

## The 'Ghost of an Idea': Technology, Adaptation, and the Motion-Captured Body in Robert Zemeckis's *A Christmas Carol*

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The opening of Robert Zemeckis's *A Christmas Carol* (USA, 2009) incorporates the complex interactions between the supernatural, the filmic body, adaptation and technology which will be explored in this article. The scene opens on a lighted candle and a window with a view onto a winter street in what appears to be Victorian London. The camera tilts downwards to find a leather-bound book with '*A Christmas Carol*' by Charles Dickens inscribed in gold lettering. As the camera zooms in, the pages suddenly flick open and stop on the book's famous opening line, "*Marley was dead: to begin with.*" A further zoom focuses on the word "*dead*", and the page turns again to a drawing of the corpse: a close-up details the pallid face and coins resting over the eyes. As the camera tracks backwards, the image of the dead man's head begins to transform, and the black lines of the ink illustration metamorphose into a photorealistic digital image. The first cut in the sequence introduces the central character – Scrooge – in a low-angled shot, staring at the body. He turns his head so that part of his face is illuminated against the shadows cast by his hat. This lighting reveals the verisimilitude of the animation: Scrooge's skin is rendered with a photographic quality which highlights the wrinkles and pores of his skin. The breath emanating from his lips suggests the coldness of his surroundings, as his first words confirm Marley's condition: "*Yes. Quite dead.*"

The action quickly establishes the supernatural themes of the narrative as well as activating extra-diegetic references to Dickens's tale. The film is clearly another adaptation of the famous Christmas story, with Dickens explicitly identified as the author on the book's cover, which is reminiscent of the 1843 first edition. This similarity is reflective of how Dickens's work is "*an important point of convergence within our popular culture*", where the majority of audiences experience the story primarily through film and television adaptations.<sup>1</sup> The audience's likely familiarity with the tale enables Zemeckis to remain focussed on the minute detail of the shots: the scene emphasises the spectacular nature of the digital animation, with the close-up of Marley's and then Scrooge's face drawing attention to the veracity of detail afforded to these characters.

The film is, then, already haunted on two levels. First, by the narrative, which is concerned with the depiction of ghosts: it is significant that Marley's lifeless face is privileged here as this body be re-animated in spectral form later. Second, the film is haunted by its own technological mediation and status as an adaptation. The opening shots dramatize a movement from the written word to the still illustration, and then to the moving image, and these transitions suggest a lineage in storytelling media where cinema is presented as the teleological conclusion of its predecessors. Yet these effects embody a strange, ghostly ontology: the film uses motion-capture technology, whereby the movement and appearance of digital characters are based upon the recording of live performances. The use of the technology in *A Christmas Carol* for the purposes of animation signals an unusual hybridity where the film appeals to animation's ability to caricature the human form but where these bodies also retain an indexical link to their real-world counterparts – the actors – whilst the film's aesthetic appeals to the verisimilitude of photographic realism.

This article reflects upon how representations of the supernatural – the literal ghosts of the story – function to draw attention to the haunted and uncanny nature of the digital body on screen. The ghost becomes an apt metaphor for conceptualising the ontology of new film technologies like motion-capture. In utilising the ghost as emblematic of the strangeness of this digital visual effect, the article illuminates the complexity inherent in equating motion-capture with the spectral, but the suitability of drawing this analogy within Zemeckis's film specifically. The first part of my article outlines audience responses to the film which demonstrate how Zemeckis's re-telling of Dickens's story is not only figuratively haunted, but a text which needs to be historically contextualised as haunting. Zemeckis's film was unfavourably received by viewers, with critics repeatedly commenting on the digital characters' "*dead eyes*" and the "*soulless*" impression this creates.<sup>2</sup> These reactions confirm

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<sup>1</sup> Fred Guida, *'A Christmas Carol' and Its Adaptations: A Critical Examination of Dickens's Story and Its Productions on Screen and Television*, Jefferson, NC: McFarland, 2006, pp. 3–4.

<sup>2</sup> Sonny Bunch, 'Movie Review: *A Christmas Carol*', *The Washington Times*, <https://www.washingtontimes.com/news/2009/nov/6/movie-review-a-christmas-carol/>, accessed 29 January 2013.

that it is not the portrayal of ghosts which is eerie about the film but rather it is, ironically, the representation of the human, living body which is haunting.

I go on to demonstrate the importance of these reactions for screen history and the development of visual effects. Integral to this is highlighting the suitability of Zemeckis's choice of *A Christmas Carol* for adaptation. Exploration of the novel's previous adaptations reveals a longer history of representing the supernatural elements in Dickens's work using new technologies. These optical tricks and illusions, which include early cinema, evoke a similar double haunting present in Zemeckis's film: the ethereal appears material, and the living human body becomes unstable and ghostly. I conclude by reinforcing the connection between Zemeckis's *A Christmas Carol* and the story's earlier incarnations by returning to motion-capture and its analysis within film theory. Here motion-capture itself is characterised as ghostly, illuminating a wider context which perceives human interactions with digital technology in increasingly supernatural terms. Ultimately, *A Christmas Carol* presents a timely and pertinent challenge for its viewer: the uncanniness of motion-capture suggests that it is not the portrayal or even the idea of ghosts which is disturbing; rather, it is the conceptualisation of the filmic human body which haunts.

### **The Uncanny Reception of Zemeckis's *A Christmas Carol***

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Motion-capture technology combines the live performance of actors with the creation of digital characters. During the motion-capture process, actors wear skin-tight suits fitted with a series of reflective dots. These dots reflect infrared light back into the cameras surrounding the performance area, called the Volume, where the actors move and interact. The collected data is then used to shape an animated body, creating a digital avatar which has the capacity to retain a physical resemblance to the real-world performer. Zemeckis used the technology in his earlier films *The Polar Express* (2004) and *Beowulf* (2007), and *A Christmas Carol* uses the technique for all its major characters.<sup>3</sup> The cast includes Jim Carrey playing Scrooge and the three Christmas spirits. The film was released by Disney in London in November 2009 to coincide with the festive season.<sup>4</sup> The end result, however, attracted extensive criticism from reviewers and audiences. James Plath calls the film "creepy", a sentiment echoed by Ken Hanke who describes the characters as "rubbery-faced".<sup>5</sup> Chris Barsanti calls the characters "goony-faced animatronic creatures" and Sonny Bunch argues that Zemeckis's film answers

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<sup>3</sup> During his experiments with the technology, Zemeckis developed a system to record facial movements as well, naming this 'performance capture'. This technique is used for *A Christmas Carol* although I refer to the technology as 'motion-capture' here to maintain continuity with the terminology used in reviews and scholarship on the topic.

<sup>4</sup> The film was produced by ImageMovers Digital, a company jointly created by Zemeckis's ImageMovers and Disney to focus on motion-capture. Only *A Christmas Carol* and *Mars Needs Moms* (Wells, USA, 2011) were produced under the company name before Disney removed its support following commercial losses.

<sup>5</sup> James Plath, 'A Christmas Carol', *Movie Metropolis*, 6 November 2010, <http://moviemet.com/review/christmas-carol-blu-ray-review-0>; Ken Hanke, 'A Christmas Carol', *Mountain Xpress*, 11 November 2009, [http://www.mountainx.com/movies/review/christmas\\_carol#.UQZ1\\_fL-JzU](http://www.mountainx.com/movies/review/christmas_carol#.UQZ1_fL-JzU), both accessed 29 January 2013.

