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**Body and Technology in Time and Space**

**University of Derby August 2018**

**Submitted towards PhD by Published Works**

## Abstract

This critical review ascertains the development of the research into memory screens and the relationship between memory, history, the body and technology on film, television and related media experiences. The body of research develops from a consideration of the gendered body on screen. This theme is continued and refined throughout the research. I consider the conventional personification of technology as potentially threatening or recuperative in relation to concerns regarding bodily cohesion and individual identity in relation to history and memory formation.

The main focus of the work becomes the negotiation of memory formation in relation to media at both a personal and social level and the relationship between viewers and film and television texts. I encompass and develop post-structural definitions of the body and the theoretical implications of engaging with contemporary media. The research also encompasses the experience of exhibition and fan activity in extending the process of memory screens and engagement with the media.

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# Memory Screens: The Body and Technology in Time and Space

## Introduction

The body of published work included in this essay illustrates the progression of my research into the relationship between the body and technology, memory screens and media spaces. The focus is on film and television as texts as well as a consideration of transmedia manifestations such as exhibition and display.

The overarching theme of my research critically evaluates the construction of memory within an interdisciplinary approach towards the relationship between the body and technology specifically in relation to film, television and related exhibitions with a focus on science fiction. This research has developed with a focus on film and television as sites of memory construction as well as the relationship between history and identity. The research considers the ways in which film and television represent the gendered body, and how technology contributes to the construction and depiction of memory within narratives embedded within space and time. The works develop to consider aural as well as visual aspects of texts and to evaluate the extent to which viewers are implicated in establishing textual meaning. It also encompasses the physical experience of exhibition space and the role of viewers in negotiating the memory screens of film and television.

The significance of memory and history emerges within the consideration of texts depicting different time periods and characters negotiating the relationship between memory and history on screen. It also relates to the ways in which the text can be engaged with via visual and aural cues and the relationship between texts is negotiated in terms of adaptation. Memory and history are intrinsic to the museum and exhibition spaces constructed for fan entertainment and engagement which I also consider. Ultimately, these texts illustrate the extent to which identity is negotiated across individual and publicly shared experiences of film and television, with implications for the social and cultural significance of identity formation. My work has contributed significantly to emerging fields of study and developed areas of film and television theory in new and original ways.

## The Body and Technology

One of my initial areas of research interest is the relationship between gendered bodies and technologies. My interest arose from a consideration of the ways in which women are depicted on screen and the overarching tropes of physical threat and loss of identity. This representation had been particularly affected by the relationship between the body and technology that was re-emerging as a theme within films exploring contemporary concerns with new technologies in society. In order to enhance study within this area I decided to develop the focus on the impact of technology for gendered characters on screen. The main focus of this early research was in developing the notion of the cyborg that was established by Donna Haraway (1991) and has been used by theorists such as Elizabeth Grosz (1994) to consider the ways in which the body has become a site of critical contestation. The cyborg is a post-structural concept exploring both the potential of and crisis within the body, particularly in terms of gender. Haraway's focus is on the relationship of the cyborg to science and technology and Grosz considers the historical tropes that configure particular approaches to the body. Although the cyborg is a potentially volatile figure, I specifically establish the ways in which analysing bodies on screen explores the film and television narratives that represent gender and identity in crisis. Within texts that explore technological change, the body in physical crisis becomes a vehicle for gendered performance, particularly in examples such as technothrillers in which characters must negotiate the threat of technology and reclaim their identity. This process of negotiation also reveals characters who cannot be fully recuperated into narrative closure. Characters may be punished for non-conformity within conventional narrative patterns yet their difference, and attempts to change their behaviour, cannot be fully contained by the narrative denouement.

I argue that memory screens establish the relationship between personal and shared memories constructing a form of mediated memories that impact upon character development, shared social and cultural history, broadcasting history and personal memories of viewers. Such memories are not only related to what happens on screen, but to the context of viewing and formation of meaning. Equally, the relationship between texts informs an understanding of memory screens and viewer experience. The focus on personal and shared memories, and the mediation of these, has also led to my significant consideration of the function of soundtrack in relation to memories that are shared on screen. Individual negotiation of the gaps between and amongst texts enables negotiated meaning and can evoke emotional responses such as the sublime,

which can be evoked or articulated in a viewer's response. I have also innovatively expanded the notion of the viewer to consider the relationship between academic and fandom in the context of exhibition and media history. This has been established through my own engagement with physical spaces that draw upon film and television references as part of story-building and transmedia strategies.

## Technothrillers

In the 1990s, the effects of online engagement and the impact of technology on identity were being considered by a number of post-structural and postmodern theorists such as Haraway (1991) in her treatise on the potential of cyborgs and Baudrillard's account of postmodern virtuality and simulation (1993; 1994). To establish a set of parameters I initially compared a range of films exploring similar themes. These ideas formed part of a discourse on the status of technology and were drawn upon in attempts to deconstruct its impact. Haraway proposes a dualistic cyborg which is both post-human and non-/human. Her account indicates that the potential to provide a critique of contemporary capitalist practices and the ambivalent nature of cyborg politics results in a figure which potentially challenges traditional human identity. The ambivalence of the cyborg offers a critique of our relationship with technology as well as with the natural world. My interest is in the way Haraway positions the cyborg in relation to contemporary capitalism and also considers the effects of the gendered cyborg as a form of social critique. This is an original approach that I have developed in order to assess the extent to which the ubiquitous cyborg figure can be redefined as a body on screen. The body becomes partially redefined by interaction with technology yet also cannot always be completely 'contained' by it. I have developed an approach to the representation of human interaction with technology on screen and its ensuing effect upon the notion of a stable subject identity. My research focuses on an exploration of a near contemporary or time-shifting world in which online and physical vulnerability are compounded to the extent that online vulnerability becomes physical threat. My identification of the portrayal of this fear as a particular visual trope led me to consider the effect on the body of vulnerability associated with women going online within films such as *Strange Days* (Bigelow, 1995), *CopyCat* (Amiel, 1995) and *The Net* (Winkler, 1995). These films all emerged in the mid-1990s when going online was becoming more a popular way of engaging with technology both at home and in the workplace. Additionally, these films all had female leads and portrayed women as being under threat, which is expressed as a physical threat due to online activity.

My significant contribution to the discussion of gendered bodies on film is to argue that as the body becomes vulnerable it becomes simultaneously threatened and productively demarcated by technology. This strategy specifically recognises the space within representation and provides a sophisticated approach to the implications of engaging with technology. I emphasise the ways in which women and men are threatened on screen as they become active and key protagonists in moving the narrative forward. The potential effects of engagement with technology and online communication were deemed to be rather perilous and potentially conducive to an assault on identity, whether originating physically or online. In order to explore the extent to which such an identity might become 'lost' in the process of online interaction and its ensuing physical threat, I have considered Baudrillard's (1994) approach to screen simulation which depicts a figure lost in a state of simulacra and ultimately removed from any reference to the real. This provocative position posits an extreme scenario within which any notion of agency or self becomes obfuscated in the immersion with the screen. It is potentially not important whether this vision of the body and technology is utopian or not, although in the notion of the sublime he implies that there is a seductive aspect to immersion in the screen which exists as a continuous and simulated scene.

