such astronomical and military associations, but also reflects more contemporary uses. From the 1970s, thermographic technologies evolved as medical diagnostic tools, eschewing the sprawling topographical analyses of prior usage to facilitate a more intimate scheme of viewing in which vast vistas of interrogation – theatres of both combat and the cosmos – are replaced by a solitary object of analysis: the vulnerable body in need of thermal diagnosis.⁷⁹ In *Predator*, this thermographic diagnostic scheme highlights the sensitivity of the bodies it surveys, coding them as candidates for invasive surgical intervention, while the invisible observer is further entangled with the violence of both corporeal and cinematic cut.⁸⁰ Throughout, the incised thermographic fragments contrast with the film's predominant *mise en scène*, through which long, fluid shots give an uninterrupted sense of the temporal and spatial logistics of the film's topography, personnel and action.⁸¹ The majority of the forty-two thermographic inserts last less than three seconds each, with just two composed of more than one shot, and those are spliced together with disorienting jump cuts that complicate the sense of subjective, real-time surveillance, so rendering the point-of-view even more alien: transitions that further jar through the insertion of abstract frames (fig. 3.41). Editor Helfrich refers to the 'zoom of that lens changing as he gets closer and closer', in the construction of which 'I used a piece of that heat vision that looked like the reflection of an eye and I put two frames in, then I think a

⁷⁹ Thermographic images are colourised with a 'pseudo colour' scheme, whereby each thermal range is represented by a different colour tone, designed to be intuitively interpreted by the viewer, with the thermal spectrum represented at the top by the colours white and red, and at the bottom by the colours blue and black, and so forth.

⁸⁰ It is notable that sequels to the film feature extraterrestrial POV shots that offer a further range of medical diagnostic visualisations. The 'predators' of both *Predator 2* (Stephen Hopkins, 1990) and *AVP: Alien vs. Predator* (Paul W.S. Anderson, 2004) relent in their murderous pursuit after diagnosing pregnancy and terminal illness respectively, their analyses – resembling schemes of ultrasound and CAT scan – rendering the viewed figure as an unsuitable target for termination, and perhaps as an unsuitable trophy object. This technologically augmented apprehension allows the creature to perform as both midwife and oncologist, and further draws upon body-image anxieties (figs 3.39 and 3.40).

⁸¹ Speaking of his interest in using lengthy shots in which focal shifts and camera movement connect active and passive elements of a sequence, McTiernan notes that 'it's more than one shot hooked together, or the camera moves somewhere, or it's one image leading to another image, [whereas] the kind of traditional stunt style of shooting is just static cameras.' The film's second unit photography, which did not adhere to this pattern of long, flowing shots when shooting some stunts for the attack on the rebel camp, McTiernan dismisses as 'static shot after static shot'. (McTiernan, 'Audio Commentary'.)

black frame.’⁸² The invisible body thus performs as a cinematicised entity, its thermographic POV scheme exacerbating the schizophrenic and heterogenous multiplicity of viewing modes so often homogenised in the editing room, presenting a technologised viewpoint that is augmented by the facilities of the editing suite.

Neither penetrative nor destructive, the passive mode of thermographic evaluation privileges both thermal differentials and surface integrity, apt values for this proficient violator who performs flaying, evisceration, dismemberment, decapitation, and other brutal defilements of warm-blooded bodies. The thermal sensory modality is present in predatory animals such as the pit viper, whose infrared sensors collect thermal data for integration with ocular data.⁸³ Visual effects coordinator Hynek suggests that the thermographic scanner’s low resolution ‘made the heat vision look more abstract’, as if ‘seeing the thinking process [...]. It’s like a fly’s vision: A million images you can’t comprehend but you know that somehow there’s a mind processing information.’⁸⁴ It is notable that the colourised thermographic imaging also evokes, on the one hand, contemporary visualisation of neurological activity, such as those produced by PET and MRI scans,⁸⁵ but also, in a post-1960s context of psychedelia, such hallucinogenic colour schemes connect with radical breaks with conventional orders of consciousness, of visual culture, and of the socio-political. Representing invisible thermal cues rendered visual for the privileged eyes of the viewing cinematic audience, these visuals conflate an extra-visual sensory range with an alienated mental process, the technological complexion of the sensing invisible psyche increasingly complicated by signifiers of the psychic-organic.⁸⁶

⁸² Helfrich, qtd in Lichtenfeld, ‘Text Commentary’.

⁸³ Writing in 2011, Fiona Macpherson describes how ‘scientists are now uncovering lots of interesting facts about the way in which nonhuman animals sense the world. The apparently wide and varied nature of senses in the animal kingdom provides lots of new empirical data to consider. For example, scientists claim that some animals can perceive the world by means of magnetic fields (e.g., pigeons), electric fields (e.g., many fish), infrared (e.g., pit vipers and some beetles), and echolocation (e.g., bats and dolphins).’ (Fiona Macpherson, ‘Individuating the Senses’, *The Senses: Classic and Contemporary Philosophical Perspectives* (Oxford: Oxford University Press, 2011), pp.3–43 (pp.3, 21).) It is also thought that some fish (such as piranha) and mosquitoes also possess similar sensory modalities that allow them to register the infrared range of light.

⁸⁴ Hynek, qtd in Lichtenfeld, ‘Text Commentary’.

⁸⁵ Hynek, qtd in Lichtenfeld, ‘Text Commentary’.

⁸⁶ Other cinematic appropriations of the thermographic from this period are similarly engaged with technological anxiety. *Wolfen* (Michael Wadleigh, 1981) shows the menacing vision of supernatural wolves to mimic the infrared (described in the film as ‘heat vision’, though actually conventional footage modified in post-production), and uses actual thermographic imaging as part of a police observation and interrogation environment. *Blue Thunder* (John Badham, 1983) adopts thermographic imaging as part of the stealth-surveillance platform that is an experimental military helicopter (the ‘Blue Thunder’ of the title), though the images representing this scheme were again fabricated in post-

Predator's invisible body is first materialised through fluorescent yellow blood traces, liquescent matter taken as evidence that 'if it bleeds, we can kill it', signifying both vitality and mortality, whilst reminding that the blood of the invisible body in Wells's *The Invisible Man* '[g]ets visible as it coagulates' (IM 81). Such coagulation enacts a substantial phase transition that in both *Predator* and *The Invisible Man* coincides with a shift across registers of visibility, defining blood as visible trace of invisible internal viscera; although, in the case of *Predator*'s extraterrestrial, the blood is no 'dark spot on the linoleum' (IM 77), but a hypervisual, photoluminescent substance that is visible even in darkness.⁸⁷ The yellow colouring conveys an ectothermic coldness, and such cold-bloodedness expresses the technical production of this thermographic register, for which imaging equipment required cooling with liquid nitrogen, a cryogenic means to protect the camera's sensor from being impeded by the emissions of the unit itself.⁸⁸ Such a scheme also suggests cryonic preservation, first performed on a human body in 1967, and through which a diseased body is frozen in liquid nitrogen with a view to the ailment's future eradication: a cold mummification that relies for its impulse towards immortality on sub-zero temperatures rather than the warm vital conditions appropriated in Egyptian funerary practice. All of these associative factors combine to illuminate the thermal economy of the invisible embodied presence in *Predator*, and, in their shared thermodynamics, both fictional and actual thermographic sources intertwine as a compound category of imagery in which the hidden mechanics of image-production further contribute to the identity of the alien-organic invisible.

With visible thermal values key to *Predator*'s visualisation of invisibility, it is notable that this thermographic imagery merges film and electronic imaging processes. To enhance distinction between foreground bodies and background spaces,

production. *RoboCop* (Paul Verhoeven, 1987) again uses special visual effects to approximate a kind of thermographic imaging that can penetrate through solid walls, registering only organic material on the other side. *Patriot Games* (Phillip Noyce, 1992) incorporates actual thermographic images as part of a silent sequence within a tactical viewing environment, through which is witnessed an illicit assassination. Other schemes of electronically enhanced viewing embedded significantly in mainstream cinema at this time include the enhanced 'night vision' employed, to unsettling effect, in *Silence of the Lambs* (Jonathan Demme, 1991), *Patriot Games*, and *Cliffhanger* (Renny Harlin, 1993), all of which utilise a night-vision perspective to signify the vantage point of a dangerous killer.

⁸⁷ This effect was practically produced for the film through blending the chemiluminescent solution from glow sticks with K-Y jelly, a mixture that hardened and coagulated very quickly. McTiernan explains that they 'would just cut them open and pour them out on things and [...] it looked weird and it glowed, and it took much less optical work' (McTiernan, 'Audio Commentary').

⁸⁸ Ectothermic creatures rely on ambient thermal conditions to survive, assuming the thermal characteristics of their environment, so can themselves evade thermographic apprehension, just as the chameleon and the 'predator' can evade environmental sources of visible light.

thermal images of the performers' bodies were composited with conventionally filmed backgrounds, recorded simultaneously through the use of a 'beam splitter', a prism that divided the photographed image between thermographic and cinematic sources.⁸⁹ These background images were then adjusted in post-production to evoke cold thermographic readings, before being composited behind the genuine infrared body images that themselves had been re-shot on film from the thermographic unit's display screen.⁹⁰ It is the culmination of a seventy-second thermal shot that provides the first primary visual evidence of the body that is the diegetic source of these images, as the otherwise invisible observer reaches a hand into its own thermo-optic arena (fig. 3.42). The presence of this organ of touch makes explicit the signification, amidst these thermal signatures, of the stimulation of thermal receptors in the skin. In the register of the infrared, it is an extra-visual discourse of tactility that here expresses a vision *of* vision as both augmented and frustrated. In this multimedial arena in which the thermographic and the cinematic fold in on one another, and in which mingle also intra- and extra-diegetic mechanisms of invisibility, there emerges an expression of sensory intermingling that can best be described in terms of *hapticity*, a category that I will now explore.

Haptic visuality

The modern understanding of the category of the haptic, a synaesthetic conflation of vision and touch, is often attributed to the art historian Alois Reigl.⁹¹ The haptic, however, has held a particular importance in film studies over recent decades. In her 1998 essay 'Video Haptics and Erotics', Laura U. Marks writes of haptic *visuality* as a condition in which 'the eyes themselves function like organs of touch':

Haptic visuality, a term contrasted to optical visuality, draws from other forms of sense experience, primarily touch and kinaesthetics. Because haptic visuality draws upon other senses, the viewer's body is more obviously

⁸⁹ As screenwriter John Thomas confirms: 'We had a thermographic heat-vision camera that actually ran on liquid nitrogen, and was married to the Panavision. Through the use of a beam splitter, 70% of the image went to the thermographic video camera and 30% went to the 35mm film camera.' (John Thomas, qtd in Lichtenfeld, 'Text Commentary'.)

⁹⁰ For these backgrounds, McTiernan relates that 'regular film' was converted 'into a negative and then we made it all blue and then isolate certain areas and attach false colour to it and we created most of the special effects – most of the heat effects shots – that way. It was a budget issue but it was also just, it was nearly impossible to get the real heat vision shots.' (McTiernan, 'Audio Commentary'.)

⁹¹ See, for example, Angela Dalle Vacche, 'Introduction: Unexplored Connections in a New Territory', *The Visual Turn: Classical Film Theory and Art History* (New Brunswick, NJ: Rutgers University Press, 2003), pp.1–29 (esp. pp.4–10).

involved in the process of seeing than is the case with optical visibility. The difference between haptic and optical visibility is a matter of degree, however. In most processes of seeing both are involved, in a dialectical movement from far to near, from solely visual to multisensory. Touch is a sense located on the surface of the body: thinking of cinema as haptic is only a step towards considering the ways in which cinema appeals to the body as a whole.⁹²

As she continues:

Haptic cinema does not invite identification with a figure so much as it encourages a bodily relationship between the viewer and the video image. Thus, it is not proper to speak of the *object* of a haptic look so much as to speak of a dynamic subjectivity between looker and image.⁹³

Marks extends these notions in her 2000 book *The Skin of the Film*, where she argues that haptic visibility ‘suggests the way vision itself can be tactile, as though one were touching a film with one’s eyes’.⁹⁴ In Marks’s 2002 book *Touch*, she notes that ‘[h]aptic looking tends to rest on the surface of its object rather than to plunge into depth, not to distinguish form so much as to discern texture’, attesting that by ‘engaging with an object in a haptic way, I come to the surface of my self [...], losing myself in the intensified relation with an other that cannot be known [...]: I lose myself as a subject (of consciousness) to the degree that I allow myself to be susceptible to contact with the other’.⁹⁵ Concurring with this sentiment, Jennifer M. Barker in *The Tactile Eye* (2009) similarly affirms that in ‘letting our gaze wander over the surface of the image, we *do* come to the surface of ourselves, feeling ourselves more keenly in the touch of our skin against the film’s skin, a touch in which we and the film constitute one another and bring each other into being.’⁹⁶ In addition to its fusion of vision and touch, haptic cinema thus expresses a phenomenon

⁹² Laura U. Marks, ‘Video Haptics and Erotics’, *Screen*, 39.4 (1998), 331–348 (p.332).

⁹³ Marks, ‘Video Haptics and Erotics’, 332.

⁹⁴ Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham and London: Duke University Press, 2000), p.xi.

⁹⁵ Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2002), pp.8, 19.

⁹⁶ Jennifer M. Barker, *The Tactile Eye: Touch and the Cinematic Experience* (Berkeley and Los Angeles, CA and London: University of California Press, 2009), p.35. An alternative version of this passage states: ‘This is a touch by which we and the film bring each other literally and sensuously into being. Indeed, as Marks writes, “haptic images are erotic in that they construct an intersubjective relationship between beholder and image” (Marks 1999, p.183).’ (Jennifer M. Barker, ‘Touch and the Cinematic Experience’, in *Art and the Senses*, ed. by Francesca Bacci and David Melcher (Oxford and New York: Oxford University Press, 2011), pp.149–160 (p.152).)

through which the sensory mechanisms of cinema and the body come into close contact, the boundaries of each blurred.

For Marks, haptic visuality is ‘a journey into states of erotic being’ whereby two individuals, ‘so close [...] yet distinct’, are each ‘drawn into a rapport with the other where [they] lose the sense of [their] own boundaries’.⁹⁷ For *Predator*, such an expression of the eroticism of haptic visuality emerges most distinctly as the film’s full-frame thermographic scheme intensifies towards a succession of close-up thermal images that show the alien’s brutal physical assault on Dutch’s body, intercut rhythmically with complementary optical shots (fig. 3.43). As these two naked masculine bodies wordlessly interact in hand-to-hand combat, the touch of interspecies intercourse is a sadomasochistic expression of latent haptic homoeroticism, but also illustrates Marks’s characterisation of the ‘abrupt shift from haptic to optical image’ that ‘implies a tension between viewer and image’ to be full of ‘violent potential’, and through which ‘[h]aptic visuality implies making oneself vulnerable to the image, reversing the relation of mastery that characterizes optical viewing’.⁹⁸ Through this erotic expression of intercorporeal intersubjectivity, the audience of *Predator* enters into a dynamic relationship with two viewers’ physical experiences of each other as subjects. As in the coincidence of the film’s first vision of the invisible body with the evisceration of its viewer, problematic schemes of vision and touch collapse in on each other in a proxy stimulation of the skin’s receptors of warmth and cold, of pain and pleasure, as mediated by the electronic eye. In this register of hapticity is communicated a proximate physical interaction with the remote photographic referent. In common with *Star Trek*’s kinaesthetic expressions of radar screen systems, the haptic expressions of *Predator* extend visual comprehension beyond the visible, as visuality intermingles with the extra-visual.

It is in similar terms that *Predator*’s sound design communicates invisibility, as aural cues signal strange optical moments, persuading the film’s spectator to look again. At points, syncopated percussion intimates the beating heart of the invisible body, while the thermographic scheme itself, a silent regime in its conventional usage, is intensified through the accompaniment of the sound of muffled heartbeats, as produced through the fusion of human heartbeats and synthesised foley effects,

⁹⁷ Marks, ‘Video Haptics and Erotics’, p.331.

⁹⁸ Marks, ‘Video Haptics and Erotics’, p.341. The low resolution of *Predator*’s thermographic regime exacerbates Marks’s contention that ‘[w]hen vision yields to the diminished capacity of video, it gives up some degree of mastery’ (p.339).

distorted through tempo shifts and reversals. The sudden cuts to the thermographic shots synchronise with a sound that combines further elements, such as the cracking of a whip, described by supervising sound effects editor David E. Stone to be ‘tonal modifiers that gave it that angry, ugly darkness’: visualisations of invisible sense data extended through such sonification.⁹⁹ Many of these sound effects were initially conceived in visual terms, as Stone recalls:

we would communicate about the concept for a sound element by making little drawings to each other. I’d say ‘It has to have a fat envelope here at the beginning, then it tapers down.’ ‘This part is rizzly, this part is searing and hot.’ We would talk like that and draw little unfinished cartoons about the way a sound would sound. [...] Not so much graph it as draw a childish version of what it would look like if you could see it in a cartoon world.¹⁰⁰

Alienated subjectivity is here expressed through the cutting, sampling and distortion of the sonic editing suite, itself made apparent in the film through waveform visualisations alongside the POV thermographic readout (fig. 3.44). This single-channel audio signal runs up the left-hand side of the screen, mimicking the incorporated audio in sound film formats where a sonic reading similarly occupies the margins of the film strip, while the vocal distortions of these sequences evoke early experiments in sound recording as they undermine the synchronicity of the standard cinematic audiovisual mix. The aberrant audio exhibited in these segments also resembles the sonic regime designed by Walter Murch for *The Conversation* (Francis Ford Coppola, 1974): disintegrating audio that that film’s protagonist analyses until it loses its meaning, and is made ripe for misinterpretation.

In *Predator*, the two-mouthed invisible being demonstrates an uncanny capacity for sonic mimesis, playing back the voices of its victims to draw further prey towards its acousmatic source: garbled aural reproductions that further sonify fragmentary invisibility and confirm the film’s preoccupation with the multifarious

⁹⁹ David E. Stone, qtd in Lichtenfeld, ‘Text Commentary’.

¹⁰⁰ Stone, qtd in Lichtenfeld, ‘Text Commentary’. Other sound effects in *Predator* mimic the hydraulic, the pneumatic and the crustacean, and synthetic materials such as plastics were used to simulate organic body sounds (Stone, qtd in Lichtenfeld, ‘Text Commentary’). Further alien vocalisations were created by voice artist Peter Cullen, who developed a purring trill after seeing the creature’s face, a throaty interior sound, that bypasses the lips, and that emerged inaudibly as Cullen worked in the sound booth. Cullen reflects: ‘as I watched the Predator take off his helmet, I remembered the sounds of an upside down horseshoe crab bubbling in the sun. The sounds of the clicking bursting bubbles came to me. The horrible underside of the dying crab and the face of the Predator just intertwined.’ (Peter Cullen, qtd in Kevin Gilvear, ‘Prime Directive: An Exclusive Interview with Peter Cullen’, <<http://film.thedigitalfix.com/content/id/62478/prime-directive-an-exclusive-interview-with-peter-cullen.html>> [accessed 24 September 2012] (para. 41 of 47).)

complexities of comprehension. Such technologised ventriloquism evokes the sounds referred to by Sean Redmond as a ‘spectacular rendering of a liquid chaos [that] enables the viewer to experience the logic of sensation beyond bodily integrity’, as he contests that ‘one hears in science fiction film the profound potential of a radical alterity that exists beyond the sonorous limit’.¹⁰¹ The rough textures of these soundscapes mingle discordantly with their accompanying imagery to produce a kind of ‘haptic sound’, a term used by Marks to describe ‘undifferentiated’ sound through which ‘the aural boundaries between body and world may feel indistinct’.¹⁰²

An alienated sensorium

It is this sense of boundaries becoming blurred, indistinct or otherwise distorted that most emerges from *Predator*’s depiction of an invisible body: boundaries between the organic and the technological, between vision and touch, between vision and sound, between subjects and objects, between interiority and exteriority, and between the individual and the other. For Barker, hapticity in cinema ‘opens up the possibility of cinema as an *intimate* experience and of our relationship with cinema as a *close* connection, rather than as a distant experience of observation, which the notion of cinema as a purely visual medium presumes’.¹⁰³ She declares that, as ‘a material mode of perception and expression, [...] cinematic tactility occurs not only at the skin or the screen, but traverses all the organs of the spectator’s body and the film’s body’, describing cinematic tactility as

a general attitude toward the cinema that the human body enacts in particular ways: haptically, at the tender surface of the body; kinaesthetically and muscularly, in the middle dimension of muscles, tendons, and bones that reach toward and through cinematic space; and viscerally, in the murky recesses of the body, where heart, lungs, pulsing fluids, and firing synapses receive, respond to, and reenact the rhythms of cinema. The film’s body also adopts toward the world a tactile attitude of intimacy and reciprocity that is played out across its nonhuman body: haptically, at the screen’s surface, with the caress of shimmering nitrate and the scratch of dust and fibre on celluloid; kinaesthetically, through the contours of on- and off-screen space and of the bodies, both human and mechanical, that inhabit or escape those spaces; and

¹⁰¹ Sean Redmond, ‘Sounding Alien, Touching the Future: Beyond the Sonorous Limit in Science Fiction Film’, *New Review of Film and Television Studies*, 9.1 (March 2011), 42–56 (p.42).

¹⁰² Marks, *The Skin of the Film*, p.183.

¹⁰³ Barker, *The Tactile Eye*, p.2.

viscerally, with the film's rush through a projector's gate and the 'breathing' of lenses.¹⁰⁴

Furthering this argument, then, the context of alien invisibilities in both the *Predator* and *Star Trek* series promotes the body's mediation and interpretation through a cinematicised network of sensory technologies. The alienations of the embodied human sensorium in both series – both within and without the diegeses – collide representation with misrepresentation, showing the sensorium as something unfamiliar, and perhaps impossible to fully comprehend: a making alien of the senses that is also a technologisation and prostheticisation of the sensorium. In these anxious schemes the audience is both alienated and implicated, both repelled and seduced.

The greatest expression of this comes in the figure of the fully exposed extraterrestrial body of *Predator*, which is materialised as an integrated fusion of variant terrestrial parts: a dark physiognomic mingling of the reptilian, the insectoid, the arachnid, the crustacean and the humanoid that sends out a bestial cry as it is assessed by Dutch to be 'one ugly motherfucker' (fig. 3.45).¹⁰⁵ Just as the visual construction of this figure's invisibility revolves around the cinematic compositing of layers of special visual effects, its visibility is likewise composited, a murk of uncircumscribed features that contrasts starkly with the distinct anatomisation of its human counterparts. The being's final evasion of visual disclosure in death can be

¹⁰⁴ Barker, *The Tactile Eye*, pp.2, 3.

¹⁰⁵ It is notable that a recognisably humanoid core is submerged beneath this conglomeration of bestial values, as performed by the seven-foot-four mime artist Kevin Peter Hall, who replaced the less physically-imposing Jean Claude Van Damme (the latter being present only for the initial stages of shooting, before the alien was redesigned). Most of Hall's other screen roles involved performing as elusive and monstrous creatures, his body hidden beneath latex costumery: as 'Katahdin, the Mutant Bear' in *Prophecy* (John Frankenheimer 1979); as 'The Alien' in *Without Warning* (Greydon Clark, 1980); as 'Gorvil' in *Mazes and Monsters* (Steven Hilliard Stern, 1982); as 'Monster' in *Monster in the Closet* (Bob Dahlin, 1986); as 'Harry' in *Harry and the Hendersons* (William Dear, 1987); as 'Leyor' in the *Star Trek: The Next Generation* episode 'The Price' (Robert Scheerer 1991). For *Predator*, wearing an animatronic mask beneath which he was effectively blind, Hall would prepare for filming by memorising his actions in relation to particular objects and spaces ('"Predator" – The Man in the Suit', *Cinefantastique*, 18.1 (1987), 37 (p.37)). In relation to matters of race, McTiernan remarks that 'I did not want, and would not have countenanced a racial suggestion as to what the predator looked like. Yes, those are sort-of dreadlocks but there was no notion that people should somehow think he seems African.' (McTiernan, 'Audio Commentary'.) In various persuasive readings, however, this creature is understood to represent a black body; it satisfies, for example, Adilifu Nama's compelling understanding that 'the black body is often a site of representational trauma, the ultimate signifier of difference, alienness and "otherness" in sf cinema'. Nama cites *Predator* as one 'of the most cogent examples in sf film of how the black body is a representational canvas coated with signifiers of alien unsightliness, danger, fear, social inferiority, and even transgressive sexuality that evoke a wide range of racial anxieties and cultural politics circulating in American society.' (Adilifu Nama, *Black Space: Imagining Race in Science Fiction Film* (Austin: University of Texas Press, 2008), pp.75–81 (pp.7, 73).)

directly contrasted with the detailed visceral revelations of corporeal interiority that accompany the deaths of each human character, autopsical imagery that actually begins before the appearance of any corpse, with the cast's hypermuscular torsos ostentatiously exhibiting the otherwise subtle subsections of the body. It is notable that the prior professional roles of this exercised cast include bodybuilder (four-time 'Mr Universe' Schwarzenegger), athlete (Carl Weathers), pornographic actor (Sonny Landham), and wrestler (Jesse 'The Body' Ventura), and that an extended sequence in which these powerful figures pointlessly expend their ammunition was conceived by McTiernan as an exhibition of impotence that would '*quietly ridicule*' tropes of phallic power.¹⁰⁶ These actors perform the *visible* body for the camera, exhibiting every muscle in a dissection of the body's component parts, and in doing so collaborating with the camera on their own autopsies: a dynamic collage of muscles and organs that prefigures the brutal dismemberments that follow.

The extreme visibility of these compartmentalised muscle bodies promotes their disintegration, so contrasting with the comparative invisibility and invulnerability of the alien body, the carapacial integrity of which is swiftly re-established even when briefly wounded. Even once the alien body is visualised, it still remains indistinct as its constituent parts have no clear boundaries, merging into one another as a diverse multiplicity of forms, species, senses and technologies. The grotesque physiognomy of the exposed invisible body expresses chaotic nuclear connotations of meltdown, mutation and change, evoking in particular the recent 1986 incident at Chernobyl. Yet this is also a physiognomic metaphor of tantalising mutational and hybridised sensory architecture, in which electrical pulses seemingly hold together a Frankenstein's monster of intersecting zones (fig. 3.46). As with the disguised bodies of *The Invisible Man* cycle, whose visually demarcated sense organs are cast off in expressions of sensory reconfiguration, this exposed invisible body articulates the contemporary condition of the anxious human sensorium, in which the technological blurring of sensory boundaries is manifested as something to be feared.

Merleau-Ponty recognises such a notion of unfamiliar and intersecting senses:

The senses are distinct from each other and distinct from intellection in so far as each one of them brings with it a structure of being which can never be exactly transposed. We can recognise this [...] without any threat to the unity of the senses. For the senses communicate with each other. [...] They are

¹⁰⁶ McTiernan, 'Audio Commentary'.

united at the very instant in which they clash. [...] Sensory experience is unstable, and alien to natural perception, which we achieve with our whole body all at once, and which opens on a world of inter-acting senses.¹⁰⁷

In expressing that which is ‘alien to natural perception’, *Predator*’s imagery of the alien invisible unfolds through the unstable interaction of variant distinctive sensory regimes, themselves expressed primarily through stylistic shifts to the film body that echo the narrative’s preoccupation with bodily disintegration. The alien manufactures the invisibility of its body using a prosthetic arm-mounted device that, linked with the other sensory technologies of thermographic visor, gaze-controlled laser cannon and blinding nuclear arsenal, mediates the visualities of the invisible body whilst fostering a clear equivalency between cinematic special effects and advanced alien technology.¹⁰⁸ This invisible organism utilises technical organs to perform as filmmaker, demonstrating authority over the film object as it pushes buttons to impel the narrative’s atomic end: a director’s cut. Here, the surveilling and inscrutable alien is multifarious counterpart for cinematic producer, cinematic apparatus, and cinematic spectator.

Conclusion

The indecipherabilities and mistranslations at work in both the *Predator* and *Star Trek* series – in which related screen technologies of radar, television, cinema and thermography intersect – speak of intermedial translations between the visible and the invisible, expressing multimediality as a metaphor for multisensoriality. The ‘distortions’ that these examples present imperceptibly conjoin the sensory mechanisms of the body with those of screen media, articulating a prosthetic sensorium as an extension both away from, into and between multiple sensory modalities. If the examples I have analysed in this chapter further express the invisible body’s problematic relationship with language, as has been touched upon in earlier

¹⁰⁷ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. by Colin Smith (London and New York: Routledge, 1962), p.225.

¹⁰⁸ According to Joel Hynek, Don Poynter, the animator who drew the animated sparks for these sequences, ‘spelled his name out on the Predator’s arm’ (Hynek, qtd in Lichtenfeld, ‘Text Commentary’).

chapters, then it is notable that the notion of *prosthesis* has linguistic connotations, referring to the addition of a syllable or letter to the beginning of a word. The sensory prosthesis thus functions on the edge of discourse, as Marquard Smith and Joanne Morra assert:

the material and metaphorical figurations of prosthesis initiate considerations of the historical and conceptual edges between ‘the human’ and the posthuman, the organic and the machinic, the evolutionary and the postevolutionary, and flesh and its accompanying technologies.¹⁰⁹

In relation to this thesis’ wider discourses on invisibility, the overtly science-fiction contexts addressed in this chapter bring out the increasingly technological nature of the film medium, but also of the senses in contemporary society, exemplifying Caroline A. Jones’s understanding of ‘the modes by which sensing bodies [...] can now become technological to produce an amplified, connected, expanded but also disequibrated corporeality – a new sensorium’.¹¹⁰

The invisibilities I have explored in this chapter demonstrate what Jones describes as

the aesthetic attitude of this hybrid moment, where modernist segregation of the senses is giving way to dramatic sensorial mixes, transmutations, and opportunities for intensified and playful mediation.¹¹¹

As with *Star Trek*’s viewing screen, we can understand the cinematic mode to also work through such ‘dramatic sensorial mixes’, producing visualisations and sonifications through which one sensory media is converted into or conflated with another, so connecting with Marks’s suggestion that ‘the desire to squeeze the sense of touch out of an audiovisual medium, and the more general desire to make images that appeal explicitly to the viewer’s body as a whole, seem to express a cultural dissatisfaction with the limits of visibility’.¹¹² In such a context, the visual sense is thus reconstituted as an *unfamiliar* thing that may yet be constituted of new depths, indirectly accessible via the symbols and metaphors of invisibility.

¹⁰⁹ Marquard Smith and Joanne Morra, ‘Introduction’, *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future* (Cambridge, MA and London: MIT Press, 2006), pp.1–14 (p.3).

¹¹⁰ Jones, ‘Introduction’, p.2.

¹¹¹ Jones, ‘Introduction’, p.3.

¹¹² Marks, ‘Video Haptics and Erotics’, p.334.

As I have demonstrated in this chapter, the fearsome invisible entities of *Star Trek* and *Predator* express contemporary anxiety in relation to the operations, capacities and limitations of sensory schemes, imparting anxious responses to a climate of advanced technologies. In both series, blinding thermonuclear catastrophe enacts a problematisation of the ‘logical’ organ of vision. In developing his understanding of ‘the innovation of eyeless vision’ as described in *War and Cinema*,¹¹³ Virilio argues in *The Vision Machine* that

Blindness is thus very much at the heart of the coming ‘vision machine.’ The production of *sightless vision* is itself merely the reproduction of an intense blindness that will become the latest and last form of industrialisation: *the industrialisation of the non-gaze*.¹¹⁴

Such persistence of visuality as a kind of ‘*sightless vision*’ – an embodied and intersubjective vision – emerges from the schemes of invisibility interrogated in this chapter. Chapter Four shall proceed by exploring the social character of such schemes of invisibility, analysing the role of onscreen bodily invisibility in the configuration and reconfiguration of interpersonal schemes of sensation in late twentieth-century western culture.

¹¹³ Virilio, *War and Cinema*, p.2.

¹¹⁴ Paul Virilio, *The Vision Machine*, trans. by Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp.72–73.