*"the one question still remaining about the Dickens classic: What would the movie look like if it were cast with figures from Madame Tussauds?"*<sup>6</sup>

In this way *A Christmas Carol* continues the trend in negative critical reactions garnered by Zemeckis's previous forays into motion-capture technology. For example, Paul Clinton writes that *The Polar Express* is so "creepy" that the film "should be subtitled 'The Night of the Living Dead'" and Manohla Dargis concludes that the characters of *Beowulf* lack "the spark of true life [...] You see the cladding but not the soul."<sup>7</sup> The key complaint against all of Zemeckis's motion-captured works concerns the portrayal of the digital human characters. These bodies may have been rendered using the vitality of live-action actors, but the attempt to transfer this real-life performance into a photorealistic digital animation is found wanting. The contradictory appearance of the motion-captured character as simultaneously unrealistic and altogether too real inspires the reactions outlined here: the digital body is mechanical-looking, the creepy movement of the lifeless, and evocative of automata.

It is for these reasons that Zemeckis's motion-captured films have been associated with the theory of the 'Uncanny Valley', a term coined by Masahiro Mori in 1970 to theorise the interaction between people and artificial human bodies. Mori proposes that the more such synthetic bodies appear lifelike – even real – the more repulsive the figure seems.<sup>8</sup> This is particularly applicable where a high degree of realism is evident but where the illusion is not complete: the small imperfections, such as stiffness of movement or lifeless eyes, are readily apparent. Mori's 'Uncanny Valley' piece was written within the context of Japanese robotics but the term was soon adopted at the beginning of the 21<sup>st</sup> Century to describe digital human bodies too, such as those in Hironobu Sagakuchi's and Motonori Sakakibara's *Final Fantasy: The Spirits Within* (USA/Japan, 2001), the first feature-length production to use this type of 3D photorealistic animation. Critics of *A Christmas Carol* also utilise the term, noting that the film "slides into the uncanny valley, introducing us to supposedly-realistic 'humans' that are both too human and not human enough".<sup>9</sup>

With its origins in robotics, the application of the 'Uncanny Valley' within the critical reception of the digital body is apt, particularly for motion-capture, whose technological processes are based on movement.<sup>10</sup> However, the 'Uncanny Valley' alone is not enough here: as I have argued elsewhere, the concept should be contextualised within a much longer

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<sup>6</sup> Chris Barsanti, 'Disney's *A Christmas Carol*', *Popmatters*, <http://www.popmatters.com/pm/review/115846-a-christmas-carol/>, accessed 29 January 2013; Bunch, 'Movie Review: *A Christmas Carol*'.

<sup>7</sup> Paul Clinton, 'Review: *Polar Express*': A Creepy Ride', *CNN.Com*, 10 November 2004, <http://edition.cnn.com/2004/SHOWBIZ/Movies/11/10/review.polar.express/index.html>; Manohla Dargis, 'Beowulf', *New York Times*, 15 November 2011, <http://www.nytimes.com/2007/11/16/movies/16beow.html>, accessed 29 January 2013.

<sup>8</sup> Masahiro Mori, 'Bukimi No Tani [the Uncanny Valley]', trans. Karl F. MacDorman and Norri Kageki, *IEEE Robotics & Automation Magazine*, June 2012, pp. 98-100.

<sup>9</sup> Bell, 'A Christmas Carol'; Simon Miraudo, 'Lesson Learned – A Christmas Carol Review', *Quickflix*, 5 November 2009, <https://www.quickflix.com.au/News/Reviews/AChristmasCarol/6353>, accessed 29 January 2013.

<sup>10</sup> Mori makes the point that the effects of the Uncanny Valley are exacerbated by movement.

tradition of associating the filmic body with tropes of the uncanny.<sup>11</sup> For *A Christmas Carol*, such historicising helps to elucidate the significance of the supernatural specifically; many of the film's spectators express the uncanniness of watching the motion-captured body in terms of the uneasy blurring between the living and the dead. The digital humans in *A Christmas Carol* are not just repulsive as incomplete illusions but, rather, convey the impression of the living as appearing deceased, and the dead becoming re-animated. The body becomes a ghost.

The critical responses to *A Christmas Carol* can be categorised into three groups: comments which focus on the digital characters' eyes; those which draw upon metaphors of the dead or undead body; and statements which reflect upon the technology's uncanniness in relation to film aesthetics more broadly.<sup>12</sup> First, the dead appearance of the human characters' eyes is a constant theme in viewer reactions: the motion-captured body has a "creepy, dead-eyed effect", and this perception recurs elsewhere, in comments on "creepy, dead-eyed and inexpressive performances" where "especially their eyes [...] look dead and soulless".<sup>13</sup> The characters' "animated eyes never seem to focus", it is claimed, evoking the impression that these bodies are "lacking soul", even to the extent that *A Christmas Carol* is inhabited by "ghoulishly dead-eyed human characters".<sup>14</sup>

Significantly, these complaints refer to the appearance of digital bodies who are diegetically alive; although the film explicitly explores representations of spirits and the undead, it is the portrayal of the *living* human characters which is the source of these reactions to the uncanny. The film's opening thus conveys an unintentional irony: the first body seen is that of a corpse, and Marley's deceased state is emphasised through the coins placed over his eyes and the words of Scrooge. The cut to (the living) Scrooge should therefore appear all the more spectacular, where viewers can marvel at the vitality and realism of this digitally created body, particularly the face and eyes. The fact the opposite occurs – that this alive character is seen as "dead-eyed" – signals how the impression of the uncanny is transported onto the living body as a direct result of its digital rendering.

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<sup>11</sup> Frances Alice Kamm, *A Mirror Image of Ourselves? The Technological Uncanny and the Representation of the Body in Early and Digital Cinema*, PhD Thesis, University of Kent, 2015.

<sup>12</sup> This research is based on the collection and analysis of audience and critical responses gathered for my PhD thesis. Over 500 of these concern Zemeckis's motion-capture works although in this article I focus on the reactions to *A Christmas Carol* in particular.

<sup>13</sup> Alistair Harkness, 'Film Review: *A Christmas Carol*', *The Scotsman*, 5 November 2009, <http://www.scotsman.com/news/film-review-a-christmas-carol-1-781944>; Gary Thompson, 'Creepy Christmas', *Philadelphia Daily News*, 5 November 2009, [http://articles.philly.com/2009-11-05/news/24987846\\_1\\_motion-capture-bob-cratchit-marley](http://articles.philly.com/2009-11-05/news/24987846_1_motion-capture-bob-cratchit-marley); Eric D. Snider, 'Movie Review: *A Christmas Carol*', 6 November 2009, <http://www.ericdsnider.com/movies/a-christmas-carol-5/>, all accessed 29 January 2013.

<sup>14</sup> Joe Neumaier, 'Blah, humbug! *A Christmas Carol*'s 3-D Spin on Dickens Well Done in Parts but Lacks Spirit', *New York Daily News*, 5 November 2009, <http://www.nydailynews.com/entertainment/tv-movies/blah-humbug-christmas-carol-3-d-spin-dickens-parts-lacks-spirit-article-1.414317>; Kevin Lally, "Film Review: Disney's *A Christmas Carol*", *Film Journal International*, 5 November 2009, [http://www.filmjournal.com/filmjournal/content\\_display/reviews/majorreleases/e3i2ca673163cd6b1aade9da1667935af93](http://www.filmjournal.com/filmjournal/content_display/reviews/majorreleases/e3i2ca673163cd6b1aade9da1667935af93), both accessed 29 January 2013.