Baudrillard recognises that the simulacrum has relevance outside of its immediate framework because it holds relevance even when an individual is not engaged with it, as is indicated in the example of Disneyland as a simulacrum in the USA. However, I have established that this experience of immersion is presented as a potential threat within narratives where technology becomes seductive and deadly and also a marker for rupture or excess. The implications of any 'loss' of a cohesive body and identity when engaging with technology is articulated by Baudrillard's account of the simulacra within which the reference to the real becomes unanchored yet visceral: 'There is an escalation of the true, of the lived experience; ... And there is a panic-stricken production of the real and the referential' (Baudrillard, 1994, 174). Baudrillard represents an hysterical vision of the simulacra, as displaced from any sense of the real, although I have evaluated the relationship between lived experience and the function of memory within film and television to consider the depiction of lived experience between characters and viewers of a text.

My account stresses two significant issues: the experience of the enrapt viewer, who can still negotiate the ephemeral image, already fading through time and space; an engagement and negotiation that takes place without necessarily having to sacrifice a

sense of agency or memory in the process of engaging with the image on screen and resituating the memory screens as negotiated sites of meaning.

## Technology and Memory

The chapter entitled 'Strange Days: Might as well Face it You're Addicted' emerged from this initial research into the body and technology and contributes to a collection of essays in *Cultures of Addiction*. This study explores the function of technology within a social context and, importantly, the implication for gendered experiences as well as the potential assault on identity. I consider the depiction of vulnerability of the body through interaction with technology. In the chapter on *Strange Days* I argue that technothrillers incorporate both a fear of and a fascination with technology. My approach diverges from the assumption that representations of technology offer primarily erotic possibilities, as argued by Springer's (1996) account of cyberthrillers, and recognises the potential recuperation of the technological device within the narrative of *Strange Days* as it is also used in the film to highlight political injustice. The consideration of the body and technology within my work advances the analysis of the depiction of the human/organic body and technology becoming intrinsically related. I argue that the gendered body on screen raises issues such as the physical vulnerability and the need to emphasise the physical body most significantly at the very point at which it is most threatened as well as potentially disruptive to binary definitions. Also, these characters negotiate the filmic space by reclaiming technology and illustrating that they cannot always be contained.

My work offers an alternative argument to other readings that focus on the negative portrayal of online engagement to consider the ways in which it is manifested on screen and how other readings related to memory and history can emerge. I understand the perilous nature of online interaction which is developed through analysing technothrillers that depict technology as problematic. However, beyond recognising the potential threat, I have established that this invasion pervades the physical world on screen and, more than this, that such films work to recuperate the physical body but do not always manage to recuperate the female characters into the narrative, in particular, with interesting results. The critical discourse of science fiction narratives, aligned with the action trope of the contemporary thriller, explore the



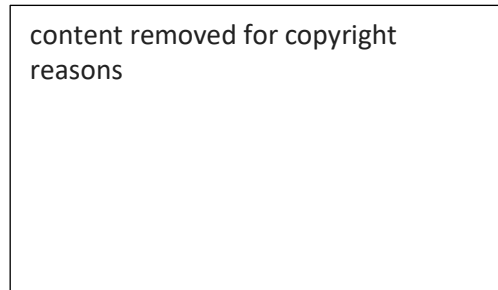
dangers of technology in particular ways which led me to consider the ways in which such fears were played out on screen. I began research into in this developing area of critical discourse, considering the portrayal of vulnerability associated with characters online that could be found within television series such as *Killer Net* and films such as *Strange Days*. My argument is that an online threat becomes a physical threat to the body in the diegesis in order to express danger to bodily and character cohesion as well as to provide a visual and aural demarcation of characters being in peril. Most significantly, I argue that in these films there is an inability to maintain ideological closure and equilibrium due to attempts to realign female characters into the text whilst providing the potential to exceed being comfortably reconstituted into narrative paradigms due to the nature of their experiences. Within technothrillers such as *Strange Days*, *CopyCat* and *The Net* there is an ambiguity and ambivalence still in place at the denouement. This dislocation between online activity and lived experience presents a critique of technology which, conversely, highlights its myriad potential. This theme pervades my analysis of Kathryn Bigelow's film *Strange Days* as a technothriller which presents a discourse of addiction and exploitation whilst recognising the socially recuperative possibilities of negotiating the use of technology.

Within *Strange Days* Mace, the female protagonist and Lenny's chauffeur/minder, finally 'saves the day' and becomes a heroic figure. She must undergo a brutal attack by the rogue police officers in order to do so and reframe the function of technology within the film. Mace is physically attacked as she tries to spread this 'truth' about political events. The physical onslaught she experiences reinforces the tenuous nature of the physical body on screen which I have identified as a significant issue for the gendered body. I argue that Mace's suffering functions as a problematic marker for the relationship between the body and technology and that physical violence and threat are visual expressions that are used to articulate inner fears. Part of my argument is that it is more effective to depict the physical human body in crisis on screen rather than to present a series of computer codes being disrupted because the body needs to articulate the onslaught on the mind and character identity in a visual context to articulate change as the physical threat of technology can also be perceived as a psychological one. Within *Strange Days* Lenny, who is addicted to playbacks, is often physically assaulted and does not conform to a traditional masculine hero figure. He is coded as 'feminised' in traditional filmic terms as he is unable to progress the narrative as a protagonist (Mulvey, 1975). Lenny is eventually 'awoken' and realises that he needs to re-establish his agency to make a change. Lenny, as non-masculine or feminised, is addicted to emotionally immersive experiences and cannot perform fully

as the male protagonist until he breaks away from this addiction. This challenging analysis of male addiction to technology also progresses the study of complex male characters within science fiction gendered tropes. This is a newly developing area I further develop in work on *Doctor Who* and the impact of time travel (Forde, 2016).



Mace protects Lenny who is weakened by his addiction to his memories via technology



Lenny supports Mace when she is attacked for trying to bring forward the truth about the murders via technology

Relevant studies in deconstructing the body on screen, considering the physical body as well as character identity, which have contributed to my own approach are the post-structural positions utilised by Grosz (1994) as a consideration of volatile bodies, Haraway (1991) in the concept of the cyborg, and Butler (1993) considering the body as performance. These perspectives variously address the diversity of women juxtaposed with dichotomising depictions of 'woman', a position that can be constructed within the text. I innovatively established this approach in relation to woman/women on screen in relation to the notion of agency and action. This development enables the exploration of a rupture in gendered identity proposed by a post-structural body in 'crisis' which I establish in terms of the relationship between technology, memory and lived experience. My argument is that the body is representative of identity on screen and can become a disrupting influence as well as becoming co-opted into the narrative. This development of the post-structural trope of constructed woman on screen also offers what Haraway has recognised in relation to the cyborg as both 'offering an argument for *pleasure* in the confusion of boundaries and for *responsibility* in their construction'. (Haraway, 1991, 292) Haraway's cyborg is a provocative figure that accounts for our experience of technology with the potential for a more nuanced interpretation. In drawing upon feminist paradigms I have developed a response to the depiction of women on screen which challenges traditional assumptions about their impact.