Fig. 3.1, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)



Fig. 3.2, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)



Fig. 3.3, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)

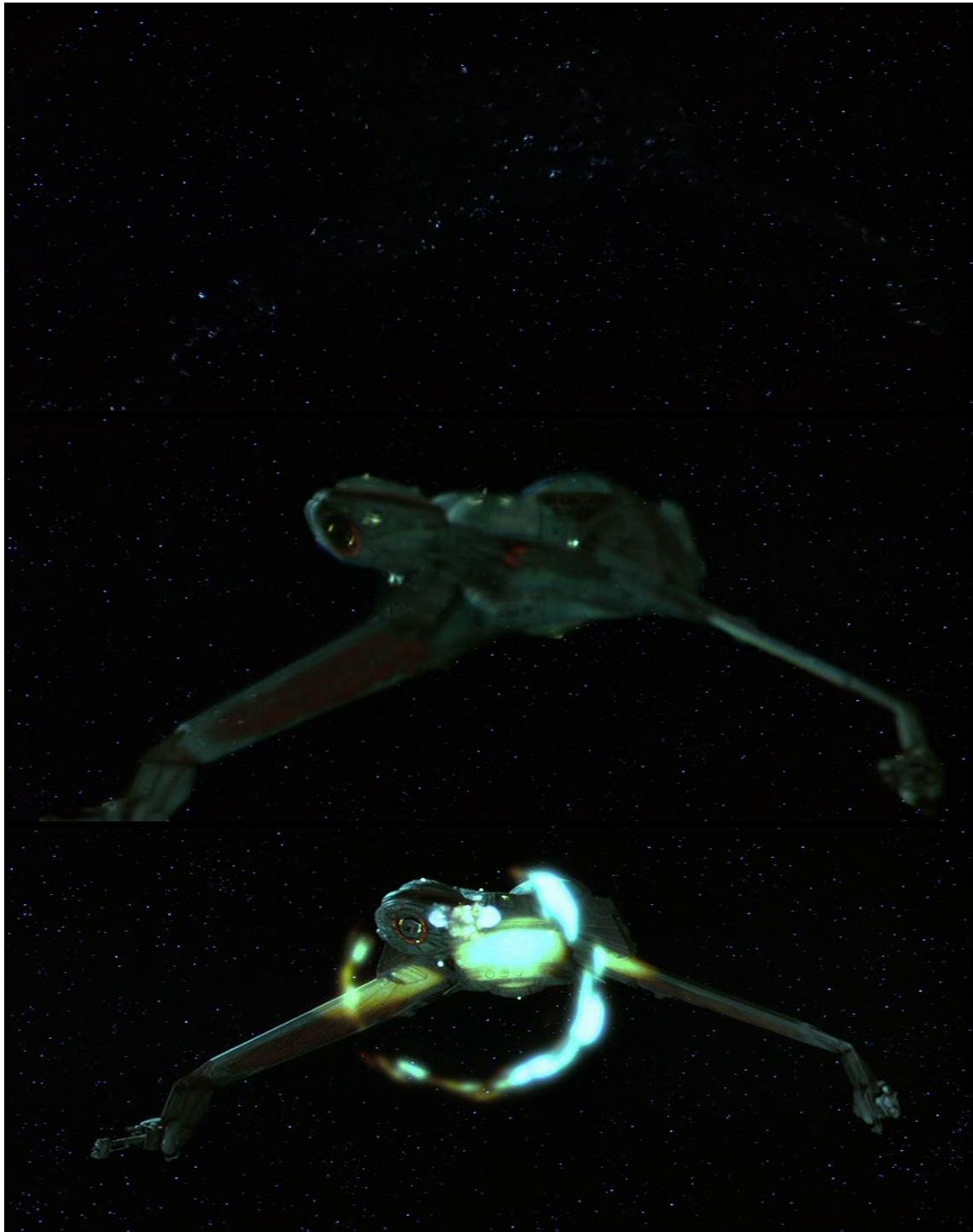


Fig. 3.4, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)

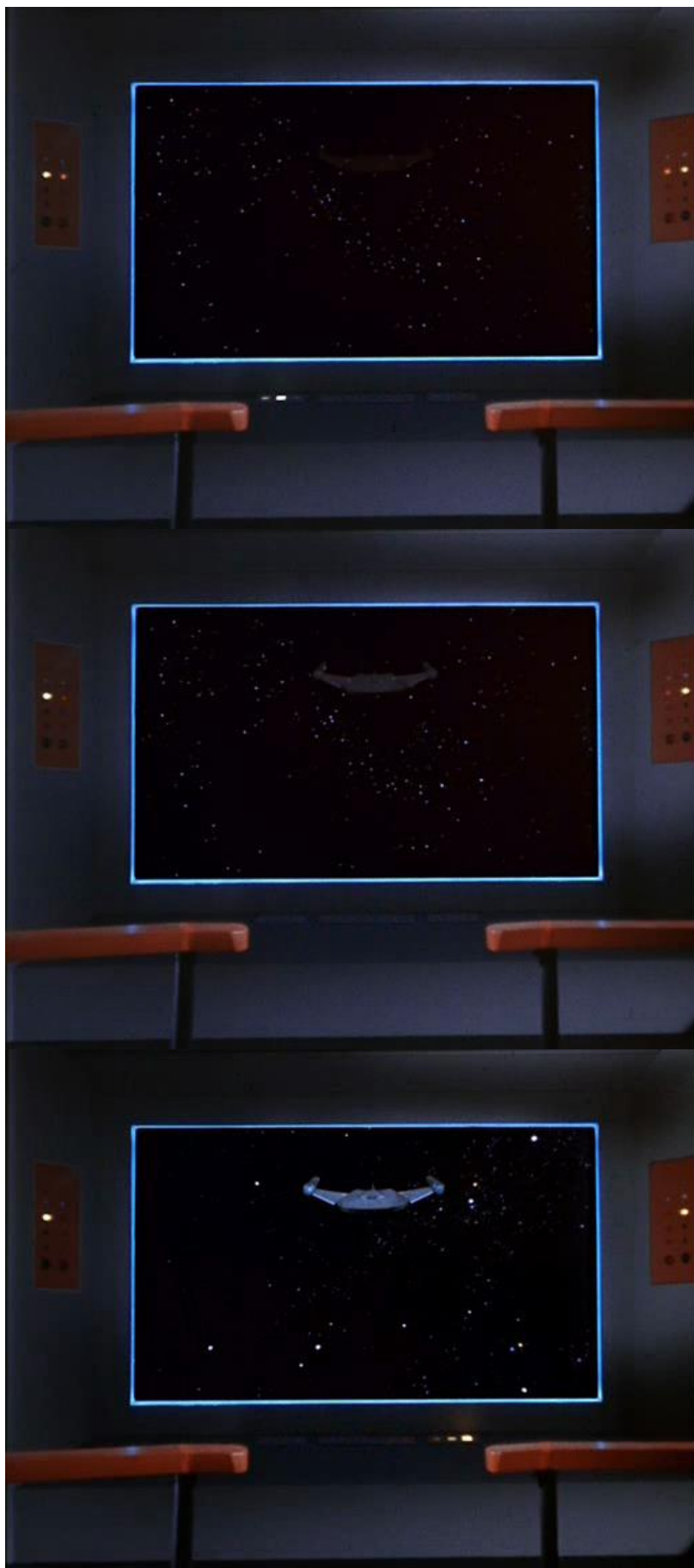


Fig. 3.5, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.6, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.7, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.8, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.9, *Buck Rogers* (Ford Beebe and Saul A. Goodkind, 1939)



Fig. 3.10, *Buck Rogers* (Ford Beebe and Saul A. Goodkind, 1939)

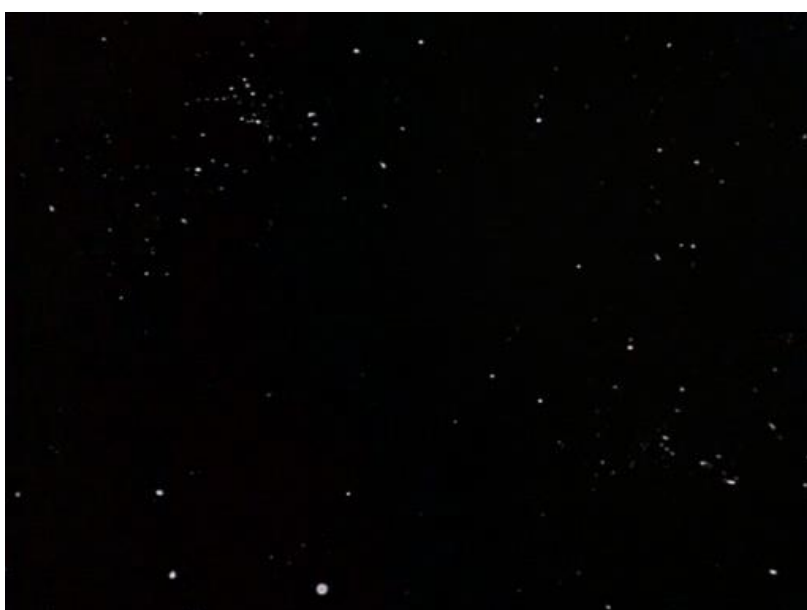


Fig. 3.11, *Star Trek* (1966–1969)



Fig. 3.12, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.13, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.14, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.15, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.16, 'Balance of Terror', *Star Trek* (Vincent McEveety, 1966)



Fig. 3.17, *Star Trek: The Motion Picture* (Robert Wise, 1966)



Fig. 3.18, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)



Fig. 3.19, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)

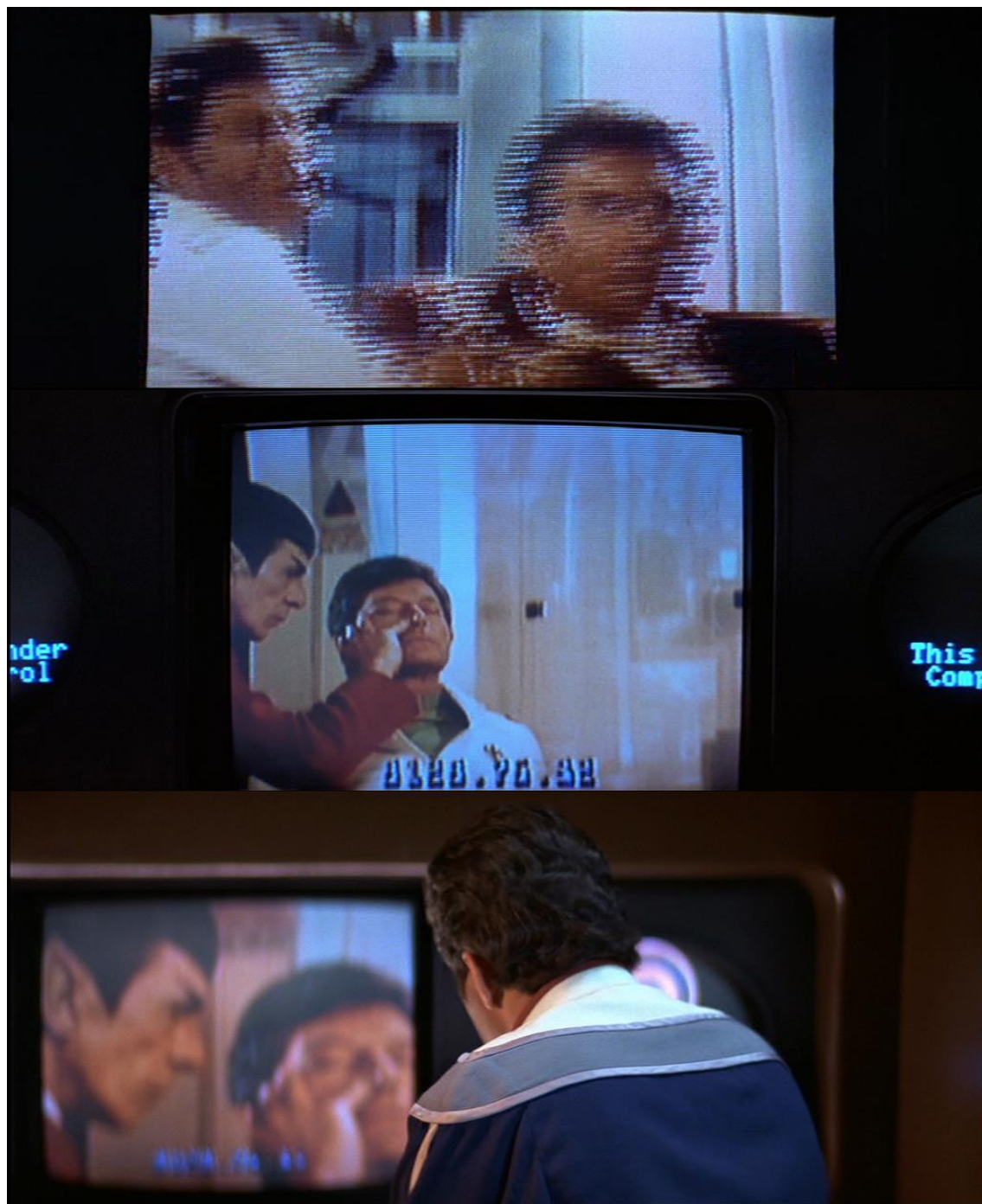


Fig. 3.20, *Star Trek III: The Search for Spock* (Leonard Nimoy, 1984)



Fig. 3.21, *Star Trek IV: The Voyage Home* (Leonard Nimoy, 1984)



Fig. 3.22, *Predator* (John McTiernan, 1987)



Fig. 3.23, *Predator* (John McTiernan, 1987)



Fig. 3.24, *Predator* (John McTiernan, 1987)



Fig. 3.25, *Predator* (John McTiernan, 1987)



Fig. 3.26, *Predator* (John McTiernan, 1987)



Fig. 3.27, Eugene Mamut's 'elastic effect' (1981)



Fig. 3.28, *Predator* (John McTiernan, 1987)



Fig. 3.29, Alvin Langdon Coburn



Fig. 3.30, Berenice Abbott



Fig. 3.31, *Predator* (John McTiernan, 1987)



Fig. 3.32, *Predator* (John McTiernan, 1987)



Fig. 3.33, *Predator* (John McTiernan, 1987)



Fig. 3.34, *Predator* (John McTiernan, 1987)



Fig. 3.35, *Predator* (John McTiernan, 1987)



Fig. 3.36, *Predator* (John McTiernan, 1987)



Fig. 3.37, *Predator* (John McTiernan, 1987)

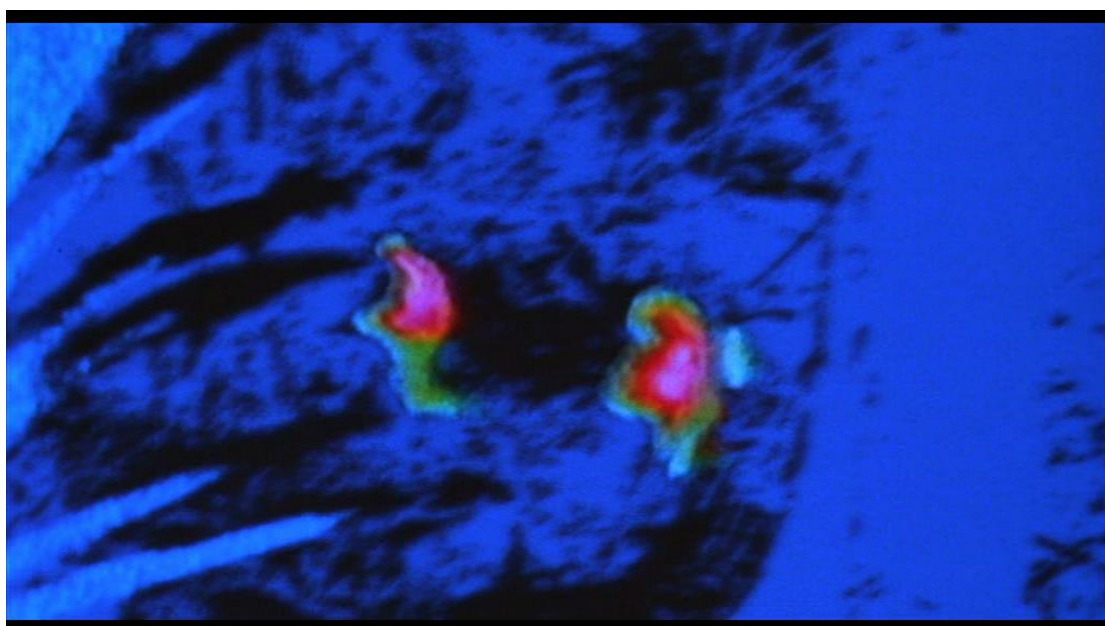


Fig. 3.38, *Predator* (John McTiernan, 1987)

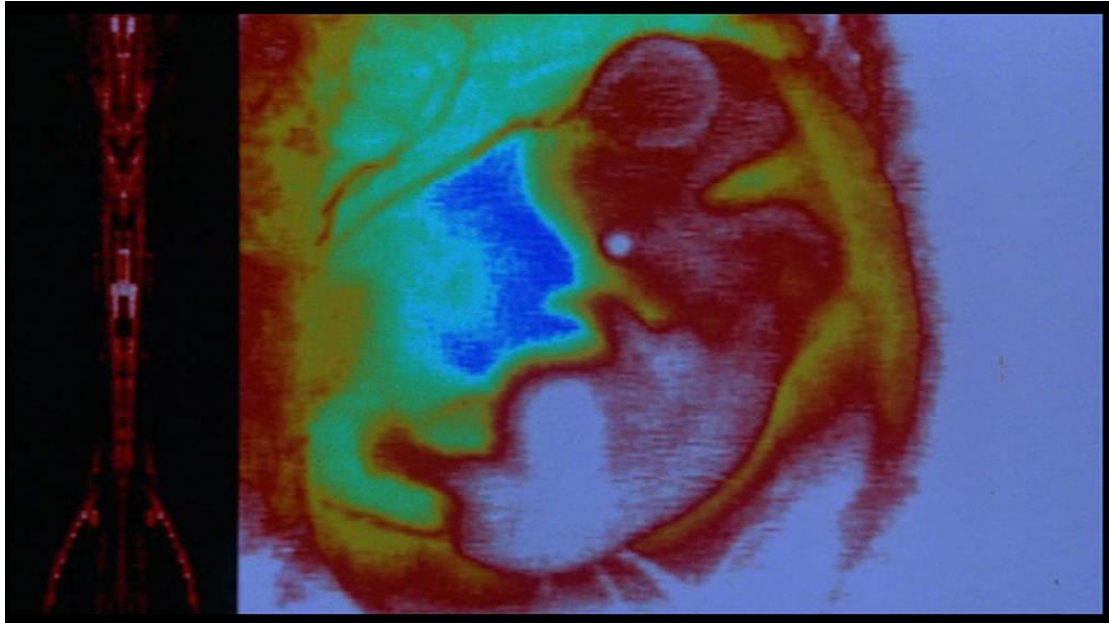


Fig. 3.39, *Predator 2* (Stephen Hopkins, 1990)

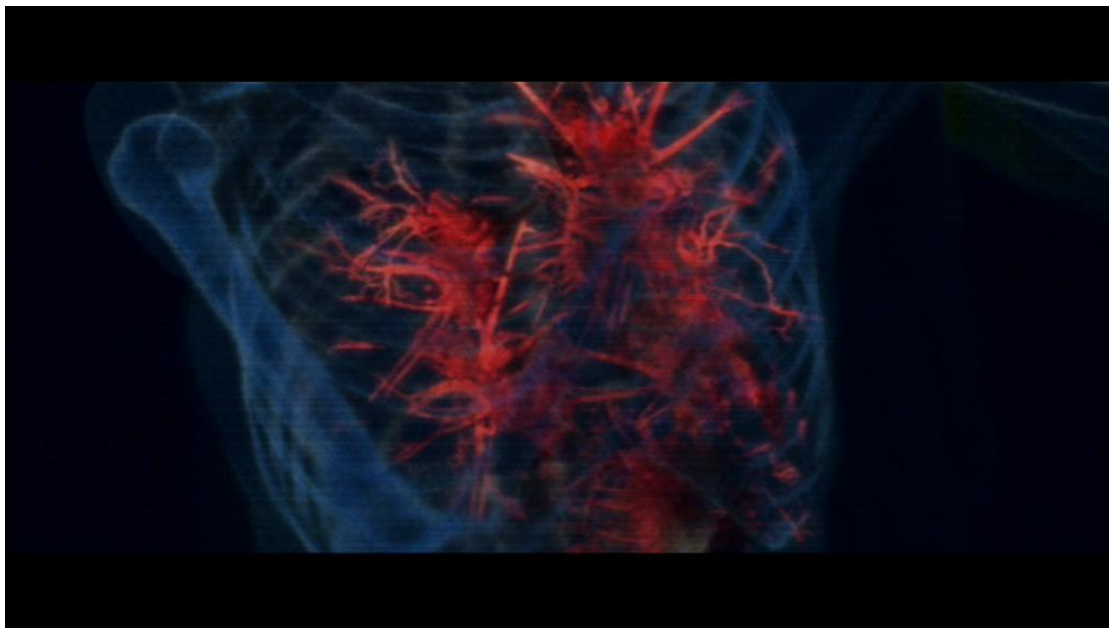


Fig. 3.40, *AVP: Alien vs. Predator* (Paul W.S. Anderson, 2004)

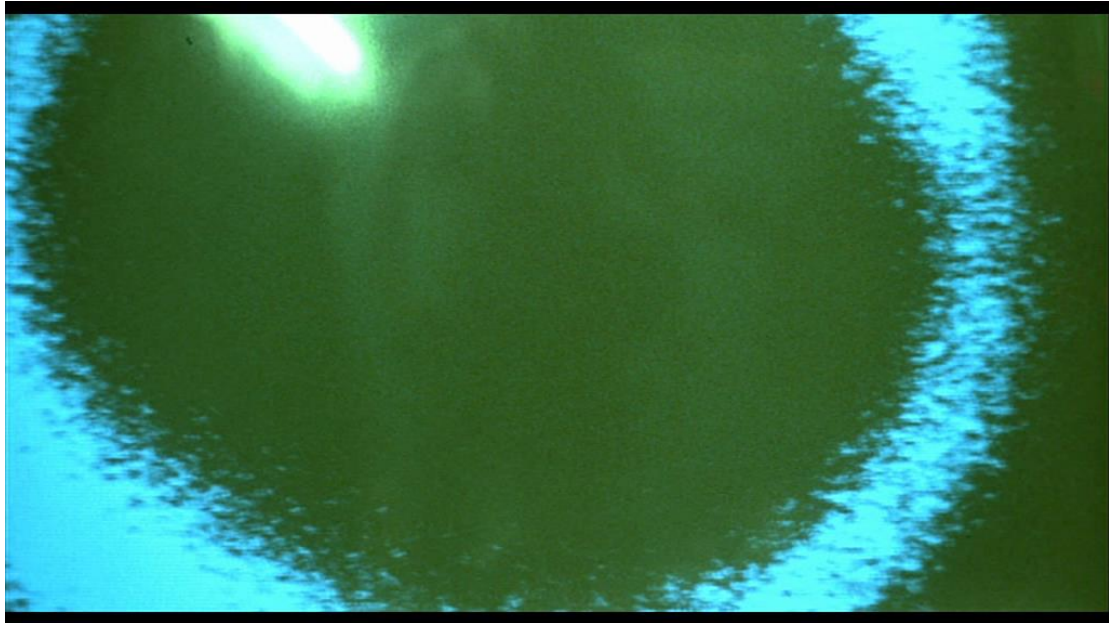


Fig. 3.41, *Predator* (John McTiernan, 1987)

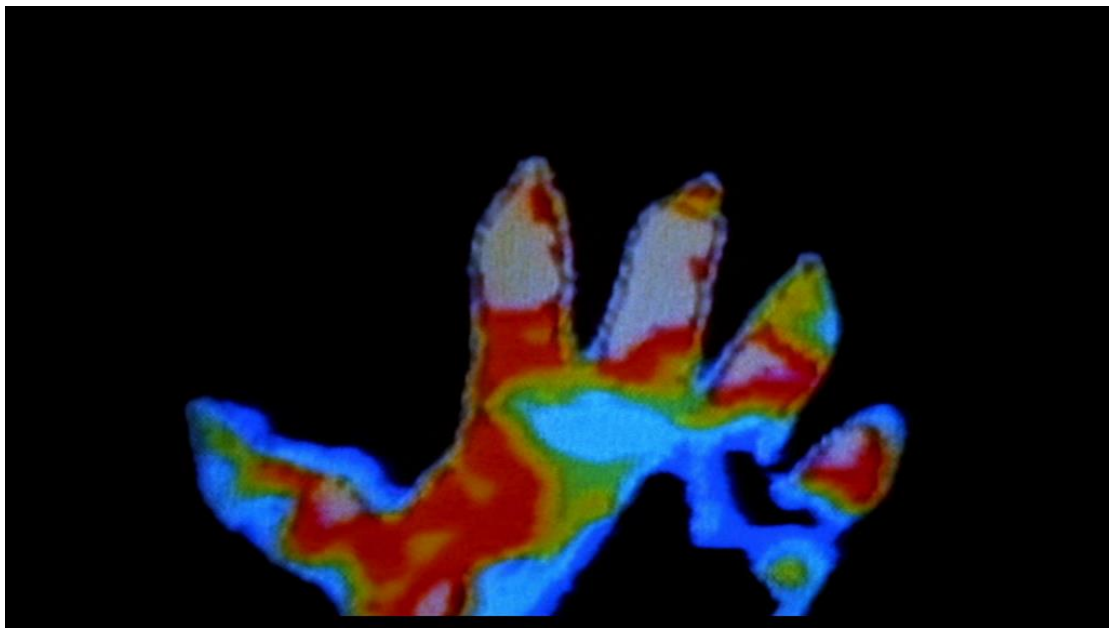


Fig. 3.42, *Predator* (John McTiernan, 1987)

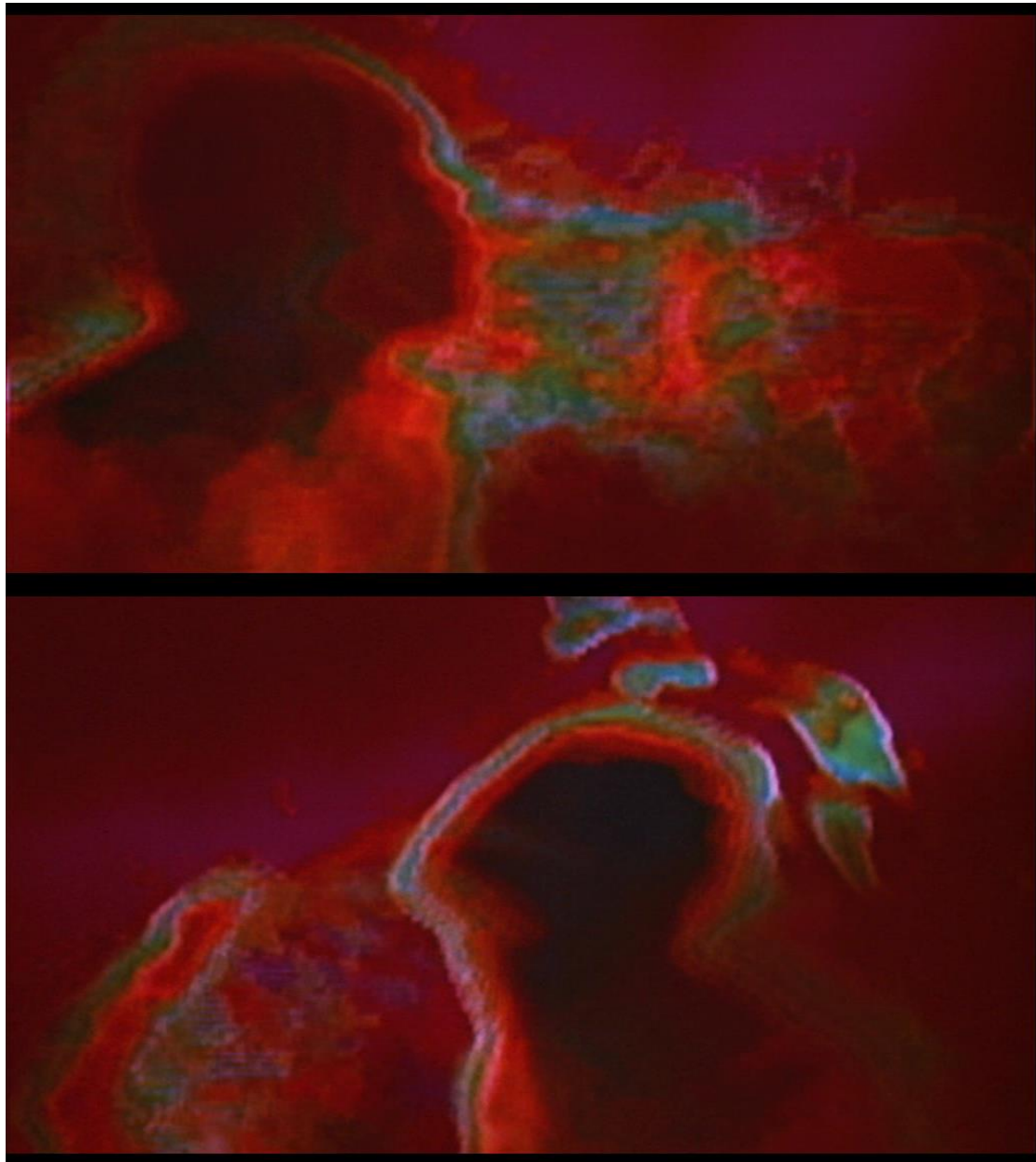


Fig. 3.43, *Predator* (John McTiernan, 1987)

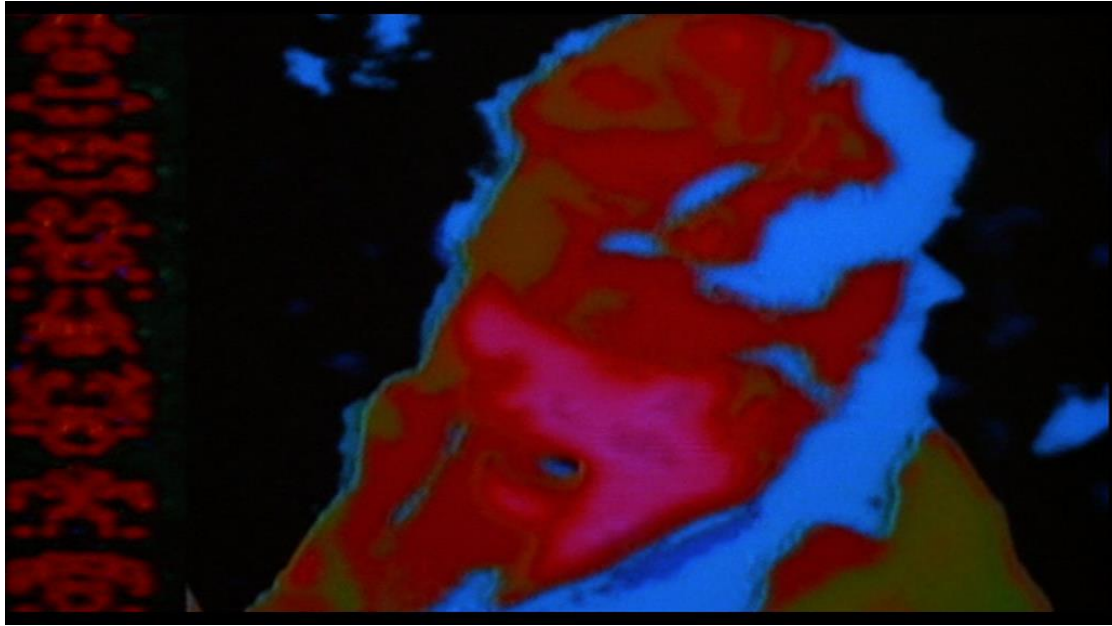


Fig. 3.44, *Predator* (John McTiernan, 1987)



Fig. 3.45, *Predator* (John McTiernan, 1987)



Fig. 3.46, *Predator* (John McTiernan, 1987)

Chapter Four

Mirror, Identity and the Social Sensorium: Thresholds of the Digital
in *Memoirs of an Invisible Man* (1992) and *Hollow Man* (2000)

Introduction: A Nauseating Reflection

In a tastefully decorated apartment sits a visible man, Nick Holloway, gulping a long drink (fig. 4.1). ‘I was starving,’ Holloway’s voiceover declares, ‘felt like I hadn’t eaten in a week... which is easier said than done when you can’t even see your own hands.’ At the word ‘hands’, a close up shows chopsticks being manoeuvred by what must be invisible fingers (fig. 4.2). Holloway – his body and his suit of clothes – is entirely invisible in the diegesis, and it can be understood that the scene’s opening visible image of this body is designed to illustrate the character’s dishevelment, the result of his lost looks. A wider shot shows the chopsticks abandoned in favour of salad tongs, with the visible-invisible man now frenziedly cramming noodles into and around his mouth (fig. 4.3). Holloway’s only partly successful consumption is interrupted by a news report from the nearby television, the broadcaster stating that:

There was an accident today at the Magnascopics Laboratory near Santa Mira. A spokesman for the nuclear regulatory agency says that, although the laboratory was the site of research related to nuclear fusion, there was no radioactive material at the site, and there was no risk of contamination. No injuries have been reported...

With his mouth full of noodles, Holloway says ‘bullshit’ and stands, from which position the mirror catches his eye. As he tentatively approaches the reflection, the camera pans left, providing a greater vantage point for the audience (fig. 4.4). The man has no reflection, yet a strange sight appears in the centre of the mirror. A shifting, gurgling mass, glistening in shades of red and pink, seems to hover in mid-air, representing the undigested contents of Holloway’s invisible stomach. A close up confirms this, the morphing food matter sharply rendered against a grainy and defocused background (fig. 4.5). The repulsed Holloway steps back, turning his head, which moves out of shot, and vomits. The discordant sounds of retching are

synchronised with a close view, again in the mirror, of liquescent stomach contents being ejected, as the scene ends (fig. 4.6).

Memoirs of an Invisible Man (John Carpenter, 1992),¹ based on H.F. Saint's 1987 novel of the same name, depicts the 'memoirs' of the financial securities analyst Nick Halloway (Chevy Chase), a loner with a disposable income and a sexual appetite, whose body – along with the clothes he is wearing – becomes invisible in an industrial accident, shortly after having met the girl of his dreams, Alice Monroe (Daryl Hannah). Corrupt government agent David Jenkins (Sam Neill), working for the CIA-like Security Intelligence Agency (SIA), desires control of this invisible man, who abandons his home to hide out, first at 'one of the last private men's clubs in San Francisco', then at an isolated beach house. Coming to terms with his unexplained condition, Halloway, whose invisible body is periodically (and reassuringly) shown to the cinematic viewer as if visible, proceeds in romantic pursuit of Alice. She aids him in escaping Jenkins, whose eventual death allows them to settle and start a family.

A number of facets of the sequence in which Halloway vomits are worth remarking upon. One is that this invisible body is intermittently shown to the cinematic spectator in visual terms, similar to tactics used in *Siegfried*, through which privileged imagery of the invisible body is made available to the film's audience alone. The visual doubling provided by the mirror encourages a splitting between these two schemes, wherein Halloway's reflection remains objectively unseen, while his invisible body is subjectively visualised, the character's own understanding of his embodied invisibility ushering with it an explanatory image.² Such an image appears periodically to reassure the viewer, normalising the phenomenon of the potentially alienating invisible body. As his problematic eating demonstrates, colliding fingers and mouth in an ungainly fashion, this character struggles throughout to perform the most basic of tasks. Already, the sequence connects strongly with the cycle of invisible body cinema discussed in Chapter Two, as gustatorial and consumptive processes take centre frame, and as the science fiction of the invisible body discussed

¹ Hereafter referred to in the main text as *Memoirs*. Production began on this film on 7 March 1991, and it was released to cinemas on 28 February 1992. The actor Chevy Chase acquired the novel's adaptation rights, along with his partners, engaging William Goldman to write and Ivan Reitman to direct, before a long drawn-out process eventually resulted in Goldman's screenplay being revised by Robert Collector and Dana Olsen, and John Carpenter being hired as director.