I use 'uncanny' quite specifically here: the term evokes the theoretical dimensions postulated by Freud in his seminal essay 'The Uncanny' (1919), in which he sought to explain the uncanny as an experience of unease in both aesthetic (and, specifically, literary) and real-life contexts. Freud explores a range of examples of uncanny experiences – including the Gothic workings of E.T. A. Hoffmann's *The Sandman* (1816), accounts by his patients, and his own strange experiences – and postulates several reasons behind this type of unease within a psychoanalytical framework. Freud concludes that the uncanny is the return of a former repressed state or memory related to childhood fears and beliefs, and specifically related to the fear of "being robbed of one's eyes" which "is quite often a substitute for the fear of castration".<sup>15</sup> Freud's characterisation of the uncanny is reliant upon the etymology of the adjective *unheimlich* where the combination of 'homely' with 'unhomely' reveals his key definition of the uncanny experience: "*Heimlich* thus becomes increasingly ambivalent, until it finally merges with its antonym *unheimlich*. The uncanny (*das Unheimliche*, 'the unhomely') is in some way a species of the familiar (*das Heimliche*, 'the homely')." <sup>16</sup>

The uncanny is, then, "a peculiar commingling of the familiar and unfamiliar"<sup>17</sup> which "deals in the constant troubling of the quotidian".<sup>18</sup> The uncanny resides in the uncertainty of the in-between, in the slippage of boundaries and the removal of definitional borders. The negative reactions to *A Christmas Carol* which focus upon the lifeless appearance of the eyes are symptomatic of this experience. Zemeckis's framing of Scrooge's introduction seeks to convey the spectacular realism of the motion-captured body by establishing distinct classifications: the moving image is distinct from the still image; the line-drawing is different from 3D digital animation; and the (living) motion-captured body is juxtaposed with a corpse in order to emphasise the vigour of the moving avatar. The uncanny experience of the film, for viewers, occurs because these categories appear to blur or collapse: the photorealistic digital animation is neither a straightforward cartoon nor a live-action film, and it is the living characters who appear lifeless as a result. The "dead eyes" are indicative of this uncanny experience, as Simon Reynolds notes: "Presented in this form, the eyes – supposedly the windows to the soul – just don't have it".<sup>19</sup>

The second group of audience reactions emphasises how the "soulless" rendering of the digital humans' eyes gives rise to feelings of the uncanny via an evocation of the supernatural, specifically the undead. The digital characters move "with a weightlessness" and are described as "zombie-like", "ghoulish", "corpse-like", and "dead".<sup>20</sup> In these instances,

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<sup>15</sup> Sigmund Freud, *The Uncanny*, London: Penguin, 2003, pp. 138, 139.

<sup>16</sup> Freud, *The Uncanny*, p. 134.

<sup>17</sup> Nicholas Royle, *The Uncanny*, Manchester: Manchester University Press, 2003, p.1.

<sup>18</sup> David Punter and Glennis Byron, *The Gothic*, Oxford: Blackwell, 2004, p. 286.

<sup>19</sup> Simon Reynolds, 'A Christmas Carol', *Digital Spy*, 4 November 2009, <http://www.digitalspy.co.uk/movies/review/a184132/a-christmas-carol.html>, accessed 29 January 2013.

<sup>20</sup> Bunch, 'Movie Review: A Christmas Carol'; Tom Long, 'Creepy 3D A Christmas Carol Deserves a Lump of Coal', *The Detroit News*, 6 November 2009, <http://www.detroitnews.com/article/20091106/OPINION03/911060320/1034/ent02/Review--Creepy-3-D--A-Christmas-Carol--deserves-a-lump-of-coal>; Kevin Lally, 'Film Review:

the human characters are akin to a ghost: they maintain a link to the living – reviewers acknowledge the motion-capture technology and the actors' function in this process – but the body on-screen is an empty vessel, an unnerving echo of the real, embodied performance of the actor. This displeasure is expressed as both the failure of technology to preserve the emoting performance of the original actor – "*motion-capture remains an impediment to capturing emotion*"<sup>21</sup> – and the symptom of an overabundance of technology, where the digital mediation masks the real body underneath: the "*real actors [are] slathered with digital effects*".<sup>22</sup> These contradictory comments speak to the uncanniness of the human characters, which can be understood in terms of ghosts. The ghost is an uncanny figure: it encompasses the ultimate slippage in time, space, movement and stillness, the living and the dead. As María del Pilar Blanco and Esther Peeren suggest: "[The] *ghostly can be said to refer to that which is present yet insubstantial (the spirit rather than the body), secondary rather than primary (a faint copy, a trace, a ghost writer), and potentially unreal or deceptive.*"<sup>23</sup>

The oxymoronic nature of the ghost's ontology is dramatized within the film itself. Marley's spirit does not suddenly appear to Scrooge in its complete, repulsive form; rather the ghost initially announces its presence through the transformation of Scrooge's environment in the world of the 'living'. Marley first materialises out of Scrooge's door-knocker, initially unmoving, framed within a close-up to echo his introduction as a corpse during the film's opening images. As Scrooge reaches towards the strange, glowing, spectral head, Marley suddenly opens his eyes and his visage becomes monstrous, with his flesh revealing the decaying bone underneath, and his mouth spits teeth. The apparition disappears and Scrooge dismisses its significance. Soon afterwards, Scrooge's world is disrupted again by spectral forces as he begins to suspect the familiar surroundings of his bedchamber. This scene, which privileges high-angle shots in order to emphasise Scrooge's vulnerability, produces a moment of terror when the servant bells inexplicably begin to ring.

Marley's manipulation of Scrooge's lived experience encapsulates what is haunting about a ghost's existence and why this is experienced as uncanny. Marley collapses the distinction between the still and the animate, the solid and the malleable object, silence and noise, and, ultimately, the spaces of the living and the existence of the dead. The ghost challenges logical conceptions of time and space as it is both a presence and an absence, as reflected in Marley's embodied but ethereal appearance. Like the reviewers' observations

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Disney's *A Christmas Carol*, *Film Journal International*, 5 November 2009, <http://fj.webedia.us/content/film-review-disneys-christmas-carol>; Brian Tallerico, 'Movie Review: *A Christmas Carol*', *Movie Retriever*, 5 November 2009; Eric D. Snider, '*A Christmas Carol*', *EricDSnider.Com* (blog), 6 November 2009, <https://www.ericdsnider.com/movies/a-christmas-carol-5/>, all accessed 29 January 2013.

<sup>21</sup> Joe Morgenstern, '*A Christmas Carol: Carrey, Disney Play Scrooge*', *Wall Street Journal*, 6 November 2009, <https://www.wsj.com/articles/SB10001424052748704013004574517482456740524>, accessed 29 January 2013.

<sup>22</sup> Kyle Smith, 'Holiday Jeer', *New York Post*, 6 November 2009, [http://www.nypost.com/p/entertainment/movies/holiday\\_jeer\\_1LW55dBm3wMVEw1KUIt0TN](http://www.nypost.com/p/entertainment/movies/holiday_jeer_1LW55dBm3wMVEw1KUIt0TN), accessed 29 January 2013.

<sup>23</sup> María del Pilar Blanco and Esther Peeren, 'Introduction', in del Pilar Blanco and Peeren, eds., *Popular Ghosts: The Haunted Spaces of Everyday Culture*, New York and London: Continuum, 2010, p. x.

concerning the use of motion-capture, the ghost's existence is both over-abundant and excessive, but also a symbol of lack and emptiness. The ghost is uncanny, but the uncanny is also ghostly as it, too, "*unsettles time and space, order and sense*".<sup>24</sup> It is in this way that ghosts and the supernatural become fruitful metaphors for audiences articulating their experience of *A Christmas Carol*, and why the uncanny is an apt theoretical concept through which to analyse this trend. The film's depiction of the uncanniness of ghosts within the diegesis becomes an allegory for the experience of viewing the digital human body on screen. To experience the uncanny is to experience a haunting; the "*anguish of the mind haunted by a familiar and unknown guest*".<sup>25</sup> Ironically, Scrooge's interaction with Marley becomes a metaphor for viewers watching the film because, as Peter Howell suggests, Zemeckis's motion-captured characters become "*another Yule ghoul: the Ghost of Christmas Without Soul*".<sup>26</sup>

This effect upon viewers is clearly unintentional and indicates a failure on the part of the film: the motion-capture conveys less the feeling of Christmas cheer and more the experience of humans "*embalmed by technology*" and "*as insubstantial as the snowflakes*".<sup>27</sup> Indeed, in what I have defined as the third category of critical responses, many writers reflect upon the reasoning for using motion-capture at all. Kimberly Gadette notes that Zemeckis should have learned from the negative reactions to his previous motion-captured films: in respect to this technology, "*enough is enough*".<sup>28</sup> Similarly, James Rocchi notes that there is no "*compelling reason to make*" the film using motion-capture, a sentiment echoed by Tom Long: "*Yes, it could be made this way [...] but why bother?*"<sup>29</sup> This question implies that Zemeckis's film is a mistake, insignificant in the wider context of contemporary film-making practices.