My analysis establishes the perceived threat of technology as depicted in technothrillers as the ability to become lost within the moment and lose a sense of

coherent identity. The function of memory requires the capacity to forget in order to ensure and enhance social cohesion. Within *Strange Days* the relationship between Lenny and Faith is also depicted. Lenny cannot move forward from his lost love and replays augmented reality tapes in order to experience her presence as well as his own feelings recorded at the time when the initial filming took place. This focus on reliving the past does not enable a processing of memories or a sense of perspective. The use of the interactive technology within the film illustrates the ways in which human experiences can become commodified. My position is that the act of engaging with a (gendered) difference, even as a way of interacting with multisensory immersion, can merely reinscribe the stability of the subject. The technology constructs a simulation culture (Baudrillard, 1994) as opposed to an historically situated one. However, my point is that there is always something that cannot be contained at the denouement and that this threat can be redefined. This is one of the reasons why such films are pleasurable, because they present the lone individual as not being fully recuperated or classified into accepted norms. My interest in the relationship between the physical world on screen in relation to virtual experiences and online engagement has emerged as a significant and distinctive aspect of my research in considering the extent to which the physical body is often reinscribed on screen due to, and often at the point of, the fear of its loss. In the context of a number of the examples explored in my work, the fragmentation of identity contributes to an inability to differentiate the self from technology and to experience a sense of loss in this immersion into a virtual landscape (Poster, 1995; 1996). *Strange Days* illustrates both an exploration of and a response to this perceived 'crisis' that is intrinsic to the function of technology within *Strange Days*. There are contesting forces that negotiate technology in order to establish a political and personal terrain which highlights the distinctiveness of my approach.

### Mediating Memory Screens

Research into *Strange Days* and other technothrillers developed a focus on memory, space and time and the science fiction focus of these films. Also, the role of technology has become more significant in accessing the past as mediated and cultural remnants of history and it became clear that both individual and social memories are constructed on screen. The development of on-screen action and establishing the diegesis is implicated by the definition of traditional screen narratives as a process of cause and effect in time and space (Bordwell, 1990). The texts I investigated in relation to

television drama presented themes that manipulated the process of time and space via technology in order to affect memory and progress. The construction of memories on screen, and their effect on characters' emotions and desires, becomes fundamental both to our engagement with their storyworld and our own experiences of watching them. In order to encapsulate this process I establish the concept of memory screens to identify an archive of personal memories upon which we can draw and a pool of shared social memories that are also circulated. This approach progresses from the notion of public memory as a set of discourses from which we can experience a sense of the past without having lived it.

Advancing the research into memory and identity in relation to media, I collated and edited a collection the special volume entitled 'Memory Screens' for the online journal *Image & Narrative*. With an interdisciplinary focus, incorporating video art, film, television, history and exhibition, the whole volume explores the ways in which a variety of visual media reconstitute memory in relation to a negotiation between personal and shared, social memories. The volume draws together home movies and historical texts with film and television drama with the overarching focus on Memory Screens both projecting and constructing memory and identity.

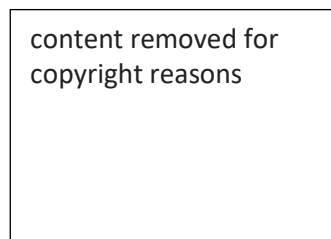
As part of this collection, my article entitled 'Television Dramas as Memory Screens', considers aspects of Annette Kuhn's work on personal memory. Kuhn recognises the ways in which memory functions mythically and, often nostalgically, in relation to media. Kuhn's account of memory is a way of understanding personal experience and recollection as memory work in order to look back at our collective and individual memories (Kuhn, 2002). Kuhn's approach considers how and why we engage with public media and 'personalise' this experience. This consideration encapsulates personal memory as a process to be worked through. In developing this approach, and applying it to the wider, shared media of film and television, I argue that the intricate relationship between what we remember and share actually moves beyond personal recollections in relation to mass media texts and becomes a more complicated circulation of meaning.

I evaluate Alison Landsberg's position that shared social memory can form a kind of public memory that is culturally shared as prosthetic memories which provide 'an unprecedented circulation of images and narratives about the past' (Landsberg, 2004, 4). New technologies explore the parameters of "real" and mediated experiences in order to establish Landsberg's concept of prosthetic memories and we engage with these at an emotional and intellectual level. Specifically, the notion is developed in my

work and adapted to consider the selective process of remembering as significant; remembering and forgetting can ameliorate difficult memories through being shared as well as indicate what we choose to remember as individuals and as a society.

Additionally, I incorporate King's notion of afterwardsness which she uses to describe the ways in which traumatic experiences are negotiated via memory. I argue that there is a need to recognise the ways in which engagement with media texts can reflect the process of selective remembering after the event in order to be able to process and manage what is remembered (King, 2000).

My article on Memory Screens explores memory construction in relation to the past as depicted in two dramas and the relationship of characters to media and memory. In order to consider the extent to which personal memory intersects with social memory, the article considers the extent to which television dramas both work through social history and utilise media in order to distort or reshape the past to provide a social critique. The two dramas I focus on are *Life on Mars* and *The Long Walk to Finchley*. *Life on Mars* depicts a police officer from the 21<sup>st</sup> century who is knocked down by a car, loses consciousness and then appears to wake up in the police force of the 1970s with all of its questionable institutional practices. The series utilises a number of references to 1970s broadcasting, music and popular culture in order to establish the period but also to invoke a sense of nostalgia. However, I distinctively identify a contemporary reworking of history in order to reframe past influences in the figure of the disillusioned police officer and the feminist 'co-opting' of a former female Prime Minister. Although the lead male protagonist in *Life on Mars* is ultimately supportive of those who are victimised by the police and disapproves of violence and corruption, he becomes fascinated by the past he encounters, which also merges within his own personal life as a child growing up in the period. Within the series children's programmes are subverted and the Test Card girl becomes an ominous figure as dreams merge with historical depictions of the past.



Testcard Girl Outside TV



Sam, Detective, and Annie, WPC

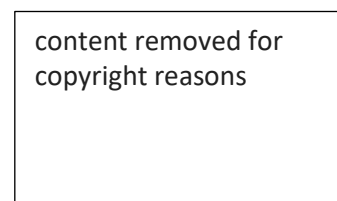


Photo of Sam as a child

The second drama is *The Long Walk to Finchley*, which depicts a young Margaret Thatcher as a woman striving to success in a male dominated world of the 1950s and experiencing the 'glass ceiling' as she tries to become an MP. The figure of Thatcher as a seeming ingénue places her in a very different position to her legacy from her period as Prime Minister and the discourse within the drama is one of a woman striving to become successful. This approach draws upon a 1980s discourse of female professional emancipation, which Thatcher appears to have done little to progress in her policies at the time. Therefore the glamorous image of a young Margaret Thatcher superimposes a gendered narrative of ambition that is simultaneously undermined as it emphasises her manipulative behaviour. I illustrate the ways in which both dramas confuse and conflate the past with the present in order to playfully exploit both worlds. Viewers are called to reference what happens on screen in relation to historical events that have subsequently informed their development and, more significantly, to view a depiction of Thatcher on screen in a world of the 1950s re-presented with issues of 'feminism' and a negotiated nostalgia. Specifically, I demonstrate how these dramas incorporate both a recognition of this playfulness and the social implications in these readings.