² The film's director John Carpenter suggests that: 'In his memory, he sees himself as whole and complete, as does the audience' (John Carpenter, qtd in Julie Lew, 'It's not easy being invisible, says "Memoirs" star Chase', *The Gainesville Sun Extra*, 4 March 1992, p.4).

in Chapter Three recedes in favour of the quotidian. Indeed, the upsetting of Halloway's stomach relates to the employment of the title figure of 1933's *The Invisible Man* who is creating remedies for upset stomachs, a decidedly mundane application of his spectacular skills.

Most of all, the theme of troubling reflection, as the invisible man privately views his own exposed innards, reveals a narrative concerned with self-image and repulsion. Reproducing only the visual register, the mirror that only reflects bodily digestion promotes vision and the visible as nauseating components of sensible experience. This chapter thus identifies the mirror as a crucial mechanism through which the invisible body is mediated, and which offers a meta-narrative that expresses a breakdown or failure of representation. In the face of the invisible body, the empty mirror reflects difficulties in representing the extra-visual senses, the nature of sensory experience and, therefore, sensory identity.

*

The primary objects of this chapter, a group of popular film productions that depict a protagonist's experience of bodily invisibility, share an overwhelming imagery of disturbed or difficult self-reflection. Part one of this chapter describes a history of invisible body cinema through the recurrent motif of the empty mirror, symbol of an unstable, uncertain sense of identity. This motif is explored with reference to its appearance and function across the 1933–1951 cycle of invisible body films that were introduced in Chapter Two. In part two, the empty mirror is interrogated in the context of its significant appearances in two films from the end of the twentieth century. In both *Memoirs* and the similarly themed *Hollow Man* (Paul Verhoeven, 2000), the relationship between the invisible body and the mirror emphasises themes of representational crisis, but also of masculine identity crisis and the challenges of a reconstituted social sensorium. Finally, part three will examine the themes of waste and gross materiality that connect the plots and production of both films, interrogating the use of digital visual effects in the construction of images of both films' invisible protagonists, and coming to focus on the sensory confluence of gross materiality and nausea that emerges from these particular depictions. In questioning the nature of these films' expressions of a multisensory cinema, I ask: To what extent does the invisible body perform as agent of a transgressive regime of sensation?

Mark Paterson, Martin Dodge and Sara MacKian argue that ‘the primacy and living immediacy of sensory experience does not reside solely within the boundaries of the skin, somehow locked within discrete, disconnected bodies’. As they continue:

The *senses* are not equivalent to the tissues and cells of the sense organs themselves, nor reduced to nerves that connect to the brain. The cultural chronology of the formulation of a ‘sensorium’ necessitates that the senses are ineluctably social: felt individually, but also *always* shared intersubjectively. [...] Although physiologically located within an individual body, its operation is continually shifting and culturally variable.³

This chapter pays particular attention to the social nature of sensory formations, whilst also coming to centre upon the peculiarities of the digital production techniques that both *Memoirs* and *Hollow Man* utilise in their construction of the onscreen invisible body. Amidst the contemporary, domestic milieu of both films, the innovative use of computer-generated imagery in both films foregrounds a relationship through which the invisible body is positioned as an agent between anxious frameworks of the virtual and the real, the immaterial and the material, the clean and the dirty, and the pure and the obscene.

As with many of the examples I address in this thesis, the visualisation of the invisible body in both *Memoirs* and *Hollow Man* exemplifies Jennifer M. Barker’s description of the ‘texture’ of ‘the film’s skin’ as constituted of ‘simultaneous expression and perception, [...] revelation and concealment’.⁴ This chapter further probes such textures, in which are interwoven tensions between private and public, interior and exterior, the individual and the social, and sensory modalities both proximal and distal. Developing my analysis of the cinematic annunciation of an embodied, materialised invisibility, this chapter unpacks the relationship between cinematic invisibilities and themes of prohibition and the ‘uncivilised’, bringing the invisible body’s role as agent of transgressive sensuality to the fore. The overwhelming and recurrent emphasis in popular cinema on the invisible *man* is key to this chapter’s focus upon the identities of invisibility, and of the apparent invisibilities of identity, and I explore the extent to which unsettled social identities

³ Mark Paterson, Martin Dodge and Sara MacKian, ‘Introduction: Placing Touch within Social Theory and Empirical Study’, in *Touching Space, Placing Touch*, ed. by Mark Paterson and Martin Dodge (Farnham, Surrey and Burlington, VT: Ashgate, 2012), pp.1–28 (pp.2–3).

⁴ Jennifer M. Barker, *The Tactile Eye: Touch and the Cinematic Experience* (Berkeley and Los Angeles, CA and London: University of California Press, 2009), p.29.

coincide with fragile sensory identities. A motivating question for this chapter thus asks: What of the social sensorium do these films express, and how do the peculiarities of their productions relate to the social and sensorial themes that they address? Phillip Vannini, Dennis Waskul and Simon Gottschalk consider ‘the work of the senses as an active, social, and often public form of action and interaction’, arguing that ‘the senses are the objects and subjects of the *sensual performance of everyday life*, whereby “performance” denotes conduct, public behaviour, and the carrying out of skilled, bodily action’.⁵ It is with respect to such sentiments that Chapter Four is preoccupied with the role of embodied invisibility in the configuration and reconfiguration of social and interpersonal schemes of sensation in late twentieth-century western society.

One: The Medium of the Empty Mirror

Social and sensory uncertainty

In their 2014 book *Ways of Sensing*, David Howes and Constance Classen, in a chapter on ‘The Politics of Perception: Sensory and Social Ordering’, have outlined the ways in which ‘[s]ensory ways, models and metaphors inform our notions of social integration, hierarchy and identity. The senses are directly put to political ends through acts of marking, excluding, punishing or exalting particular individuals and groups.’⁶ They go on to explain how, in ‘the modern West [...] individualism made people less willing to enter into physical contact with their neighbours. Individuals, or at least members of the middle and upper classes, were now more reluctant to have their corporeal boundaries infringed’.⁷ However, the ‘growing sense of bodily boundaries in modernity coincided with a growing attention to national boundaries’, in which ‘a new emphasis on visual representation had a role to play’.⁸ For individuals of the nation state, ‘the increased prevalence of portraits and mirrors made

⁵ Phillip Vannini, Dennis Waskul and Simon Gottschalk, *The Senses in Self, Society, and Culture: A Sociology of the Senses* (Abingdon and New York: Routledge, 2012), pp.44, 42.

⁶ David Howes and Constance Classen, *Ways of Sensing: Understanding the Senses in Society* (Abingdon and New York: Routledge, 2014), p.66.

⁷ Howes and Classen, *Ways of Sensing*, pp.69–70.

⁸ Howes and Classen, *Ways of Sensing*, p.71.

people more aware of themselves as discrete, visually-bounded entities'.⁹ The mirror, then, becomes a key conduit for the formation of individual identity as part of the state and society, promoting visibility while negating other sensorial schemes such as touch through the formation of 'corporeal boundaries'.

However, when faced with the invisible body, the mirror, now empty, presents a challenge to the formation of 'bodily boundaries in modernity'. Sabine Melchior-Bonnet, in her cultural history of the mirror in art, literature and philosophy, understands the empty mirror as a primarily twentieth-century manifestation, complicating enlightenment encounters with the mirror in which a 'supreme concern with appearance [...] signaled a mastery over the self'.¹⁰ For Melchior-Bonnet, the empty mirror exemplifies a condition wherein the self-studying individual

may also leave the reassuring boundaries of known models and discover a strange and troubling representation of himself in which he perceives traces of the radical other, and where his awareness of himself becomes troubled and alienated.¹¹

In imagery in which the reflection 'disintegrates or disappears', Melchior-Bonnet writes that 'the fragile bridge linking the inner and exterior worlds is thus broken'.¹² It is in this context that the mirror within invisible body cinema, as both purveyor and problematiser of socialised identity, plays such a crucial role.

If, as described in Chapter Two, the chaotic public exposure of the invisible body is a defining feature of the 1933–1951 cycle of invisible body cinema, it is notable that, in the films concerned, the exposure of invisible flesh is often repeated in a more precise manner when in private. When, in *The Invisible Man* (James Whale, 1933), the secluded Griffin slowly undresses in front of the mirror, revealing no bodily reflection, the silence punctuated only by the distant sounds of a chiming clock and the bark of a dog, the scene speaks of a complex sense of subjectivity (fig. 4.7). The sequence has no direct parallel in the source novel, though the mirror is similarly important to Wells's conception of the invisible body. Where the 1933 film adaptation reserves visual disclosure of its protagonist's body until the climactic post-mortem

⁹ Howes and Classen, *Ways of Sensing*, p.71.

¹⁰ Sabine Melchior-Bonnet, *The Mirror: A History*, trans. by Katharine H. Jewett (New York and London: Routledge, 2001), p.2.

¹¹ Melchior-Bonnet, *The Mirror*, p.6.

¹² Melchior-Bonnet, *The Mirror*, p.247.

reappearance, Wells's text foreshadows that final trauma as Griffin describes the physical torment of his body becoming invisible:

I had not expected the suffering. A night of racking anguish, sickness and fainting. I set my teeth, though my skin was presently afire, all my body afire; but I lay there like grim death. [...] There were times when I sobbed and groaned and talked. But I stuck to it. I became insensible and woke languid in the darkness. [...] I thought I was killing myself and I did not care. (*IM* 100)

The ensuing disappearance is a difficult transformation, described in terms of material instability, the body's visuality assuming various attributes as it gradually vanishes. Observing the change in 'the looking-glass' – disappearing before his own eyes – Griffin sees himself as 'white stone', then soon appearing 'as clouded glass' before 'my limbs became glassy' (*IM* 100). At the last, as he 'stared at nothing in my shaving-glass', he sees that 'an attenuated pigment still remained behind the retina of my eyes, fainter than mist. I had to hang on to the table and press my forehead to the glass' (*IM* 100). He then disappears entirely. These seemingly substantial changes, passing from stone to glass to mist, suggest a transformation that is more than merely visual in its nature: the physical properties of the invisible body appear to become alchemically unstable in their constitution, even seeming to merge with the mirror as Griffin loses his balance. Rather than being an actual physical metamorphosis into stone, glass or mist, however, it is Griffin's self-perception of the nature of his embodiment that is transformed, and, with it, his perception of his own identity. As such, the disruption of visual identity in the mirror marks the beginning of the invisible man's movement towards a destabilised social and sensory identity: the private loss of his visual reflection instituting a social suicide – 'I thought I was killing myself and I did not care' – with very public consequences.

Echoing both Wells's vivid description of Griffin's initial disappearance, as mediated through his reflection, and the spectacular mirrored exposure of invisibility in the film adaptation, subsequent films in the Universal cycle reproduce such moments, demonstrating the invisible body's lack of reflection as a key signifier for the unsettling of identity. *The Invisible Man Returns* (Joe May, 1940) avoids the complexity of its predecessor's quadruple-exposure matte effects, instead producing an implied POV shot of its protagonist reflected in the mirror, creating a subtly dislocated sense of identification (fig. 4.8). As he subsequently disrobes and disappears, this scene is witnessed, via the mirror, by his horrified fiancée, who faints,

so too marking the invisible man's undressing as a lewd transgression of societal decency (fig. 4.9). In *Invisible Agent* (Edwin L. Marin, 1942), the invisible man sits in front of a mirror in order to observe his own reappearance as he smothers his skin in 'cold cream'. The mirror, here, is used as part of a direct POV shot, where the camera, in its guise as 'invisible observer', performs both as mirror and as viewpoint of the self-observing invisible man (fig. 4.10). Similarly, the first action of the newly invisible man of *The Invisible Man's Revenge* (Ford Beebe, 1944), after he wakes to find that 'my hand... it's gone...', is to look in vain for his reflection, feeling for his invisible face with invisible fingers (fig. 4.11). Later, after murderously, and vampirically, reacquiring his visibility through blood transfusion – and with it a newly 'respectable' social identity – he begins to disappear in public and rushes to find a mirror in which to witness his relapse (fig. 4.12). In this way, the loss of visual identity, again, becomes a metaphor for a sense of social uncertainty.

In each of these described cases the mirror, an ostensible site of visual reproduction, becomes – when confronted with the invisible body – a defining site of disappearance: bodily invisibility marked as that which must be (un)seen with one's own eyes. Faced with the empty mirror, the invisible individual commits to a kind of soul searching, connecting with the figure of the vampire, whose own lack of reflection denotes the lack of a soul. The repetition of such moments continually draws the invisible body away from contexts of magic and experiment, of fantasy and science fiction, emphasising instead domestic settings and everyday practices. In contemporary cinematic contexts that are unconcerned with the invisible body, the imagery of the empty mirror or otherwise inscrutable reflection is likewise potent. In both versions of *Der Student von Prag* [*The Student of Prague*] (Hanns Heinz Ewers and Stellan Rye, 1913; Henrik Galeen, 1926), the poor student and swordsman Balduin's losing control of his reflection impedes his movement in love and society and results in his having to kill his reflection and so himself (figs 4.13 and 4.14).¹³ Similarly, in *Spellbound* (Alfred Hitchcock, 1945), amnesiac John Ballantyne (Gregory Peck), who refers to himself as 'John Brown' after posing as his own murdered psychoanalyst Dr Anthony Edwardes, describes his condition to be 'like looking in a mirror and seeing nothing but the mirror. [...] I don't know who I am'.

¹³ Such matters of problematic reproduction and representation are also contemporaneously addressed in paintings such as René Magritte's *La Reproduction interdite* (*Not to be Reproduced*, 1937, Museum Boijmans Van Beuningen, Rotterdam).

The empty mirror thus expresses problematic self-interrogation: the isolated visual sense marked as an insufficient means of ‘knowing oneself’. In this way, such sequences suggest a revised modern economy both of introspection and of sensation.

Doubling the invisible body

The central role of the empty mirror in the imagery of the invisible body expresses challenges to visual representation, and through this metaphorical trope reflects an instability in individual identity. The seemingly malfunctioning mirror promotes doublings and splits. Such can be understood in the Universal cycle of films through the difficulties in recognising the precise relationship between one invisible man and another. If the conclusion of *The Invisible Man* depicts a character who is subject to visual return only in death, the sequelisation of that film – and the appearance of numerous derivatives – seems to complicate the notion of ‘return’, as the cycle of sequels accommodates both the multiplication and fragmentation of the character of ‘Griffin’, named as ‘Jack Griffin’ in that first film. Despite its title, *The Invisible Man Returns* does not depict the same invisible man. There is a Griffin, Dr Frank Griffin (John Sutton), described as the brother of the Griffin previously known, and who derives his invisibility procedure from his brother’s research, though this Griffin is not the man who becomes invisible.¹⁴ Rather, he performs the procedure on Geoffrey Radcliffe (Vincent Price), wrongly imprisoned for the murder of his own brother, and for whom invisibility facilitates both liberty and the reckoning of those responsible for that crime and his framing. Much of the story echoes that of the first film, with the disguised invisible man struggling with insanity and being badly wounded by the police. A key difference is thus the original character’s division into two constituent parts: on the one hand, that of the producer of invisibility, Dr Frank Griffin; on the other hand, the body made invisible, that of Geoffrey Radcliffe. Thus begins a series of multiplications and divisions of the figure of Griffin across the series of sequels.

The title character in the propaganda-heavy *Invisible Agent*, who is both inheritor and subject of the invisibility formula, is also named Frank Griffin, though is first identified using the name Frank Raymond. The script makes Frank’s precise

¹⁴ The Jack Griffin of Whale’s film is here referred to by the more formal name, John Griffin, as evidenced in a police file which includes a photographic portrait of Claude Rains, along with Griffin’s set of fingerprints.

relationship with the Griffins of the previous two films deliberately ambiguous, as an exchange in the first scene shows:

Conrad Stauffer: ... your father's formula, or was it your uncle who discovered it?

Baron Ikito: No, no, no. It was his grandfather, Frank Griffin.

Conrad Stauffer: Yes, yes, of course. Frank Griffin Senior. Shot by the police.

In *The Invisible Man's Revenge*, the main character Robert Griffin, who has no apparent relationship with any of the preceding Griffins, is turned invisible by a Dr Drury (who speaks partly using expository dialogue lifted directly from Griffin in Wells's novel). Robert Griffin is by turns known firstly as an identity-less amnesiac, then as Robert Griffin, Rob Griffin, Bob Griffin, and, finally, Mr Field, the name he adopts once returned to visibility. In addition to the film's similarity in title to that of the first sequel, particularly confusing is the fact that the apparently unrelated Frank Griffin in *Invisible Agent* and Robert Griffin in *The Invisible Man's Revenge* are both played by the actor Jon Hall, sporting a marginally distinguishing moustache in the later film. The uncertain heritage of this confusion of identities of 'the invisible man' testifies to the pervasive theme of problematic reproduction that the invisible body endures, with no proper evidence that any of the men have been directly reproduced by their antecedents.

The situation is exacerbated in the shifting relationships between 'Griffin' and 'the invisible man' as either producer or recipient of invisibility, who in some cases are the same person, while in others the roles are split or reversed. This baffling lineage is further intensified in the repeated use – in these films, and in popular culture since – of the term '*the* invisible man', a singular term that uses the definite article to describe a plural category of multiple figures. The invisible man thus emerges from the cycle as a peculiar figure, whose multiple identities, in the absence of stable authenticating images, merge together, Griffins and non-Griffins alike, producers and embodiments of invisibility all. The fraught nature of 'reproduction' that is implied throughout the series, in terms of both the visual reproduction of the invisible body's image and the biological reproduction of the invisible body itself,

contributes further to the insecurity of identity, authenticity and sensoriality at the heart of the series.¹⁵

Empty mirrors

In his influential 1949 paper, the psychoanalyst Jacques Lacan understands a relationship with the mirror as concerned with the institution of a stable social identity, describing ‘the mirror stage *as an identification*’, in the psychoanalytical sense of ‘the transformation that takes place in the subject when he assumes an image’.¹⁶ Lacan suggests that ‘the mirror-image would seem to be the threshold of the visible world’, describing the mirror stage as ‘a drama [...] which manufactures for the subject [...] the assumption of the armour of an alienating identity, which will mark with its rigid structure the subject’s entire mental development’.¹⁷ If the mirror promises the fuller visibility of one’s own body, and so a fuller understanding of one’s own social self, in these cinematic depictions I have described the medium of the empty mirror collapses together body and self in invisibility, conjoining a problematic sense of social selfhood and identification with a problematic mode of representation.

Writing on the empty mirror, Melchior-Bonnet suggests that ‘[s]ight, without desire, leaves the mirror empty’:

The divided self looks at itself, but it does not see itself, or no longer recognizes itself. It deserts its body and dismisses its reflection in order to escape a persecuting double. [...] Aggressive mirrors, empty mirrors, blurred mirrors: these specular disorders always reveal a serious identity crisis. The mirror abandons all symbolic operation and the subject no longer tries to represent himself. The dynamic of the reflection is reversed and, instead of anticipating unity, the reflection returns to an archaic state of psychic disorganization, like an anamorphosis whose perspective would be inaccessible.¹⁸

¹⁵ To add to the confusion, Vincent Price returns to provide the voice of the invisible man when he appears in the final moments of *Abbott and Costello Meet Frankenstein* (Charles T. Barton, 1948). Further issues are present in *Abbott and Costello Meet the Invisible Man* (Charles Lamont, 1951), in which the invisible man of the title is entirely unrelated to any of the other invisible men of the other films, though the scientist who uses the invisibility formula refers to ‘its discoverer John Griffin’, who ‘willed me this formula’. As he speaks these words, we see a portrait photograph of Claude Rains hanging in his laboratory.

¹⁶ Jacques Lacan, ‘The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience’, trans. by Alan Sheridan, in *Contemporary Critical Theory*, ed. by Dan Latimer (New York: Harcourt Brace Janovich, 1989), pp.502–509 (p.503).

¹⁷ Lacan, ‘The Mirror Stage’, pp.504, 505–506.

¹⁸ Melchior-Bonnet, *The Mirror*, pp.257, 258.

Melchior-Bonnet connects such imagery with ‘the horror of self-consciousness’ and with fantasies of ‘losses of origin, vacillating identities, phantasms of being engulfed, labyrinthine spaces, and fears of powerlessness and dismemberment’, noting that ‘crossing through the mirror also leads to the incommunicable – to confusion and void. The world loses its intelligibility and, in this chaos, the self perceives its own fragmentation.’ In such a climate, ‘[i]ndifference and decomposition replace the humanist aim of “Know thyself.”’ The empty mirror is, thus, ‘the mirror stage turned inside out’.¹⁹

At the intersection of relations between the empty mirror, insanity and the invisible body is Guy de Maupassant’s 1887 story *Le Horla*, whose protagonist reflects upon the ‘mystery of the Invisible’ through an audit of the sensorium:

We cannot fathom it with our miserable senses: our eyes are unable to perceive what is either too small or too great, too near or too far from us; we can see neither the inhabitants of a star nor of a drop of water; our ears deceive us, for they transmit to us the vibrations of the air in sonorous notes. Our senses are fairies who work the miracle of changing that movement into noise, and by that metamorphosis give birth to music, which makes the mute agitation of nature a harmony. So with our sense of smell, which is weaker than that of a dog, and so with our sense of taste, which can scarcely distinguish the age of a wine!

Oh! if we only had other organs which could work other miracles in our favor, what a number of fresh things we might discover around us!²⁰

This conception of alternative sensory organs begins the character’s obsessive anticipation of the evolution of an advanced being, with ‘a new body which is penetrated and pervaded by the light’, bemoaning that ‘my eyes are so weak, so imperfect, that they do not even distinguish hard bodies, if they are as transparent as glass!’²¹ Isolating himself to stimulate an encounter with such a being, and setting a

¹⁹ Melchior-Bonnet, *The Mirror*, p.269. Melchior-Bonnet writes: ‘The mirror refuses to suggest that there is any correlation between the visible and the invisible and denies itself all symbolic function. Neuropsychiatrists know that the deterioration of the mirror image is one of the most flagrant signs of insanity and that indifference to it is the ultimate symptom: the mirror stage turned inside out’ (p.269). She argues: ‘First the empty mirror, and then the broken one, becomes a sign of the inadequacy of man and the world. Only their fragments can take into account a broken and fallen self.’ (p.251.)

²⁰ Guy de Maupassant, ‘The Horla’, in *A Spectrum Unseen: Invisible Men, Women, and Creatures in Classic Science Fiction and Fantasy*, ed. by Chad Arment (Landisville, PA: Coachwhip, 2009), pp.53–78 (p.54).

²¹ De Maupassant, ‘The Horla’, pp.74, 73.

brightly lit mirror in order to double the visual field, he senses the presence of this invisible body ‘almost touching my ear’, and views a terrifying sight:

Horror! It was as bright as at midday, but I did not see myself in the glass! It was empty, clear, profound, full of light! But my figure was not reflected in it – and I, I was opposite to it! I saw the large, clear glass from top to bottom, and I looked at it with unsteady eyes [...]; feeling certain, nevertheless, that He was there, but that He would escape me again, He whose imperceptible body had absorbed my reflection.²²

This momentary manifestation of an ‘imperceptible body’ suggests the madness of the empty mirror to be part of a multisensory malaise, anticipating the onscreen invisible body’s power as an agent of both social and sensory reconfiguration. It is such a theme that I shall interrogate in Part Two, as I move to focus upon examples from the end of the twentieth century.

Two: Mirrors, Touch and Masculine Identity

Unstable masculinities

The problem of identity and the invisible body is further complicated in *The Invisible Woman* (A. Edward Sutherland, 1940), which spoofs the tropes established in the preceding films, playing for laughs the expectation of the invisible body to be gendered male.²³ Those films’ core identity tropes are reproduced here to comic effect: the drug’s side-effects concern not madness but drunkenness, with the consumption of alcohol prolonging disappearance. The characters and scenario deviate significantly from the template, and the film features no ‘Griffin’ figure, though themes of self-analysis and shifting identity are just as potent. The film’s opening shot combines imagery of shadow and reflection to show its protagonist – out-of-work fashion model Kitty Carroll (Virginia Bruce), who describes herself initially as ‘nothing but a nothing’ – in silhouette at a dressing table with mirror; her silhouette fades away as the film’s granular title coalesces into legibility (fig. 4.15). Made invisible by an absent-minded professor, the character’s first act after

²² De Maupassant, ‘The Horla’, p.75.

²³ As the invisibility producing scientist says when Kitty Carroll arrives to undergo the procedure, after answering his advertisement: ‘I expected a man, but you’ll do’.

disappearing is to look into a mirror, which is shortly thereafter shattered (fig. 4.16). That Carroll's reflection later mediates a joyful reappearance – as she singlehandedly disrupts a criminal scheme whilst finding love with a former playboy – inverts the fraught nature of most invisible men's confrontations with the mirror (fig. 4.17). On the other hand, the notional nudity of the invisible woman, whose undressed body is partially visualised in sequences where she puts on underwear, enables the bypassing of the censoring Hays Code's instructions on nudity. Consequently, the partial visibility of the invisible woman's body provides a transgression of societal decency, her sexualised body becoming the crucial marker of her feminine identity.

Despite – or because of – its female protagonist, *The Invisible Woman* demonstrates a preoccupation with relations between invisibility and qualities of maleness. This scheme is most evident in the film's treatment of a group of aggressive hyper-masculine gangsters, whose experience of a failed invisibility procedure affects only their vocal chords, raising their vocal pitch and so upsetting the preceding films' sonic potency of the invisible male body. The botched encounter with invisibility is described by the men in emasculatory terms, as they assert that their 'pipes are gone'. Such themes of fragile and mutable physical, psychological, social, sexual and sensual identity – and the cultural construction of such identities – are ripe in these invisible body films.

Alongside many self-consciously repeated characteristics of the earlier invisible man cycle, themes of gender identity and uncertain masculinity find further expression in *Memoirs*, and it is the mirror – and its relationship with screen media – that is central to Nick Halloway's invisibility-as-identity-crisis. Into the context of Halloway's 'private men's club'²⁴ – which he describes as the 'sort of place railroad tycoons and robber barons would hang out at night, eat roast beef, hire the occasional whore, discuss how much they stole that day', and so casually identifying himself with an outmoded, and immoral, patriarchal power – enters Alice Monroe. She appears through a rapid string of successively magnified POV shots that signpost

²⁴ *Memoirs* is mostly shot on location in San Francisco's Financial District, principally constituting a collection of skyscrapers built between the 1960s and the 1980s, during the city's financial boom, including the prominent Transamerica Pyramid (1972). The transposition of the novel's action to San Francisco exacerbates matters of unstable masculinity in the text, as the city is a significant site of the emergent LGBT community, and was described in *Life* magazine in 1964 as the 'gay capital' of the US (Paul Welch, 'The "Gay" World Takes to the City Streets', *Life*, 26 June 1964, pp.68–74 (p.68)). There is useful material on this in William Lipsky, *Gay and Lesbian San Francisco* (Chicago and San Francisco: Arcadia, 2006).

Halloway's potent, desirous gaze, from which Alice averts her own (fig. 4.18). Her role as idealised fantasy figure is marked by her name – amalgamating Alice in Wonderland and Marilyn Monroe – and by her statuesque posture, long blonde hair, and virginal white wardrobe.²⁵ Halloway's obvious attraction to Alice as she talks – he leers at the word 'primitive', widens his eyes as she describes the 'virgin' Amazon rainforest, smiles when she suggests a basketball team will go 'all the way' (a sexual metaphor homophonous with Halloway's surname) – cuts to an intimate clinch between the two in what at first appears to be a private bedroom, though which is actually the ladies' toilet. Describing their embrace as 'foreplay', Halloway intends to engage in sexual intercourse, semi-jokingly invoking the language of prostitution ('what do I owe you?', to which she replies 'you couldn't afford it'). But Alice is no 'occasional whore', and would rather 'not do anything cheap and meaningless'. In this way, Alice therefore undercuts the usual predatory sexual motives of Halloway, forcing him to reassess his bachelor identity.

Halloway's entry into the arena of invisibility – described by him at one point to be 'Alice's fault' – is a visual manifestation, then, of anxieties that can only be resolved, it is suggested, through entry into a family unit. When Halloway jokes about starting 'a foster home for poor kids... girls mostly... late teens, early thirties. I need a family', the role of predatory playboy slips to reveal underlying insecurities. Here, exterior invisibility exaggerates unsettled psychological interiority, revealing Halloway's status as a 'financial securities analyst' – part of the testosterone-driven, male-dominated financial sector – as symbolic of his predicament. This search for familial, sensual and sexual security drives the narrative, in which Halloway proceeds to analyse and secure his own identity, transforming from ladies man to family man.

The morning after meeting Alice, Halloway reluctantly (and improbably, given his occupation) attends a lecture – at the Magnascopics scientific facility, located in the fictional 'Santa Mira'²⁶ – on 'magnetism', the topic ostensibly

²⁵ The actor Daryl Hannah was by this point associated with a range of popular fantasy figures of femininity, having played: the android Pris in *Blade Runner* (Ridley Scott, 1982), described as a 'basic pleasure model' and at one point indistinguishable from a fashion mannequin; the mermaid Madison in *Splash* (Ron Howard, 1984); the Cro-Magnon orphan Ayla in *The Clan of the Cave Bear* (Michael Chapman, 1986); and the title character in *Roxanne* (Fred Schepisi, 1987), a variation on *Cyrano de Bergerac*.

²⁶ The laboratory's name 'Magnascopics' is evolved from the 'MicroMagnetics' of Saint's novel, with optical connotations emphasised. Its location in 'Santa Mira' (a name used elsewhere in Carpenter's films) refers to Jack Finney's fictional setting of his 1955 novel *The Body Snatchers*, and its subsequent

describing the scientific phenomenon, but clearly symbolising Halloway's crisis of 'animal magnetism': his unstable sexual identity. After falling asleep in the darkened theatre space, Halloway wakes and goes searching for a toilet, wandering mystified through labyrinthine corridors before asking for directions to 'a men's room'. As the man giving the directions points, he spills coffee over a computer console, which malfunctions. Halloway departs, oblivious to having inadvertently caused the accident that will render him invisible: a chain reaction that will transform the Magnascopics building into a site of visual and 'molecular' instability.²⁷ In lieu of a toilet, the 'men's room' that Halloway finds is a room lined with mirrors (fig. 4.19). He closes its mirrored door – facing off against his own image for the final time – removes his sunglasses and lies back in a sauna, a sequence intercut with sirens and flashing monitors stating 'EMERGENCY', 'WARNING' and 'CRITICAL FAILURE', terms that signify Halloway's masculine identity crisis. Back in the auditorium, the screen fails and the audience – predominantly, like Halloway, white men in suits with overcoats and briefcases – panic, running in terror from the building, though the sleeping Halloway remains insensible to the sirens that resound around the evacuated facility. With one occupant, the priapic building fizzles as a pulsing phenomenon ripples across its surface to thunderous aural accompaniment, surface rifts issuing intense light that resembles the auto-ignition of the film base itself (fig. 4.20). Halloway's unconscious body, splayed out to fill the widescreen format, is intensely illuminated, then enveloped entirely by a white field that fills the screen for a full five seconds (fig. 4.21).

The initial disappearance of Halloway sets the tone for *Memoirs*' metaphor of catastrophic male invisibility. The sauna site, I would argue, evokes the 'sweat lodge' so celebrated as a site of reconstructed and renewed masculinity by the mythopoetic men's movement of the 1980s–1990s, led, to some degree, by the poet Robert Bly. Bly's influential 1990 book *Iron John: A Book About Men* (revised in 2001 as *Iron John: Men and Masculinity*) bemoans the proliferation of the 'soft male' in the wake of second-wave feminism, and seeks to reassert a certain patriarchal community and

film adaptation, *Invasion of the Body Snatchers* (Don Siegel, 1956), with the Spanish *mira* also connoting 'sight'.

²⁷ This is described as 'a completely random, freakish reaction', occurring at a facility whose 'research had nothing to do with invisibility', thus framing the phenomenon not as a discernable technological effect, but rather as endemic to Halloway himself: an internal impulse specific to his individual, insecure state of mind, and to his sexuality.

confidence amongst its readership.²⁸ Bly also identifies the mirror as a potent object, interpreting a passage from the brothers Grimm story ‘Iron John’ in which an adolescent boy is preoccupied with ‘gazing at the reflection of his face in the water’.²⁹

As Bly writes:

when we do look into our own eyes, whether we do that staring into a mirror, or into a pond surface – we have the inescapable impression, so powerful and astonishing, that someone is looking back at us [...] questioning, serious, alert, and without intent to comfort; and we feel more depth in the eyes looking at us than we ordinarily sense in our own eyes as we stare out at the world.³⁰

Bly understands the mirror to testify to ‘the existence of the interior soul’, and contends that ‘the person who gazes in the mirror receives an awareness of his other half, his shadow, or hidden man; awareness of that hidden man is a proper aim for all initiation’.³¹

The centring of Hallway’s invisibility around the mirror connects with Bly’s conception of the reflection as a key ingredient in the psychology of masculine ritual. Such ideas are described by Lynne Segal as amongst ‘a diversity of “masculinities” jostl[ing] to present themselves as the acceptable face of the new male order’ in the 1990s.³² Segal shows how ‘some men have found [...] the possibility of adapting to the changes in women’s lives [...] by adjustments [to their own lives] which allow for a new loosening up of masculinities while leaving older privileges and power relations intact’.³³ Such notions are reflected in Hallway’s first meeting with the overbearing Jenkins – codenamed ‘Scorpion’ – where the former rejects the offer of ‘a complete physical workup’ by declaring that ‘I’d just as soon not have my balls floating in a petri dish’: a morbid articulation of laboratory castration that illustrates Bly’s characterisation of the period’s apparent crisis of masculinity.

²⁸ Robert Bly, *Iron John: Men and Masculinity* (London: Ebury Press, 2001), p.2.

²⁹ Jacob and Wilhelm Grimm, ‘The Story of Iron John’, trans. by Robert Bly, in Bly, *Iron John*, pp.255–266 (p.258).

³⁰ Bly, *Iron John*, pp.50–51.

³¹ Bly, *Iron John*, pp.31, 52.

³² Lynne Segal, *Slow Motion: Changing Masculinities, Changing Men*, rev. edn (London: Virago, 1997), p.293.

³³ Segal, *Slow Motion*, p.294.