This is a view against which I argue for two reasons. First, these reactions of the uncanny and their evocation of the supernatural constitute an important record of how motion-capture is conceptualised by viewers and suggest some of the broader implications for thinking about the reception of new technologies. This also has an impact on how such technology is theorised within film scholarship, as I will later explore. Second, by adapting Dickens's work Zemeckis inevitably activates the "*paratextual halo*" surrounding *A Christmas Carol* and its previous re-tellings.<sup>30</sup> This history reveals remarkable precedents in portrayals

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<sup>24</sup> Royle, *The Uncanny*, p. 2.

<sup>25</sup> Jean-François Lyotard, *The Inhuman: Reflections on Time*, Cambridge: Polity Press, 1991, p. 2.

<sup>26</sup> Peter Howell, 'A Christmas Carol: Disney Dips Scrooge in Digital Goo', *Toronto Star*, 6 November 2009, <http://www.thestar.com/entertainment/movies/article/721923--a-christmas-carol-disney-dips-scrooge-in-digital-goo>, accessed 29 January 2013.

<sup>27</sup> Morgenstern, 'A Christmas Carol'.

<sup>28</sup> Kimberly Gadette, 'A Christmas Carol', *Indie Movies Online*, 6 November 2009, <http://www.indiemoviesonline.com/reviews/a-christmas-carol-061109>, accessed 29 January 2013.

<sup>29</sup> James Rocchi, 'Disney's A Christmas Carol', *Red Blog*, 6 November 2009, <http://blog.redbox.com/2009/11/disneys-a-christmas-carol.html#more>; Long, 'Creepy 3D', both accessed 29 January 2013.



of the body as uncanny and ghostly. Drawing an analogy between the past and Zemeckis's contemporary film re-frames the above reactions within a longer narrative exploring the boundaries between the supernatural and technology. Two specific previous adaptations of *A Christmas Carol*, one from the theatre and the other from early cinema, illuminate this history.

### Ghosts of Christmas Past

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In reflecting upon his adaptation of Dickens's classic tale, Zemeckis provides an answer to the question: why make a motion-captured version of the story? Zemeckis writes that the technology allows him to depict events the way "*Dickens saw it [...] which never could be done before because we never had the technology. So now, we finally get a chance.*"<sup>31</sup> Zemeckis's claim is somewhat disingenuous: *A Christmas Carol* has been adapted within various media on numerous occasions and some are significant for innovatively using technology to convey the supernatural events of the story. The two I will explore here are the stage adaptation using 'Pepper's Ghost', and the first known film adaptation, *Scrooge; or, Marley's Ghost* (Booth, UK, 1901). To appreciate the aesthetics of both these ventures, it is important to note that the first visual adaptation of Dickens's work was through illustrations: the first edition of *A Christmas Carol in Prose Being a Ghost Story of Christmas* was released with engravings by artist John Leech, whose work embodies a "*highly stylized realism*" which pays close attention to the creation of Scrooge and his world.<sup>32</sup>

Significantly, it is with such 'realism' that Leech depicts the supernatural presence of the spirits: all four are represented in some way by the illustrator, including Marley, whose face is given colour but whose body is detailed with a blue-grey which echoes the heavy shadows prominent elsewhere in the frame, thereby affording him an ethereal presence. Leech's work keeps the living and the spectral bodies in Dickens's story as distinct and separate entities, differentiating these through the use of colour, composition and line work. (The Ghost of Christmas Past is represented as a bright light which Scrooge covers with a candle extinguisher, as described in the story. The complexity of Dickens's description of this spirit explains why Leech did not depict it directly.)

The staging of *A Christmas Carol* using Pepper's Ghost maintains this appeal to realism but begins to blur the boundaries between the living body and the ghost. *A Christmas Carol* was adapted immediately for the stage following its publication; eight theatrical versions had appeared by the middle of February 1844.<sup>33</sup> One later depiction coincided with the development of Pepper's Ghost. The name refers to a stage illusion which projected translucent spectres onto the main performance area with other actors' (living) characters.

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<sup>30</sup> Dan North, Bob Rehak, and Michael S. Duffy, eds., *Special Effects: New Histories/Theories/Contexts*, London: British Film Institute, 2015, p. 10.

<sup>31</sup> Robert Zemeckis in *Diana Landau, The Art of Disney's 'A Christmas Carol'*, New York: Disney Editions, 2009, p. 12.

<sup>32</sup> Guida, *A Christmas Carol and Its Adaptations*, p. 131.

<sup>33</sup> Guida, pp. 39–41.

The effect was achieved by illuminating an actor beneath the stage with a bright light and reflecting this image off a large, angled mirror, unseen by the audience in the auditorium. Henry Dircks presented the idea in 1862 but the technique was not adopted for theatres until Professor John Henry Pepper of London's Royal Polytechnic Institute saw the technology and suggested improvements. The effect was debuted at the Polytechnic and was a major success; Pepper's Ghost, as it came to be known, enjoyed sustained popularity for several years.<sup>34</sup>

Pepper's Ghost embodies the uncanny slippage between the body and the spectral, as enabled by technology. The illusion is part of a lineage of optical tricks, including the magic lantern and the phantasmagoria, which showed how bodies could be "*risen from the grave and recreated 'live' on stage*".<sup>35</sup> Pepper's Ghost, however, is "*one of the pivotal points of the nineteenth-century*" because now the "*body of the actor shared its space with various manifestations of modern technology*".<sup>36</sup> Pepper's Ghost demonstrated how the materiality of the body – the actor beneath the stage – could be transformed into an ethereal presence: the representation of the dead is embodied by the performance of the living and mediated by technology. Yet this mediation is itself a spectre, haunting the stage. The uncanniness of this experience is emphasised by the promotion of Pepper's Ghost which, far from denying its technological ontology, explicitly advertised itself as a special effect. As Adelphi Theatre manager Benjamin Webster describes in 1863, Pepper's Ghost is "*the Extraordinary Machinery and the appliances requisite for the marvelous new Spectral effects*".<sup>37</sup>

The haunting effect of Pepper's Ghost is exacerbated by the subjects chosen for its ghostly demonstrations: the work of Dickens. Pepper's Ghost successfully staged an adaptation of *The Haunted Man* (1848), depicting protagonist Redlaw and his ghostly double. This story – itself haunted by the huge success of *A Christmas Carol*<sup>38</sup> – was soon accompanied by an adaptation of the *Carol* entitled *Scrooge and Marley's Ghost*.<sup>39</sup> *A Christmas Carol* continued to be adapted for the stage using Pepper's Ghost, and advertisements stress how the spectres are a technological phenomenon: a poster from 1877 presents the story using the "*Original Professor Pepper's Optical Illusion*" on the new "*Ætherscope*". Like Zemeckis's film, these versions appeal to the audience's familiarity with Dickens's text, a knowledge which is uncannily rendered 'unhomely' by the new technological mediation of the body and ghosts. Deborah Vlock notes that the connection between the novel and its adaptation was

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<sup>34</sup> Marvin Carlson, 'Charles Dickens and the Invention of the Modern Stage Ghost', in Mary Luckhurst and Emilie Morin, eds., *Theatre and Ghosts: Materiality, Performance and Modernity*, Basingstoke: Palgrave Macmillan, 2014, pp. 27–45.