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The Long Walk to Finchley: The focus on the young Margaret Thatcher emphasises her position as a political underdog whilst illustrating her social position

I explore the extent to which memory is negotiated in relation to what is happening on screen and as embedded within both media and social history. This engagement with film and television is negotiated by our existing personal and publicly shared memories; memories which are further triggered in response to the screen. There is a greater impact than the feedback loop that Haraway (1994) has recognised as functioning in relation to information systems. Instead they incorporate the already-existent memories we have of interaction with the media as well as newly established ones. This process then incorporates watching the film or programme yet contributes to a further layering of memories. Expanding upon this approach, I argue that the role of prosthetic or

mediated memories also incorporate a phenomenological experience due to their reinscribing of the past as media circulation. Therefore my article on Memory Screens establishes the ways in which personal and social engagement with screen media works to validate these screen 'memories' that also blend with our own shared media memories and personal experience. Within the article I explore the relationship between memories of British cultural and political history, broadcasting and individual character memory. Garner (2012) recognizes that I have identified the nuanced ways in which characterization negotiates these memories. Although viewers' experiences can be drawn from personal experience they are also negotiated through a media discourse of shared memories.

The experience of watching texts can form its own memories for re-watching in the future. Memory screens, such as *Life on Mars*, accentuate the relationship between personal and social memory. I argue that the identification of the relationship between the body and technology also has implications for the formation of memory and identity and that any reconstitution of a real, lived experience can become problematic for human agency and its ability to comprehend the present in relation to the past. My research developed into a consideration of film and television narratives that draw upon a range of nostalgic and retrogressive tendencies that are vying with progressive and critical perspectives. I also originally identified the ways in which this tension in trying to remember and negotiating the past includes personal, social and media memories that implicate the viewer in their own memory negotiation.

My correlation between historic events and media re-construction informs a thesis on *Mad Men* and cultural memory (Bacon, 2012). I have moved beyond Landsberg's term prosthetic memory and Kuhn's account of 'memory work' to establish the ways in which we experience film and television in terms of both specifically personal and social or shared memories in the process of engaging with media texts. I have established the term memory screens for this process of mediation. Within this article I uniquely establish how television dramas incorporate the notion of personal biography, social memory and the status of broadcasting within a public circulation of meaning and also move beyond these parameters. I assert that affective engagement with film and television requires memory construction on behalf of the viewer in relation to what is on screen: remembering what has happened in the context of viewing; remembering that it has happened in a social context as shared memory; recalling the memories going forward as personal memories; merging personal and social memory. However, my interest has further developed to consider the moments of viewing and the extent to

which viewers encounter these texts in relation to their own understanding and knowledge of wider media frameworks.

## Memory Screens and Aural Attraction

My research into science fiction film and television has also established an account of the function of soundtrack in relation to the screen image in terms of the critical and emotional space that is established by the use of compositional music. The function of soundtrack is a developing area of study which is still debating the impact of aural composition. 'The Sunshine Soundtrack as Aural Attraction' is part of a collection in a special journal volume on science fiction soundtrack in the *New Review of Film and Television Studies* which contributes to fresh approaches to film and television. My argument establishes the extent to which the soundtrack of *Sunshine*, as a science fiction film, functions as both mood music and sound effect: within *Sunshine* the soundtrack directs the viewer to feel what the crew on the spacecraft are unable to articulate and often do not share with the viewer via dialogue or point of view perspectives. As the crew on the spaceship are viewing an amazing vista, the camera circles behind them, accompanied by emotional music for us to internalize and interpret the scene, as we cannot hear the crew talking and they then fall silent as the planet comes into view. I utilise the term aural attraction as a reciprocal effect via the soundtrack to that achieved by the term 'cinema of attractions'. Gunning (1986) refers to a cinema of attractions to analyse the image in early cinema and a correlation is made between early cinema and contemporary special effects films. I argue that within *Sunshine* the soundtrack performs the function of a complementary aural attraction in order to elicit a response from the viewer, particularly when the image is intentionally oblique. This term aural attraction usually refers to aspects of the soundtrack that are particularly notable but I am using the term specifically to encapsulate the function of excess within film that can be addressed through the use of music and sound effects to provide what the screen image does not articulate.



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At these moments of contemplation in *Sunshine* the camera pans behind the crew, who are staring out and talking amongst themselves as the music swells to create an effect of 'aural attraction'.

In relation to this example, I identify the ways in which a sublime feeling, which in Lyotard's (1994) account describes a state near to unreason, is effectively expressed specifically within moments of visual 'inarticulation': the soundtrack replaces the visual dimension as a locus of aural and immersive experience. The notion of the sublime is traditionally applied to visual elements of science fiction and to the effect of music and, importantly, I have brought these two elements together in an innovative way in relation to the film. Unlike the protagonists in *Sunshine*, who focus on the vista as they stand on their spaceship, we are led through the soundscape away from the scenario to consider our own emotional responses as we move behind the crew and beyond the scene, prompted by the ambient soundtrack that acts as a form of aural attraction. The relationship of both protagonists and viewers to technology becomes a sublime articulation conveyed through orchestrated soundtrack as both the characters on screen and viewers of the film become enchanted by the implied symbolism of the scene. Our memories of the scene will have been evoked by both the music and the implied experience of awe at the scene. Within the context of science fiction, this is a superlative approach to convey the impact of an awe-inspiring scene by almost bypassing it and relating it directly to the viewer's own response to the soundtrack.

I argue that the film emphasises the ways in which memory and time become intertwined as the crew travel closer to their death whilst simultaneously going back to the sun as the origin of life; a point that has been appreciated by Xie (2012). The soundtrack draws the viewer in by simultaneously creating a space for responses to the scene that move outside of the diegesis, as the capacity of the film to articulate emotion instigates textual excess. At the end of the film the last remaining crew member becomes subsumed into the burning ship as a form of sacrifice. This conclusion exemplifies the extent to which the body suffers in its attempt to control technology and reverse the effects of the dying sun. Before, as this ending becomes inevitable, memories of the protagonist's family on earth merge with the recognition

that they will know if the mission has been successful. Eventually, immersion in the flames denotes a surrender that accentuates the ultimate futility of their mission and their return to the sun.