Tactility, empathy and ‘the other’

In tandem with *Memoirs*’ themes of unstable social identity are a range of unstable sensory matters, most particularly in the immediate wake of the body’s first disappearance. After awakening, the disoriented Halloway panics as his handling of a cup reveals his hand to be invisible, directing his horrified attention towards his lack of mirrored reflection (fig. 4.22). The hand’s role as the first representative of the invisible body here foregrounds such a body’s propensity for a particular style of tactile intercourse. To be reassured of the physical persistence of his organ of touch, Halloway feels one invisible hand with another, an invisible touch rendered visible only to the film’s audience (fig. 4.23). With this action – ascertaining if he is still there, and still himself – Halloway encounters himself simultaneously as both subject and object. This scene thus illustrates Merleau-Ponty’s metaphor in *The Visible and the Invisible* for the relationship between vision and the visible world as that of one hand touching the other, through which can be found a powerful sense of the ‘encroachment, infringement [...] between the tangible and the visible’.³⁴ Such intermingling between vision and touch in ‘the *touching itself, seeing itself* of the body’ is developed by Merleau-Ponty in relation to the mirror, as he declares that ‘the mirror is an extension of my relation with my body’.³⁵

This notion connects with aspects of Merleau-Ponty’s 1961 essay ‘Eye and Mind’, in which he suggests that:

More completely than lights, shadows, and reflections, the mirror image anticipates, within things, the labor of vision. Like all other technical objects [...] the mirror has sprung up along the open circuit *between* the seeing and the visible body. Every technique is a ‘technique of the body,’ illustrating and amplifying the metaphysical structure of our flesh. The mirror emerges because I am a visible see-er, because there is a reflexivity of the sensible; the mirror translates and reproduces that reflexivity. [...] The mirror’s phantom draws my flesh into the outer world, and at the same time the invisible of my body can invest its psychic energy in the other bodies I see.³⁶

Although, in *Memoirs*, the work of the mirror, now disturbingly empty, expresses Halloway’s *inability* to invest himself in social relations with those around him, the

³⁴ Maurice Merleau-Ponty, *The Visible and the Invisible*, trans. by Alphonso Lingis (Evanston: Northwestern University Press, 1968), p.134.

³⁵ Merleau-Ponty, *The Visible and the Invisible*, pp.249, 255.

³⁶ Maurice Merleau-Ponty, ‘Eye and Mind’, *The Merleau-Ponty Aesthetics Reader: Philosophy and Painting*, ed. by Galen A. Johnson (Evanston: Northwestern University Press, 1993), pp.121–149 (pp.129–130).

film shows that it is in spite of his invisibility, or perhaps because of it, that he thrives in his relationship with Alice, who protects him when he is at his most vulnerable and through whom he develops a nuanced and socialised relationship with his own extra-visual senses.

The comingling and destabilising of socialised and sensory identities is expressed in *Memoirs* in a number of scenes. In order that the two can go out to dinner together in public, Alice applies cosmetic makeup to Halloway's invisible face, stroking its contours into visibility to starkly communicate its tangible three-dimensionality, delicately fleshing out – and feminising – Halloway's features (fig. 4.24). Fully made up and intensely visible – with whitened teeth, synthetic wig, and fashionable new clothes – Halloway is sanitised, resembling the generic catalogue model looks of the Ken doll to Alice's Barbie (fig. 4.25). This is just one of Halloway's numerous attempts to evolve – or 'loosen up' – his masculine persona through the reinvention of his visible appearance, with other outfits including both the bandages and dressing gown of 1933's *The Invisible Man* and those of socially marginalised figures such as a vagrant and an African taxi driver. The idealised costume that Alice produces for Halloway, however, cannot contain the tumult of his identity crisis: a grotesque bestial snarl manifests as he wipes his mouth with a napkin, his observation of polite social customs inadvertently revealing the markings of an obscene appetite that is too much for the distressed Alice, who demonstrates throughout a purity incompatible with this kind of pollution (fig. 4.26).

The matter of disgust is addressed directly when a shower of rain interrupts the likely separation of the couple, rendering Halloway partially visible. Alice describes the indefinite sight of Halloway's body to be 'beautiful', the downpour a soft revealing that opposes themes of disgust with a cleansing purification of Halloway's body and mind: a romantic moment that exploits the association of water and femininity whilst undermining the protective raincoats worn by so many men in this film (fig. 4.27). As the panicking Halloway tries to brush the rain away, a reassuring Alice instigates a passionate kiss. Her touching of his wet face cuts to a post-coital image of the two in a motel room, shown with Halloway's invisible body just as visible to the audience as the body of Alice, a sense of visual and tactile equality emphasised as they stroke each other's skin, fingers entwined (fig. 4.28).

What emerges, then, from this particular depiction of an invisible body is a sensibility through which the invisibilities of touch allow for an individual's

recognition of and by an other. Such a mode of tactility connects with the philosopher Emmanuel Levinas's concept of 'the caress', explained to be an erotic mode of contact that 'transcends the sensible',³⁷ but that is also 'a mode of the subject's being, where the subject who is in contact with another goes beyond this contact'.³⁸ The notion of the caress allows Levinas to 'contest the idea that the relationship with the other is fusion', and addresses a number of questions:

How, in the alterity of a you, can I remain I, without being absorbed or losing myself in that you? How can the ego that I am remain myself in a you, without being nonetheless the ego that I am in my present – that is to say, an ego that inevitably returns to itself? How can the ego become other to itself?³⁹

Mark Paterson argues that, for Levinas, the caress is 'more about an orientation to an "other" subject in general than the straightforward sensation of touch', and that 'the caress allows a more ethical sensibility, letting the other be'.⁴⁰ In this way, the caress serves as a means of recognising the 'other' as not just an object, there to be used or absorbed into the subject's identity. Instead, the other's difference remains, the caress providing a sensual orientation towards the other in which equality is foregrounded: an ethics of sensuality.

As previous chapters have argued, the sensory confluence that can be observed in cinematic depictions of the invisible body is redolent of cross-modal schemes of synaesthesia. It is something of a sympathetic synaesthesia that the moral philosopher Adam Smith describes in his 1759 chapter 'Of Sympathy':

When we see a stroke aimed and just ready to fall upon the leg or arm of another person, we naturally shrink and draw back our own leg or our own arm; and when it does fall, we feel it in some measure, and are hurt by it as well as the sufferer. The mob, when they are gazing at the dancer on the slack rope, naturally writhe and twist and balance their own bodies, as they see him do, and as they feel that they themselves must do if in his situation. Persons of delicate fibres and a weak constitution of body, complain that in looking on the sores and ulcers which are exposed by beggars in the streets, they are apt

³⁷ Emmanuel Levinas, *Totality and Infinity: An Essay on Exteriority*, trans. by Alphonso Lingis (The Hague, Boston and London: Martinus Nijhoff Publishers, 1979), p.257.

³⁸ Emmanuel Levinas, *Time and the Other*, trans. by Richard A. Cohen (Pittsburgh: Duquesne University Press, 1987), p.89.

³⁹ Levinas, *Time and the Other*, pp.90, 91.

⁴⁰ Mark Paterson, 'The Human Touch', *The Philosophers Magazine*, 21 May 2009, <<http://philosophypress.co.uk/?p=214>> [accessed 23 October 2014] (para. 21 of 22).

to feel an itching or uneasy sensation in the correspondent part of their own bodies.⁴¹

These observations, in which is developed an acute sense of physical connection with the subject of one's vision, are exacerbated in the experience categorised as 'Mirror Touch Synaesthesia' (MTS), first diagnosed in 2005, and that most strongly resonates with the turn-of-the-century context of unconventional visuality, mirroring and tactile sensations that this chapter addresses. MTS describes an experience in which the empathic observation of another works as a kind of hapticity, conflating vision and touch in a virtual stimulation of the tactile senses. In MTS, the boundaries between vision and touch become complicated, and the mirror serves as a metaphor for the complication of boundaries between self and other. Cinema has been seen as a connective medium that both resonates with and exacerbates the experience of MTS. As Elsaesser and Hagener write, 'the cinema may play an important part in human cognitive evolution, when it comes to the origins of empathy, sympathy and affective interaction with others', arguing that 'the mirror in the cinema' can 'refer to the mirror of the other as identified by anthropologists as a component of human identity, agency and intersubjective communication'.⁴² An empathic sensuality thus comes into play in which mirroring becomes a metaphor for understanding, for sympathy, and so for intersubjectivity. It is in Halloway's invisibility, then, that he is able to fully regard the other, Alice, and, in sympathy with that other, create a renewed sense of intersubjective sensual understanding that does not elide alterity.

Invisible agents of patriarchal power

Released eight years after *Memoirs*, *Hollow Man* constructs a similarly anxious vision of the invisible body, centring again upon a forty-something white American male: the more overtly narcissistic Sebastian Caine (Kevin Bacon), a precocious scientist who illegally submits to his own classified Pentagon experiments to render living bodies invisible, a project intended to generate invisible agents of national security. The invisible Caine subsequently descends into a destructive cycle of sexual and

⁴¹ Adam Smith, *The Theory of Moral Sentiments*, third edn (London: printed for A. Millar, A. Kincaid and J. Bell in Edinburgh; sold by T. Cadell, 1767), p.3

⁴² Elsaesser and Hagener, *Film Theory*, p.63.

homicidal offences.⁴³ Unlike the self-conscious Halloway – a private and reluctantly invisible individual who seeks security from a willing female partner whilst attempting to evolve his identity – the immoral, state-sponsored Caine willingly disappears, thereafter devolving towards an obscene and uncivilised masculinity. *Hollow Man*'s Dr Caine – the name surely referring to the biblical Cain, the first murderer, but also to the insanity-inducing 'monocaine' serum of *The Invisible Man* – is a Dr Jekyll figure, and his invisible incarnation is undoubtedly Mr Hyde: primitive, illicit, violently libidinous and ultimately murderous. After raping his neighbour and drowning his Pentagon supervisor, Caine seeks to preserve his secret condition by killing his team and escaping his military backers, so as to re-enter society as a thoroughly uncivilised civilian. He kills all but two of the prime witnesses to his invisibility, being ultimately annihilated by his assistant and ex-lover Linda McKay (Elisabeth Shue) – whose subordinate operational role becomes supervisory when Caine becomes a test subject, thus charting a shifting gender dynamic – and her sensitive partner Matthew Kensington (Josh Brolin). As with *Memoirs*, the film's ending depicts the resolution of an acceptable social order, in which a happy couple walk arm in arm; only here, the oppression of the invisible man has been thoroughly eradicated.

As in *Memoirs*, invisibility manifests amidst an anxious gender framework, while the mirror is a similarly central motif aligning visual abnormality with a transformative process of self-interrogation. Caine observes stages of his own descent in the mirror, his absent reflection strongly suggestive of a vampiric lack of soul and reminding of the 'empty men' of T.S. Eliot's 1925 poem 'The Hollow Men', from which the film in part derives its name.⁴⁴ Before the experiment, Caine looks deeply into his own eyes in the mirror, softly touching his face (fig. 4.29); after becoming invisible, he breathes on the mirror, sketching his own portrait in the condensation with his finger, though the underlying image in the frame is of consenting couple Matthew and Linda (fig. 4.30). Though Caine's supposedly temporary disappearance is viewed as a success, attempts at reappearance fail, and invisibility becomes a paralysing and confining condition: a state of exclusion in which Caine cannot modify

⁴³ The film's director Paul Verhoeven's body of work is elsewhere preoccupied with male identity breakdown, rediscovery and reconfiguration in films such as *RoboCop* (1987), *Total Recall* (1990) and *Basic Instinct* (1992) (whose title summarises that film's deconstruction of the male psyche in accordance with an emphasis on dangerous 'primal' urges towards violence and volatile sexuality).

⁴⁴ T.S. Eliot, 'The Hollow Men', *T.S. Eliot: Complete Poems and Plays* (London: Faber and Faber, 1969), pp.81–86 (p.85).

base impulses, and through which his agency in sensory and social orders is diminished, the latter emphasised – as in *Memoirs* – through visual correspondence with a similarly cloaked homeless man. Unable to reassert his visual potency, Caine correlates invisibility with ‘Never Never Land’, situating the condition as a zone of temporal catalepsy in which a regressive return to the infantile occurs. Awakening after a failed attempt at reappearance, a cacophony of animal cries – low in the film’s audio mix – signpost Caine’s descent towards bestiality, the soundtrack swelling as caged invisible creatures become wilder in sympathy with Caine’s temperament. When covered in a supposedly reassuring latex skin, Caine is told by Linda that he ‘could *almost* pass for human’ (emphasis mine), though the accompanying image of his uncanny reflection contrasts starkly with that of the happy couple with whom he is preoccupied (fig. 4.31).

Though Caine claims to be ‘a prisoner’ of his invisibility, he begins to address his condition as if mourning patriarchal privilege, telling Linda: ‘you have no idea what it’s like... the power of it, the freedom. I can’t let that go.’ It is in this context of disappearing power that Caine’s invisible touch becomes ever more aggressive, as his practices of distal spectatorship begin to collapse into a shocking and imbalanced proximal intercourse with those he observes. Frustrated after spying on Linda and Matthew’s consensual sexual liaison, Caine kills a barking invisible dog – symbol of familial domesticity – with his bare hands. He later gropes a sleeping colleague and kisses the resistant Linda, whose lips are seen impressed upon by his own (fig. 4.32). This kiss reflects similar moments in both *Invisible Agent* and *Memoirs*, though in these films it is portrayed as comic and romantic respectively (fig. 4.33). In *Hollow Man*, all of these forced tactile engagements occur as POV shots, inviting the film’s spectators to imagine their own bodies inhabiting Caine’s visual vacancy.⁴⁵ It is the mirror, however, that is central to those scenes in which extreme tactile connections express extreme social disconnection. In one particular sequence, Caine appears influenced by his own grotesque latex reflection to undress and so sneak unseen to

⁴⁵ Director Verhoeven was interested in challenging audience identification with erstwhile protagonist Caine, as he states: ‘*Hollow Man* leads you by the hand and takes you with Sebastian into teasing behavior, naughty behavior, and then really bad and ultimately evil behavior. At what point do you abandon him? I’m thinking when he rapes the woman would probably be the moment that people decide, “This is not exactly my type of hero,” though I must say a lot of viewers follow him further than you would expect. I’ve had people say to me, “He really should have gotten the girl.” I was amazed.’ (Paul Verhoeven, qtd in Dennis Lim, ‘Triumph of the Ill: Trash Talking with Mad Scientist Paul Verhoeven’, 15 August 2000, <<http://www.villagevoice.com/2000-08-15/news/triumph-of-the-ill/full/>> [accessed 13 August 2014] (para. 6 of 17).)

terrorise his neighbour (fig. 4.34). In her pink apartment – a stereotypically feminine space, populated with an abundance of family photographs – Caine tilts her dressing table mirror to displace her reflection, before forcing her onto the bed, the POV scheme again suggesting the cinematic spectator’s complicity, while a cut renders invisible the ensuing assault – a probable rape – thus marking it as *too* obscene, but also ratifying arguments that the non-visualisation of rape in cinema is a political strategy that plays down its male violence against women (fig. 4.35).⁴⁶ This is far away from the consenting caress of *Memoirs*; as such, this invisible man does not respect the subjectivity of the other, and his scopophilic drive propels a predatory and destructive tactility, rather than an intersubjective empathic mirroring. The power dialectic here only allows for mastery of one over another.

The sequence connects sharply with many of the themes of Laura Mulvey’s influential 1975 essay ‘Visual Pleasure and Narrative Cinema’, in which she describes ‘the way film reflects, reveals and even plays on the straight, socially established interpretation of sexual difference which controls images, erotic ways of looking and spectacle’.⁴⁷ If the invisible Caine embodies phallogocentric, scopophilic, logocentric drives, his voiceless, nameless female victim can be understood, in Mulvey’s terms, as ‘bound by a symbolic order in which man can live out his phantasies and obsessions through linguistic command by imposing them on the silent image of woman, still tied to her place as bearer of meaning, not maker of meaning’.⁴⁸ Beyond Mulvey’s scheme of ‘obsessive voyeurs and Peeping Toms, whose only sexual satisfaction can come from watching, in an active controlling sense, an objectified other’,⁴⁹ *Hollow Man* is most concerned with depicting the collapse of a too-rigid formulation of patriarchal masculinity, whose distal voyeurism spills over into a dangerously proximal physical contact that jars with Howes and Classen’s characterisation of touch as ‘intimate and reciprocal’. The non-consensual touch of this invisible body is sensually and socially destructive, as the visual imbalance of his

⁴⁶ For more on the non-visualisation of rape in cinema, see Sarah Projansky, *Watching Rape: Film and Television in Postfeminist Culture* (New York and London: New York University Press, 2001) and essays in *Rape in Art Cinema*, ed. by Dominique Russell (New York and London: Continuum, 2010).

⁴⁷ Laura Mulvey, ‘Visual Pleasure and Narrative Cinema’, *Screen*, 16.3 (Autumn 1975), 6–18 (p.6).

⁴⁸ Mulvey, ‘Visual Pleasure and Narrative Cinema’, p.7. Mark Bould refers to Mulvey’s work when acknowledging the ‘predatory voyeurism’ of *Hollow Man* to function as ‘an essay on cinema’s scopophilic drive’ (Mark Bould, *Science Fiction* (London and New York: Routledge, 2012), p.43). It is notable that the invisible female character of *Fantastic Four* (Tim Story, 2005) is not shown to exercise a powerful gaze. Her invisibility paradoxically consolidates her objectified status, and, as in the earlier *The Invisible Woman*, facilitates her reappearance in various states of titillating undress.

⁴⁹ Mulvey, ‘Visual Pleasure and Narrative Cinema’, p.9.

invisibility precipitates a further imbalance in social tactility.⁵⁰ The power dynamic of the male gaze is here literalised in the forced tactility of sexual violence, the POV shot emphasising this configuring of touch as functioning according to the one-way structuring of vision.

The director Paul Verhoeven describes discussions of invisibility in Plato's *Republic* as a formative influence on the film's philosophy, and parallels with the 'Ring of Gyges' story are clear.⁵¹ Plato's text draws upon Herodotus's earlier story of the concealed Gyges's erotic surveillance of the naked Queen of Lydia, surveillance orchestrated by her husband King Candaules, who is then killed and usurped by Gyges. In Plato's text, this story is modified so that Gyges's actions result from his possession of a ring that renders his body magically invisible. Both texts describe state power to centre upon intimate and obscene visual and physical transgressions whose ramifications reverberate between the private and the public. In their formulations of the troubled invisible male body, both *Hollow Man* and *Memoirs* similarly mingle frameworks of political, social and sexual transgression. In both films, Capitol Hill is prominently visible, its looming dome insisting upon problematic relations between the private invisible individual and prevailing patriarchal systems – themselves often invisible – of national power and identity. Key to both films is the equation of the invisible body as an agent, whether unwitting or complicit, of dominant – and so invisible – patriarchal authority and values. The milieu of espionage extends such correspondences, feeding from the James Bondian archetype of masculine fantasy, in which the state agent's designation as 'licensed to kill' registers him as a transgressive figure who is able to legitimately perform beyond the bounds of normative social legislation, and is just as likely to perform such duties with his gun as with his penis.⁵²

The confluence of invisible secret agents at the end of the twentieth century follow a diverse lineage, perhaps beginning with the invisible Siegfried's provision of secret service – at court and in bedroom – to the State of Burgundy.⁵³ In addition,

⁵⁰ Howes and Classen, *Ways of Sensing*, p.8.

⁵¹ Lim, 'Triumph of the Ill', para. 3 of 17.

⁵² Like 'the invisible man', the figure of 'James Bond' is, as Tony Bennett and Janet Woollacott have remarked, 'a variable and mobile signifier rather than one that can be fixed as unitary and constant in its signifying functions and effects' (Tony Bennett and Janet Woollacott, 'The Moments of Bond', in *The James Bond Phenomenon: A Critical Reader*, ed. by Christoph Lindner, rev. edn (Manchester and New York: Manchester University Press, 2009), pp.13–33 (p.31)).

⁵³ This milieu of espionage extends relations between invisibility and self-analysis in invisible body cinema, fed by a body of twentieth-century literature describing secret agents and a number of post-

however, to its facilitation of patriarchal empowerment, the secret agent, as has been shown, also serves as an agent of perpetually reconfigured identity, and so as a potent cultural expression of late twentieth-century notions of social identity shift. Although *Memoirs* and *Hollow Man* ultimately show the state, in its desire to control the public visual realm, as incapable of containing the multisensory agent of the invisible body, the alternative yet interrelated modes of invisible agency in these films are channelled to alternative ends. In *Memoirs*, Halloway's initial situation on the fringes of his gentlemen's club and the SIA – both symbols of the patriarchy – compels a trajectory through which he must either enter fully into this corrupt patriarchal system – by becoming a secret agent – or move away from it and so become a reconstructed male. In choosing the latter, Halloway finds *himself*, not in the mirror, nor in a renewed visuality, but in the multisensory alterity of his embrace with an other, a woman; his remaining happily invisible at the film's end attests to the significance of this development. In *Hollow Man*, on the other hand, Caine's repeated designation as a 'genius' illustrates his state-sponsored licence to freely express himself – through the medium of deleterious tactile transgression – as an agent of the political system from which he cannot be divested. Caine's absolute absorption into the invisible and intractable register of patriarchal power sees him unable to comprehend the reciprocal dynamics of ethical social and sensory existence.

As with earlier cinema of the invisible body, the motif of the invisible body in both *Memoirs* and *Hollow Man* emphasises tensions and slippages between vision and touch, and in doing so expresses the manifestation of social identity through the intertwining texture of people, together in the world, whose intermingling is mediated through diverse sensory entanglements. In Part Three, these themes are developed in relation to the imagery and process of the films' digital production techniques.

Second World War screen depictions in which the professional skills of governmental or military agents are facilitated by their inhabitation of a literally invisible body. This trope begins with 1942's *Invisible Agent*, and continues in a slew of popular television serials. The title figure of the UK series *The Invisible Man* (1958–1959) serves to enforce contemporary British domestic and foreign policy, as its invisible protagonist Brady cheerfully – though unofficially – assists British Intelligence with fighting local crime as well as facilitating illicit incursions into the Soviet Union, Middle East and a range of fictional rogue states. Similar themes are addressed, from a US point of view, in Universal's series *The Invisible Man* (1975–1976), which was itself reworked as *Gemini Man* (1976). In such narratives, the invisible individual tends to reluctantly supplement national security in the guise of secret agent, that category of transgressive voyeur who operates beyond the bounds of normative social, political and industrial systems, authorised to commit illegal activities in private, the consequences of which may have dramatic public consequences.

Three: Sensational Textures of Digital Cinema

Digital materialities

In production concurrently with *Hollow Man* was Universal's US television adventure series *The Invisible Man* (Sci-Fi, 2000–2002), whose eponymous protagonist, Darian Fawkes (Vincent Ventresca), is a burglar whose life sentence is commuted with his reluctant participation in a secret state experiment. Becoming a secret agent, Fawkes has a 'gland' implanted in his brain that, when stimulated by fear or sexual arousal – conditions of 'blood flow' that he learns to control – sends his body entirely invisible (fig. 4.36). As Fawkes contests that 'I've got plenty of glands. I don't need any more', his problematically sexualised invisible body can be understood as akin to those of Hallway and Caine. While centring chiefly on comic espionage, primitive sexual violence dominates the subtext: the gland – a 'new organ' – is a 'cerebral disinhibitor', and becoming invisible too often renders Fawkes a 'walking id', compulsively attacking men and attempting to rape women. As the invisibility gland begins to take control, Fawkes looks into his bloodshot eyes, reflecting that 'staring into that mirror I had the... sudden... horrible feeling that another person was looking back. A stranger, who'd stolen my face.' When Fawkes first disappears, it is in front of a mirror, though mirror imagery is here extended: the gland secretes 'quicksilver', a reflective substance that vanishes the body by mapping over its contours (fig. 4.37). In its entry into invisibility, this body becomes itself a mirror, and does so deploying visual tropes that, by the turn of the century, had become familiar screen identifiers of identity shift: those of computer-generated 'mirror morphing'.

Mirror morphing digital visual effects evolved from techniques produced first at Industrial Light and Magic (ILM) over the preceding decades. Nascent digital sequences in *Flight of the Navigator* (Randal Kleiser, 1986) use 'reflection mapping' to depict a shape-shifting craft as a metaphor for a young boy's temporal amnesia, and inculcate the mirror as a primary mechanism through which digital screen media can express itself (fig. 4.38). Similarly glistening, morphing imagery in *The Abyss* (James Cameron, 1989) illustrates the shifting relationship between a separated couple whose faces it mirrors, while *Terminator 2: Judgment Day* (James Cameron, 1991) depicts a liquescent mirror body capable of assuming any physical identity at will (fig. 4.39). Such imagery represents the signature CGI effect: synthetic yet flowing; aping the

metamorphic malleability of organic matter; incorporating atmospheric reflections of surrounding environments; and rich with a spatiotemporal fluidity exacerbated by narrative connotations of time travel and paradox. Such phenomena are described in *Terminator 2*'s diegesis in terms of 'a mimetic poly-alloy. [...] Liquid metal' that can imitate 'anything it samples by physical contact. [...] It can't form complex machines [...], but it can form solid metal shapes'. This statement provides a compelling commentary on the state of such visual effects technology at that moment, the relative simplicity of which allowed for basic imagery that appears sterile and flat. Scott Bukatman writes that this morphing effect brings a 'level of imaginary mutability to the body and self' in a 'reshaping of perception and bodily form [that] recalls, say, surrealist collage or the atemporal unfolded perspectives of cubism', noting also that 'morphing holds out the promise of endless transformation and the opportunity to freely make, unmake, and remake oneself'.⁵⁴ In this way, such computer-generated imagery provides a cinematic metaphor for the 'loosening up' of identities – masculine and otherwise – at the end of the twentieth century.⁵⁵ Its application in the onscreen depiction of the invisible body, during a period bracketed by the production of *Memoirs* and *Hollow Man*, therefore requires interrogation.

As used to express crises of identity and ideology in *The Matrix* (The Wachowski Brothers, 1999), the morphing mirror makes literal the divide between banal fantasies of digital culture and filthy reality, enveloping the body of the protagonist as he is helped to 'wake up' from a neat digital hallucination into the dirty and oppressed world, 'the desert of the real' (fig. 4.40). Such a softening of the hard mirror – flaccid, rather than erect – recalls the masculine anxieties expressed by Robert Bly, digital imagery celebrating such pliability even whilst demonstrating uncertainty over the amorphous instability of such postmodern identities. For *Memoirs*, special digital visual effects were produced by ILM, based at San Rafael in Marin County, north of San Francisco, which is part of the topography of the film's narrative. Members of the film's visual effects crew describe *Memoirs* as 'one of a

⁵⁴ Scott Bukatman, 'Taking Shape: Morphing and the Performance of Self', in *Meta-Morphing: Visual Transformation and the Culture of Quick-Change*, ed. by Vivian Sobchack (Minneapolis and London: University of Minnesota Press, 2000), pp.225–249 (pp.225–226). Bukatman goes on to focus on Michael Jackson's 'Black or White' video (John Landis, 1991) and *The Mask* (Charles Russell, 1994), both of which similarly identify CG morphing with identity shift. It is with such films as *Flubber* (Les Mayfield, 1997), which merges its overt CG production elements (produced at ILM) with the metamorphic material substance of the diegesis, that such imagery of extreme material manipulations in cinema becomes more commonplace.

⁵⁵ Segal, *Slow Motion*, p.294.

small handful of films that really showed what digital technology was capable of doing',⁵⁶ its production 'right at the fulcrum shift point between optical and digital techniques'.⁵⁷ Halloway's interactions with his visible environment extend the optical techniques used in earlier invisible body cinema, fostering a new digital language of visual invisibility.⁵⁸ The labour of *Memoirs*' visual effects team is obliquely referred to in Alice's applying of makeup to the invisible face, acting as a digital 'texture painter' as Halloway's features gradually emerge (fig. 4.41). In the film's production notes, ILM's digital effects manager Stuart Robertson describes something of the imaging process used in *Memoirs*:

Digital film technology allows a movie to be scanned into a computer and then converted to image digits. Each frame of film can then be manipulated on the screen like electronic clay, re-colored, re-sized, replicated or, as in the case of Chevy Chase's body, eliminated completely. The new pictures are then converted back into film and a new negative is run out of the computer.⁵⁹

In its metaphor of the dirty, earthen matter of 'electronic clay', this description of the manipulation of digital data reveals a climate of cinematic production in which tensions and uncertainties between materiality and immateriality echo the frameworks of clean–unclean and civilised–uncivilised that animate the film's driving narrative.

The digital grammar of the invisible body is extended, eight years on, in the production of *Hollow Man*. Caine's initial disappearance in an operating theatre inverts the concluding sequence from 1933's *The Invisible Man*. As each layer of Caine's body smoothly vanishes, this anatomy lesson – inspired by anatomical wax models at La Specola in Florence – decomposes the body in a prolonged disappearance that exposes the body's internal structure (fig. 4.42). As Jan Eric Olsén observes, the CG imaging suite and the contemporary operating theatre are related, with computerised facilities having 'redirected the attention of the surgeon from the body towards the images on the monitor. Hence, the naked eye of open surgery has

⁵⁶ Doug Smythe, qtd in 'How to Become Invisible: The Dawn of Digital FX', *Memoirs of an Invisible Man* [DVD] 2004. Warner Home Video.

⁵⁷ Neil Gorman, qtd in 'How to Become Invisible'.

⁵⁸ 'Success in this movie was showing invisibility in detail. If a character, say, was fully clothed, except for his head, we see a character standing there headless. But we also need to see the back of his collar if he's wearing a shirt. [...] The original "Invisible Man" was a great picture for its time. It was very novel and extremely well done. I essentially studied how we could improve upon what they had done.' (Bruce Nicholson (ILM director of special effects), qtd in Lew, 'It's not Easy being Invisible, says "Memoirs" Star Chase', p.4.)

⁵⁹ Stuart Robertson, qtd in 'Production Notes', *Memoirs of an Invisible Man* (Los Angeles: Warner Brothers, 1992).

given way to the techno-optical gaze of keyhole surgery and its various components.⁶⁰ *Hollow Man*'s context of innovative experiment thus produces a meta-cinematic atmosphere in which the operating theatre doubles as a site of digital image production and presentation, so emphasising digital cinema as potent site of reconstruction. Aspiring towards a post-human – or post-masculine – state, this invisible man becomes both hypermasculated and less than human (indeed, director Verhoeven believes that, through participation in the production of these visual effects sequences, the 'actor gives away his soul, kind of, being replaced by a digital clone').⁶¹ When Caine's acousmatic voice terrorises his colleagues over the public address system, Bacon's monotone delivery mimics that of deranged computer HAL from *2001: A Space Odyssey* (Stanley Kubrick, 1968),⁶² expressing irresolvable tensions between human and machine, organic and digital, civilised and uncivilised. Paul Virilio's 1990 dictum that 'people are not so much *in* the architecture; it is more the architecture of the electronic system which invades them, which is *in* them',⁶³ describes Caine, for whom both invisibility and digitality are counterbalanced by bestiality: an anticipated evolution that tends instead towards devolution. Caine's invisibility serum is blue, and the antidote red, the colour scheme connecting with the aforementioned pivotal scene of *The Matrix*, whose protagonist must choose between a blue pill – the taking of which will allow ignorant immersion in the ideology of a digital illusion – and a red pill – which brings a painful apprehension of 'the real world'. *Hollow Man*'s scheme is more cynical: the red option – visibility / reality / corporeality – fails, leaving only the invisibility / unreality / digitality of the blue (which also suggests the 'bluescreening' of cinematic illusionism). Caine's attempt to remake himself through invisibility gives way to an isolated immersion in the simulated world of digital imagery. In this way, the invisible body as reproduced through digital special effects provides a commentary on contemporary anxieties over the impact of the digital on reality. To what extent might the body become as though

⁶⁰ Jan Eric Olsén, 'Surgical Vision and Digital Culture', in *Visual Sense: A Cultural Reader*, ed. by Elizabeth Edwards and Kaushik Bhaumik (Oxford and New York: Berg, 2008), pp.427–432 (p.428).

⁶¹ Paul Verhoeven, qtd in Geoffrey Kleinman, 'Paul Verhoeven: *Hollow Man*', *DVD Talk* (2001), <http://www.dvdtalk.com/interviews/paul_verhoeven.html> [accessed 11 September 2013] (para. 25 of 36).

⁶² Indeed, one POV shot, through which Caine observe his colleagues discussing reporting him to the authorities, has a similar sequence in *2001* where HAL reads Dave and Frank's lips as they discuss disconnecting the computer.

⁶³ Paul Virilio, *Polar Inertia*, trans. by Patrick Camiller (London: SAGE, 2000), p.66.

invisible through the potential power of the digital realm? Or might the body remain as material trace despite its digitised invisibility?

More so than for *Memoirs*, the presence of the performer's body in the making of *Hollow Man* was deemed essential even to the shooting of scenes in which Bacon would be entirely unseen. Senior visual effects supervisor Scott E. Anderson – who had also worked on *The Abyss*, *Terminator 2* and *Memoirs* – relates that 'I wanted him *there* to interact with the other actors. Put him in a motion capture studio and we would lose that interplay'.⁶⁴ This desire for authentic psychophysical 'interplay' – the gruelling procedures of which led to the actor's acute discomfort and, ironically, a sense of alienation from the other performers because of the intensity of the physical demands on the actor – attempts to infuse into the digital scheme a greater sense of material authenticity.⁶⁵ As configured by Anderson and his team and embodied by Bacon, Caine's invisibility mingles the 'real' and the 'virtual' – the substantial and the insubstantial, the material and the immaterial, the hard and the soft – extending the film's themes of troubling physical interface, in which the character's forcible interactions overcompensate for such apparent dematerialisation.

Two scenes that address the tensions of digital touch both show Linda reaching out for Caine's invisible body. In the first, she asserts that 'you're *here*', as the sound of her hand on his skin is heard (fig. 4.43). Later, with both hands outstretched, she feels a disjuncture between a thermal image of the invisible body – pre-recorded and looped by Caine to reassure others of his presence – and its material absence, breaking the illusion of hapticity (fig. 4.44).⁶⁶ When Linda rejects Caine's sexual advances with the assertion 'it's not what I don't see, it's what I don't feel', she speaks of her inability to connect emotionally with his unreconstructed character, but also addresses the film's anxious scheme of digital invisibility and the corresponding need to overcompensate bodily presence through forceful tactility.