<sup>35</sup> Mervyn Heard, *Phantasmagoria: The Secret Life of the Magic Lantern*, Hastings: The Projection Box, 2006, p. 8.

<sup>36</sup> Marvin Carlson, 'Charles Dickens and the Invention of the Modern Stage Ghost', *Theatre and Ghosts*, 2014, p. 35.

<sup>37</sup> Benjamin Webster in Carlson, p. 40.

<sup>38</sup> Carlson, p. 29.

<sup>39</sup> Heard, *Phantasmagoria*, pp. 230–31.

particularly strong in the 19<sup>th</sup> Century, when "*Victorian readings were mediated by the culture of theatre*", a mutually reinforcing relationship she describes as a haunting.<sup>40</sup>

The haunting experience of the Pepper's Ghost adaptations of *A Christmas Carol* is enhanced when one considers the context within which the story was created. The 19<sup>th</sup> Century witnessed a popular and scientific debate on the connections between the existence of ghosts, the living body, and technological advancements within various forums: Pepper's Ghost is an example of this. Others include the Spiritualist movement and the use of spirit photography; emerging in the 1860s, spirit photography uncannily combined "*the recognisability of photographic likenesses*" with the "*insubstantiality of ghosts*".<sup>41</sup> Alternative discussions were interested in the workings of the mind which, if not motivated by confirming the existence of an afterlife, also characterised the body in ghostly terms.

Telepathy is one such instance and a publication of 1884 displaced the supernatural as an illusion of the mind where "*ghosts, haunted houses and apparitions were all now to be considered facets of telepathy [...] displacing the cultural resonance of the ghost as a surviving spirit of the dead.*"<sup>42</sup> Dickens was well read in theories where "*apparitions and spectral illusions were widely discussed [...] in relation to the involuntary functions of the mind.*"<sup>43</sup> Helen Groth notes that the use of Pepper's Ghost in the adaptation of the author's work is complementary to Dickens's belief in the "*civilising power of memory*" as the illusion promotes "*rational responses to seemingly inexplicable supernatural phenomena*".<sup>44</sup> Louise Henson argues that Dickens's knowledge of such research offers a radical re-interpretation of *A Christmas Carol*: the story is less about the appearance of the supernatural and more to do with the idea that the ghosts are an illusion of Scrooge's mind.<sup>45</sup> The context within which *A Christmas Carol* was adapted for the stage thus reveals how representations of the ethereal were refracted into conceptions of the living body as ghostly.

It is particularly apt, then, that the story was also adapted for another form of optical illusion rising to prominence in the 1890s, namely, animated photography. Frederick Talbot reflects upon the development of this film technology and notes how, during its inception, "*to many it appeared uncanny*".<sup>46</sup> The term is pertinent as the filmic body is uncanny: a photographed impression of reality which is preserved at a temporal and spatial remove from

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<sup>40</sup> Deborah Vlock, *Dickens, Novel Reading, and the Victorian Popular Theatre*, Cambridge: Cambridge University Press, 1998, p. 9.

<sup>41</sup> Tom Gunning, 'Phantom Images and Modern Manifestations: Spirit Photography, Magic Theater, Trick Films, and Photography's Uncanny', in Patrice Petro, ed., *Fugitive Images: From Photography to Video*, Bloomington: Indiana University Press, 1995, p. 47.

<sup>42</sup> Roger Luckhurst, *The Invention of Telepathy, 1870-1901*, Oxford: Oxford University Press, 2002, p. 72.

<sup>43</sup> Louise Henson, 'Investigations and Fictions: Charles Dickens and Ghosts', in Nicola Bown, Carolyn Burdett, and Pamela Thurschwell, eds., *The Victorian Supernatural*, Cambridge: Cambridge University Press, 2004, p. 45.

<sup>44</sup> Helen Groth, 'Reading Victorian Illusions: Dickens's 'Haunted Man' and Dr. Pepper's 'Ghost'', *Victorian Studies* vol. 50 no. 1, Autumn 2007, pp. 43-44.

<sup>45</sup> Henson, 'Investigations and Fictions', p. 47.

<sup>46</sup> Frederick Arthur Ambrose Talbot, *Moving Pictures: How They Are Made and Worked*, London: William Heinemann, 1914, p. 30.

reality but appears to 'live' again through the projected illusion of movement. Early cinema thus contributes to the previous conceptualisations of the body as ghostly debated earlier in the century, but this spectral capacity is specifically located within the ontological features and technology of film itself. This uncanniness was noted by early cinema viewers; reviewing the Lumière *Cinématographe* in 1896, Maxim Gorky describes the experience of watching the moving bodies on-screen as a "*Kingdom of Shadows*": "*It is not life but its shadow, it is not motion but its soundless spectre [...] All this moves, teems with life and, upon approaching the edge of the screen, vanishes somewhere beyond it.*"<sup>47</sup>

For Gorky, viewing the film image is an uncanny experience of liminality: the images are imbued with movement and the living, but the effect is spectral and eerie. The cinema frame itself fails to control and contain the ethereal qualities of its projected pictures: life simply "*vanishes somewhere*" into the ether, beyond the viewer's sight. This slippage between the lifelike appearance of the filmic body and its spectral presence on-screen is indicated by the reactions of other early cinema viewers. Writing about the same 1896 film featuring future President McKinley, one critic wrote the film presents the presidential candidate "*in the flesh*", whilst another describes the experience as supernatural: "*No ghost can startle after this, no Frankenstein pursue us, for we have seen the instrument of the day become the playful specter of the night*".<sup>48</sup> The ghost as a metaphor for the on-screen body incorporates the uncanny experience of watching such a spectacle, as these examples indicate, as well as illuminating the strange mechanisms behind the technology; film's illusionism has the ability to convey and evoke – like the uncanny itself – "*an uncertainty, at the heart of our ontology, our sense of time, place and history, which is unsettling, potentially terrifying and intriguing*".<sup>49</sup>

The spectral qualities of the filmed body are emphasised in creative ways in an adaptation of *A Christmas Carol* for the screen in 1901. *Scrooge; Or, Marley's Ghost* is the earliest known film adaptation of Dickens's story, which was directed by Walter Booth and produced by R. W. Paul; only an incomplete version survives today, with 323 feet of the film preserved by the BFI National Archive. The film's final sequences, including Scrooge's redemption, are lost but surviving scenes convey the majority of the plot events. Like previous adaptations of *A Christmas Carol*, the film condenses the action of the novel considerably by privileging the ghost of Marley at the expense of the other spirits; it is only Marley who appears to Scrooge and shows him events of the past, present and future. In this way, the film's narrative progression is reliant upon the interaction of two human bodies, one living

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<sup>47</sup> Maxim Gorky, 'Review of the Lumière Programme', in Jay Leyda, *Kino: A History of the Russian and Soviet Film*, 3<sup>rd</sup>. ed, London: Allen & Unwin, 1983, Appendix 2, p. 407.

<sup>48</sup> Anon, *N. Y. Mail and Express*, 13 October 1896, in Bebe Bergsten, ed., *Biograph Bulletins: 1896–1908*, Los Angeles, CA: Artisan Press, 1971, p. 12; Anon, *Cincinnati Enquirer*, 2 November 1896, in Bergsten, p. 15.

<sup>49</sup> Jo Collins and John Jervis, 'Introduction', in Jo Collins and John Jervis, eds., *Uncanny Modernity: Cultural Theories, Modern Anxieties*, Basingstoke and New York: Palgrave Macmillan, 2008, p. 2.

and one dead. Marley's status as spectre is marked by the actor's draping of a white cloth around his body.