## Memory Screens and Adaptation

As both personal and social memories contribute to our experience as viewers, I decided to consider the extent to which different texts are negotiated during the process of textual adaptation. The study of adaptation has re-emerged as a response to more traditional perspectives. This chapter was developed from a conference considering the process of adaptation within science fiction and foregrounds innovative approaches to the theme. My chapter considers the ways in which there is space for the viewer to negotiate the relationship between texts. The act of adaptation has become contested and moved beyond simply considering one source text in relation to another to a consideration of a more complex set of relationships based upon a range of criteria (Stam & Raengo, 2005; Hutcheon, 2006). The process of adaptation often considers the relationship between two specific, individual texts. However, I am interested in also exploring the 'in-between' relationship of viewers or readers in relation to a number of linked text/s. In order to explore the relationship between different versions of a text and the adaptive process, I decided to examine the role of adaptation between film and literature in three versions of *Solaris* mainly because the three versions are often considered and evaluated in relation to each other by both viewers and critics. The three versions consist of the novella *Solaris* (Lem, 2003) and two films, *Solaris* (Tarkovsky, 1972), *Solaris* (Soderbergh, 2002). The role of adaptation complements the consideration of intertextuality and foregrounds the potential for a consideration of transmedia relationships across texts.

The chapter entitled 'Solaris: Lem/Tarkovsky/Soderbergh: Adaptations in Space' is part of an edited collection on science fiction and adaptation, entitled *Science Fiction across the Media: Adaptation/Novelization*. The relationship between these three examples is particularly useful because they are discussed in relation to each other to compare their effect. In order to understand the ways in which science fiction texts based upon memory can engage with the viewer, I draw upon the notion of the Derridean archive which can be non-chronologically invoked in order to experience the present. Derrida's exploration of the archive recognises that it is a construction

informing the past, the present and the future and its constitution as non-chronological that is key (Derrida, 1995). In order to account for the in-between spaces of these three texts I also establish Bakhtin's (1982; 1990) concept of the chronotope, to explain a temporal layering of experience which I argue is articulated within the context of adaptation. Bakhtin also considers the emergence of genre texts and their negotiation by the viewer/reader. Just as I developed Kuhn's approach to memory work, I reconfigure the process of adaptation and archiving to express memory work within space and time. The reader/viewer processes the various texts by building memories of engaging with the novel and film adaptations, so that our experience of *Solaris* hovers in the adaptation of memories between texts.

In order to provide comparisons, I discuss in an innovative manner the way in which all versions of *Solaris* depict the moment in the narrative where weightlessness caused by two planets passing each other invokes an almost ethereal experience for the protagonists and the viewers. The suspension of time, space and narrative is most emphasised in Tarkovsky's depiction of the spiritual relationship between the two protagonists as the figure Hari, reconstructed from her husband's memories, experiences memories of his childhood. These memories are triggered by the Breughel painting 'Hunters in the Snow' which evokes memories of Chris's childhood home. As Hari scans the painting, memories appear on screen and the scene culminates in the suspension of gravity that causes the protagonists and objects in the room to float in space. In the study of *Solaris*, audience and readers draw upon their own experience and invoke the third text or the invisible intertext that Lampolski refers to as the locus of meaning (1988). However, I develop the notion of the intertext to argue that this intertextual relationship positions all versions of *Solaris* as potentially being seen in relation to each other as well as within our own memories of encountering any of these versions. Viewers and readers also discuss the adaptations of *Solaris* in these relative terms, which becomes part of their appeal and further circulation of meaning. My argument is not necessarily concerned with science fiction privileging an origin text for *Solaris*, even though Tarkovsky's art film is the version that is most often privileged in arthouse critical evaluation and viewer responses, perhaps because of its open and evocative approach; Lem's novella is appreciated for being 'hard' science fiction and Soderbergh is viewed as making the story more conventionally accessible.



The three versions of *Solaris* illustrate the process of adaptation as a transmedia experience, working across texts and highlights a more sophisticated application of adaptation theory.

I also argue that the process of adaptation implies a relationship to memory because archival processes, however they are configured, will be both contingent and comparable. Although an origin text is not necessarily sought, it can be found in the ways in which Tarkovsky's is privileged and I address the reasons why it should have such a status but do not assume its predominance. As Barthes argues in relation to the readerly text, the reader holds the text together and becomes the locus of its meaning (Barthes, 1977). This approach is original in considering the function of memory in the relationship between texts.

In order to reconsider these personal experiences of viewing within a wider framework, I incorporate and deconstruct traditional notions of archiving and establish a form of adaptation that functions via a process of coalescence. Part of this process is a concern with the gendered distinctions in the text which position the female character of Hari/Rheya as a kind of cipher who is an extension of the protagonist's mind. Establishing Braidotti's definition of the monstrous figure in relation to the projection of Chris's psyche, I position her as a projection of his memories and threat to Chris's sanity (Braidotti, 1966). Hari/Rheya is invoked by the planet but is also seemingly threatening to the stability of the subject and becomes a trickster figure with her lack of origin story and ambivalent intent. Technology is utilised to expunge her and she experiences panic and rejection, although there is a shift in the denouement as the latter version allows her space to exist. Mikhail Bakhtin's concept of the chronotope enables an understanding of history and experience as a way of considering the relationship between texts. As I argue in the chapter, the Bakhtinian chronotope refers to the coalescing of time and space, and expresses the ways in which we can engage with the spaces between texts when we are viewing each individual text. In relation to biography and autobiography, Bakhtin argues that the internal chronotope of an individual life or the self is significantly transformed within 'the exterior real life chronotope in which the representation of one's own or someone else's life is realized' and 'made public' (Bakhtin, 1982, 131). The chronotope recognises particular

historical coalescence and is also influenced by genre as an historical process of narrative. In doing so, it effectively accounts for the ways in which we can engage with these three versions of *Solaris* as adaptation.

In order to consider the ways in which readings between the three versions of *Solaris* function, Bakhtin's account provides a process the extent to which narrative has been interpreted and retold as time thickens and coalesces at particular moments and these re-establish an historical engagement with the past. However, I have identified that the process of adaptation both deconstructs the specific nature of such coalescence and enables a relationship between texts over time without losing their historical specificity. As *Solaris* explores the body and technology and draws upon the protagonist's psyche in the negotiation of emotion and memory, it is an extremely effective vehicle through which to explore the relationship between versions of the story where each provides a further 'thickening' of the text. I establish that the tangible nature of such a thickening, solidifying it within history, establishes a relationship with both individual and social practices of understanding and remembering. Developing my research aims, this analysis illustrates the extent to which the science fiction genre enables such fantasies to emerge within the context of technology and highlights the ways in which individual and social memory are heightened and deconstructed within and between these texts.

## Memory and Exhibition

A significant aspect of watching film and television is the extent to which our own memories can be affected by screen interaction. The next stage in this research was to consider the interaction within physical space and the extent to which this could be interpreted in terms of textual experience. This area of study regarding exhibition and fan engagement in terms of film and television is relatively new and this is an innovative study of the Doctor Who Experience as a specific exhibition space. The project arose from my interest in attending the Doctor Who Experience, which was situated in Cardiff Bay, in order to explore the exhibition's relationship to the television series Doctor Who. I am also interested in museum display and the process of historiography. This research formed a chapter in an edited collection entitled *Doctor Who: Fan Phenomena* as part of an Intellect series on fandom, and co-incided with the 50<sup>th</sup> anniversary celebration of the television series. Within the chapter, 'You Anorak: The Doctor Who Experience: Experiencing *Doctor Who*', I have critically reflected upon the position of the fan within academia in the context of this popular cult text. I critically

explore the Doctor Who Experience as an exhibition in the context of Benjamin's flâneur (2002), transforming the concept of the stroller of Parisian arcades into the fans/shoppers in the exhibition's last location in Cardiff Bay.