⁶⁴ Scott E. Anderson, qtd in Estelle Shay, 'Disappearing Act', *Cinefex*, 83 (2000), 104–131 (p.112).

⁶⁵ Kevin Bacon, 'Diary of a Hollow Man', *Entertainment Weekly*, 4 August 2000, <<http://www.ew.com/ew/article/0,,276927,00.html>> [accessed 13 August 2014].

⁶⁶ An opening shot depicts a thermal camera and its lens in extreme close up, one of a network of such devices whose output is deferred to throughout the film. As discussed in Chapter Three with relation to the film *Predator*, the figure most associated with the thermographic gaze – a haptic mode of vision that privileges the surface values of the body – is the malign viewer and defiler of corporeal integrity. As master of the thermographic gaze, Caine is immune to its use as a monitoring tool: he easily manipulates his own thermographic image, acting as a capable editor whose seamlessly looping repetition facilitates his transgressive invisible activities and disturbs the assumed temporal veracity of this mode of imaging. In his invisibility, Caine is a filmmaker who produces his own image, creating an electronic image with an absent referent that contrasts with the materialised invisibility of his condition.

Laura U. Marks observes that ‘the semiotic foundation of photographic images in the real world is thought to be destroyed in digital media’. As such, ‘it is common for critics to note that in digital media the indexical link between image and represented object, the existential connection between them, is irrevocably severed’, noting that, for many, ‘this qualitative change occasions fear for the status of the image as real’.⁶⁷ But, as Marks argues in her insistence that ‘[d]igital and other electronic images are constituted by processes no less material than photography, film, and analog video’,⁶⁸ and as these films attest in their use of digital imagery to illustrate the materialities of the invisible body, there still remains a material excess even in the digital realm. It is the nature and extent of this excess that the following section shall now explore.

Waste, nausea and the social sensorium

In these digital images of the invisible body, a sense of persistent materiality emerges through both films’ close attention to the visualisation of waste matter. In particular, the clean, smooth textures of nascent CG imagery are corrupted in *Hollow Man*’s attention to the defilement of the sensual invisible body, which – at points saturated in bodily fluids, its covering in blood a corporeal inside-outing (fig. 4.45) – is often subjected to ablution, in the sink, the swimming pool, and under sprinklers (fig. 4.46). When Caine washes his invisible face in the mirror after raping his neighbour, the sterile geometry of the mirror – with the success of the visual reproduction necessitating an absence of aberrant surface texture – demonstrates an aspiration towards purification. The mirror’s reflection of visual properties alone aligns such purification with the visual sense. *Hollow Man*’s production design, chiefly centred upon the subterranean scientific-industrial site, is permeated by a sense of waste. Sterile lab surfaces, including a toilet into which Caine spews invisible vomit, give way to reveal rusting industrial piping amidst which he hides out. The underground base – with its menagerie of caged invisible creatures – is a clear expression of Caine’s bestial subconscious, making explicit Bly’s contention that oppressed males ‘become secret underground people’ for whom masculinity can only be reconfigured

⁶⁷ Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2002), p.162.

⁶⁸ Marks, *Touch*, p.163. As Marks continues: ‘What I question in the current rhetoric about the loss of indexicality in the digital image is that it assumes a concurrent loss of *materiality* of the image. As a result it is assumed that digital images are fundamentally immaterial, and that, for example, to enter cyberspace or to use VR [Virtual Reality] is to enter a realm of pure ideas and leave the “meat” of the material body behind.’ (p.163.)

and renewed through a further and deliberate ‘descent’.⁶⁹ There is, however, no undoing this disorder. Unlike Halloway, Caine is too polluted to be purified. The negation of the purifying visual sense, then, is not in tandem with the idea of a digital realm of immateriality. Rather, the embodiedness of this invisible body is exaggerated much further, a material overcompensation for the digitality of his characterisation. His inability to reappear is due to the ‘decaying’ of ‘primary DNA strands’ and ‘cellular bonding stability’: attempts at proper reappearance would render him nothing more than ‘a steaming pile of flesh’, an obscene notion redolent of the loosening of the bowels, the invisible body’s reorganisation of visuality synchronous not with immateriality but disorganised materiality (as pre-empted in the depiction in *Hollow Man*’s opening titles of disordered language that resembles aberrant floaters on the surface of the eye (fig. 4.47)). At the climax, the charred Caine, semi-visible as a foul purgatorial zombie, is consigned by Linda to the inferno of a filthy lift shaft, into which he finally disappears, excessively materialised but corporeally compromised (fig. 4.48). In the context of a developing climate of digital cinema referred to by Vivian Sobchack in terms of a ‘material and technological crisis of the flesh’, this ending affirms the gross sensualities of the body, despite or even because of its demise, perhaps confirming Sobchack’s hope that ‘through this crisis the lived body has, in fact, managed to reclaim our attention sufficiently so as to forcefully argue for its existence and against its simulation or erasure’.⁷⁰

Such matters of dirt and disgust are addressed in *Memoirs* when Halloway becomes partially visible in a shower of rain, a cleansing that precedes his sexual encounter with Alice. That Alice is later shown to be pregnant confirms this intercourse as productively centred upon the family unit. When she rhetorically remarks, ‘how am I gonna tell my mom about this?’, Halloway’s playful reply of ‘all the dirty parts I’d leave out’ emphasises the repression of obscene interests that facilitates his entering the family: an effacing of ‘dirty parts’ that underlines the film’s

⁶⁹ Bly, *Iron John*, p.101 and chapter three ‘The Road of Ashes, Descent, and Grief’, pp.57–92. Such archaic industrial sites form familiar climactic backdrops to US science-fiction films from *Alien* (Ridley Scott, 1979) onwards, and including Verhoeven’s own *RoboCop* (1987), which ends in derelict factories full of toxic waste. Such environments are referred to by Amy Taubin, writing principally of the ‘dripping pipes and sewage tunnels’ of *Alien*³ (David Fincher, 1992), as representing ‘not only the fear of the monstrous-feminine, but homophobia as well. It’s the uterine and the anal plumbing entwined’ (Amy Taubin, ‘The “Alien” Trilogy: From Feminism to Aids’, in *Women and Film: A Sight and Sound Reader*, ed. by Pam Cook and Philip Dodd (London: Scarlet Press, 1993), pp.93–100 (pp.98–99)).

⁷⁰ Vivian Sobchack, *Carnal Thoughts: Embodiment and Moving Image Culture* (Berkeley and Los Angeles: University of California Press, 2004), p.161.

identity themes. It is notable that the visualisation of cleansing in the rain sequence was a complex digital visual effects process that necessitated the actor's physical pain: huge contact lenses inserted into Chase's eyes, his body and mouth soiled with dye, the maintenance of the illusion of the 'beautiful' described by the actor as 'horrendous'.⁷¹ At the climax of *Memoirs*, Holloway, progressively unable to fully exorcise the taint of filth, washes away a cosmetic disguise in the shower of a passing street cleaner, though immediately falls in more dirt, rendering visible his invisible jacket (fig. 4.49). Intending to throw Holloway from the top of a monolithic construction site – his preferred method of phallogentric execution – Jenkins falls to his death grabbing the semi-visible coat, the begrimed remains of which are found by Alice in lieu of Holloway's corpse (fig. 4.50). As an attractor of dirt, this invisible jacket is a vestigial remnant of Holloway's unreconstructed self, symbolising the archaic masculine values that accompanied his body into invisibility.⁷² Ultimately made visible through waste, this uniform's destruction is synchronous with the annihilation of Jenkins's patriarchal agent. The discard and ruin of the garment signals the closure of the narrative: only with Jenkins dead and the jacket destroyed can the couple survive, and the film end. However, despite Holloway's seeming reconstructed masculinity, purity – by which can be read in this film idealised 'femininity' – is foregrounded in an overdetermined manner. The presence of dirt in *Memoirs* thus serves as metaphor for a repressed unacceptability. Although the extra-visual senses of the couple continue to be engaged, as demonstrated through Holloway's continued invisibility, the film ends with Holloway and the pregnant Alice locked in embrace in a pure and unpolluted snowy landscape, a fantasy of familial, and feminine, purity (fig. 4.51).

The first effects shot of *Memoirs* exhibits the invisible body by showing Holloway's unwrapping and chewing of a flesh-coloured bubblegum that is inflated, burst and spat beyond the margin of the screen (fig. 4.52). A peculiar and pervasive waste, gum is an indigestible non-food that leaves an indelible remnant. Its summoning in the inaugural representation of the invisible body insinuates unseen

⁷¹ 'By the time Daryl came away from that kiss her hands and face were just a mess. Yuck! It comes off in the film as a very beautiful moment, but you should have seen what I looked like. Horrendous!' (Chevy Chase, qtd in James Ryan, 'Chevy Chase Searches for Respect', *Entertainment News Wire*, 20 February 1992).

⁷² The dirt-attracting tendencies of Holloway's invisible suit cast it in opposition to the eponymous costume, initially thought to be dirt-repellent and indestructible, of *The Man in the White Suit* (Alexander Mackendrick, 1951).

matter as both malleable and marginal, mobilising also marginalised senses in a gustatorial image that contributes to a nauseous sensory economy. As with *Hollow Man, Memoirs* – with its diegetic description of invisibility in terms of ‘molecular instability’ – works through a discourse of material distortion in which the invisible body, as symbol for the attempted critical reconstitution of male social identity, is underscored by a persuasive and alchemical materiality. It is in the imagery with which this chapter began that such tendencies reach their apex, in *Memoirs*’ most striking digital sequence: the scene in which Halloway binge eats, resulting in the sight of his gurgling digestive system (fig. 4.53).⁷³ Viewing his reflection, Halloway is compelled to projectile vomit, purging himself of this remnant of visibility as his reflux action appears in the mirror (fig. 4.54). This failed assimilation of matter returns as repressed visibility, a vision of incomplete process and maldigestion effected through a kind of pure morphing – constantly shifting, neither one thing nor the other – to visualise digitality as pungent, nauseating materiality. The sequence can be understood in relation to Julia Kristeva’s description in *Powers of Horror: An Essay on Abjection* of the process of vomiting as one in which ‘I expel *myself*, I spit *myself out*, I abject *myself* within the same motion through which “I” claim to establish *myself*. [...] I give birth to myself amid the violence of sobs, of vomit.’⁷⁴ For Kristeva, the abject ‘draws me toward the place where meaning collapses’, unsettling ‘the fragile texture of a desire for meaning’.⁷⁵ The vomiting of the invisible body (which seems designed to solicit a similar response in the film’s spectator) expresses both the relation of self-disgust to Halloway’s unstable masculine identity – this spew itself is an ejaculatory discharge – whilst also recognising invisibility as an unsettling sensory condition. Although presented in the ostensibly sterile medium of digital cinematic imagery, the gross materiality of vomit strives towards an inconsistent

⁷³ Of Halloway’s ‘foul’ and ‘disgusting’ consumption, Saint writes in the novel, ‘I was becoming a sack of vomit and fecal matter. I suppose, on reflection, that that is what I had always been, but nature had not formerly imposed this aspect of the human condition quite so vividly upon me. The nasty facts had been discreetly enveloped in opaque flesh. Now I was to be a transparent sack of vomit and fecal matter. I cannot begin to tell you how distasteful it was. [...] Hideous, the way, as the food churned slowly through the stomach, the color and consistency altered. Foul. [...] a blotchy translucent sack of filth. [...] Small amounts of milky brown sludge were being squirted into the small intestine. [...] I took a good swallow and watched it gurgle rhythmically down my esophagus [sic] to join the rest of the sewage in my stomach. Disgusting. My condition was unspeakably, hopelessly disgusting. And at the same time ridiculous. Hard, in a way, to take it seriously. I felt, almost, like laughing out loud, but I was afraid the laughter would turn into vomiting.’ (H.F. Saint, *Memoirs of an Invisible Man* (Harmondsworth: Viking, 1987), pp.129–130.)

⁷⁴ Julia Kristeva, *Powers of Horror: An Essay on Abjection*, trans. by Leon S. Roudiez (New York: Columbia University Press, 1982), p.3.

⁷⁵ Kristeva, *Powers of Horror*, p.2.

texture that challenges the extra-cinematic sensory modalities of touch, taste and smell: proximal and nominally subordinate senses whose invocation extends the discourse of inappropriate social intercourse, but that have also, in western society, been traditionally associated with women, in contrast to the male association with the orderly distal senses of sight and hearing.⁷⁶

With respect to Mary Douglas's 1966 understanding of uncleanness or dirt as 'matter out of place', 'the by-product of a systematic ordering and classification of matter', the upsetting of Hallway's stomach can also be considered, in its upsetting of vision and the visible in which the extra-visual senses are implicated, as an upsetting of the 'systematic ordering and classification' of sensation.⁷⁷ *Memoirs'* unsightly visualisation of vomit makes visible and interrupts the invisible everyday digestive process through which the world is organically woven into the body. If, as suggested in Chapter Two, the invisible body's systematic shedding of prosthetic sense organs is a disordering of sensory identity and rejection of rigid sensory formations, this nauseating ejection of internal matter further evokes a social sensorium in disequilibrium, so connecting with William Ian Miller's characterisation of disgust – which he contends is 'always very present to the senses, arguably more so than any other emotion' – as 'a moral and social sentiment' that 'ranks people and things in a kind of cosmic ordering'.⁷⁸ Here, the textures of both identity and sensation are a social and cultural weave: a sensuous intermingling in which is woven vision and invisibility, the sensible and the nonsensical. Michel Serres refers to his own 1985 book *The Five Senses*, in which he pursues the inseparability of distinctive senses, as a 'meditation on chaos and mingling' in which 'this attention paid to the sensible, does tend to resemble a philosophy of unruliness'.⁷⁹ Positioning the senses amidst the sensorium, Serres describes each sense organ 'like an island [...] woven from canvas of the same texture as its background' to form 'an abundant, teeming complex of sensations', and the liquescent yet motley consistency of vomit can also

⁷⁶ Howes and Classen, *Ways of Sensing*, pp.67–68. Howes and Classen describe women in western society as having 'tended to be allied with the "lower" senses of smell, taste and touch', in keeping with 'the customary association of women with bodily concerns' and in contrast with the male association with the distal 'senses of sight and hearing' that were 'associated with the faculty of reason and the mind' (pp.67–68).

⁷⁷ Mary Douglas, *Purity and Danger: An Analysis of Concepts of Purity and Taboo* (London: Routledge, 2003), p.36.

⁷⁸ William Ian Miller, *The Anatomy of Disgust* (Cambridge, MA and London: Harvard University Press, 1998), pp.33, 2.

⁷⁹ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, trans. by Margaret Sankey and Peter Cowley (London and New York: Continuum, 2008), p.193.

be considered to express well Serres's understanding of the 'variable confluence of the qualities of the senses'.⁸⁰ In this sequence in *Memoirs*, the mirror-morphing technology of CG digital effects does not provide a dematerialised form, but rather is used to evoke the continued presence of materiality. As an evocation of the social sensorium, the digital stomach contents churn, their visualisation causing a multisensorial ejection that expresses the birth of digital imagery as a challenge to both identity construction and sensory formations.

Conclusion

The examples I have attended to in this chapter demonstrate Robert Desjarlais's contention that 'modes of sensory perception are deeply imbricated in myriad forms of technology, ideology, cultural imaginaries, and political and social arrangements. [...] A kind of *sensory imbrication* is consistently at work, for sensory means are constantly intertwined with other vectors of life.'⁸¹ Such a 'sensory imbrication' is deeply in evidence in the case of the onscreen invisible body, and the main movements of this chapter have unpacked a particular climate in which the intersection of 'technology, ideology, cultural imaginaries, and political and social arrangements' is made manifest in the body of the invisible man. Addressing the reconstruction and reconstitution of white heteronormative masculinity along the lines of Robert Bly's work, both *Memoirs* and *Hollow Man* provide cinematic interventions into masculine identity crises at the end of the twentieth century, representing the invisibilities of social and political regimes of power as the disruption of the dominant visionary sense recalibrates notions of individual identity.

In unfolding their cinematic metaphors of invisibility, the fluxing invisible bodies of both *Memoirs* and *Hollow Man* motivate intersecting themes of spectatorship and self-reflection, desire and repulsion, encapsulating an anatomy of transgression, obscenity and disgust. Both films describe invisible bodies as zones at which the private matter of self-reflection comes into contact with the public matter of social intercourse, and the phenomenon of nausea expresses well the complexion of

⁸⁰ Serres, *The Five Senses*, pp.53, 52.

⁸¹ Robert Desjarlais, 'The Look: An Afterword', in *Senses and Citizenships: Embodying Political Life*, ed. by Susanna Trnka, Christine Dureau and Julie Park (Abingdon and New York: Routledge, 2013), pp.262–274 (p.266).

such a curdling, generating a complex texture of sensation and so recalling Merleau-Ponty's understanding of the body as 'the fabric into which all objects are woven'.⁸² The digital imagery that underpins the production of these films evolves a visual language of physical and material intercourse that further contributes to the constitution of the invisible body in terms of an emissary through which is expressed a textured cinematic sensorium for which sensation is an unstable social and cultural construction, and that embody a 'loosening up' of sensory identities at the end of the twentieth century.

In this chapter, the imagery of the empty mirror represents a misrecognition of the self and the beginnings of a revised approach towards self-scrutiny. The empty mirror qualifies specular self-knowledge, mobilising the extra-visual sensorium and so promoting a mode of understanding – of the self and of others – through multisensoriality: the nauseating textures of the invisible body expressing the fullness – and so refusing to neglect the foulness – of sensation. Developing such notions, Chapter Five shall explore the themes of hyperaesthesia, intersensoriality and enworldment in sequences depicting an invisible body in *The Lord of the Rings* trilogy of films (Peter Jackson, 2001–2003), and in doing so will further probe frameworks of multisensoriality.

⁸² Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. by Colin Smith (London and New York: Routledge, 1962), p.235.



Fig. 4.1, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.2, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.3, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.4, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.5, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.6, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.7, *The Invisible Man* (James Whale, 1933)



Fig. 4.8, *The Invisible Man Returns* (Joe May, 1940)



Fig. 4.9, *The Invisible Man Returns* (Joe May, 1940)



Fig. 4.10, *Invisible Agent* (Edwin L. Marin, 1942)



Fig. 4.11, *The Invisible Man's Revenge* (Ford Beebe, 1944)



Fig. 4.12, *The Invisible Man's Revenge* (Ford Beebe, 1944)



Fig. 4.13, *Der Student von Prag* (Hanns Heinz Ewers and Stellan Rye, 1913)



Fig. 4.14, *Der Student von Prag* (Henrik Galeen, 1926)



Fig. 4.15, *The Invisible Woman* (A. Edward Sutherland, 1940)



Fig. 4.16, *The Invisible Woman* (A. Edward Sutherland, 1940)



Fig. 4.17, *The Invisible Woman* (A. Edward Sutherland, 1940)



Fig. 4.18, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.19, *Memoirs of an Invisible Man* (John Carpenter, 1992)

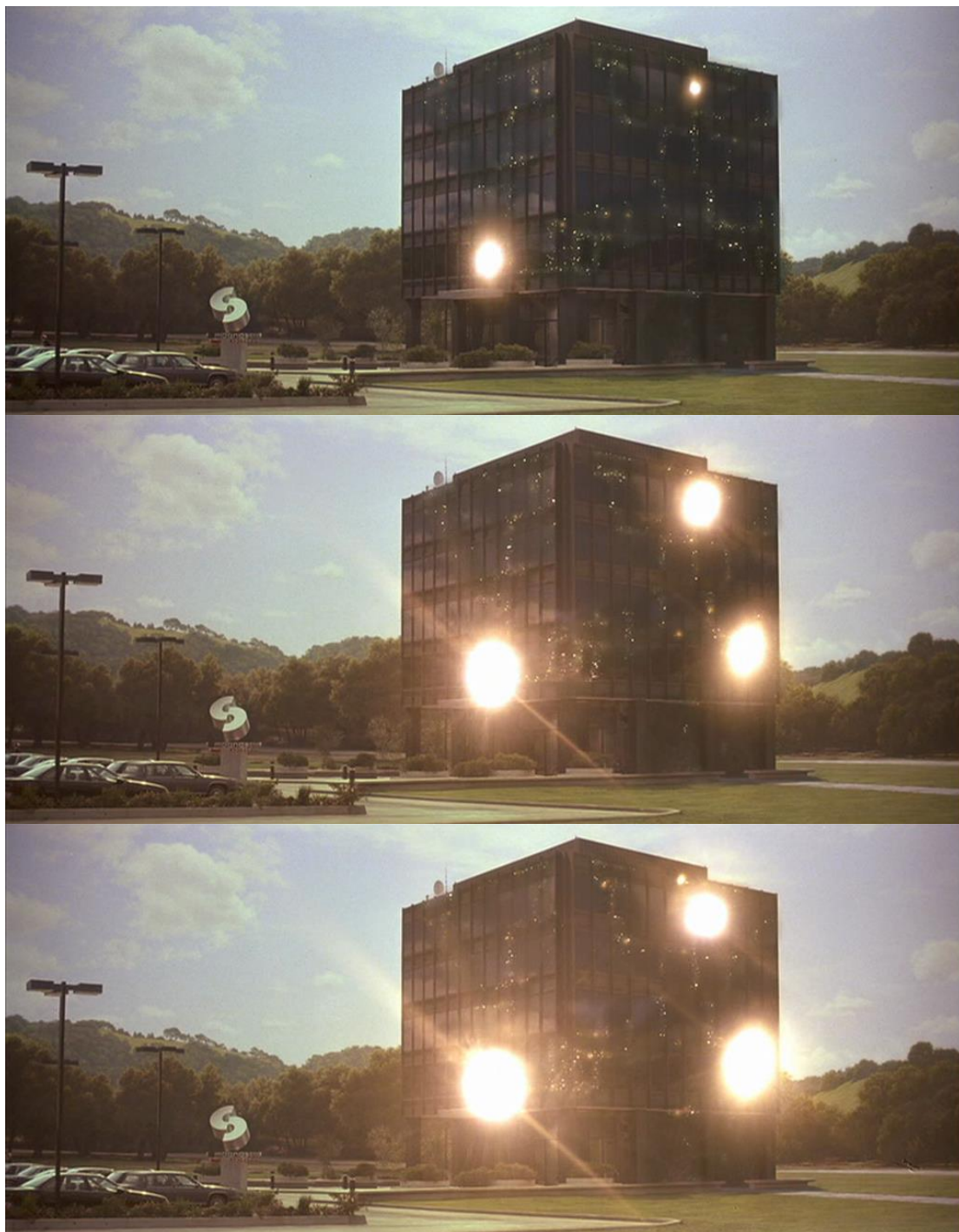


Fig. 4.20, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.21, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.22, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.23, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.24, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.25, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.26, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.27, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.28, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.29, *Hollow Man* (Paul Verhoeven, 2000)

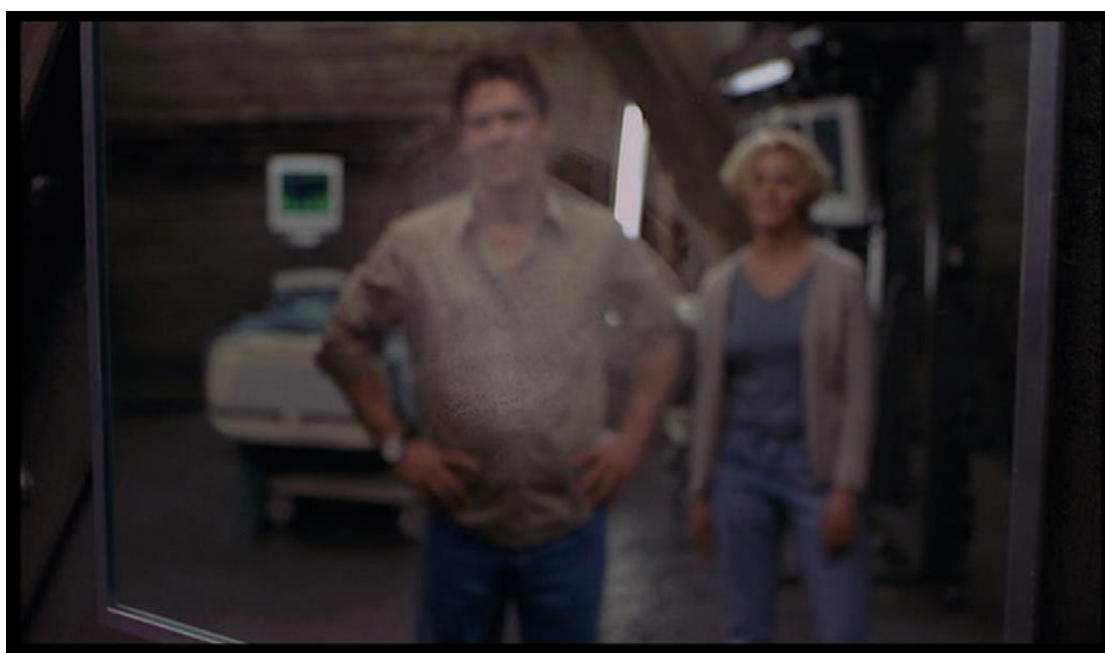


Fig. 4.30, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.31, *Hollow Man* (Paul Verhoeven, 2000)

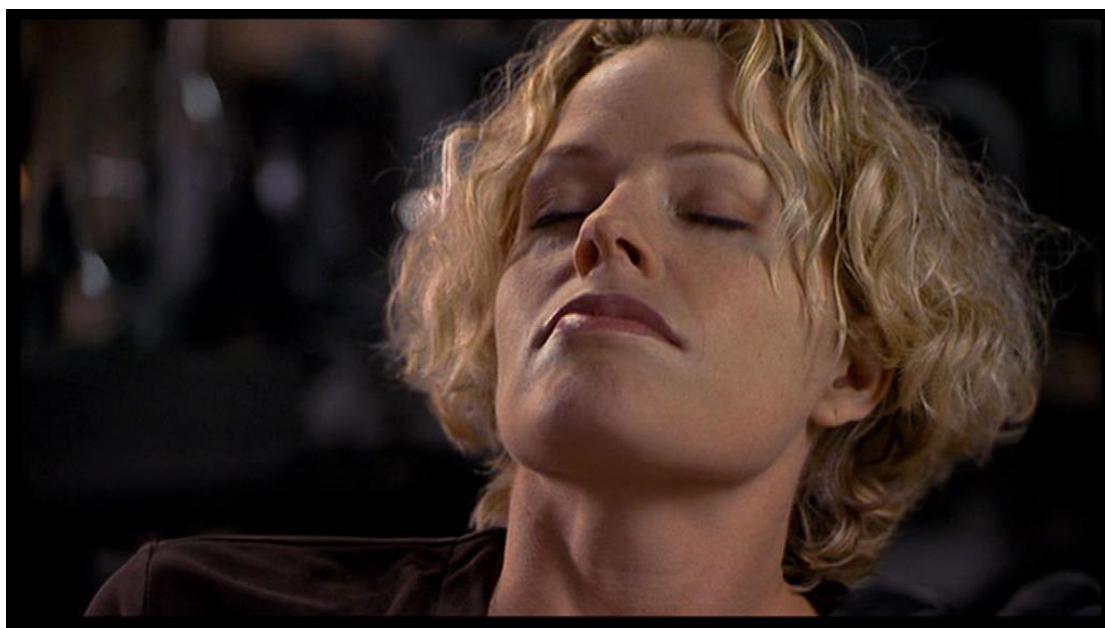


Fig. 4.32, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.33, *The Invisible Woman* (A. Edward Sutherland, 1940)



Fig. 4.34, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.35, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.36, *The Invisible Man* (Sci-Fi, 2000–2002)



Fig. 4.37, *The Invisible Man* (Sci-Fi, 2000–2002)



Fig. 4.38, *Flight of the Navigator* (Randal Kleiser, 1986)



Fig. 4.39, *The Abyss* (James Cameron, 1989); *Terminator 2: Judgment Day* (James Cameron, 1991)

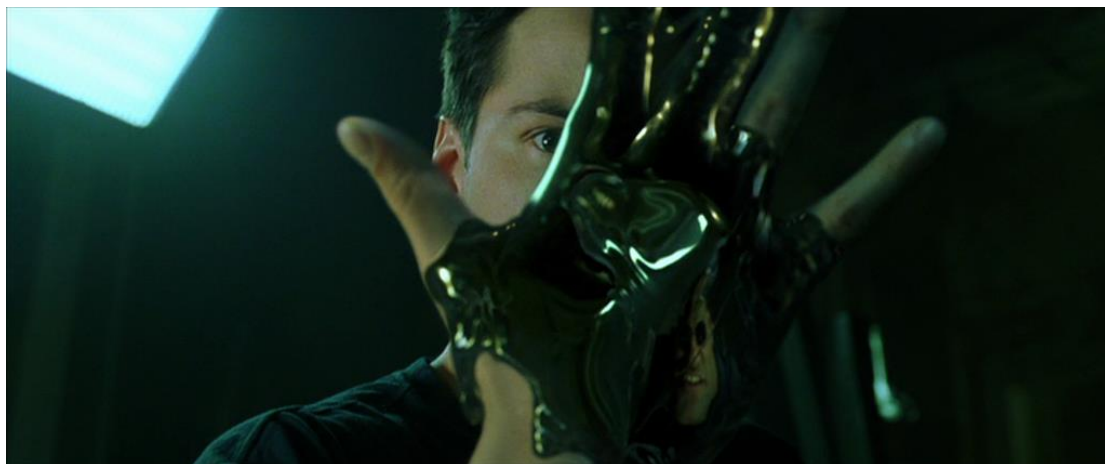


Fig. 4.40, *The Matrix* (The Wachowski Brothers, 1999)



Fig. 4.41, *Memoirs of an Invisible Man* (John Carpenter, 1992)

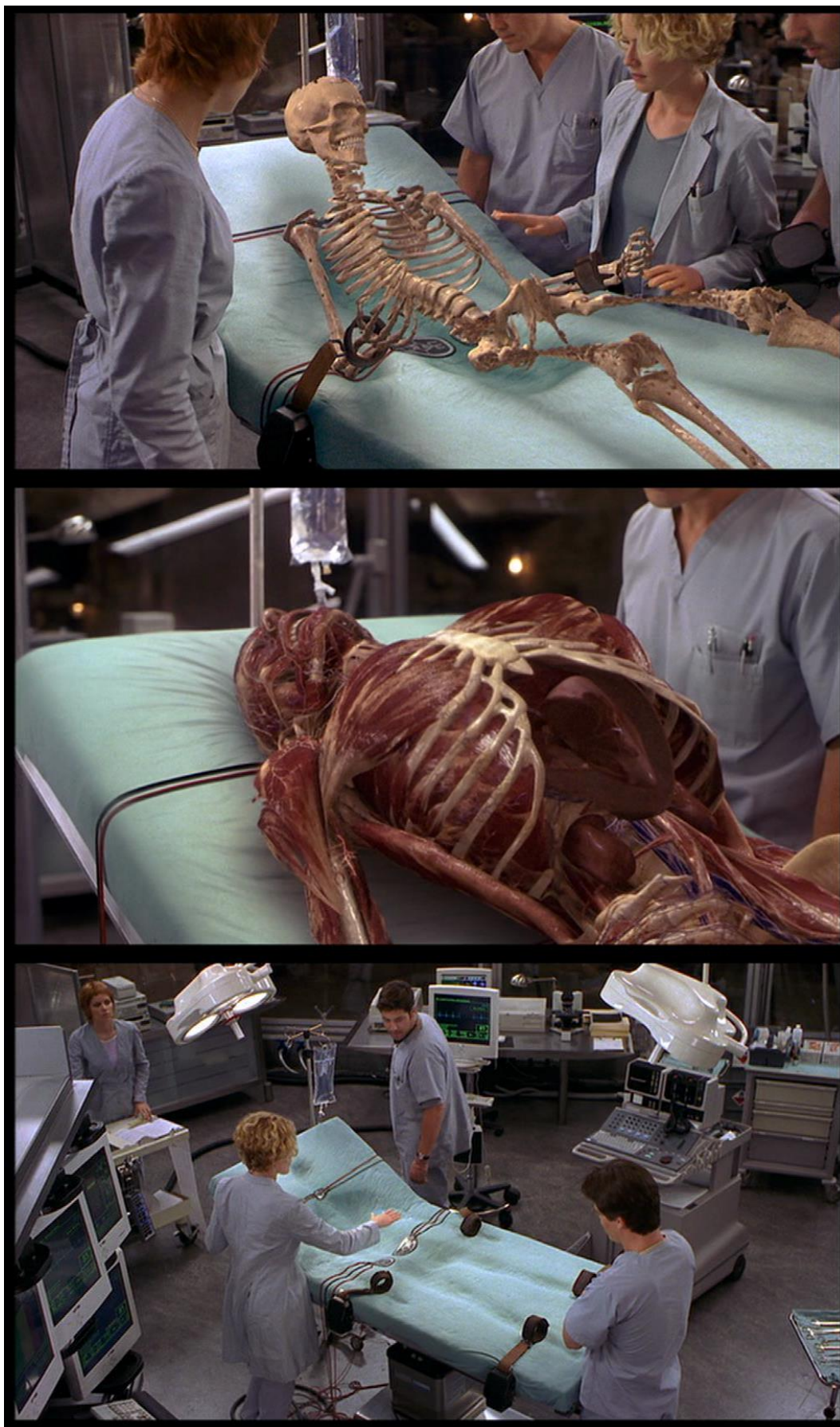


Fig. 4.42, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.43, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.44, *Hollow Man* (Paul Verhoeven, 2000)