It is by evoking the theme of the supernatural through this visual signification, however, that the film reveals the uncanny ghostliness of the living body on-screen. Marley's interaction with the physical space of the *mise-en-scène* is presented through a series of trick shots, beginning with his appearance in the door-knocker. As with the Zemeckis version, this film presents the scene as a moment of horror, and in Booth's film the actor's decapitated head is seen to float before the Scrooge character. Later, in Scrooge's bedchamber, Marley's body is presented as translucent, superimposed on the action behind. Significantly, this effect, which is reminiscent of Pepper's Ghost, is no longer contained within the representation of the spectral figure: Scrooge's body is also depicted using this visual trick, as when Marley transports him to the past, present and future.

As Gorky comments a few years earlier, the filmic body here is imbued with supernatural qualities. Its photographic qualities make it realistic, but this veracity is rendered unstable. The body can be mutated, decapitated, vanish and reappear, or superimposed with other bodies and backgrounds. The trick effects work to emphasise the uncanniness of the on-screen body further by actively drawing attention to the technology of cinema and its mediation of events; indeed, the trick shots are only made possible because of the tension between the still images of film and the projected illusion of movement inherent in the cinematic experience. The trick film itself is an integral part of what Tom Gunning terms the "*cinema of attractions*", whereby the earliest films formed "*an exhibitionist cinema*" which privileged the novelty of the medium over narrative progression.<sup>50</sup> The notion that narrative remained a secondary concern is particularly relevant to this adaptation of *A Christmas Carol*. As Pepper's Ghost had already shown, audiences' familiarity with Dickens's work already haunts any re-telling of the story, enabling spectators to focus on the experience of the special effect.

The film builds upon these associations by extending the trick effects across several scenes whilst the need for narrative exposition remains minimal: the film does not even require Dickens's original title to activate the story's cultural relevance. Instead the attraction lies in the depiction and transformation of the body on-screen using novel technology. This attraction is parodied within the film itself: during a creative re-interpretation of events, the undead Marley shows Scrooge images of his life by projecting the images upon curtains. These memories become a film within a film, with Scrooge now also a spectator who reacts emotionally to the moving bodies before him. The moment offers an intertextual reminder of the uncanniness of cinema, the bodies it projects and the spectator's experience: the filmic figures Scrooge observes are lifelike, but this illusion sustains a disruptive temporality whereby the projected image is both present and past, moving and still. The instability of the

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<sup>50</sup> Tom Gunning, 'The Cinema of Attraction[s]: Early Film, Its Spectator and the Avant-Garde', in Wanda Strauven, ed., *The Cinema of Attractions Reloaded*, Amsterdam: Amsterdam University Press, 2006, p. 382.

filmic body is exacerbated by the film's use of trick effects. In this early adaptation of *A Christmas Carol*, Marley's spirit may appear to Scrooge in events which repeat a familiar fictional haunting but, through the technological development of special effects, it is now the living Scrooge who, on film, is revealed to be a ghost.

Dickens's *A Christmas Carol* is therefore a cultural artefact which is haunted by its numerous adaptations; re-tellings which correlate with the development of various visual effects technologies. The theatrical and filmic presentations of the story's supernatural events draw attention to the ghostly qualities of the projected body, within a context which actively explored the associations between technology, the spectral, and the human body. Dickens's fiction was already imbued with these relationships, as the author engaged in scientific debates concerning the supernatural and the mind, a connection which is emphasised in *Pepper's Ghost*. It is within the filmic body that these concerns converge again: *Scrooge; Or, Marley's Ghost* demonstrates how Dickens's supernatural themes reveal that spectres are not only in the mind (like telepathy) or technological representations (like *Pepper's Ghost*), but are infused within the recording and projecting of the living body.

It is within this history that Zemeckis's work should be evaluated. The criticisms and uncanny experience outlined in my earlier remarks should not be interpreted as simply evidence that the film is an anomaly or technological failure. Rather, the film needs to be historically situated in order to understand how Zemeckis extends the tradition of adapting *A Christmas Carol* to explore these boundaries between technology and the supernatural. The uncanny experience of Zemeckis's film is a reminder of how the ghost becomes an emblem for the spectral ontology of the filmic body, a trait which is analogous to previous adaptations of the story. What remains to be seen is what it is about motion-capture specifically that mobilises these associations, and how this should be contextualised within the 21<sup>st</sup> Century. In my final comments I argue that the uncanny rendering of the human characters as ghostly within Zemeckis's film is inextricably linked to the spectral qualities of motion-capture, as indicated by the ways in which the technology is analysed within scholarly discourse.

### **The Ghosting of Motion-Capture**

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Booth's 1901 film demonstrates how cinema's trick effects emphasise and exaggerate the haunted nature of the filmic body, and so relating film technology to the supernatural is not, therefore, new: "*With its ability to record and replay reality and its presentation of images that resemble the world but as intangible half-presences, cinema had been described as a haunted or ghostly medium from early on.*"<sup>51</sup> This idea, however, has been distinctly re-animated by the development of new visual effects and, in particular, by the increased use of digital technology. The scholarly evaluation of motion-capture is an important part of this

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<sup>51</sup> Murray Leeder, 'Introduction', in Leeder, *Cinematic Ghosts: Haunting and Spectrality from Silent Cinema to the Digital Era*, London: Bloomsbury, 2015, p. 3.

discourse into the spectral qualities of new technology and it is within this ongoing dialogue that Zemeckis's version of *A Christmas Carol* should also be contextualised.

The uncanniness of motion-capture resides in the technology's capacity to blur the boundaries between the live performance of real actors and the representation of embodiment created through animation. Motion-capture's technique is often discussed in terms of the index: the idea that the digital avatar retains a trace or physical impression of the motion-captured body. This notion is evocative of previous debates in film theory which discuss the indexical properties of cinema's photographic qualities, as famously discussed, albeit in differing contexts, by André Bazin and Roland Barthes.<sup>52</sup> Barry King notes how the indexical claim for motion-capture is difficult to maintain because of its transformative properties and he likens the process instead to a form of digital 'prosthesis', an argument also made by Lisa Bode.<sup>53</sup> Tanine Allison, on the other hand, defends motion-capture's indexical qualities, arguing that the "*translation*" of the performer into a digital avatar signals digital animation's ability to combine the index and icon in a hybrid fashion.<sup>54</sup>

The bodies in Zemeckis's *A Christmas Carol* highlight the disparity between these two theoretical positions. Scrooge's introduction to the film emphasises Allison's position that the motion-captured body is a fusion between markers which signal the physical presence and similarity to the original performer, and the malleability of the technology to transform this body through animation. As analysed earlier, Scrooge is first sighted through a zoom into a close-up which picks up on the features of his face. The film remains focused on Scrooge's head throughout the succeeding sequence which dramatises the miser's reluctance to pay the undertaker, and the reimbursement of this financial loss by means of the coins placed on Marley's dead eyes. As Scrooge moves into the street, the camera tracks his movements, again privileging close-up and medium shots which frame the head and shoulders. After Scrooge signals his displeasure at the festive cheer being exhibited by his fellow citizens, the camera moves in front of Scrooge's walking figure, so that he now faces the camera head-on, and the opening credits resume with the star name "*Jim Carrey*".

These shots emphasise Scrooge as a character, but also Scrooge as an embodied performance. Similarly to the way in which the action efficiently conveys narrative by activating the audience's collective familiarity with Dickens's story, so too does the film appeal to the knowledge of Carrey's star persona. Viewers acquainted with Carrey's acting style will recognise some physical similarities between the performer and his digital avatar – traces of Carrey are evident within Scrooge's face – as well as the actor's distinct,

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<sup>52</sup> André Bazin, 'The Ontology of the Photography Image', in Bazin, *What Is Cinema?*, vol. 1, Berkeley, CA: University of California Press, 2001, pp. 9–7; Roland Barthes, *Camera Lucida: Reflections on Photography*, London: Flamingo, 1980.

<sup>53</sup> Barry King, 'Articulating Digital Stardom', *Celebrity Studies*, vol 2 no 3, pp. 247-62, <https://www.tandfonline.com/doi/abs/10.1080/19392397.2011.609331>, and Lisa Bode, 'Fleshing It Out: Prosthetic Makeup Effects, Motion Capture and the Reception of Performance', in North, Rehak, and Duffy, *Special Effects*, pp. 32–44.