I consider how aesthetic attraction and economic commodification within the Doctor Who Experience forms part of a much larger archive of television history. For fans, the experience places the viewer physically in the position of a companion who has to negotiate and respond to narrative threat as though they are being chased by daleks. As recognised by Wolf (2017) I discuss the way in which visitors to the Experience are addressed as 'shoppers' in the version I attended. When entering the Experience, the exhibition space also highlights the presence of the Doctor's deadly foes and offers a nostalgic and informative experience, drawing upon both cognitive and emotional responses from the fans, even if visitors are not familiar with all the original episodes. I argue that the exhibition illustrates a world-building extension of the Whoniverse where our engagement with it reflects back onto the series in order to reestablish our fan based experience of the world of the Doctor. Most specifically, I argue that the Doctor Who Experience constructs an alternative history of fan memories and experiences, and my argument has been recognised by Jones (2017). The relationship between the body and technology become rearticulated within the exhibition. As there is currently very little written on these kinds of spaces, my research is breaking new ground and gaining recognition by academics exploring media fandom who have recognised the relevance of fan heritage in my analysis of the *Doctor Who* Experience. (Booth, 2015; Hills, 2013). The interest in exhibition practices also developed from an earlier piece of research which consisted of a visit to Derby Museum to study the relationship between the painting and object of 'The Orrery' (2012) on display. In this study I argue that it is the relationship between the painting and the object that has to be negotiated and, as this was a family trip, the responses of my own children were also considered.

My analysis of the *Doctor Who* Experience has been an influential piece of research within the field and is significant as it is at the forefront of this study and provides early consideration of this type of experience which is grounded within critical theory and fan studies. This area of research is now developing in relation to fans, consumers and game culture. My chapter extends the consideration of transmedia studies in exploring both fan and consumer engagement with film and television displays within public spaces. Transmedia storytelling is developing as a concept within media studies to account for the extension of storyworlds onto different platforms and building on the notion of intertextuality. My research also develops the notion of world-building within

transmedia texts in an innovative manner. The world-building can take place through active experience of these spaces, which are both commercial enterprises and sites of fan-orientated culture. The analysis of the Doctor Who Experience as a site of both exhibition and display establishes the academic and fan within contemporary media discourses of personal and shared memories.

The exploration of an interaction with archiving and display of film and television has been particularly productive and referenced in a number of texts exploring game play and tourism. Visitors to the Experience in the iteration of the Eleventh Doctor were referred to as passing shoppers who have wandered into the space. In order to explore possible interaction with the *Doctor Who* themed exhibition I have drawn upon game theory such as work on video game play by Matteus (2004), Matteus and Stern (2006) and Morris (2002)). In these accounts game play is juxtaposed with cinema and privileged as an active experience of choice and negotiation. Although I have refuted the implication that watching a film is passive due to viewers' negotiation of screen texts, the spatial dimension of the Doctor Who Experience provides an additional platform from which to explore and share fandom and enjoyment of the wider Whoniverse. I focus specifically on the construction of narrative by 'players' undertaken through interaction and the process of play. I have developed the notion theories of gameplay to recognise a specific experiential practice of negotiating this space and its relationship to the wider Whoniverse. Visitors are offered the opportunity to make personal, shared and mediated memories of engagement with the Whoniverse as well as being offered the opportunity to buy souvenirs of their experience.

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Inside the TARDIS at The Doctor Who Experience, Cardiff Bay

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The location of the Doctor Who Experience where a lot the series is filmed. The graphics use an old style clock face with Roman numerals which also resembles a vortex and a sea anemone fossil, drawing on the time travel motif, the link to the past and the archival function of the exhibition

I establish the ways in which visitors respond to this space both as consumers and fans, as well as the way in which I respond to the Experience as an academic, a fan and a consumer. I argue that the negotiation of the space in relation to the wider Whoniverse exemplifies a form of media, fan-fuelled experience with its own cultural heritage. My analysis has been recognised as a valuable and significant piece of work as I recognise all of these aspects of the *Doctor Who* Experience in an original approach. Extending this aspect of the research, I am also currently co-curating and contributing to a retrospective exhibition for a Derby artist, Marion Adnams, and I have set up a website and digital link as part of the project.

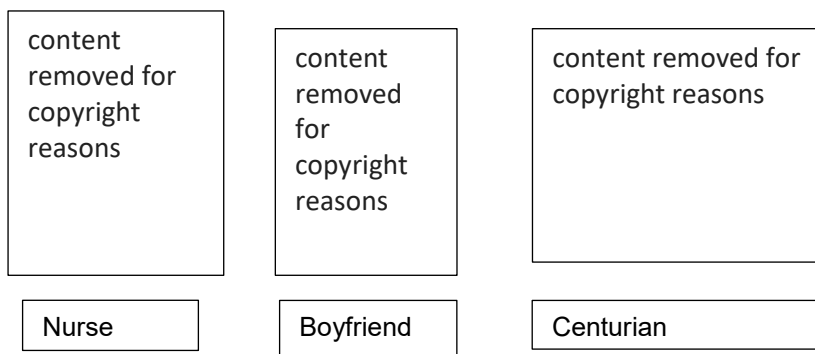
### Memory, Gender and Time Travel

The consideration of gendered representations in relation to Doctor Who has further developed in response to the New Who era. Following a conference celebrating 50 years of *Doctor Who*, where I presented a paper on gender in relation to *Doctor Who* companions, I provided a chapter on 'Rory Williams: The Boy who Waited' for the edited collection *Doctor Who Companions: Who Travels with the Doctor?* (2016). Within this chapter I considered Rory's character in *Doctor Who* in terms of fluid constructions of masculinity and fan identification within the series. As a time travelling scenario, there are many opportunities within the series for the characters to negotiate different time periods and become challenged by the vagaries of new technologies as well as responding to alien threats. The analysis of masculinity within science fiction, and *Doctor Who* in particular, is an underdeveloped area of research. This chapter has explored fresh academic territory in the exploration of transgressive male characters in science fiction in relation to male companions in the Whoniverse. Although I have considered gendered distinctions throughout much of my work, this chapter represents the burgeoning interest in male companions and is my original study on Rory as a male



companion of the Doctor. I identify the character Rory's reconstitution as an emotional male hero within the series. Developing aspects of my consideration of Lenny in *Strange Days*, and identifying the fan and media responses of Rory as a companion, I evaluate the extent to which Rory is a redemptive male figure who is both vulnerable and heroic. This is an analysis of Rory in the time-travelling series as one of the Doctor's companions.