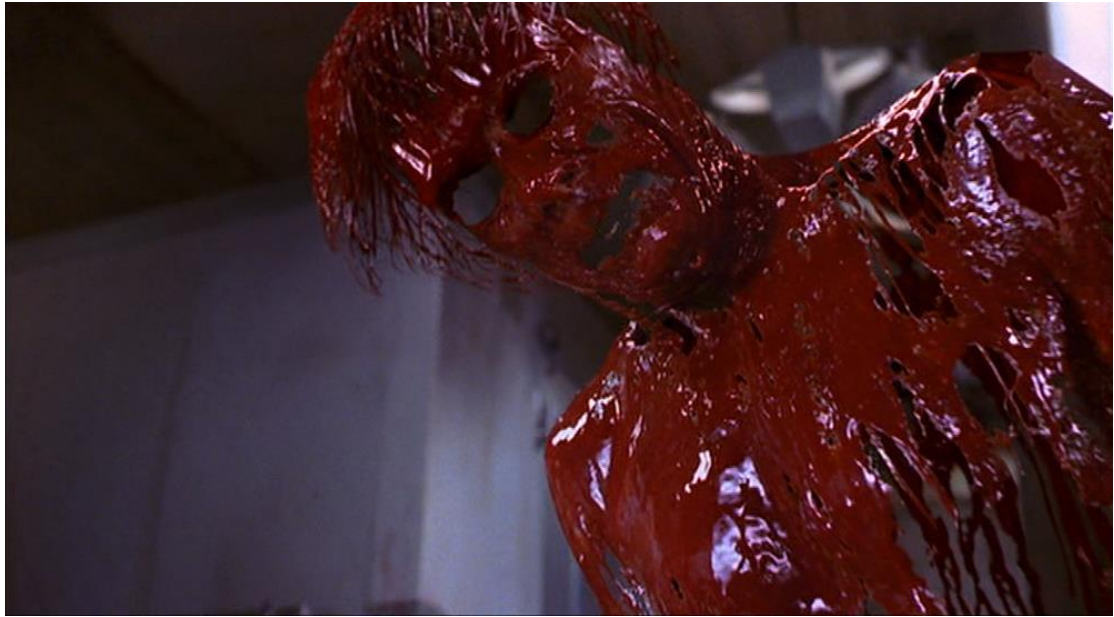


Fig. 4.45, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.46, *Hollow Man* (Paul Verhoeven, 2000)

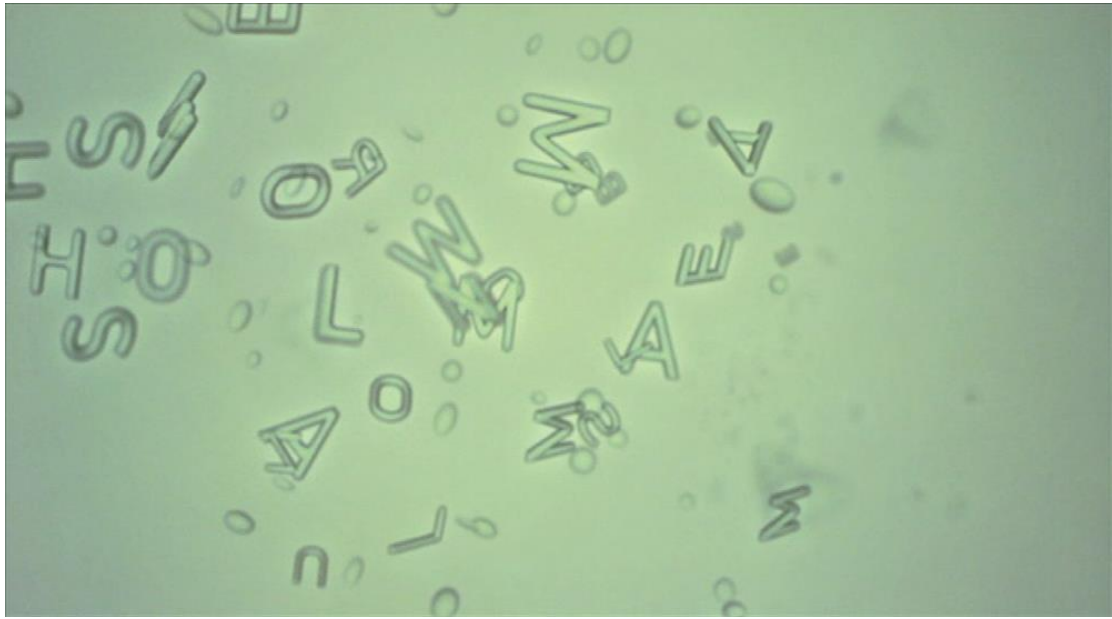


Fig. 4.47, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.48, *Hollow Man* (Paul Verhoeven, 2000)



Fig. 4.49, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.50, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.51, *Memoirs of an Invisible Man* (John Carpenter, 1992)

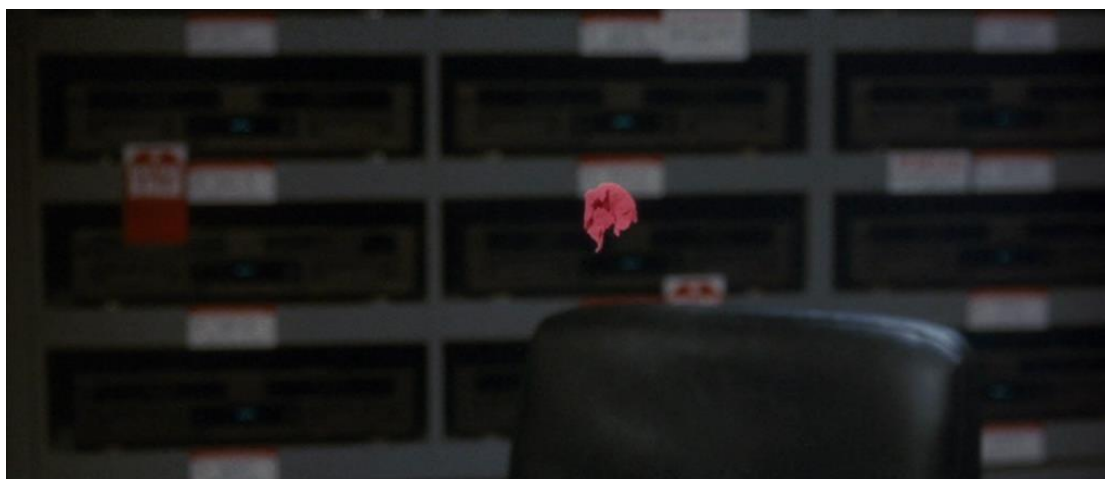


Fig. 4.52, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.53, *Memoirs of an Invisible Man* (John Carpenter, 1992)



Fig. 4.54, *Memoirs of an Invisible Man* (John Carpenter, 1992)

Chapter Five

The Experience of Invisibility: Hyperaesthesia, Intersensoriality and Enworldment in *The Lord of the Rings* (2001–2003)

Introduction: A Knife in the Dark

In the darkness, a disturbance of noise and the light from a small fire alerts five hooded figures to a presence in an isolated, ruined watchtower. As these five approach, atop the ruin four hobbits – small humanoid creatures – prepare themselves to be attacked (fig. 5.1). All five figures enter the ruin, raising their swords in unison and easily dismissing three of the hobbits. Dropping his own sword, the fourth, Frodo Baggins, stumbles onto his back, prone. On the floor, Frodo finds himself removing a ring from his pocket, the appearance of which alerts one of the hooded figures, who steps forward, though a closer view reveals no visible sign of flesh or features beneath the hood. The figure advances upon Frodo, drawing a shorter second sword, as the hobbit squirms backwards along the stone floor. As the figure prepares to strike, Frodo holds the ring to the outstretched index finger of his own left hand, obeying an irresistible compulsion to put it on: he does so and disappears (fig. 5.2). At this moment, an alternative visual regime is impressed upon the scene: that of the invisible Frodo's subjective existence in an otherwise invisible realm, clearly outside of conventional apprehension. The features of the hooded men – *ringwraiths*, 'drawn to the power' of the ring – are now grotesquely visible as pale, corpse-like beings with dead black eyes (fig. 5.3). Likewise, the ostensibly invisible Frodo is now seen by the ringwraiths, affirming his entry into an alternative regime of visibility through which the notion of invisibility signifies not the definitive absence of the visible, but rather its adjustment. Amidst the chaotically blurred atmosphere, Frodo struggles to draw his clenched hand away from the outstretched fingers of his assailant. Aggravated, the wraith pierces Frodo's shoulder with a thin, finger-like blade (fig. 5.4). As Frodo's protector appears to ward off the wraiths, Frodo pulls off the ring, becoming visible as he does so, and simultaneously letting out a terrible, agonised scream, the sound itself intensified through a visual cut to close up (fig. 5.5).

As has been demonstrated throughout this thesis, the onscreen depiction of the invisible body harbours a framework of conditions in which sensory values, and their relationship to screen media, can be analysed and appreciated. A compelling case is provided by the 2001–2003 film trilogy *The Lord of the Rings*, directed by Peter Jackson, from the first part of which, *The Fellowship of the Ring*, the above sequence description derives. The films present a cinematic translation of J.R.R. Tolkien's novel of the same name that was first published in three parts in 1954–1955.¹ The films' story, as written by Philippa Boyens, Fran Walsh, Stephen Sinclair and Jackson, closely follows that of the source novel, describing a quest in the land of 'Middle Earth' to destroy the 'ring of power' before it can be reclaimed by its malevolent creator. This creator is 'the dark lord Sauron', a disembodied consciousness whose acquisition of this ring, into which 'he poured all his cruelty, his malice, and his will to dominate all life', will enable the expression of his catastrophic might. This catastrophic eventuality does not ultimately occur, despite ever-increasing tension as the ring is carried ever closer to Sauron's habitat of Mordor and the 'Crack of Doom', the only place it can be destroyed, and where it is ultimately undone.

As can be understood from the sequence described above, a cinematic rendering of the book's eleventh chapter, 'A Knife in the Dark', a secondary function of the ring's power, expressed infrequently and momentarily, lies in its rendering of its wearer invisible to the conventional viewer, the device that confers abominable power being also the device with which invisibility is entered into. In both film trilogy and source novel, the matter of invisibility and the invisible body revolves around the story's core, connecting a discourse on power, and the tendency of power to corrupt, with themes of problematic visibility. From the narrative's preoccupation with hierarchical systems of power, there emerges a discourse of sensory hierarchies.

*

The plot of *The Lord of the Rings* focuses on a struggle between good and evil, creating particular tension in the potential vacillation of the ring bearer between those

¹ Largely following the structure of the three parts of the novel, the film trilogy is constituted of *The Fellowship of the Ring* (2001), *The Two Towers* (2002) and *The Return of the King* (2003). The editions I will be discussing will be the 'extended editions', first released on DVD in 2002–2004. When discussing Tolkien's novel I will make reference to the single volume edition, first published in 1968.

two poles: the ring's malign influence being a cultural agency that unsettles any assumed 'natural' propensity for good. The sensory dynamics at play are equally at their most rich and unstable in the form of the ring bearer: the body with a curious propensity for invisibility. The role of the ring as a facilitator of invisible form centres upon its complex and disturbing entanglement with the senses. Where much invisible body cinema centres upon the senses of those who witness the disappearance and subsequent environmental interaction of the invisible body, these films demonstrate a particular focus on the sensory experience of the participant in invisibility. As Jennifer M. Barker contests: 'the "film's body" is a concrete but distinctly cinematic lived-body, neither equated to nor encompassing the viewer's or filmmaker's body, but engaged with both of these even as it takes up its own intentional projects in the world'.² The components of such a cinematic body can be identified in the experience of the invisible body in *The Lord of the Rings*, the persistent yet challenging sensualities of which coincides and colludes with the film that supports it. The invisible body, as expressed in the trilogy, thus stands both for the human sensorium and for the cinematic sensorium. In these films, the invisibility of the body is configured in terms of challenging sensory experience, and as an encounter in cinema through which understandings of the cultural configuration of the sensorium are made explicit.

In order to explore these films as both a cinematic expression of the senses and as a sensory expression of cinema, Chapter Five will principally attend to the four intense sequences in which the character of Frodo Baggins (Elijah Wood) enters into an experience of embodied invisibility: a psychophysical state in which he finds himself, if not agonisingly, as in the example given above, then at least problematically embedded within his environs. Part one unpacks the sequence with which this introduction begins, addressing the diverse values of sensory intensity and disorder that connect frameworks of both invisibility and pain. Part two moves to discuss the unsettling of the visual sense that is in evidence throughout *The Lord of the Rings* – and that has been implicit throughout this thesis – arguing for the trilogy as a testament to contemporary notions of 'intersensoriality', a term defined by scholars such as David Howes and Steven Connor. Finally, part three explores the environmental location of the invisible body in *The Lord of the Rings*, the plot of

² Jennifer M. Barker, *The Tactile Eye: Touch and the Cinematic Experience* (Berkeley, Los Angeles and London: University of California Press, 2009), pp.7–8.

which is itself strongly motivated by the plotting, mapping and crossing of a diverse range of atmospheric landscapes; here, I demonstrate the onscreen invisible body's suitability as representative of notions of 'enworldment', and the eco-system of sensation that this term implies.

Throughout this thesis the concept and design of the cinematic invisible body has emerged as a figure of awkward and indefinite sensory expression. It is in terms of such an 'indefinite series of integrations and transformations' that Connor writes of the relationships between otherwise individuated sensory modalities:

The sense we make of any one sense is always mixed with that and mediated by that of others. The senses form an indefinite series of integrations and transformations: they form a complexion. [...] The senses communicate with each other, in cooperations and conjugations which are irregular and emergent. This complexion of the senses knits itself together anew with each new configuration.³

It is such a 'complexion' that is expressed, mediated and interpreted through the shape of Frodo's invisible body, its contours, as illustrated in the example I have already described, being irregular and uncertain. If the 'knife in the dark' is *vision*, then I argue that these films suggest alternatives to the ocularcentric, complicating the relationship between vision and invisibility with respect to the body, and so engaging, in the invisibility of the body, with a range of extra-visual encounters and experiences. As I will demonstrate in this final chapter, *The Lord of the Rings* provides a popular expression of the invisible body that animates both the cultural construction of the senses and also the particular relationship between the cinematic mode and understandings of – and enactments of – sensory formations.

³ Steven Connor, 'Intersensoriality', <<http://www.stevenconnor.com/intersensoriality>> [accessed 15 May 2013] (para. 33 of 37). This paper was delivered at a talk given at the conference on *The Senses*, Thames Valley University, 6 February 2004.

One: Pain and Disappearance: Hyperaesthesia and Disorder in the Invisible Body

Frodo and the embodiment of the invisible

Much of *The Fellowship of the Ring* is concerned with asserting the complexity of the ring's properties as a multifunctional object, and so developing the unique character of the device in relation to earlier such fictional devices.⁴ The 'ring of power' is shown to channel great psychophysical energies towards its wearer, though the nature of such effects is relative to the wearer; it is also a conscious object that has 'a will of its own', described to itself possess cognitive and sensory capabilities ('the ring of power perceived'). The ring's facilitation of bodily invisibility is illustrated early on, as a prologue shows the ring cut from Sauron's hand by Isildur (Harry Sinclair). Isildur puts it on when under attack and his disappearance is effected through a quick though uneven fade that coincides with the sound of a low, grating reverberation (fig. 5.6).⁵ The invisible Isildur's passage across terrain is tracked as he moves through branches and long grass before splashing into a river (fig. 5.7). Underwater, the ring slips from his finger and he reappears in the dusky medium to be shot by archers: their arrows a literal materialisation of aggressive, seeking vision (fig. 5.8). Isildur's unwanted emergence into visibility is an emergence into death, and the ring is lost in the depths. It is next seen in use as the hobbit Bilbo Baggins (Ian Holm), Frodo's uncle and testator, puts it on as a public prank. Again, an audiovisual rippling pre-empted the invisible body's ensuing intensified environmental interaction (fig. 5.9). Bilbo's gate creaks loudly as it is opened, and distinct is the press of the soles of bare feet as they cross hard stone steps, before a squeaking front door opens and closes with a bang (fig. 5.10). As Bilbo removes the ring, a low rumble entwines with the growing sound of laughter as his image is restored (fig. 5.11).

⁴ See, for example: Plato's classical 'Ring of Gyges'; 'Luned's ring', in the story of 'Iarlles y Ffynnon' ('Lady of the Fountain') in the medieval Welsh epic *Mabinogion*; Ludovico Ariosto's *Orlando Furioso* (1532); the Brothers Grimm's nineteenth-century story 'Der König vom goldenen Berg' ['The King of the Golden Mountain']; and E. Nesbit's *The Enchanted Castle* (1907).

⁵ According to the editor John Gilbert, this sequence was removed from the original cut, partly over concerns about 'putting on the ring and disappearing' being 'just an added complication' to a dense prologue. (John Gilbert, 'Audio Commentary: The Production/Post-Production Team', *The Lord of the Rings: The Fellowship of the Ring*, dir. by Peter Jackson (New Line Home Entertainment, 2002) [on DVD].)

In this familiar cinematic invisibility, the frame privileges the audible points of contact that certify the persistent material presence of invisible form.⁶ Augmenting these exaggerated aural traces of the body as it connects with objects in space, the movement of the camera in both of the sequences described above imbues invisible form with a sense of dynamic mobility: the invisible body borrows the momentum of the film's body, as pan, tilt and tracking shot stand in substitution for the step and passage of the invisible body that is known to occupy the frame. Such camera movements, along with their structuring within the scene and relationship to each other, demonstrate something of what Barker refers to as the 'musculature' of the film's body, and promote a kind of contact between the body of the onscreen invisible character and that of the film itself, continuing a system of dynamic invisible motion that is well defined in earlier invisible body cinema.⁷ Barker declares such 'muscular mimicry' to contribute 'to a dynamic of repulsion and attraction, push and pull, between the films and their viewers that leaves us hanging in the balance between them', and, as has been demonstrated throughout this thesis, such a vertiginous interval is exacerbated in the presence of the onscreen invisible body.⁸

Although these early instances confirm something of the objective nature of invisible form in *The Lord of the Rings* – as a condition through which a vanished body persists in its occupation of time, space and materiality – both are observed externally, avoiding any distinct description of the subjective *experience* of embodied invisibility. Such descriptions are reserved for Frodo's experience alone, the first of which occurs as the hobbits embark upon their quest to destroy the ring. At an inn, a consternated Frodo, travelling under an assumed name, feels the ring with his fingers, the image of which fills the screen (fig. 5.12). This prolonged palpation sends Frodo drowsy, his eyes closing as an unfamiliar language rises on the soundtrack, from which emerges the urgent and repeated whisper of his own surname. Frodo breaks from his trance and rushes to stop his companion Pippin from publicly revealing his identity, but loses balance and slips backwards. From above, he is shown to tumble in

⁶ The effect is intensified by the fact that, despite the presence of some direct lighting during this sequence, no shadows are cast by Bilbo's invisible body. In Tolkien's *The Lord of the Rings* precursor, *The Hobbit* (1937), where this particular ring of invisibility is introduced, repeated reference is made to the invisible body's 'awkward shadow' as 'shaky and faint' or 'thin and wobbly'. This may have been influenced by the 1924 depiction of the shadow of the invisible Siegfried, as discussed in Chapter One of this thesis. (J.R.R. Tolkien, *The Hobbit, or There and Back Again* (London: Unwin Books, 1966), pp.173, 75, 160.)

⁷ Barker, *The Tactile Eye*, esp. pp.69–119.

⁸ Barker, *The Tactile Eye*, p.119.

slow motion, the ring tossed into the air where it hangs before seeming to manoeuvre itself onto the outstretched index finger of his right hand (fig. 5.13). Frodo vanishes with the anticipated audiovisual aberration, a public disappearance that shocks the surrounding crowd (fig. 5.14).⁹

So far, so familiar, and yet a subsequent transition reveals more, showing a visible Frodo amidst a darkened environment. That he continues to occupy his position on the floor of the inn is clear, though these surroundings are visually distorted as a tumultuous realm of indistinct atmospheres (fig. 5.15). A great burning eye dominates the scene, fixing the petrified Frodo – whose own eyes remain wide open – in its gaze, its presence certifying this invisibility as a paradoxically visual experience, complicating the sensory bipolarity that the term suggests (fig. 5.16). The onset of invisibility here produces a powerful sensory signal for reception by malign forces, the sequence being crosscut with shots of distant ringwraiths who are alerted to Frodo's location and begin to converge on his position. Exacerbating the overbearing visual scheme, an aural battery similarly assaults the ears, from which emerges a barely intelligible voice, intoning 'you cannot hide... I see you!' These are the telepathic words of a cognate eye; dialogue properly discernable to this listener only through a viewing of DVD subtitles, with which both the unintelligibility and invisibility of the speech could be undone. The disturbed Frodo struggles to remove the ring from his finger; when he does so the deranged audiovisual textures of the scene smoothly revert to a conventional mode, indicating Frodo's return to a conventional sensory order (fig. 5.17).

What this sequence exhibits is a mode of invisibility in which the invisible body simultaneously inhabits multiple sensory dimensions, becoming undesirably apprehensible in an alternative register of perception. Isolated from conventional schemes of visibility, the invisible Frodo encounters a threatening audiovisual regime in which an uncomfortable intersubjective reception of imagery, sound and speech occur, his own senses at once heightened and extended even as they are dulled and distorted. In this seeming escape from the visual, Frodo is made subject to a humiliating immersion in a regime comprising intensified and abrasive visuality. Such

⁹ In Tolkien's novel, Frodo is engaged in a public performance of song at the moment he disappears: 'The audience all opened their mouths wide for laughter, and stopped short in gaping silence; for the singer disappeared. He simply vanished, as if he had gone slap through the floor without leaving a hole!' (J.R.R. Tolkien, *The Lord of the Rings* (London: HarperCollins, 1995), p.157).

a scheme reminds strongly of Michel Foucault's assertion, made in his 1975 analysis of relationships between power and spectacle, that

Disciplinary power [...] is exercised through its invisibility; at the same time it imposes on those whom it subjects a principle of compulsory visibility. In discipline, it is the subjects who have to be seen. Their visibility assures the hold of the power that is exercised over them. It is the fact of being constantly seen, of being able always to be seen, that maintains the disciplined individual in his subjection.¹⁰

As the ostensible officers of the invisible, the powerful presence of the eye and its subservient network of ringwraiths illustrate Foucault's suggestion, when discussing the development of modern policing powers, that

in order to be exercised, this power had to be given the instrument of permanent, exhaustive, omnipresent surveillance, capable of making all visible, as long as it could itself remain invisible. It had to be like a faceless gaze that transformed the whole social body into a field of perception: thousands of eyes posted everywhere, mobile attentions ever on the alert, a long, hierarchized network [...].¹¹

For Frodo, in his invisible body's entry into an alternative and dangerous visibility, the swirling atmospheres insinuate a flowing connectivity between subjectivities, and the conventional bipolarity of visibility and invisibility is firmly undone.

Atmospheres of sensory overload

Frodo's entry into invisibility begins the character's journey through successive stages of psychophysical torment, which centre in part upon his notional vulnerability: he is a member of a small, rural species – described variously as 'hobbits', 'halflings' and 'little ones', and who are portrayed in some scenes by child performers including a body double for Elijah Wood – who have been little heard of in the wider world in which the story is set. Frodo's potential for ruin is demonstrated with reference to the figures around him who have similarly endured invisibility. His uncle Bilbo is effectively embalmed by his prolonged exposure to invisibility, and feels 'thin... sort of stretched, like butter scraped over too much bread', words spoken as he strokes the ring in his watch pocket, further infusing invisibility with a sense of atemporality.

¹⁰ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. by Alan Sheridan (London: Allen Lane, 1977), p.187.

¹¹ Foucault, *Discipline and Punish*, p.214.

Bilbo's engagement with invisibility's uncertain mode of reproduction renders him ever youthful, though, like Oscar Wilde's Dorian Gray, he becomes quickly wizened and frail upon abdicating his relation with the invisible. The mortified visual appearance of the ringwraiths similarly expresses the dangers of prolonged exposure to invisibility,¹² though a more significant example is presented in the figure of Gollum (Andy Serkis), whose extreme physical and mental frailties suggest a likely template for the outcome of Frodo's corrupting encounter with invisibility, Gollum's emaciated physiognomy undoubtedly invoking the imagery of twentieth-century death camp trauma.¹³

Tolkien's novel describes vividly a subjective experience of the abnormal temporalities and sensualities of invisibility:

The world changed, and a single moment of time was filled with an hour of thought. At once he was aware that hearing was sharpened while sight was dimmed [...]. All things about him now were not dark but vague; while he himself was there in a grey hazy world, alone, like a small black solid rock, and the Ring, weighing down his left hand, was like an orb of hot gold. He did not feel invisible at all, but horribly and uniquely visible; and he knew that somewhere an Eye was searching for him.¹⁴

This passage describes Frodo's companion Sam's brief experience of invisibility, the film's omission of which only intensifies the particular experience of Frodo, though this description clearly serves as the key source for the cinematic sonification and visualisation of the experience of invisibility. Such tumultuous sensory conditions can also be thought to well illustrate Karl Marx's 1867 description of a human being's occupation of industrial atmospheres:

Every organ of sense is injured in an equal degree by artificial elevation of temperature, by the dust-laden atmosphere, by the deafening noise, not to

¹² Tolkien writes that a ringwraith 'does not die, but he does not grow or obtain more life, he merely continues, until at last every minute is a weariness. And if he often uses the Ring to make himself invisible, he *fades*: he becomes in the end invisible permanently, and walks in the twilight under the eye of the dark power that rules the Rings.' (Tolkien, *The Lord of the Rings*, p.46.) In a later work Tolkien writes that '[t]hey had, as it seemed, unending life, yet life became unendurable to them. They could walk, if they would, unseen by all eyes in this world beneath the sun, and they could see things in worlds invisible to mortal men [...]. And they became for ever invisible save to him that wore the Ruling Ring, and they entered into the realm of shadows.' (J.R.R. Tolkien, *The Silmarillion*, ed. by Christopher Tolkien (London: Book Club Associates, 1978), p.327.)

¹³ Gollum's prolonged exposure to invisibility grants him 'unnatural long life', while 'for five hundred years it poisoned his mind' and 'consumed him'. Isildur too reflects that the ring 'is precious to me, though I buy it with great pain'.

¹⁴ Tolkien, *The Lord of the Rings*, p.717.

mention danger to life and limb among the thickly crowded machinery, which, with the regularity of the seasons, issues its list of the killed and the wounded in the industrial battle.¹⁵

Marx argues that, amidst such conditions, ‘contaminated with the mephitic breath of plague given off by civilization, [...] [n]one of his senses exist any longer, and not only in his human fashion, but in an *inhuman* fashion, and therefore not even in an animal fashion.’¹⁶ To counter such tendencies, Marx suggests that the ‘transcendence of private property [will] therefore [bring] the complete *emancipation* of all human senses and attributes’, attesting that ‘man is affirmed in the objective world not only in the act of thinking, but with *all* his senses’.¹⁷ Such sentiments remind that the core values of *The Lord of the Rings*, and its invisible body’s occupation of such unfavourable sensory conditions, concern the destruction of a ‘precious’ and valuable item of jewellery.

In line with Marx’s complaints, Tolkien’s novel has been much discussed as an attack on the effects of industrialisation in the environs of Birmingham in the West Midlands, where the author had lived from 1895 to 1911.¹⁸ It is also easy to understand Frodo’s experience of intense vulnerability as drawing directly upon the experiences of Tolkien during the First World War, in which a number of his close friends – Robert Gilson, Ralph Payton, Thomas Kenneth Barnsley, and Geoffrey Bache Smith – were killed. During the Battle of the Somme, Tolkien himself was afflicted with trench fever, a condition that caused *hyperesthesia* – ‘[e]xcessive and morbid sensitiveness of the nerves or nerve-centres’¹⁹ – in his shins.²⁰ Most

¹⁵ Karl Marx, *Capital: A Critique of Political Economy*, qtd in David Howes, ‘Hyperesthesia, or, The Sensual Logic of Late Capitalism’, *Empire of the Senses: The Sensual Culture Reader* (Oxford and New York: Berg, 2005), pp.281–303 (p.282).

¹⁶ Marx, *Capital*, qtd in Anthony Synnott, ‘Puzzling over the Senses: From Plato to Marx’, in *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*, ed. by David Howes (Toronto and London: University of Toronto Press, 1991), pp.61–76 (p.74).

¹⁷ Marx, *Capital*, qtd in Howes, ‘Hyperesthesia’, p.283.

¹⁸ See, for example: Patrick Curry, *Defending Middle-earth: Tolkien, Myth and Modernity* (London: HarperCollins, 1998). Tolkien writes in the foreword to the second edition that the ‘country in which I lived in childhood was being shabbily destroyed before I was ten, in days when motor-cars were rare objects (I had never seen one) and men were still building suburban railways. Recently I saw in a paper a picture of the last decrepitude of the once-thriving corn-mill beside its pool that long ago seemed to me so important.’ (Tolkien, *The Lord of the Rings*, p.xvii.)

¹⁹ *Oxford English Dictionary*.

²⁰ On 16 October 1917, after being in hospital for nine weeks, it was noted that ‘though his temperature returned to normal three weeks ago, he still has not recovered his strength, he suffers from debility and pain in his arms and shins, and he looks delicate’. It was not until 10 April 1918 that Tolkien is declared ‘recovered and fit for general service’. (Christina Scull and Wayne G. Hammond, *The J.R.R. Tolkien Companion and Guide*, 2 vols (London: HarperCollins, 2006), I, pp.102, 104.)

particularly, the wound that Frodo receives while invisible at Weathertop, as described at the opening of this chapter, reflects the injury suffered by Bache Smith shortly after the Somme: shrapnel in his arm and thigh that became infected with gas gangrene. In Tolkien's text, a piece of metal remains in Frodo's wound, where infection festers, almost killing the hobbit, while the film shows the blade itself to turn to gas.²¹ Tolkien describes Frodo's shoulder as being pierced by both the ringwraiths' act of looking and their 'shrill cry':

Immediately, though everything else remained as before, dim and dark, the shapes became terribly clear. He was able to see beneath their black wrappings. [...] In their white faces burned keen and merciless eyes [...]. Their eyes fell on him and pierced him, as they rushed towards him. [...] A shrill cry rang out in the night; and he felt a pain like a dart of poisoned ice pierce his left shoulder.²²

In both novel and film, Frodo's stabbing is a transgressive and multisensory mingling of vision, sound and touch, through which the extraordinarily visual register of invisibility is made manifest as the sensation of pain. Thermal values, too, are enfolded into the scheme, as the 'dart of poisoned ice' finds further voice in film through the chill blue and white palette that cuts through the darkness as Frodo is stabbed.

Director Peter Jackson describes these moments to represent 'wraith world' or 'the twilight world of the ring'.²³ The visual scheme is evocative of the paintings of El Greco, the impression of optical defect connecting with the common (though

²¹ The influence of the First World War on Tolkien's work is explored in John Garth, *Tolkien and the Great War: The Threshold of Middle-earth* (London: HarperCollins, 2004). Garth writes of Bache Smith's shrapnel injury: 'After two days, however, he developed gas gangrene. Bacteria from the soil had infected his thigh wound, killing off his tissues and swelling them with gas.' (p.211.) See also: Barton Friedman, 'Tolkien and David Jones: The Great War and the War of the Ring', *Clio*, 11.2 (1982), 115–116; and Mark Heberle, 'The Shadow of War: Tolkien, Trauma, Childhood, Fantasy', in *Under Fire: Childhood in the Shadow of War*, ed. by Elizabeth Goodenough and Andrea Immel (Detroit: Wayne State University Press, 2008), pp.129–158.

²² Tolkien, *The Lord of the Rings*, p.191. Tolkien also describes how Frodo's companions experience his disappearance: 'they had seen nothing but the vague shadowy shapes [of the ringwraiths] coming towards them. Suddenly to his horror Sam found that his master [Frodo] had vanished; and at that moment a black shadow rushed past him, and he fell. He heard Frodo's voice, but it seemed to come from a great distance, or from under the earth, crying out strange words. They saw nothing more, until they stumbled over the body of Frodo, lying as if dead, face downwards on the grass with his sword beneath him.' (p.192.)

²³ Jackson reflects that these sequences were 'tough to visualise [...]. But it was done ultimately with a computer effect of streaking the edges of the image and doing some weird stuff with the colour'. (Peter Jackson, 'Audio Commentary: The Director and Writers', *The Lord of the Rings: The Fellowship of the Ring* (2002) [on DVD].)

erroneous) supposition that the painter suffered from a visual astigmatism.²⁴ These atmospheric effects were produced by Weta Digital using a technique called ‘optical flow’, which the film’s visual effects art director Paul Lasaine describes as ‘a method of distorting imagery using other moving footage as a trigger for the distortion.’ Lasaine explains that high contrast footage of fire was used, ‘not using the imagery’, but ‘using the pattern of the imagery to create [the impression of] a physical distortion’.²⁵ The filmmakers sought to impart a cinematic atmosphere of pain, and Lasaine describes the effects to evoke ‘a really fast wind [...] and as the wind blows it tears [the figures] apart, and pieces fly off’ before they ‘come back and reconstitute’.²⁶ Visual effects supervisor Jim Rygiel explains that ‘the idea was to make it look like a painful place to be in’.²⁷ The film’s supervising sound editor Mike Hopkins similarly describes the aural disturbances of the Weathertop sequence, including the screams of the ringwraiths, to contribute to ‘the one scene that most people agree [...] can be painful’, while Hopkins’s colleague Ethan van der Ryn reflects that ‘Peter’s direction in this scene is that [the sounds] should be painful, and that the scene should be painful. It’s always a fine line between not chasing an audience out of a theatre, and making them feel like they’re actually there.’²⁸

Frodo’s distressing experience of invisibility at Weathertop reflects what Synnott describes to be a Christian sensory tradition that encourages ‘the imposition

²⁴ For example, El Greco, *The Vision of St John* (1608–1614, The Metropolitan Museum of Art, New York), reproduced at <<http://metmuseum.org/collection/the-collection-online/search/436576>> [accessed 20 September 2014].

²⁵ Paul Lasaine, ‘Weta Digital’, *The Lord of the Rings: The Fellowship of the Ring* (2002) [on DVD]. Similarly, visual effects supervisor Jim Rygiel describes the effect to have ‘multi-planing qualities to it, so, as you came around, the streaks that were coming around in front kind of occluded the ones in the back, and it was keyed to getting that dimensionality that all this stuff moved around in, and that it was actually part of the world as opposed to just a 2D effect that was added later.’ (Jim Rygiel, ‘Audio Commentary: The Production/Post-Production Team’, *The Lord of the Rings: The Fellowship of the Ring* (2002) [on DVD].)

²⁶ Jim Rygiel and Paul Lasaine, ‘Weta Digital’, *The Lord of the Rings: The Fellowship of the Ring* (2002) [on DVD].