<sup>54</sup> Tanine Allison, 'More than a Man in a Monkey Suit: Andy Serkis, Motion Capture, and Digital Realism', *Quarterly Review of Film and Video*, vol. 28 no. 4, July 2011, pp. 325–41.

exaggerated movements and voice. The superimposition of Carrey's name on Scrooge's image confirms the connection. Yet the film also struggles to maintain the visibility of these indexical and iconic links. Carrey was also motion-captured for the Christmas Spirits although Carrey's presence within these digital creations is not overt. This is particularly apparent in the case of the Ghost of Christmas Past, which is notoriously difficult to visualise because of Dickens's complex description of the spirit as both childlike and old, as though "*viewed through some supernatural medium*".<sup>55</sup> In Zemeckis's film, Christmas Past is represented as a moving flame which disappears, reappears and moves with great speed during Scrooge's first encounter. Although the flame has a face, the identity of the animation's real-world actor is obscured. In this instance, Carrey's indexical connection to Christmas Past is difficult to identify and King's notion of a digital prosthesis which accounts for the transformative element of the technology is more applicable.

What is significant for Zemeckis's film is how his adaptation of Dickens's story intersects with scholars debating the ontology of motion-capture in this way, and how theorists appeal to notions of the supernatural in their analysis. Although Vivian Sobchack does not refer to motion-capture specifically, she comments how *Final Fantasy* creates a "*deathlife*" impression for the viewers, reversing Alan Cholodenko's idea of the "*lifedeath*" nature of animation.<sup>56</sup> Livia Monnet draws a similar conclusion, noting how "*CGI humans literally 'vampirize' the motion-capture actors who modelled them*".<sup>57</sup> Together Sobchack and Monnet illuminate how the uncanniness of motion-capture lies in its technique as a process *and* its affect as an animation. Monnet's evocation of the vampire alludes to the indexical argument for motion-capture, emphasising the physicality of the connection between performing actor and the digital creation although this relationship is articulated as monstrous here: the animation's effect is achieved by acquiring the life-force – movement – from the real-world actor.

Sobchack's note demonstrates how this relationship leads to an uncanny experience for the viewer not necessarily because audiences acknowledge the indexical link – Sobchack does not specifically explore motion-capture – but because the digital body on-screen embodies both this lack of vitality together with an over-abundance of realism. The critical reactions outlined in my first section therefore extend the supernatural themes of *A Christmas Carol's* narrative to reflect upon the film's visual effects and the experience of viewing such technology in a manner comparable to these theoretical contemplations. Like Sobchack and Monnet, these responses emphasise the complexity in contemplating motion-

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<sup>55</sup> Charles Dickens, *A Christmas Carol: In Prose, Being A Ghost Story of Christmas*, London: Chapman and Hall, 1843.

<sup>56</sup> Vivian Sobchack, 'Final Fantasies: Computer Graphic Animation and the [Dis]Illusion of Life', in Suzanne Buchan, ed., *Animated 'Worlds'*, Eastleigh: John Libbey, 2007, pp. 171–182.

<sup>57</sup> Livia Monnet, 'A-Life and the Uncanny in *Final Fantasy: The Spirits Within*', *Science Fiction Studies*, vol. 31 no. 1, March 2004, p. 99.



capture and its connection to the performing actor, with comments remarking on the film's lack of "warmth", the removal of the "human element", and the loss of "the nuance of flesh-and-blood".<sup>58</sup>

Scott Balcerzak synthesises the concerns surrounding motion-capture's ontological properties with the experience of watching the technology when he conceptualises the process specifically in terms of haunting. Balcerzak argues that the technology does not enable a straightforward digitisation of the human body but rather removes the physical body altogether in favour of an actor's electronic presence: the motion-captured body "can transcend the bodily and move completely into the realm of the spectral".<sup>59</sup> The indexical potential of motion-capture becomes a form of spirit or, in Balcerzak's terms, an "aura": "[The] effect onscreen helps to humanise the special effects performance by 'ghosting' the actor as a tangible presence. Mo-cap provides a major step in supplying corporeality to the artificially animated by affixing the aura of a body."<sup>60</sup>

Balcerzak's description of motion-capture echoes the experience of viewing *A Christmas Carol*: the spirits within the story become emblematic of the ghostly nature of the performing body. Carrey may maintain an indexical link to his digital Doppelgänger – and the latter may or may not translate this into a physical resemblance – but his movements haunt these characters. This evaluation of motion-capture technology and its affect is particularly relevant to *A Christmas Carol* because Zemeckis actively draws attention to the mechanisms behind the digital illusion. For the Blu-ray release of the film viewers can activate the special feature *Behind the Carol: The Full Motion Capture Experience*. This "picture-in-picture" viewing experience allows the spectator to watch the film on two screens: one which depicts the motion-capture sessions' recording in the Volume, and the other displaying the finished animation.

In a manner comparable to how audiences were addressed by the illusion of Pepper's Ghost and the trick effects of early cinema, viewers are encouraged to marvel at the technology on display, with Zemeckis pushing this experience further by displaying the illusion and its explanation simultaneously. But this viewing feature also encapsulates what is haunting about the motion-capture too: Carrey's performance is abstracted into the digital character, who appears as only an echo or approximation of the real actor's embodied presence. Carrey's existence in Zemeckis's film is pushed to the periphery – during the Blu-

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<sup>58</sup> Fernando F. Croce, 'Foxy Grins: *Fantastic Mr. Fox*, *The Men Who Stare at Goats*, *A Christmas Carol*', *The Box*, 8 December 2009, <http://www.cinepassion.org/Archives/FantasticGoatsCarol.html>; Adam Tobias, 'Dickens' *A Christmas Carol* Gets a Wonderful 3D Makeover', *Watertown Daily Times*, 6 November 2009, [http://www.wdtimes.com/features/screen\\_scenes/article\\_01a8b609-0dcf-5cac-9202-d328f4d2cbb4.html](http://www.wdtimes.com/features/screen_scenes/article_01a8b609-0dcf-5cac-9202-d328f4d2cbb4.html); Kevin Williamson, 'Christmas Carol Lacks a Soul', *Canoe.com*, 6 November 2009, [http://jam.canoe.ca/Movies/Reviews/D/Disney\\_A\\_Christmas\\_Carol/2009/11/06/11656411-sun.html](http://jam.canoe.ca/Movies/Reviews/D/Disney_A_Christmas_Carol/2009/11/06/11656411-sun.html), all accessed 29 January 2013.

<sup>59</sup> Scott Balcerzak, 'Andy Serkis as Actor, Body and Gorilla: Motion Capture and the Presence of Performance', in Scott Balcerzak and Jason Sperb, eds., *Cinephilia in the Age of Digital Reproduction, Part 1: Film, Pleasure and Digital Culture*, London and New York: Wallflower Press, 2009, p. 198.

<sup>60</sup> Balcerzak and Sperb, p. 210.

ray's special feature the real Carrey is exorcised into another frame altogether – existing like a ghost out of time and space.