The chapter establishes an original perspective on the character Rory Williams and considers Rory's story arc across the Whoniverse. Within the series' narratives, Rory and his girlfriend/wife Amy often time travel, confronting different timelines and versions of the Doctor and themselves. The transgressive figure of Rory is established in terms of gendered and organic mutability: Initially he performs his duties as Rory the nurse in the local hospital. Later in the series he becomes an auton, a facsimile of himself, and protects Amy for over 2000 years, illustrating that he performs as both the hero and the trickster in terms of a cyborg. Although he performs caring roles, one traditionally defined as female and the other as male, these roles exemplify Haraway's cyborg in terms of contesting gender binaries within a contemporary context and the effect of technology on the body. Also, Rory's double, as an auton, performs the role of Amy's fantasy figure of a Roman centurion which illustrates a performance which Rory then re-interprets as both a bodyguard and carer. The figure of Rory also raises questions about the function of time and memory as he 'survives' becoming an auton and is also 'rebooted' as a human via time travel.



Rory suffers both physically and emotionally in his relationship with Amy and the Doctor. My argument is that the process of time travel further compounds the need for characters to maintain a stable subject identity. Rory's narrative arc exemplifies my argument that versions of the self within space and time are constructed within memories and are often only partially renegotiated into the text. Rory is finally taken back in time to live the rest of his life in the past where Amy goes to join him, thus

creating a resolution by their absence from the diegesis and any potentially mutable timelines. In terms of establishing alternative heritage and transmedia fandom I expanded this experience further: after visiting the Doctor Who Experience and writing the chapter on Rory, I also attended East Midlands Comic-Con 2016 where I had a photograph taken with the actor who plays Rory (Arthur Darvill) whilst holding my book in front of me. As Russell argues, 'Emotional meta-experience is the construction of a coherent narrative, interpreting, packaging and labeling the episode' (2003, 165) so, in reflecting on the visits, the chapter and the photograph I have engaged in a meta-process of such experiences which accounts for the in-between spaces in a specific way. Following from the work on *Doctor Who* I also reviewed Telotte's *Guide to Science Fiction* (Forde, 2017) which presented the Eleventh Doctor on the cover but was more focused on science fiction television in the USA and indicates a tendency towards shared and individual memories related to an engagement with a specific legacy of broadcasting.

## Conclusion

In reviewing the published works, the main focus is the relationship between memory screens, and viewers. My research is explored through the themes of memory, history and identity and in the relationship between the body and technology. My research originally identifies the ways in which on-screen narrative is negotiated via viewer engagement and the extent to which there is an interplay between the memory formation of on screen characters, the relationship between film and television texts and viewers' own memories of engaging with texts and their transmedial ephemera. My initial interest is in the extent to which the physical and gendered body on screen is privileged as a site of contestation where memory screens are negotiated amidst narratives about the effect of new technologies and the consequences for personal and social identity. This has developed to consider the relationship between social and personal memory and history within the relationship of the body and technology. I make the significant point that the threat to the body from the use of technology indicates the potential inability to contain character identities within conventional narratives. This motif of bodily and mental cohesion is developed throughout the publications in order to establish the ways in which a stable identity on screen is maintained or compromised. The influence of history is aligned with personal and social memory in identity formation. The emphasis on the use of technology has provided a focus on science fiction or fantasy based texts which provide a correlation with issues within the contemporary world whilst resituating this world within time and space. In order to evaluate the ways in which the viewer engages with film and television I have considered the negotiation of texts as adaptations and as intertextually linked and implicate viewers as a source of meaning at both a personal and social level.

My interpretation of gendered strategies demonstrates that characters perform on screen in order to play out potential threats and desires. Their attempted recuperation within the narrative can leave them not completely re-integrated into the text and, instead, to challenge traditional representations, providing space to identify both the fears about and hopes for technology. The technologised body is a potentially transgressive figure, which I have established is a marker for the crisis in identity that

emerges from the relationship between the body and technology on screen. Within such depictions, the function of memory construction has been significant in science fiction narratives. I have taken this challenging approach to consider the extent to which the battle to protect human memory and identity is played out physically on screen. As such, the body becomes representative of the onslaught on identity formation and memory construction.

I have critically reframed social and media assumptions about the threat of technology, explored and deconstructed feminist and post-structural discourses on the gendered screen body, and developed an understanding of the ways in which memory functions as a cultural phenomenon in depictions on screen. I have reassessed the relationship between the body and technology and developed an analysis in relation to film and television in terms of memory screens and aural attraction. The research evolves to argue that the viewer is strongly implicated in the process of media experience and memory construction. My research has developed to evaluate film and television texts as well fan engagement with exhibition spaces. Increasingly my research is breaking new ground in its consideration of the relationship between viewer experience and text as part of wider transmedia and exhibition practices, via the process of adaptation and transmedia world-building, as well as through the theoretical position of individual viewer engagement with film and television. There are a number of ways in which this research has made an original contribution to the study of film and television and in which it can further develop. Specifically, my work has been at the forefront of emerging fields of research and recognised by researchers for contributing to contemporary considerations of memory, character identity and fan studies in relation to film and television and transmedia texts.

## References

- Bacon, K. (2012) 'Memories by *Mad Men*: Cultural Memory, Television, and early 1960s Domesticity', MA Dissertation, McMaster University, Ontario, Canada
- Bakhtin, M. (1990) *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press
- Barthes, R. (1977) *Image, Music, Text*. London: Fontana
- Baudrillard, J. (1993) 'The Ecstasy of Communication' in *Postmodern Culture*, ed. Foster, H. London: Pluto
- Baudrillard, J. (1994) *Simulacra and Simulation*, Ann Arbor: University of Michigan Press
- Benjamin, W. (2002) *The Arcades Project*, trans. Eiland, H. and Kevin McLaughlin, K., Cambridge: Harvard University Press
- Booth, P. (2015) *Game Play: Paratextuality in Contemporary Board Games*, London: Bloomsbury
- Booth, P. (2015) *Playing Fans: Negotiating Fandom and Media in the Digital Age*, University of Iowa Press
- Bordwell, D, & Thompson, K. (1990) *Film Art*, New York: McGraw-Hill
- Braidotti, R. (1996) 'Signs of Wonder and Traces of Doubt: On Teratology and Embodied Differences' in N. Lykke and R. Braidotti (eds) *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace*, London: Zed Books
- Bukatman, S. (1999) 'The Artificial Infinite: On Special Effects and the Sub-lime', in A. Kuhn (ed.) *Alien Zone II: The Spaces of Science Fiction Cinema*, pp. 249-75. London: Verso
- Butler, J. (1993) *Bodies that Matter: On the Discursive Limits of Sex*. London: Routledge
- Derrida, J. (1995) 'Archive Fever: A Freudian Impression', trans. Eric Prenowitz (Chicago and London: University of Chicago Press
- Forde, T. (2011) 'Introduction' and 'Television Dramas as Memory Screens' "Memory Screens", Special Volume of *Image and Narrative Online Journal*, ed. Forde T. Katholieke Universiteit Leuven, Directory of Open Access Journals (DOAJ) April, 66-82