²⁷ Rygiel and Lasaine, ‘Weta Digital’.

²⁸ Mike Hopkins and Ethan van der Ryn, ‘Audio Commentary: The Production/Post-Production Team’, *The Lord of the Rings: The Fellowship of the Ring* (2002) [on DVD]. The disorientating atmospheres of this invisible realm also appear in a prequel to the trilogy, *The Hobbit: An Unexpected Journey* (Peter Jackson, 2012), in which a single similar sequence – in which Bilbo wears the newly discovered ring and becomes invisible, experiencing an intersubjective sense of Gollum’s mental and physical pain – was shot, and presented in some theatres, in 3D and at 48 frames per second: new modes of presentation that were reported to produce feelings of extreme nausea and discomfort in some viewers. (See, for example, Catherine Shoard, ‘The Hobbit: What’s the Gross-factor as Film-goers Complain of Sickness?’, *The Guardian*, 3 December 2012 <<http://www.guardian.co.uk/film/shortcuts/2012/dec/03/the-hobbit-film-complain-sickness>> [accessed 3 June 2013].)

of physical pain on the self, in imitation of Christ's passion and death'.²⁹ There are Christ-like dimensions to many of the invisible bodies discussed in this thesis, but the figure of Frodo – throughout the trilogy, but particularly in this 'crucifixion' sequence – connects most strongly with a such a paradigm of painful embodiment that affirms the fragility of incarnation. The development in Frodo's experience of invisibility from disorientation at the inn to the experience of intense physical pain – described as the distinct sensory modality of *nociception* – at Weathertop is the beginning of the gradual visible ruination of Frodo's body that proceeds throughout the film. Murray Pomerance, exploring Frodo's invisibility in these films in terms of adolescent ritual, has interpreted the Weathertop sequence to demonstrate Frodo's pursuit of a 'fantasy' of 'voyeurism', in which, 'as he is threatened by the fierce Ring Wraiths [...] Frodo disappears and watches them from the safety of his invisible envelope'.³⁰ However, I do not recognise Frodo's position as one of safe or conventional voyeurism, but of subjection, the punishment for the transgression of Frodo's becoming invisible being to be made subject to an unconventional gaze, to be tortured and tormented by the dead-eyed stares of his persecutors, whose penetrative, cross-modal vision is materialised as the blade with which he is stabbed. It is part of the paradoxical quality of this invisibility that, subjected to a *spectacular* pain, Frodo experiences an intensification of extra-visual sensation. The word 'pain' has its roots in the word 'punish',³¹ though, as Foucault observes, what was once 'an art of unbearable sensations', in contemporary frameworks of punishment, '[p]hysical pain, the pain of the body itself, is no longer the constituent element of the penalty.'³² Foucault argues that 'modern rituals of execution attest to [...] the disappearance of the spectacle and the elimination of pain,'³³ and Frodo's private punishment, hidden from the eyes of his companions, surely connects with Foucault's contention that, in modernity, 'the great spectacle of physical punishment disappeared; the tortured body was avoided; the theatrical representation of pain was excluded from punishment.'³⁴ And yet, as I

²⁹ Synnott, 'Puzzling over the Senses', p.68.

³⁰ Murray Pomerance, 'The Laddy Vanishes', in *From Hobbits to Hollywood: Essays on Peter Jackson's Lord of the Rings*, ed. by Ernest Mathijs and Murray Pomerance (Amsterdam and New York: Rodopi, 2006), pp.351–372 (p.360).

³¹ *Oxford English Dictionary*.

³² Foucault, *Discipline and Punish*, p.11.

³³ Foucault, *Discipline and Punish*, p.11.

³⁴ Foucault, *Discipline and Punish*, p.14.

shall explore below, something of the invisibility of both Frodo's torture and his pain is presented spectacularly to the cinematic witness.

The disappearance of the body: pain, metaphor and boundary blurring

A certain correlation between invisibility and pain has been observed by numerous writers. Describing pain as 'the most dynamic of the senses', Jean E. Jackson emphasises 'pain's invisibility and ontological and epistemic uncertainty',³⁵ while Elaine Scarry contends that '[o]ne aspect of great pain [...] is that it is to the individual experiencing it overwhelmingly present, more emphatically real than any other human experience, and yet is almost invisible to anyone else, unfelt and unknown'.³⁶ Drew Leder complicates such notions with his assertion that, when the body is functioning ordinarily and without pain it seems, to the subject, as though disappeared.³⁷ Leder contrasts this condition with what he calls 'dys-appearance', a term that defines experiences of painful bodily *dys*function through which awareness of one's own body becomes unpleasantly aggravated. Frodo's unconventional and unpleasant reappearance in invisibility illustrates well Leder's notion of the experience of pain as an undermining of conventional frameworks of invisibility in which the body seemingly disappears.

When, in writing on the representational problems of pain, James Elkins describes the 'sharp, ocular quality of pain on skin [...] the place where all sensation is most precise', he argues that sensation 'speak[s] most eloquently using the language of skin'.³⁸ Relationships between pain and language have been explored in numerous works over recent years,³⁹ with many observers concurring to some degree with Scarry's suggestion that '[p]hysical pain does not simply resist language but actively destroys it, bringing about an immediate reversion to a state anterior to language, to the sounds and cries a human being makes before language is learned',⁴⁰ attesting, for example, that pain 'occurs on that fundamental level of bodily

³⁵ Jean E. Jackson, 'Pain: Pain and Bodies', in *A Companion to the Anthropology of the Body and Embodiment*, ed. by Frances E. Mascia-Lees (Chichester: Blackwell, 2011), pp.370–387 (pp.374, 370).

³⁶ Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World* (Oxford: Oxford University Press, 1985), pp.10, 51.

³⁷ Drew Leder, *The Absent Body* (Chicago and London: University of Chicago Press, 1990), p.69.

³⁸ James Elkins, *Pictures of the Body: Pain and Metamorphosis* (Stanford, CA: Stanford University Press, 1999), p.35.

³⁹ Jean E. Jackson observes that a 'great deal has been written, often employing a phenomenological approach, about the relationship between language and pain. [...] Pain tends "to actively 'resist' the cultural patterning of linguistic and interpretive frames"' ('Pain: Pain and Bodies', p.381).

⁴⁰ Scarry, *The Body in Pain*, p.4.

experience which language encounters, attempts to express, and then fails to encompass', and that 'pain resists symbolization'.⁴¹ For Scarry, pain is invisible 'in part because of its resistance to language', but

it is also invisible because its own powerfulness ensures its isolation, ensures that it will not be seen in the context of other events, that it will fall back from its new arrival in language and remain devastating.⁴²

The invisible Frodo always remains inarticulate, and his agonised emergence from exposure to invisibility is synchronised with an awful cry, as if having screamed himself back into visibility, distancing distinctive language in the expression of a chaos of sensation (fig. 5.18). This initially silent scream falls into Scarry's category of 'the open mouth with no sound reaching anyone' in painting and film: imagery of 'a human being so utterly consumed in the act of making a sound that cannot be heard', that, she argues, 'coincides with the way in which pain engulfs the one in pain but remains unsensed by anyone else'.⁴³ For Scarry, pain's 'resistance to language' ensures its 'unsharability',⁴⁴ and for Leder, likewise, 'pain is the consummately private sensation [...] largely enacted within the solitary theaters of the body', as contrasted with the reaching out of 'sight and hearing [...] to a common world'.⁴⁵ As we have seen, such tendencies are challenged with the invisibility of Frodo's pain mediated through a passage of extraordinary visualisation and sonification, and it is notable that all of Frodo's encounters with invisibility are sonically punctuated with the 'black speech of Mordor', an abrasive foreign tongue that Tolkien describes as 'a tongue of the Black Land', an 'unknown' language that is 'foul and uncouth'.⁴⁶ In the films this unspeakable language of invisibility is translatable primarily through the hyperaesthesia of intense audiovisual and atmospheric experience.⁴⁷

⁴¹ Arthur Kleinman, Paul E. Brodwin, Byron J. Good, Mary-Jo DelVecchio Good, 'Pain as Human Experience: An Introduction', *Pain as Human Experience: An Anthropological Perspective* (Berkeley and Los Angeles, CA: University of California Press, 1992), pp.1–28 (pp.7–8). Scarry contends that '[p]hysical pain [...] is language-destroying' (*The Body in Pain*, p.19). Leder similarly observes that, 'lacking any referential object in the world, pain is notoriously difficult to translate into speech', and that it is 'actively speech destroying' (Drew Leder, 'Illness and Exile: Sophocles' *Philoctetes*', *Literature and Medicine*, 9 (1990), 1–11 (p.5)).

⁴² Scarry, *The Body in Pain*, p.61.

⁴³ Scarry, *The Body in Pain*, p.52.

⁴⁴ Scarry, *The Body in Pain*, p.4.

⁴⁵ Leder, 'Illness and Exile', p.5.

⁴⁶ Isildur writes that '*the language is unknown to me. I deem it to be a tongue of the Black Land, since it is foul and uncouth.*' (Tolkien, *The Lord of the Rings*, p.246. Emphasis in original.)

⁴⁷ Scarry, *The Body in Pain*, p.19.

Amidst the ‘language-destroying’ potential of the invisible body, *The Lord of the Rings* institutes both invisibility as a metaphor for pain and pain as a metaphor for invisibility. It is thus notable that, for Joanna Bourke, ‘metaphorical diversity is a key feature in pain-speech’.⁴⁸ Bourke argues that ‘pain-narratives’ (‘most often fragmentary’) use metaphors ‘to bring interior sensations into a knowable, external world’ in order ‘to impose (and communicate) some kind of order’ onto pain experiences that are otherwise ‘resistant to expression’.⁴⁹ For Jackson, pain narratives ‘are often gripping: even “pointless,” “meaningless” pain can motivate the teller to aim for impressive heights of descriptive power, in particular through metaphor’.⁵⁰ As well as serving as a detailed pain narrative told through the audiovisual metaphor of invisibility, *The Lord of the Rings* powerfully depicts pain as a psychophysical challenge to mind–body dualism, corroborating Bourke’s assertion that the experience of pain actively ‘undermines mind–body dichotomies’.⁵¹

For Jackson, it is in the particular experience of *chronic pain* that such undermining of mind–body dichotomies may be expressed. As she writes:

chronic pain, by profoundly challenging mind–body dualism, turns the person embodying that challenge into someone ambiguous, perceived to transgress the categorical divisions between mind and body [...].⁵²

It is such a category that Frodo’s pain occupies, the wound he receives whilst invisible described as one that ‘will never fully heal, he will carry it for the rest of his life’. As the trilogy closes, Frodo feels the pain of his wound keenly on the anniversary of its infliction (‘It’s been four years to the day since Weathertop, Sam. It’s never really healed’), and it is stimulated anew as the focal point of a number of

⁴⁸ Joanna Bourke, ‘Pain: Metaphor, Body, and Culture in Anglo-American Societies between the Eighteenth and Twentieth Centuries’, *Rethinking History*, 18.4 (2014), 475–498 (p.482). Bourke believes that ‘an analysis of the dynamic interconnections between language, culture, and the body can contribute to a history of sensation’ (p.475). As she writes: ‘bodies are not simply receptacles of sensations, but are actively engaged in the linguistic processes and social interactions that constitute those sensations. Language [...] collaborates in the creation of physiological bodies and metaphoric systems.’ (p.476.) For Bourke: ‘The body that creates language and metaphor is a social entity. The entwining of body and language only occurs within social contexts. [...] Sensations of pain arise in the context of complex interactions within the environment, including interactions with other people. [...] Pain-metaphors can also arise out of [such] interactions’ (p.489).

⁴⁹ Bourke, ‘Pain’, p.477.

⁵⁰ Jackson, ‘Pain: Pain and Bodies’, p.381.

⁵¹ Bourke, ‘Pain’, p.475. Jean E. Jackson, too, suggests that ‘pain still straddles the body–mind fence’ (Jackson, ‘Pain: Pain and Bodies’, p.383). As she explains: ‘the experience of pain is always both “mind” and “body,” mental and physical, simply because the pain experience is always embodied’ (p.373).

⁵² Jackson, ‘Pain: Pain and Bodies’, p.379.

subjective pain flashbacks at intervals throughout. Such a flashback occurs in *The Two Towers* as a distant ringwraith emits a piercing cry, ‘calling for’ the ring, and another occurs in *The Return of the King*, when the ringwraith’s similarly penetrating screech causes Frodo to ‘feel his blade’. In the former sequence, Frodo’s renewed sensation of pain is intensely communicated to the film’s audience through interruptive visual flashbacks to the moment he received the wound while invisible. This jarring reconnection with Frodo’s original pain experience emphasises his psychophysical condition as one equating to shellshock or Post-Traumatic Stress Disorder. For Roger Luckhurst, such trauma ‘is engraved in the mind under distinct conditions, etched in by the heightened adrenaline of the physiological reaction to bodily stress’, and he contends not only that the ‘foundational stories of cinema themselves circle around profound physiological shock’, but that cinema ‘has continued to interact with and help shape the psychological and general cultural discourse of trauma into the present day’.⁵³ Janet Walker defines a post-1980s category of ‘trauma cinema’ as ‘films that deal with a world-shattering event or events [...] in a nonrealist mode characterized by disturbance and fragmentation of the films’ narrative and stylistic regimes’.⁵⁴ Frodo’s pain flashback fits this description, as does each sequence in which his body becomes invisible: the trauma of invisibility thus marked as a chronic sensory condition.

While a viewing of Frodo’s discomfited body might chime with Elkins’s suggestion that ‘Because the body intromits thought, important aspects of my responses to a picture of a body might not even be cognized: I may [...] be thrown into a frustrated mood upon seeing a figure that is twisted or cramped’,⁵⁵ the particular cinematic form induces further sensory assaults, received by the cinematic witness through visual, aural interruptions that stimulate psychic and physical shocks even as they sit comfortably in the theatre, feeling cramped and agonised in plush and spacious seats as they too submit to a psychophysical blurring of sensory boundaries. Susan Buck-Morss has written of the relationship between the ‘prosthetic

⁵³ Roger Luckhurst, *The Trauma Question* (London and New York: Routledge, 2008), pp.148, 177. Luckhurst has observed that, in the representation of traumatic incidents that the perceptual experience of ‘flashback’ provides, ‘the visual image is held to be somehow closer to the event, less mediated, than the verbal record’. He observes that: ‘In C.S. Peirce’s semiotics, the written sign is an arbitrary *symbol*, rendered meaningful by convention, whilst the image is an *index*, still a conventional sign but one that also carries the physical trace of the object itself’ (p.149).

⁵⁴ Janet Walker, *Trauma Cinema: Documenting Incest and the Holocaust* (Berkeley and Los Angeles, CA: University of California Press, 2005), p.19.

⁵⁵ Elkins, *Pictures of the Body*, p.vii.

experiences' of cinema and 'the nervous system', arguing that the 'cinematic communal experience is one of shock':

Cognition is a physical as well as an intellectual function. If we consider the cinema screen as a prosthetic organ of the senses, then one characteristic strikes us as paramount. Exposed to the sensual shock of the cinema, the nervous system is subject to a double, and seemingly paradoxical modification: On the one hand there is an extreme heightening of the senses, a hypersensitivity of nervous stimulation. On the other, there is a dulling of sensation, a numbing of the nervous system that is tantamount to corporeal anaesthetization.⁵⁶

For Buck-Morss, the 'simultaneously hypersensitized and anaesthetized mass body that is the subject of the cinematic experience is held in this paradoxical situation [...] [p]recisely because the bodies of the beings that inhabit the screen are absent'.⁵⁷

Buck-Morss argues that such '[b]odily absence sets the stage' for

a heightened intensification of the senses. The techniques of framing, close-up and montage are powerful instruments for the intensification of the senses. They expose the nerve endings to extreme stimulation from the most shocking physical sensations [...]. Sitting, facing forward, in the darkened theatre, [...] the viewer is bombarded by physical and psychic shock, but feels no pain. [...] The shocking, hyper-sensory cinema-events are absorbed passively, severing the connection between perception and muscular innervation.⁵⁸

With such a sense of absence exacerbated in the case of an onscreen invisible body, the audience of *The Lord of the Rings* shares something of the fraught sensations of the invisible individual. Distinctions between protagonist and spectator become as blurred as those between the visible and the invisible, and so too intermingles the hyperaesthetic with the anaesthetic, another upsetting of sensory binaries and intermingling of ostensible bipolarities. Frodo's persistent desire to enter into invisibility – illustrated through the use of slow-motion and muted palettes of both

⁵⁶ Susan Buck-Morss, 'The Cinema Screen as Prosthesis of Perception: A Historical Account', *The Senses Still: Perception and Memory as Material Culture in Modernity*, ed. by C. Nadia Seremetakis (Chicago: University of Chicago Press, 1996), pp.45–62 (p.55).

⁵⁷ Buck-Morss, 'The Cinema Screen as Prosthesis of Perception', pp.55–56.

⁵⁸ Buck-Morss, 'The Cinema Screen as Prosthesis of Perception', pp.56–57. In terms of 'the violence of the gaze itself', Buck-Morss writes that the 'movie camera, and the audience with it, dehumanizes erotic perception by reifying the screen body, which is displayed in all its intimacy as a public object for specular enjoyment. [...] All kinetic activity is reserved for the "objectified" screen-bodies – who are as anaesthetized to the audience reaction as the latter is to the spectacle of their bodily pain. And yet, despite the fact that they feel no pain, the screen bodies remain vulnerable to the pure, reduced, and intrusive brutality of the gaze.' (p.57.)

sound and colour as he fondles the ring – frequently resembles a numb and orgasmic sensation: a sadomasochistic expression of a kind of pain that has, in the disorientative and multisensory state of invisibility, been defocused, the sensation dispersed – erotically – across the wider sensorium. As we will see in part two, such interconnective frameworks are extended in *The Lord of the Rings*' construction of relations between vision and the invisible.

Two: Invisibility and Intersensoriality

The disembodied eye

Although most of the figures associated with invisibility in *The Lord of the Rings* are characterised by their experiences of physical pain, the delicate sense of embodiment that finds its most powerful expression in Frodo's vulnerable body is formulated in opposition to that of Sauron, whose relationship with invisibility, and with the ring, is more singular. When shown wearing the ring, in flashback, Sauron's body seems visible enough, though, beneath the enveloping armour that encases him completely, the matter of Sauron's body is indeed invisible, and even this prosthetic shell is cinematically expressed in terms of frustrated visibility: full visual disclosure tempered through quick cuts and close, fragmented framing, while a single, albeit brief, full body view is distorted through a haze (fig. 5.19). Sauron's visualisation elucidates a frustrated experience of viewing, and a similarly frustrated tactility is exercised in his initial defeat, losing the ring whilst attempting an act of touch: the amputation of his splayed digits precipitating his body's explosion with a mighty shockwave, while the smoke then seeping from beneath his armour speaks of consignment to an immaterial fate (fig. 5.20).⁵⁹ Without the ring, Sauron 'cannot yet

⁵⁹ When the ring, and so the capacity for embodied invisibility, is lost, so is the finger, the mechanism of both touching and pointing. Frodo similarly loses his finger when losing the ring at the trilogy's conclusion. Ruth Goldberg and Krin Gabbard read this amputation as 'an upward displacement of the castration that is constantly threatened by the flaming vulva as well as the film's other nightmare symbols of female sexuality, including the vagina with teeth that is the gigantic spider Shelob'. (Ruth Goldberg and Krin Gabbard, "What does the Eye Demand": Sexuality, Forbidden Vision and Embodiment in *The Lord of the Rings*', in *From Hobbits to Hollywood*, ed. by Mathijs and Pomerance, pp.267–281 (p.274).)

take physical form, but his spirit has lost none of its potency.’⁶⁰ His disembodied nature is an immaterial one, described, in terms of problematic viewing, as ‘darkness’, ‘shadow’, and as the unintelligible and ataxonomical ‘whispers of a nameless fear’. That the embodied Sauron exists only in flashback (‘three thousand years ago’), outside the standard temporal register of the film, positions him as out of touch with the immediacy that most characterises sensory experience. In the present tense that the film mostly narrates, Sauron’s unnatural character derives largely from his lack of a body, his absence of flesh. Despite a distinct lack of fingers, Sauron is invested entirely in reacquiring the ring, and so stimulating his full re-embodiment, his prospective reconstitution and rematerialisation itself constituting a key and fearful trajectory of the story.⁶¹

In this disembodied state, ‘concealed within his fortress, the lord of Mordor sees all. His gaze pierces cloud, shadow, earth and *flesh*. [...] A great eye... lidless... wreathed in flame’. First seen as Frodo’s friend Gandalf hesitantly moves to examine the ring, this eye induces immediate tensions between vision and touch. Looking on the ring from above, Gandalf reaches his hand down to pick up the ring, his fingers extended and drawing closer and closer, the lens zooming gently with them, until, at the moment they are about to make contact, they pause, and any contact is prohibited by a near-subliminal cut – with startling audio accompaniment – that shows a momentary insert of a huge, burning eye, which fills the screen (fig. 5.21). This interruption jolts Gandalf just as it jolts the film’s audience out from a close, quiet, straining contemplation of touch. This physical response to jarring audiovisual experience conflates a number of different strategies of looking: that of being seen, by the great eye; that of seeing the act of looking that this eye partakes in; that of feeling, physically, the raw sensation of vulnerability felt by the one who is being seen. The fiery constitution of this incorporeal, fleshless eye, corresponds with the textures of the invisibility sequences in which it has been seen to operate most powerfully. Only the ring, and a concomitant engagement with invisible embodiment, will enable Sauron’s transcendence of the sensory limitations of this mono-sensory condition. Appearing twice as coarse graffiti, the image of the eye serves to symbolise the

⁶⁰ As Tolkien expands in a later work: ‘Sauron was for that time vanquished, and he forsook his body, and his spirit fled far away and hid in waste places; and he took no visible shape again for many long years’ (*The Silmarillion*, p.333).

⁶¹ Such a passage is similarly observed in the contemporaneous *Harry Potter* series of films (2001–2011), in which the undead antagonist Voldemort is ever enacting an unsettling trajectory towards re-embodiment.

disembodied Sauron, and the round ring too evokes the eye, changing size like a dilating pupil.⁶² Although Sauron's power can thus be understood as dependent upon an incisive scopic thrust, and though this intense gaze has some propensity for psychic violence – a mindful eye, rather than an embodied eye – such powers are limited. That Sauron's eye is 'lidless' emphasises both the divorce of vision from the body and the impossibility of this eye's closure; its inability to blink expresses an inflexible mode of vision whilst also distancing it from the cinematic mechanics of projection. The sensory frustrations inherent in Sauron's disembodied gaze exhibit an aversion to a wider complexion of sensual intermingling, contrasting sharply with Frodo's intensely embodied and multisensory experience of invisibility.

Alison Peirse has observed that 'Jackson engages with and explores the possibilities of vision and images of the eye', borrowing 'spectatorial conceits from the horror film in order to relate the ocularcentric to the vulnerability of the individual body of Frodo', and thus emphasising 'the horror of being watched and of watching'.⁶³ While Peirse's discussion of Jackson's appropriation of ocularcentric horror tropes is compelling, her assertion that the 'eye of Sauron is omnipresent' belies the complexity of perceptual formulations in the films. Ruth Goldberg and Krin Gabbard's observation that 'the eye see[s] everything' is similarly misleading, as the vision of Sauron is clearly subject to debilitating limitations: an intimidating optical faculty that in no way 'sees all', expressing instead frustrated pretensions towards omniscience.⁶⁴ We might rather think of the 'watching' expressed through this malign organ in terms of a hubristic demonstration of what Howes describes as 'the watching which in a visualist age would increasingly seem to offer a total sensory experience in itself'.⁶⁵ In its static setting, at the end of its stalk, the single eye exerts a mono-directional gaze, like a radiating searchlight, and can see only one thing at a time (even this can be contrasted with Gandalf's clarification, in response to Bilbo's entreaty that he 'keep an eye on Frodo', of 'two eyes') (fig. 5.22). These scopic limitations are most apparent towards the trilogy's end, as the jittery eye roves anxiously around its backyard, failing to see what it is looking for even when pointed right at it.

⁶² In the novel, Bilbo confesses that: 'Sometimes I have felt it was like an eye looking at me. And I am always wanting to put it on and disappear' (Tolkien, *The Lord of the Rings*, p.34).

⁶³ Alison Peirse, 'Ocularcentrism, Horror and *The Lord of the Rings* Films', *Journal of Adaptation in Film and Performance*, 5.1 (May 2012), 41–50 (p.42).

⁶⁴ Goldberg and Gabbard, "'What does the Eye Demand'", p.273.

⁶⁵ Howes, 'Hyperesthesia', p.285.

The nature of the eye of Sauron illustrates, for example, some of the questions asked at the end of the twentieth century by scholars such as David Michael Levin:

Can it be demonstrated that, beginning with the Greeks, our Western culture has been dominated by an ocularcentric paradigm, a vision-generated, vision-centred interpretation of knowledge, truth, and reality? [...] Can it be argued that, in the period we call ‘modernity’ [...], this ocularcentrism has assumed a distinctively modern historical form? [...] How has the paradigm of vision ruled, and with what effects?⁶⁶

Levin wonders ‘whether our contemporary culture is really still ocularcentric, whether it is in transition to a different, historically new paradigm [...]. Is there a postmodern future beyond the governance of ocularcentrism? What would a postmodern vision be like?’⁶⁷ He writes that ‘[o]ur vision continues to change. But do we know – can we tell from this history – the full extent of our sensibilities? Do we know of what further development our senses may be capable?’⁶⁸ Perhaps most pointedly, Levin asks, ‘[d]oes changing the world require ending the hegemony of vision?’⁶⁹ It is this question that appears to be answered at the trilogy’s end, as the principle consequence of the destruction of the ring is the ensuing explosion of both the great eye and the landscape that surrounds it, a blast that sends out a huge shockwave, and that swallows up the forces of evil into the shadows of the earth (fig. 5.23). While this moment illustrates to some extent what Martin Jay has described as ‘the denigration of vision’ in twentieth-century thinking,⁷⁰ it should be noted that, in the context of *The Lord of the Rings*, this end of vision is also the end of its associative regime of invisibility.

Eye trouble and the disintegrated sensorium of Sauron

The spectacular destruction of the eye at the finale of *The Lord of the Rings* makes particularly explicit a recurring theme implied throughout invisible body cinema: the undermining of vision and the visible. Indeed, it might be remembered here that, in *Siegfried*, the title figure, shortly before acquiring the capacity for invisibility, is seen

⁶⁶ David Michael Levin, ‘Introduction’, *Modernity and the Hegemony of Vision* (Berkeley and Los Angeles: University of California Press, 1993), pp.1–29 (pp.2–3).

⁶⁷ Levin, ‘Introduction’, p.3.

⁶⁸ Levin, ‘Introduction’, p.7.

⁶⁹ Levin, ‘Introduction’, p.23.

⁷⁰ Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-century French Thought* (Berkeley, Los Angeles and London: University of California Press, 1993), p.15.

to slash at the eye of the dragon that he slays (fig. 5.24). Like a slash across the cinema screen, this full-frame image pre-empts Luis Buñuel and Salvador Dalí's 1929 slashing of the eyeball in *Un Chien Andalou*, an episode that has been described by Jay in terms of 'the violent denigration of the visual' that he argues is typical of the Surrealist period, and as having 'special significance' for 'the crisis of ocularcentrism':⁷¹

the act's literal dimension has sometimes been overlooked. That is, the violent mutilation of the eye [...] is here paradoxically given to the sight of those with the courage not to avert their eyes from what appears on the screen.⁷²

Numerous intense expressions of problematic vision pervade *The Lord of the Rings*: Gandalf is shown to sleep with unseeing eyes wide open; subject to the wizard Saruman's controlling spell, Theoden's eyes are misted over as if by cataracts; when expelled from his possession of Theoden, Saruman himself bleeds from the eye; on the peripheries of Mordor, Frodo encounters both corpse figures with misted eyes and the giant spider Shelob, who is incapacitated through blinding. Gollum's transformation from an ordinary creature into a wraith-like figure is depicted through the blinking of his eye: a moment at which a transition is also made from special makeup effects to computer-generated imagery. An eyeball motif also forms the clearest corollary of screen media in the trilogy, in the form of the *palantír*, a magical technology that enables distant communication, bringing together vision, thought and psychic speech, and that combines qualities of cinematic object and eyeball alike. Like the ring, the *palantír* induces an erotic longing, and, as an eyeball that burns the hands, sending the beholder insensible, is also an agonised expression of hapticity (fig. 5.25).⁷³

The *palantír*'s particular conflation of the proximal and distal qualities of touch and vision resonates with Laura U. Marks's assertion that the 'ability to oscillate between near and far is erotic'.⁷⁴ Marks explains that,

⁷¹ Jay, *Downcast Eyes*, pp.259, 257.

⁷² Jay, *Downcast Eyes*, p.258.

⁷³ Tolkien associates a *palantír* with the Weathertop site, writing on the function of the 'seeing stones' in terms of 'visions in the mind's eye' (J.R.R. Tolkien, *Unfinished Tales of Númenor and Middle-earth*, ed. by Christopher Tolkien (London, Sydney and Wellington: Unwin Books, 1980), pp.409, 411 n.2, 413 n.16, 415 n.21).

⁷⁴ Laura U. Marks, *Touch: Sensuous Theory and Multisensory Media* (Minneapolis: University of Minnesota Press, 2002), p.xvi.

just as the optical needs the haptic, the haptic must return to the optical. To maintain optical distance is to die the death of abstraction. But to lose all distance from the world is to die a material death, to become indistinguishable from the rest of the world. Life is served by the ability to come close, pull away, come close again. What is erotic is being able to become an object with and for the world, and to return to being a subject in the world [...].⁷⁵

In *The Lord of the Rings*, Frodo's invisible body satisfies these conditions of eroticism. Bodily invisibility through the wearing of a ring enmeshes visibility and tactility, as transference between visibility and invisibility is stimulated through the index finger's extension and isolation. Throughout, earthy hand textures are contrasted with the reflective mirroring of the metal ring, emphasised in repeated frame-filling close ups. This optic-haptic intercourse communicates a sense of grasping, probing and pointing: a coincidence of touch and vision, proximity and distance. The climactic destruction of the ring, with Frodo unable to give it up, is enabled only through the biting off of his index finger. This body exercises itself into invisibility through a conflation of the haptic and the optical, and so opening up a space in which its nature as both sensible object and sensing subject is a fluctuating, coterminous one. Blurrings of boundaries, sensory and otherwise, through which bipolarities – pain–numbness; hyperaesthesia–anaesthesia; touch–vision; proximal–distal; body–mind – are collapsed.

Such boundary blurring is less evident in the case of Sauron himself. To compensate for the limitations of his monocular perception, Sauron controls figures who can be thought of as his sensory agents, sent out in multiple to collect sensory data on his behalf: the roving ringwraiths, reliant on their sense of smell,⁷⁶ and the character 'The Mouth of Sauron' (Bruce Spence), an eyeless representative whose exaggerated mouth speaks for his disembodied master (though whose quick beheading places further limitations on Sauron's sensorium as the film nears its end) (fig. 5.26). Yet these parts come together to constitute, at best, a disintegrated sensorium, in which a stifling disconnect can be observed between alternative sensory

⁷⁵ Marks, *Touch*, p.xvi. Elsewhere, Marks suggests that 'haptic images are erotic in that they construct an intersubjective relationship between beholder and image' (Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham and London: Duke University Press, 2000), p.183).

⁷⁶ In many visual adaptations of the novel, the only visible detail, beneath the cloaks of these 'black riders', is a pair of penetrating eyes, as can be observed in *The Lord of the Rings* (Ralph Bakshi, 1978) and the cover illustration accompanying the 1985 Melbourne House computer game *Lord of the Rings: Game One*. This is not the case in the 2001–2003 films, however, with such scopic potency reserved for Sauron alone.

modalities. It is, thus, not so much that the malign eye represents a vision that must be denigrated, but that its isolation is not sustainable.

Throughout *The Lord of the Rings*, an extreme unsettling of vision unfolds. In the setting of the ruined watchtower, ruins become part of the invisible body scheme; the ruined building expresses both the mortification of the invisible antagonists that appear within its bounds and the impending debilitation of Frodo. Yet, the ruined watchtower also functions as a metaphor for the ruin of vision, invoking the invisible as a means of rethinking and reconfiguring vision through the body and its extra-visual senses. The disorientating experience of invisibility, therefore, suggests a fluctuation of sensory values and interrelations, as shall be explored in the following section.

Intersensoriality and the invisible body

In looking too intently with its segregated gaze, the ‘lidless’ eye of Sauron enacts a mode of vision that amply illustrates Connor’s interpretation of Serres’s *The Five Senses*, in which, ‘[w]here the other senses give us the mingled body, vision appears on the side of detachment, separation. Vision is a kind of dead zone, as the petrifying sense, the non-sense, which it is the role of the other senses to make good or redeem.’⁷⁷ In contrast to such an arrangement, the figure of Frodo exemplifies an engagement with a multisensory scheme of invisibility. Frodo’s physical and cultural characteristics – he has large eyes, ears and bare feet and, like other members of his species, is connected with a love of food, drink and smoking – contributes to the constitution of his sensorium, the richness of which is diminished the further he travels into the barren wastelands of Mordor.⁷⁸ As his proximity to the great eye increases, his connection with his extra-visual senses and the complexity of his sensorium begins to be effaced, as he states: ‘I don’t recall the taste of food... nor the sound of water... nor the touch of grass’. Such an experience of anguished sensory deprivation is corroborated in Gollum’s prolonged and debilitating experience of invisibility, which similarly causes him to forget the rich nature and diversity of his

⁷⁷ Steven Connor, ‘Michel Serres’ Five Senses’, in *Empire of the Senses: The Sensual Culture Reader*, ed. by David Howes (Oxford and New York: Berg, 2005), pp.318–334 (p.328).

⁷⁸ More than once, the hobbits are associated with eating, drinking, and the earth. As Bilbo’s opening narration observes: ‘it has been remarked, by some, that hobbits’ only real passion is for food; a rather unfair observation, as we have also developed a key interest in the brewing of ales and the smoking of pipe-weed. But where our hearts truly lie, is in peace and quiet, and good tilled earth, for all hobbits share a love of things that grow’.

sensorium, compromising his sense of identity and also instilling in him the speech defect from which he derives his new name. As he narrates:

Gollum: we forgot the taste of bread... the sound of trees... the softness of the wind. We even forgot our own name.