The ghostly appearance of the living body is comparable to previous adaptations of *A Christmas Carol* in terms of both the uncanny impression this evokes for viewers and how such an experience can be historically contextualised. The characterisation of motion-capture as supernatural speaks to a wider dialogue concerning the impact of digital technologies upon recording, representing, and experiencing reality. The effect of digital technologies upon cinema and filmmaking practices has been hotly debated by theorists for several decades although it is interesting to note how some of these ideas appeal to images of the ghostly. Cinema's conversion to digital has been characterised as a "death"; as an echo of previous practices, and the transmutation into another form; as the yearning for a time past expressed through nostalgia and cinephilia; as a technology haunted by its analogue aesthetics; and as the creation of a virtual "communication space" for viewers.<sup>61</sup>

Within such debates the notion of 'cinema' becomes both a ghost from the past and a spectre of the present as digital technology replaces, mimics, and preserves tradition notions of 'film' in various ways. Digital film can also collapse the boundaries between the representation of narrative themes and the technological mediation of such events. Marc Olivier reflects upon how the digital can become a spectral presence for the purposes of horror, a trend echoed by Pilar Blanco and Peeren when they observe how the creation of apparitions using new digital effects technologies becomes a reflection of the cultural reception of those technologies: "the increasing ghostliness of new media influences the representation of ghosts in new media".<sup>62</sup>

These debates are evocative of the contexts in which Dickens wrote *A Christmas Carol* and the story's early adaptations; as outlined earlier, Dickens's work engages with similar 19<sup>th</sup> Century debates concerning the supernatural qualities of new technologies and portrayals of the human body. Zemeckis's motion-capture version of the story re-activates these discussions, although the ghost of technology's relationship to the body has been re-imagined again in the 21<sup>st</sup> Century, creating a renewed sense of haunting. For Dickens's *A Christmas Carol*, literary representations of the supernatural were part of a larger discourse on the uncanny workings of the mind. The theatrical staging of *A Christmas Carol* using Pepper's Ghost transported these ideas onto the live stage before early cinema, and Booth's re-imagining of the tale, transformed this uncanniness into the projection and manipulation of the human body on-screen. When historicised in this fashion, Zemeckis's *A Christmas Carol*

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<sup>61</sup> Paolo Cherchi Usai, *The Death of Cinema: History, Cultural Memory and the Digital Dark Age*, London: Bloomsbury, 2001; Lev Manovich, *The Language of New Media*, Cambridge, MA.: MIT Press, 2001; Steven Shaviro, *Post-Cinematic Affect*, Ripley: O-Books, 2010; Balcerzak and Sperb, *Cinephilia in the Age of Digital Reproduction*; Roger Odin, 'Spectator, Film and the Mobile Phone', in Ian Christie, ed., *Audiences: Defining and Researching Screen Entertainment Reception*, Amsterdam: Amsterdam University Press, 2012, pp. 155–69.

<sup>62</sup> Del Pilar Blanco and Peeren, *Popular Ghosts*, p. x. See also Marc Olivier, 'Glitch Gothic', in Leeder, *Cinematic Ghosts*, pp. 253-70.

becomes simply another example of the ghosts in Dickens's tales becoming an allegory for the mediation of their representation in a new form.

The uncanniness of the *living* bodies as spectres in Zemeckis's film is evocative of early cinema, although the analysis of motion-capture in film theory speaks to the complexity of conceptualising the technology within its own 21<sup>st</sup> Century context. The motion-captured body is also symbolic of the body's relationship to technology in the digital age. The convergence of the body with digital technology – which motion-capture epitomises – renders the lived experience as ghostly; the materiality of flesh, along with the physicality of media forms like film, become ethereal, existing only in virtual spaces. The literal "*ghosting*" of the motion-captured body described by Balcerzak becomes emblematic of the epistemological, cultural, and physical 'ghosting' enabled by technology which is described within discussions of post-modernism and, especially, post-humanism. The post-human body is one which is now inextricably entrenched within a world defined by technological enhancements and interactions. As N. Katherine Hayles argues: "*it is no longer possible to distinguish meaningfully between the biological organism and the informational circuits in which the organism is enmeshed*".<sup>63</sup> The human body, itself, thus becomes, following Balcerzak, the 'aura' to technology; a supernatural idea or memory. The motion-captured bodies in *A Christmas Carol* are emblematic of these contemporary concerns whereby the film's representation of the supernatural acts as a reminder of how the body, in the digital age, becomes a haunted concept.

### **The Ghost of an Idea**

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Introducing a recent edited collection on cinematic ghosts, Murray Leeder comments how film is "*a haunted medium, a haunting medium, a medium that puts us in touch with ghosts*".<sup>64</sup> This description embodies the technology behind, and the experience of viewing, Zemeckis's *A Christmas Carol*. As the reactions analysed in this article reveal, the supernatural themes of Dickens's familiar story function to illuminate the haunting nature of the digital body. The spectacle of motion-capture technology is translated into the supernatural presence of living characters who embody undead features. Jim Carrey's Scrooge inadvertently surmises this uncanny affect during the film's opening as his first words become an emphatic statement on his own appearance: "*Yes. Quite dead.*" The audience engagement with Zemeckis's film is comparable to the reception of *Pepper's Ghost*, which Groth characterises as an "*epistemological speculation, technological curiosity, and literary nostalgia*".<sup>65</sup> For viewers of Zemeckis's *A Christmas Carol*, this "nostalgia" is for other adaptations of Dickens's work; the "curiosity" questions the director's continued interest in motion-capture which has already been identified as uncanny; and a "speculation" arises as to whether this version of *A*

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<sup>63</sup> N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* Chicago: University of Chicago Press, 2010, p. 35.

<sup>64</sup> Leeder, *Cinematic Ghosts*, p. 8.

<sup>65</sup> Groth, 'Reading Victorian Illusions', p. 62.

*Christmas Carol* should have been made at all. Above all else this article seeks to redeem Zemeckis's use of the technology and to argue for the relevance of this re-imaging of *A Christmas Carol* within the histories of Dickens's work and visual effects technologies.

By choosing *A Christmas Carol* as the vehicle for what would become the film-maker's last experiment with motion-capture as a director, Zemeckis exposes the haunted nature of Dickens's story. *A Christmas Carol* has been reincarnated in numerous guises since the book's first publication, in what Paul Davis calls the story's "culture-text", which is constantly resurrected as an "altered spirit".<sup>66</sup> The uncanny nature of Zemeckis's adaptation is heightened through comparisons to these earlier re-tellings of the story, which reveal not so much a completely "altered spirit" as much as a series of remarkable – and eerie – continuities. The adaptation of *A Christmas Carol* and the depiction of the book's supernatural events illuminate a history of utilising new and novel technologies for portraying ghosts.

These technologies are part of the developments which influenced the emergence of cinema, and early trick films, like *Scrooge; Or, Marley's Ghost*, demonstrate how the uncanniness of ghosts becomes superimposed upon the representation of living bodies on-screen. Motion-capture creates a fresh chapter in this longer story of how Dickens's ghosts became emblematic of the technological mediation of the human body. There are, of course, significant differences between the contexts of reception for each of these adaptations, and so it is important to situate these historically. However, it is interesting to note how debates concerning the supernatural infuse these histories, underlining the ways in which the human body itself becomes increasingly ghostly.

The cultural value and significance of Dickens's famous Christmas story is not, like Marley, "Quite dead"; in fact, the technological representation of the supernatural is part of the fabric of *A Christmas Carol*'s diverse history of adaptation, as the story was also developed for other media which were novel in their day, including the magic lantern, Edison's sound cylinders and radio broadcasts.<sup>67</sup> Zemeckis's film continues this trend whilst feeding into wider debates on how new technologies are conceptualised in contemporary culture. Dickens himself provides a useful metaphor for how to bring together the complex concerns raised by Zemeckis's film as discussed here. In the Preface to *A Christmas Carol* Dickens addresses the reader directly and calls his story "the ghost of an idea". The phrase is pertinent, acting as a reminder of the significance of Zemeckis's film. By analysing audience reactions, the historical precedents, and the scholarly debate which surround Zemeckis's *A Christmas Carol*, the digital age reveals how it is the motion-captured body which is now this very "ghost of an idea".

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<sup>66</sup> Paul Davis, *The Lives and Times of Ebenezer Scrooge*, New Haven; London: Yale University Press, 1990, 15.

<sup>67</sup> See Guida, *A Christmas Carol and Its Adaptations*, and Davis, *The Lives and Times of Ebenezer Scrooge*.