Forde, T. (2011) 'The *Sunshine* Soundtrack as Aural Attraction' in the *New Review of Film and Television Studies*, Special Issue: 'Sounding Science Fiction', ed. Cubitt, S. Volume 9, Number 1, March, 71-83

Forde, T. (2012) 'Solaris: Lem/Tarkovsky/Soderbergh: Adaptations in Space' in *Science Fiction across the Media: Adaptation/Novelization*, part of series SF Worlds: Critical Studies, in Science Fiction, eds. Van Parys, T. & Hunter, I. Q., Canterbury: Gylphi, 97-114

Forde, T. (2012) 'Strange Days: Might as Well Face it You're Addicted' in *Cultures of Addiction*, ed. Lee, J. New York: Cambria Press

Forde, T. (2012) Online Presentation: 'The Orrery/The Orrery: Between Image and Object', *New Perspectives on Joseph Wright*, D-MARC: Digital and Material Arts <http://www2.derby.ac.uk/dmarc/online-projects/teresa-forde>

Forde, T. (2013) "You Anorak": The Doctor Who Experience and Experiencing *Doctor Who* in *Doctor Who Fan Phenomena* ed. Booth, P., Bristol; Intellect, 62-71

Forde, T. (2016) 'Rory Williams: The Boy who Waited' in *Doctor Who Companions: Who Travels with the Doctor?* eds. Ginn, S. & Leitch, G. North Carolina: McFarland

Forde, T. (2017) Book Review of 'Telotte, J. P., *The Routledge Guide to Science Fiction Television*' in *MedieKultur: Journal of Media and Communication*

Garner, R. (2013) 'Nostalgia and Post-2005 British Time Travel Dramas: A Semiotic Analysis of a Television Genre Cycle', PhD Thesis submitted to Cardiff University

Grant, C. (2011) Review of 'Memory Screens: New Issue of Image and Narrative' *Film Studies for Free* <http://filmstudiesforfree.blogspot.co.uk/2011/06/memory-screens-new-issue-of-image-and.html> 28/6/2011

Grosz, E. (1994) *Volatile Bodies: Towards a Corporeal Feminism*. Bloomington: Indiana University Press

Gunning, T. (1986) 'The Cinema of Attraction: Early Film, Its Spectator and the Avant-Garde', *Wide Angle* 8 (3-4): 63-70

Haraway, D. (1991) *Simians, Cyborgs and Women: The Reinvention of Nature*, Abingdon: Routledge

Hills, M. (2015) 'Location, Location, Location: Citizen-Fan Journalists' "Set Reporting" and Info-War in the Digital Age' in Geraghty, L. ed. *Popular Media Cultures: Fans, Audiences and Paratexts*, London: Palgrave

Hills, M. (2015) *Doctor Who: The Unfolding Event: Marketing, Merchandising and Mediatizing a Brand Anniversary*, London: Palgrave MacMillan

<http://www.imageandnarrative.be/index.php/imagenarrative/issue/view/11>

- Iampolski, M. (1998) *The Memory of Tiresias: Intertextuality and Film*, London: University of California Press
- Jenkins, H. (2012), 'Textual Poachers: Twenty Years Later: A conversation Between Henry Jenkins and Suzanne Scott' in *Textual Poachers: Television Fans and Participatory Culture*, London: Routledge
- Jones, B. (2017) 'Stories are where memories go when they're forgotten:' Fandom, Nostalgia and the Doctor Who Experience', *Deletion*, 'Episode 13: *The Memory of Science Fiction*' <http://www.deletionscifi.org/episodes/episode-13/stories-memories-go-theyre-forgotten-fandom-nostalgia-doctor-experience/> 7/11/17
- Jung, D. (2004) 'Adaptation Fever: On Solaris', *The Film Journal*, <http://www.thefilmjournal.com/issue9/adaptation.html> (accessed 1.11.10).
- King, N. (2000) *Memory, Narrative, Identity, Remembering the Self*, Edinburgh: Edinburgh University Press
- Kuhn, A. (2002) *Family Secrets: Acts of Memory and Imagination*. London: Verso
- Landsberg, A. (2004) *Prosthetic Memories: The Transformation of American Remembrance in the Age of Mass Culture*, New York: Columbia
- Lem, S. (2003) *Solaris*. London: Faber & Faber
- Lyotard, J.F. (1994) *Lessons on the Analytic of the Sublime*. Stanford: Stanford University Press
- Matteas, M. (2004) 'A Preliminary Poetics for Interactive Dramas and Games' in Wardrip-Fruin, N. & Harrigan, P. (ed) *First Person: New Media as Story, Performance, and Game*, Cambridge, Mass: MIT Press
- Mateas, M. and Andrew Stern, A. (2006) 'Interaction And Narrative' in Benjamins, J. ed. *The Game Design Reader: A Rules of Play Anthology*
- Morris, M. (2002) 'First-Person Shooters – A Game Apparatus' in Geoff King & Tanya Krzywinska (ed) *Screenplay: cinema/videogames/interfaces* London: Wallflower Press, 81-97
- Mulvey, L. (1975) 'Visual Pleasure and Narrative Cinema', *Screen*, Volume 16, Issue 3, 1 October 1975, 6-18
- Poster, M. (1995) *The Second Media Age*, London: Blackwell
- Poster, M. (1996) 'Postmodern Virtualities' in *Future Natural, nature, science, culture* ed. G. Robertson, M. Mash, L. Tickner, et al, London: Routledge
- Roediger, H. L. & Wertsch, J. V. (2008) 'Creating a New Discipline of Memory Studies', *Memory Studies* January, vol. 1 no. 1 9-22

Russell, J. A. (2003) 'Core Affect and the Psychological Construction of Emotion',  
*Psychological Review* 110, 145-172

Springer, C. (1996) *Electronic Eros*, Austin: University of Texas Press

Wolf, M. J. P. (2017) *Revisiting Imaginary Worlds: A Subcreation Studies Anthology*,  
London: Routledge

Xie, W. Z. W. (2012). 'The triangulation of another earth, moon and sunshine'. Final  
year project report, Nanyang Technological University,  
<http://hdl.handle.net/10220/9462>

### **Film**

*Copycat* (1995) Dir. Jon Amiel, Regency Enterprises, USA

*The Net* (1995) Dir. Irwin Winkler, Columbia Pictures/Winkler Films, U.S.A

*Solaris* (1972) Dir. Andrei Tarkovsky, Mosfilm, U.S.S.R.

*Solaris* (2002) Dir. Steven Soderbergh, Twentieth Century Fox/Lightstorm  
Entertainment, USA

*Strange Days* (1995) Dir. Kathryn Bigelow, Lightstorm Entertainment, USA

*Sunshine* (2007) Dir. Danny Boyle, DNA Films, UK/USA

### **Television**

*Doctor Who* (BBC, 1963- ) BBC Productions

*Killer Net* (Channel 4, 1998) Channel 4, La Plante Productions

*Life on Mars* (BBC, 2006-8) Kudos Film and Television, Red Planet *Margaret Thatcher:*

*The Long Walk to Finchley* (Channel Four, 2008) Great Meadow Production