Nevertheless, the persistence of Frodo's multisensorial character is such that, in his experiences within the realm of invisibility – where the ocularcentricity of Sauron is seemingly all-powerful – he retains something of his multisensory subjectivity. While Frodo's invisibility is concomitant with hyperaesthetic experiences of pain, disorientation and sensory overload, I would argue that these sequences also reflect an unsettling and complication of rigid sensory hierarchies. In fact, visuality itself is reinvigorated through this disorientative and indistinct mingling with a multiplicity of alternative modalities, and made more vital in this mix.

Key to Howes's 2003 book *Sensual Relations* is the author's emphasis on the value of 'exploring how the senses interact with each other in different combinations and hierarchies'.⁷⁹ Such interactions are later described by Howes using the term 'intersensoriality':

The multidirectional character of intersensoriality means that no one sensory model can tell the whole story. This also applies to the senses themselves. No matter how culturally prominent a particular sensory field may be, it always operates interactively with other sensory domains and hence cannot reveal the whole story about the social sensorium.⁸⁰

For Howes, 'the concept of intersensoriality reminds us that, no matter how prominent or engrossing one strand of perception may appear, it is still knotted into the fibers of our multisensory existence'.⁸¹ As we have seen, themes of invisibility in *The Lord of the Rings* superficially afford an opportunity to isolate the visual sense, but in fact open out upon a wider exploration of the interconnectivities of the sensorium. Beyond the disturbingly dominant presence of the eye, the intersensorial mingling that

⁷⁹ David Howes, *Sensual Relations: Engaging the Senses in Culture and Social Theory* (Ann Arbor: University of Michigan Press, 2003), p.xi.

⁸⁰ David Howes, 'Introduction: Empires of the Senses', *Empire of the Senses: The Sensual Culture Reader* (Oxford and New York: Berg, 2005), pp.1–17 (p.12).

⁸¹ Howes, 'Introduction: Empires of the Senses', p.12.

emerges from invisibility is rather one in which no single sense is necessarily privileged over another.

Connor explains the mechanics of intersensoriality in terms of ‘an intensification of awareness’:

The senses are multiply related. We rarely if ever apprehend the world through one sense alone. Indeed, under conditions in which any one sense predominates, closer inspection may disclose that the predominating sense is in fact being shadowed and interpreted by other, apparently dormant senses. Indeed, we might enunciate a paradoxical principle: that the more we concentrate, or are concentrated upon one sense, the more likely it is that intersensorial spillings and minglings will be induced. To stare intently may be to long to grasp and consume; to be surrounded by sound is to be touched or moved by it. Intersensoriality is at work whenever one sense is stretched, isolated or intensified [...]. This is because every intensification of a particular sense involves a doubling of that sense, an apprehension of its action of sensing, as well as a losing of oneself in the object of the sense. Such intensifications or objectifications of the action of the senses are usually though not invariably, achieved by means of an intensification of awareness of the organ of the sense.⁸²

Such it is in the cinematic depiction of the invisible body, throughout all of the examples that this thesis addresses, where the visual sense of that body’s potential witnesses – both intra- and extra-diegetic – is stretched and challenged, as viewers confront evidence of its persistent presence, materiality and sensitivity. Ultimately, in *The Lord of the Rings*, it is with the destruction of the great eye that Frodo is able to do what it could not: he closes his eyes to describe an experience of ‘seeing’ with his own lids shut (fig. 5.27). Feeling full contact between eyes and skin, he ‘sees’ the sensual memories that he had earlier forgotten: a celebration of the intersensorial in which the bipolarity suggested by visibility and invisibility is again undermined, as the complex values of intersensorial vision – a mode of seeing that can take place even with eyes wide shut – are affirmed.

Connor describes intersensoriality to be a cultural condition:

what living in a culture offers is not just a static consortium of the senses, disposed like a molecular structure in a particular configuration, but rather a field of possibility, a repertoire of forms, images and dreams whereby reflection on the senses can take place. Intersensoriality is the means by which

⁸² Connor, ‘Intersensoriality’, para. 18 of 37.

this is enacted. Cultures are sense-traps; which bottle and make sense of sensory responses; but they are also sense-multipliers.⁸³

It is clear, too, that such a 'repertoire of forms, images and dreams whereby reflection on the senses can take place' defines one function of the cultural mode of cinema. The invisible body's experience in *The Lord of the Rings* is an intersensorial encounter through which is stimulated possibilities of extra-visual seeing that are thus proposed as viable alternatives to the ocularcentric attitude. Such alternatives express something of the access that cinema can provide for its audiences: to modes of viewing that are of the intersensorial eye, and through which the visual – despite, or perhaps because of the prevailing cinematic entry into the audiovisual – is inflected by a diversity of peripheral cultural and sensory experiences. Rather than 'define vision in some unified if not essentialist way', Mieke Bal argues that 'differentiating modes if not kinds of vision – multiplying perspectives, proliferating points of view – may be a more useful strategy for examining the ideological, epistemological, and representational implications of dominating modes of vision, including their illusory monopoly'.⁸⁴ *The Lord of the Rings*' central motif of embodied invisibility, with all its peculiarities, expresses an intense condition of multisensory, intersensorial character; and its symbiotic partner, for each are bound to each other, is the disembodied eye of Sauron, though the latter does not represent vision so much as the mono-sensory monopoly of the ocularcentric. The elevation, away from the earth, of this immobile eye compounds its lack of corporeal components, contrasting it even further with Frodo's earthbound intersensorial vision. As will be shown in Part Three, it is in the invisible body's expression amidst environmental and topographical frameworks that such sensory reconfigurations are further extended.

⁸³ Connor, 'Intersensoriality', para. 33 of 37.

⁸⁴ Mieke Bal, 'His Master's Voice', in *Modernity and the Hegemony of Vision*, ed. by David Michael Levin (Berkeley and Los Angeles: University of California Press, 1993), pp.379–404 (p.379). As Bal writes: 'I consider attention to such differentiations itself a more effective contribution to the rupturing of monopolies than their acceptance, albeit in their critical denunciation' (p.380).

Three: The Sensory Landscapes of Invisibility

The matter of enworldment

Many writers have remarked upon the diverse representations of landscape and environment in *The Lord of the Rings* films,⁸⁵ but it is the trilogy's cinematic mapping of a multifarious sensory landscape with which I am concerned in this section, and it is the invisible body that serves as port of entry to this scheme. As already discussed, when Frodo's body becomes invisible, his environment is augmented. As I will demonstrate, the invisible realm thus becomes an extension of the invisible body, expressing concepts of enworldment implicit within ordinary sensory functioning.

As a topographical metaphor, the ruined watchtower at Weathertop – the setting in which this chapter began – introduces the atmospherics of the invisible landscape: the cold palette and tormenting winds exacerbating the sense of meteorological intensity inherent in the location and so illustrating a dynamic ecosystem of sensation. For Tim Ingold, weather, particularly in its extreme manifestations, 'is not so much an object as a medium of perception'.⁸⁶ He writes:

our experience of the weather, when out of doors, is invariably multi-sensory. It is just as much auditory, haptic and olfactory as it is visual; indeed in most practical circumstances these sensory modalities cooperate so closely that it is impossible to disentangle their respective contributions. Thus we can normally see what the weather is like only because we can hear, feel and smell it too.⁸⁷

The weather of the invisible realm, then, is such a 'medium of perception' through which the audience, through audiovisual metaphor, is given access to Frodo's extreme internal experience. As a metaphor for the senses, the notion of weather suggests both the shifting interrelations between sensory modalities that can be understood in intersensoriality, but also the shifting of understandings of sensory functioning, and the delicate and changeable cultural nature of sensory formations.

⁸⁵ See, for example, Jonathan Rayner, 'Battlefields of Vision: New Zealand Filmscapes', in *Cinema and Landscape*, ed. by Graeme Harper and Jonathan Rayner (Bristol and Chicago: Intellect, 2010), pp.255–267.

⁸⁶ Tim Ingold, 'The Eye of the Storm: Visual Perception and the Weather', in *Visual Sense: A Cultural Reader*, ed. by Elizabeth Edwards and Kaushik Bhaumik (Oxford and New York: Berg, 2008), pp.377–386 (p.386).

⁸⁷ Ingold, 'The Eye of the Storm', pp.377–378.

The environmental themes of *The Lord of the Rings* are extended in the dark landscapes of Mordor, ‘where the shadows lie’. When, looking to gain access to Mordor, Frodo and Sam (Sean Astin) slide down a hill opposite the Black Gate, their presence is noticed as a cloud of dust against the barren hillside (fig. 5.28). With Sam’s body literally embedded in the landscape, and two soldiers – whose keen eyes alone are visible beneath their armour – approaching to investigate, Frodo throws his Elvish cloak – a camouflage device that can ‘shield you from unfriendly eyes’ – over both of the hobbits (fig. 5.29). Despite standing directly over the halflings, the soldiers see nothing, while the hobbits’ own viewpoint is tempered through the fabric of the cloak (fig. 5.30). From the outside, the two hobbits appear as just another rock in the landscape (fig. 5.31). This sequence demonstrates the extent of the connection between invisibility and environmental immersion, and such conditions are only intensified the more Frodo is himself immersed amidst the landscapes of Mordor. The weather of Mordor, as we are reminded, ‘is not the weather of the world’, and the closer Frodo comes to the great eye, the more his body and mind seem oriented towards the condition of invisibility, stumbling as if enveloped in the tumultuous atmospheres of the invisible. At the climax of *The Lord of the Rings*, amidst the volcanic climate of the Crack of Doom, the atmospherics of the invisible realm, previously only recognised as pertaining to Frodo’s subjective psychophysical experience, are externalised, enveloping the visible Frodo (fig. 5.32).

During Frodo’s traversing of the landscape of Mordor, the environment becomes, then, an outer manifestation of Frodo’s internal struggles, further breaking down the dichotomy between invisible and visible through a collapse of inner and outer space. Such expressions of psychic, physical and environmental sensory entanglement have been described by some scholars as ‘enworldment’ or ‘emplacement’. Often engaging with Merleau-Ponty’s definition of ‘flesh’ as neither ‘matter’, ‘mind’ nor ‘substance’, ‘a *general thing*, midway between the spatio-temporal individual and the idea, a sort of incarnate principle’, such definitions take up Merleau-Ponty’s question: ‘Where are we to put the limit between the body and the world, since the world is flesh?’.⁸⁸ For Peter Koestenbaum, writing in 1978, enworldment extends from embodiment in describing an encounter in which ‘one

⁸⁸ Maurice Merleau-Ponty, *The Visible and the Invisible*, trans. by Alphonso Lingis (Evanston: Northwestern University Press, 1968), pp.139–140, 147, 138.

experiences not only a connection with the body but with the environing world'.⁸⁹ David Abram, writing in 1996, likewise locates the sensorium amidst the environmental:

As we become conscious of the unseen depths that surround us, the inwardness or interiority that we have come to associate with the personal psyche begins to be encountered in the world at large: we feel ourselves enveloped, immersed, caught up *within* the sensuous world. This breathing landscape is no longer just a passive backdrop against which human history unfolds, but a potentized field of intelligence in which our actions participate.⁹⁰

In such a scheme, there is an encroaching onto and into the sensorium of the environmental conditions of the landscape. The designation of 'Middle Earth', in this way, can be understood to signify the environment as a medium that further interrelates the already blurred categories of mind and body.

Defining enworldment as 'emplacement', for Howes, 'the emergent paradigm of emplacement suggests the sensuous interrelationship of body–mind–environment', while the 'counterpart to emplacement is displacement, the feeling that one is homeless, disconnected from one's physical and social environment'.⁹¹ As already demonstrated, the sense of emplacement emerges from Frodo's experiences of the landscapes of invisibility, which serve as a confluence within which the body, the mind and the environment come into a sensuous interrelationship. However, there is clearly a sense in which Frodo's experience is also one of displacement, specifically through displacement from the established sensory order. The invisible landscape, therefore, emerges as a disorientating topography that both jars with conventional sensory paradigms whilst simultaneously bringing the invisible body into a potent connectivity with its environment.

Sensory mapping and the onscreen invisible body

At the conclusion of *The Fellowship of the Ring*, Frodo is chased by his companion Boromir, who wishes to seize the ring, their earthy cloaks providing some measure of integration with the surrounding woodland setting. Frodo puts on the ring and

⁸⁹ Peter Koestenbaum, *The New Image of the Person: The Theory and Practice of Clinical Philosophy* (Westport, CT: Greenwood Press, 1978), p.183.

⁹⁰ David Abram, *The Spell of the Sensuous* (New York: Vintage Books, 1996), p.260.

⁹¹ Howes, 'Introduction: Empires of the Senses', p.7.

disappears completely, evading his assailant's grasp before absconding, in the one instance of his mobility in invisibility, his escape made evident as he disturbs the bough of a felled tree. As Boromir calls his name in vain, a transition is made – linked by Boromir's cries – to the invisible Frodo's envelopment amidst extra-visual atmospheres, once more made manifest as tumultuous audiovisual textures. Ascending a flight of stone steps to hide, Frodo's bare feet become indistinct as they merge with the monochrome environment in which his body is immersed (fig. 5.33). As Frodo looks in the direction of Mordor, the distant tower of Sauron is suddenly brought unnaturally close, as a rush zoom closes in on the base of the tower, before shifting to become a tracking shot up the tower's side. On arrival at its uppermost part, the great burning eye dominates the image and the discordant 'black speech' can be heard (fig. 5.34). With his gaze locked and entangled with that of the eye, Frodo slips backwards, tumbling through the air as he falls out of invisibility, reappearing in mid-air before his tensed and disoriented body hits the ground with a jolt (fig. 5.35).

What is not made explicit in this sequence, but that is nevertheless carried over from Tolkien's text, is that this supernaturally telescopic viewing experience is both engendered by the site itself and exacerbated by Frodo's invisibility. Tolkien describes this location – 'a crumbling battlement' that Frodo sees 'as through a mist' – as 'the Seat of Seeing, on Amon Hen, the Hill of the Eye', on which the invisible Frodo's disoriented subjectivity is literally *reoriented* as he looks 'into wide uncharted lands, nameless plains, and forests unexplored':⁹²

At first he could see little. He seemed to be in a world of mist in which there were only shadows: the Ring was upon him. Then here and there the mist gave way and he saw many visions: small and clear as if they were under his eyes upon a table, and yet remote. There was no sound, only bright living images. The world seemed to have shrunk and fallen silent. [...] Thither, eastward, unwilling his eye was drawn. [...] Darkness lay there under the Sun. Fire glowed amid the smoke. [...] Then at last his gaze was held: [...] he saw it: Barad-dûr, Fortress of Sauron. All hope left him.

And suddenly he felt the Eye. There was an eye in the Dark Tower that did not sleep. He knew that it had become aware of his gaze. A fierce eager will was there. It leaped towards him; almost like a finger he felt it, searching for him. Very soon it would nail him down, know just exactly where he was. [...] For a moment [...] he writhed, tormented. Suddenly he was aware of himself again. Frodo, neither the Voice nor the Eye: free to choose, and with one remaining instant in which to do so. He took the Ring off his finger. He was kneeling in clear sunlight before the high seat. A black shadow seemed to

⁹² Tolkien, *The Lord of the Rings*, p.391.

pass like an arm above him; it missed Amon Hen and groped out west, and faded. Then all the sky was clean and blue and birds sang in every tree.⁹³

The term ‘seat of seeing’ here locates sight as a physiological, but also as a topographical experience, certifying the experience of vision to be both embodied and emplaced. If the ruined watchtower of Weathertop is a materialisation of a radical shift in visual practice, this alternative and very functional viewing platform is one that imagines vision as a site of sensation that is part of a dynamic topographical scheme. While the film’s chief adjustment to the above passage – the presence of a deranged sonic register – further muddies the edges of mono-sensory experience, the exaggerated zoom and track extend the topographical fluidity of Tolkien’s prose even while certifying this to be a particularly cinematic mode of viewing, and the vantage point from behind Frodo’s shoulder further implies a cinematic encounter: a cinema of sensory mapping.

Mapping the cinematic sensorium

In *A Thousand Plateaus*, Gilles Deleuze and Félix Guattari assert that a ‘map has multiple entryways’:

The map does not reproduce an unconscious closed in upon itself; it constructs the unconscious. It fosters connections between fields, the removal of blockage on bodies without organs, the maximum opening of bodies without organs onto a plane of consistency. It is itself a part of the rhizome. The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. Perhaps one of the most important characteristics of the rhizome is that it always has multiple entryways [...].⁹⁴

Extending this formulation in relation to the cinema, Giuliana Bruno makes reference to this passage, contending that ‘[t]his map can easily be redesigned on a white screen – indeed, *as* a film screen’.⁹⁵ In this way, I would argue that the conjunction of cinematic experience with the topographical metaphors of sensory mapping in *The*

⁹³ Tolkien, *The Lord of the Rings*, pp.391–392.

⁹⁴ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. by Brian Massumi (London and New York: Continuum, 2004), pp.13–14.

⁹⁵ Giuliana Bruno, *Atlas of Emotion: Journey’s in Art, Architecture and Film* (London: Verso, 2007), p.273.

Lord of the Rings provide a rhizomatic structure through which an erosion of established sensory hierarchies takes place, providing ways of rethinking the sensorium through the cinematic encounter.

At the volcanic Crack of Doom, Frodo struggles with destroying the ring, but ultimately puts it on and disappears for a fourth and final time (fig. 5.36). The film audience is not privy to this last experience of invisibility, an exclusion that owes something to Frodo's loss of control: he is not himself, having finally succumbed to the corrupting influence of the great eye, which now comes to focus on Frodo's invisible presence. At this moment, invisibility – and its affordance of intersensorial possibilities – is reduced to nothing more than a condition of the visual. This brief moment ends as Gollum attacks Frodo, taking the ring and falling into the lava below, where the ring is destroyed, causing the tower of Sauron to collapse, the great eye to explode, and the volcano – another fiery eye – to erupt. The 'Crack' serves as a topographical metaphor that makes literal the division between embodied subjectivity and the world, and the divisions between the senses. As the crack overflows, the volcano begins imploding and its terrain comes to resemble no longer a fixed point, but a flowing network of interconnected islands, resonating with Serres's conception of the sensorium as constituted by islands, each sense organ a 'fiery centre' that makes up a 'teeming complex of sensations' (fig. 5.37).⁹⁶ This challenging landscape expresses the complication of divisions between the senses, and the beginnings of an intersensorial economy of sensation. It is the institution of a rhizomatic network and an assertion of the rhizome as a structuring principle of the sensorium. What appears to be an ending is actually a new beginning, as an extended cinematic fade to black is penetrated by light, just as the dark atmosphere of Mordor is penetrated by sunlight. What emerges from the light are giant eagles, gliding above the flowing lava, who tenderly lift the hobbits' bodies, ferrying them through the air, weightlessly, an escape from Frodo's pain, his hyperaesthetic torment, and a lifting of his burden. As the shot of the weightless Frodo now fades to white, there can be observed the beginnings of a revised visuality, an intersensorial, enworlded visuality.

⁹⁶ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, trans. by Margaret Sankey and Peter Cowley (London and New York: Continuum, 2008), p.53.

Conclusion

The opening narration of *The Lord of the Rings*, spoken against a featureless black background, articulates a declaration of a subtle and multisensory experience of the environment: ‘The world is changed. I feel it in the water. I feel it in the earth. I smell it in the air.’ This spoken assertion of change is articulated in multisensory terms with the ‘feel’ and ‘smell’ of environmental elements expressed simultaneously in overlapping dual languages of English and Elvish. In writing of ‘the senses both as a relationship to a world and the senses as in themselves a kind of structuring of space and defining of place’,⁹⁷ Paul Rodaway observes that the ‘ambiguity of the term “sense” – referring to specific sense organs (sensation) and broader mental constructs (meaning) – is also a relationship between the immediate experience and metaphorical extrapolation.’⁹⁸ For Serres, similarly, the word *sensible* ‘has a meaning similar to that of other adjectives with the same ending. It indicates an always possible change in meaning.’⁹⁹ Emerging from the sensory metaphors of *The Lord of the Rings* are fluctuating sensory landscapes of modernity, and in their intermingling of ‘body–mind–environment’,¹⁰⁰ the sequences in which the invisible body is visualised illustrate Serres’s contention that

the sensible is in general both the constant presence and fluctuation of changing circumstances in the crown or halo bordering our bodies, around its limits or edges, inside and outside our skin, an active cloud, an aura in which take place mixtures, sorting, bifurcations, exchanges, changes in dimension, transitions from energy to information, attachments and untying – in short it is everything that connects a local and particular individual to the global laws of the world and to the manifold shifting of the mobile niche.¹⁰¹

As this chapter has demonstrated, the disorienting experience of invisibility in *The Lord of the Rings* instigates a reconfiguration of sensory landscapes, providing a challenging – and often jarring – space into which the cinematic audience also enters. In this way, *The Lord of the Rings* expresses the contemporary cultural values of

⁹⁷ Paul Rodaway, *Sensuous Geographies: Body, Sense and Place* (London: Routledge, 2011), p.4. Italicised in original.

⁹⁸ Rodaway, *Sensuous Geographies*, p.5.

⁹⁹ Serres, *The Five Senses*, p.305.

¹⁰⁰ Howes, ‘Introduction: Empires of the Senses’, p.7.

¹⁰¹ Serres, *The Five Senses*, p.303.

shifting sensory formations, so extending the effects of a century of onscreen invisible bodies.



Fig. 5.1, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.2, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.3, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.4, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.5, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.6, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.7, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.8, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.9, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.10, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.11, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.12, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.13, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.14, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.15, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.16, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.17, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.18, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.19, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.20, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.21, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.22, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.23, *The Lord of the Rings* (Peter Jackson, 2001–2003)

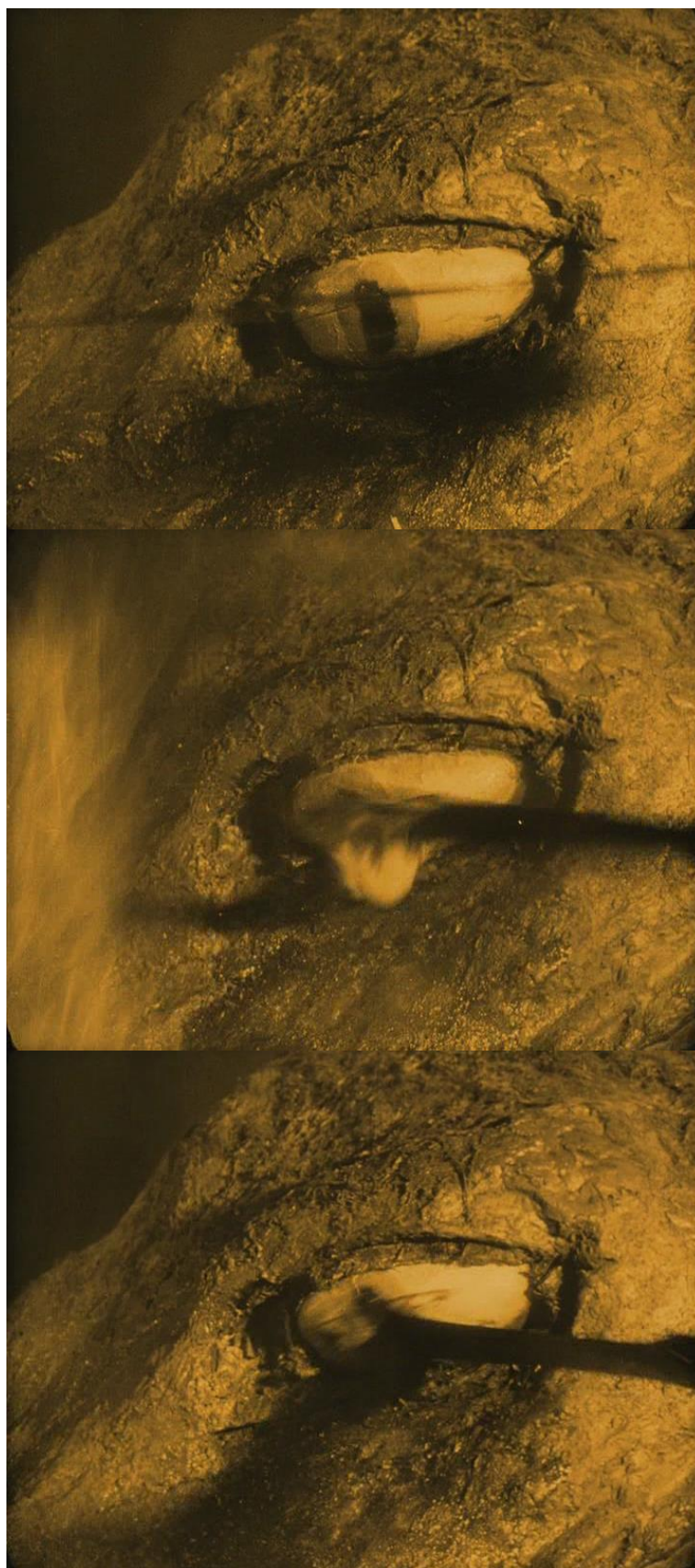


Fig. 5.24, *Die Nibelungen: Siegfried* (Fritz Lang, 1924)



Fig. 5.25, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.26, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.27, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.28, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.29, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.30, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.31, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.32, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.33, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.34, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.35, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.36, *The Lord of the Rings* (Peter Jackson, 2001–2003)



Fig. 5.37, *The Lord of the Rings* (Peter Jackson, 2001–2003)

Conclusion

This thesis has explored the interconnections of the onscreen invisible body with a history of the senses, and in doing so has addressed the role of cinema amidst such a sensual atmosphere. Through an assemblage of five discrete though nevertheless interrelated chapters, this thesis has shown the category of the onscreen invisible body to be a unifying, though not uniform, one, the cultural presence of which manifests a multifarious expression of some of the diversities of modern sensory experience. In its embodiment, the matter of invisibility has largely emerged as a mode of disorder, and particularly a mode of sensory disorder: a provocation to conventional conceptions of a stable sensory order, necessarily implicating the sensorium in schemes of absence or lack, before insisting that such voids are filled with the stuff of the extra-visual.

This recognition of the invisible body has been demonstrated to pose a challenge to producers and receivers of screen media alike, and, as has been shown, the processes of disorienting and reorienting that the presence of this figure demands provoke a generative unsettling of the work of screen media. Through its complication, in the first instance, of screen imagery, the invisible body, in its diverse incarnations, draws the cinematic audience away from being merely, or solely, a ‘viewer’ of screen media, and has been shown to provoke a multisensory manner of cinematic reception and reflection. I shall now proceed by restating the conclusions that have been drawn as the thesis progressed, before making some final remarks on the nature of ‘the multisensory cinema of the invisible body’.

*

In its investigation of *Die Nibelungen: Siegfried*, Chapter One saw the ways in which the onscreen invisible body served as both material reminder of the continued vulnerabilities of the apparently invulnerable body, while also demonstrating how the invisible body could become a mode of thought through which vision and tactility could sensuously intermingle. In this way, the chapter formulated an understanding of the capacity for cinema to extend beyond the visual, an extension through which the body of the film is foregrounded through the materiality of the invisible body. Siegfried’s invisible body, then, invites its viewers into proximity with a mode of

thinking whose relationship with visual experience is challenging, and whose strange visualisation in cinema complicates any simple sensory distinctions. The sight of this invisible mouth, speaking, and this invisible hand, touching, work to upset assumptions of the primacy and potency of vision and the visual experience, primarily distal, promoting instead the value of a more proximal exchange. This first chapter began to describe an invisibility that is of the body, and that is of the sensual experience of the body – of one's body and of the bodies of others – and so began to answer the question: How are the senses *made sense of*, and how does an interrogation of cinematic depictions of invisible bodies assist in such an undertaking?

Chapter Two's exploration of the 1933–1951 cinema of invisibility demonstrated the extent to which the invisible body can be understood as a further expression of both a delicate sense of embodiment and of the disordering of the sensorium. In addressing particular aspects of the audiovisuality of the invisible body in the atmosphere of 1930s sound cinema, I showed the invisible body to function in terms of a synaesthetic manifestation through which individuated sensory demarcations are tested and complicated. This chapter in particular worked through an understanding of the invisible body as a model for a multifunctional sensorium: a figment of embodiment that challenges visual methods of definition. Shown in this chapter was the extent to which the visuality of sensory individuation – the location of the five-sense model in conveniently visible locations of eye, ear, nose, mouth and hand – has become an overly restrictive method through which the sensorium has been constructed in western culture, and how such a restrictive model has been challenged through the figure of the invisible body.

Chapter Three identified the indecipherabilities and mistranslations at work in both the *Predator* and *Star Trek* series, in which interrelated screen technologies of radar, television, cinema and thermography intersect. The construction of an extraterrestrial register of invisibility was shown to test the capacities of a range of sensory media, so stimulating unconventional methods of mediating, and visualising, what might otherwise remain in the realm of the extra-visual. These series' expressions of intermedial translations between the invisible and the visible demonstrated multimediality as a metaphor for multisensoriality, and the sensory 'distortions' that followed in the wake of the alien invisible were shown to conjoin the sensory mechanisms of the body with those of screen media, articulating a prosthetic sensorium as an extension both away from, into and between multiple sensory

modalities. In relation to this thesis' wider discourses on invisibility, the overtly science-fiction contexts addressed in this chapter brought out the increasingly technological nature of the film medium, but also of the senses in contemporary society. Through analysis of anxious schemes of sensory technologisation, this chapter established the values of a post-Second World War sensorium in transition.

Chapter Four provided an overview of the motif of the empty mirror in the invisible body cinema of the twentieth century, establishing such imagery to both represent a misrecognition of the self in addition to a qualification of specular self-knowledge. In this way, the representational trauma of the invisible body was shown to mobilise the extra-visual sensorium and so promote a mode of understanding – of the self and of others – through multisensoriality. This chapter also established the extent to which the reconstruction and reconstitution of white heteronormative masculinity has relied on structures of invisibility, coming to focus on the cinematic interventions into social identity crisis enacted through *Memoirs of an Invisible Man* and *Hollow Man*. In unfolding their cinematic metaphors of invisibility, the fluxing invisible bodies of both these films were shown to motivate intersecting themes of spectatorship and self-reflection, desire and repulsion, encapsulating an anatomy of transgression, obscenity and disgust. Both films describe invisible bodies as zones at which the private matter of self-reflection comes into contact with the public matter of social intercourse, and the phenomenon of nausea expresses well the complexion of such a curdling, generating a complex texture of sensation and so recalling Merleau-Ponty's understanding of the body as 'the fabric into which all objects are woven'. Matters of special visual effects that have been interrogated throughout the thesis were here addressed in terms of the digital imagery through which both films' invisible protagonists are manifested, and that was shown to itself intensify matters of materiality, embodiment and sensation in the context of invisible body cinema.

In its exploration of themes of hyperaesthesia, intersensoriality and enworldment in relation to the depiction of an invisible body in *The Lord of the Rings* trilogy of films, Chapter Five concluded this thesis by establishing those films' construction of the invisible body to produce both an assault on, and alternatives to, the ostensible dominance of the visual sense in western culture. The invisible body's experience in *The Lord of the Rings* was shown to consist of an intersensorial encounter through which is stimulated possibilities of extra-visual seeing that are thus proposed as viable alternatives to the ocularcentric attitude. Such alternatives were

asserted to express something of the access that the cinematic mode can provide for its audiences: to modes of viewing that are of the intersensorial eye, and through which the visual – despite, or perhaps because of the prevailing cinematic entry into the audiovisual – is inflected by a diversity of peripheral cultural and sensory experiences. Chapter Five thus came to a detailed understanding of contemporary frameworks of multisensoriality, demonstrating the disorienting experience evoked in the depiction of embodied invisibility to instigate a reconfiguration of sensory landscapes, providing a challenging – and often jarring – space into which the cinematic audience also enters. In this way, *The Lord of the Rings* was shown to express the contemporary cultural values of shifting sensory formations, so extending the effects of a century of onscreen invisible bodies.

*

Through the findings summarised above, my investigation has revealed the extent to which these fantastical invisible bodies are exemplary human ones: bodies whose operation at the edges of conventional sensory frameworks can be connected to contemporary cultural frameworks of sensory philosophy and understanding. This multifarious roster of invisible bodies has been shown as a unique representative of the shifting social and cultural character of the senses, and of the sensorium. In its outlining of a particular sensual history of modernity, this thesis has observed the cinematic mode to operate as a key mediating force in the generation of sensory comprehension. In expressing a category of invisibility that is a condition of the body, the cinema I have explored both evinces and interrogates relationships between the body and its image, and the recurrent rethinking of the nature and operations of the invisible body across the century of cinema has also been shown to generate a unique register through which to apprehend and appreciate the multisensory character of the cinematic mode, providing a key port of entry in relating – and confusing – the sensory operations of cinema with the sensory operations of the human body.

All of the sequences I have discussed, in their negotiation of the matter of the invisible body, can be understood as sensory narratives whose defining features necessitate the unpicking of the complexities of sensory histories. It is notable that many of the secondary, non-invisible characters within these narratives are impelled to perform as detectives in their attempts to locate or verify the presence and nature of

the invisible body, and who are consequently provoked into reconfiguring their own systems of sensory understanding, and so their own sense of worldly relations. Just as the presence of Geoffrey Radcliffe's invisible body in *The Invisible Man Returns* – and the visible and invisible traces it generates – invites the attentions of a curious and efficient detective, so too does it invite critical analysis. This thesis has performed just such a function: casting the critical cultural researcher as a multisensory detective, and suggesting the extent to which the objects of this study produce sensational cinematic encounters that necessarily make multisensory detectives of all those willing to enter into them.

As this thesis has emphasised, throughout the history of cinema, the invisible body has so often been shown on screen to signify those difficult figures who persist in the peripheries of defined zones. Such a located body mobilises sensory blurs, gaps, crossovers, intersections and enfoldments, its unsettling character provoking also challenges to the edges of cinematic production, presentation and reception. In this way, the onscreen invisible body can be understood to generate a framework through which to contemplate the complexities of the sensorium, and that also affords opportunities to further interrogate interrelations and disconnections between and beyond systems of sensory organisation, mediation and interpretation.

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