Thriller, Horror, Hacker, Spy:
The Hacker Genre in Film and Television from the 1970s to the 2010s

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Abstract

This thesis argues that hacking and surveillance have formed a 'hacker' genre in film and television that begins to emerge from the influences of 1970s films, forming between the 1980s and 1990s and continuing to develop through to the 2010s, grouping together computer hacking, surveillance and espionage as activities striving to achieve order over the 'electronic frontier'[1]. In particular, this thesis identifies how hacker genre films foreground and fetishise the technology of hacking and surveillance of the period of production, which inevitably leads to an in-built expiry date and limited shelf-life. Whilst these genre films draw on the crime, horror and thriller traditions to depict the tension and anxiety presented by the capabilities of this hacking and surveillance technology, as technology progresses and becomes more familiar to the audience, these films naturally lose their ability to elicit fear and terror from the viewer; instead these films become virtual parodies of their original intention. Moreover, the thesis maps the evolution and development of the generic features of the hacker film genre, charting the progression from passive observation to active intervention of the hacker figure; as the technology progresses, there is an increased sense of speed and mobility and the hacker emerges from small enclosed spaces to engage with the physical world. Similarly, the thesis considers the role of the 'hacker figure' in these films, using the viewer's human connection to consider how this technology affects the user over time; considering the links to the thriller and horror traditions, this study considers the potential for the hacker to become dehumanised in using this technology.

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Acknowledgements

1) Introduction – Hacking and surveillance evolving into a genre

1.1 __Introduction__

The range of films and television programmes portraying hacking and surveillance has yet to be considered in a full-scale approach that recognises and identifies these texts within a particular grouping or genre. Although hacking and surveillance technology has been commonly featured in both film and television, the limited critical attention it has received has typically considered the subject from a technical perspective, focusing on the mechanics of the technology as opposed to how its representation in individual films connects these productions together. Thus, this thesis will critically examine a group of films and television series as part of a proposed hacker genre, mapping out the key generic tropes they each exhibit and charting how these characteristics evolve over time.

As I will indicate, a genre is not created, it evolves, and this is the first study to chart the evolution of the hacker film genre from the precursors produced in the 1970s, through to the true emergence of the genre in the 1980s and 1990s, and on to the 2010s. The thesis will identify emerging and surviving markers of the genre, and track how these traits develop across individual hacker genre films across different time periods. Finally, peculiar to this genre is the built-in short shelf life of the hacker genre film. Technology is fetishised for its frightening newness, which dissolves in time as the technology becomes familiar, and eventually superseded by more advanced forms.

At the heart of any narrative is a conflict driving both the story and the characters forward, and I contend for this hacker genre that the conflict is for control of more than just 'cyberspace'[2], but for, as Bruce Sterling dubs it, the 'electronic frontier' (Sterling, 1992, p.xi) which encompasses all forms of electronic communication:

> A science fiction writer coined the useful term cyberspace in 1982. But the territory in question, the electronic frontier, is about 130 years old. Cyberspace is the "place" where a telephone conversation appears to occur. Not inside your actual phone, the plastic device in your desk. Not inside the other person's phone, in some other city. The *place between* the phone. The indefinite place *out there*, where the two of you, two human beings, actually meet and communicate (Sterling, 1992, p.xi).

This is the realm of information and communication, and, therefore, if cyberspace concerns more than just the realm of computers, and technically began with telephony and sound, then the interactions within, and the conflicts to gain control over, this space include more than just computer hacking. A number of surveillance academics, including David Lyon, have undertaken several studies into the presence of surveillance systems in the modern world and goes as far as to postulate that we have become a 'surveillance society' in which 'everyday life is subject to monitoring, checking, scrutinizing. It is hard to find a place, or an activity that is shielded or secure from some purposeful tracking, tagging, listening, watching, recording or verification device' (Lyon, 2001, p.1). Whilst this study does not focus on this notion of a 'surveillance society', and incorporates 'surveillance' under a broader term of 'hacking', this social and cultural development does inform the way films and television series are both produced by the industry and received by the viewer.

Building on Lyon's idea of a 'surveillance society' (Lyon, 2001, p.1), I propose that surveillance has continued to evolve and has branched out to include computer hacking; the

computer hacker gains access to personal data through a specific medium, but continues the

surveillance tradition of focusing on a specific target and seeking to gain information and

evidence to use against them. In his examination of screening narrative surveillance, Garrett

Stewart highlights the developments of surveillance from audio-visual tracking to ever-

increasing 'dataveillance', monitoring a target's online activity and even being able to track

them through their electronic devices at any given time:

> The very notion of spatial position, let alone of site, has lost much of its visual sense
> under the new and broader rubric of dataveillance, where a panoptic regime is largely
> figurative- and "spying" little more than metaphoric. In most contemporary "walks of
> life," as they used to be called, with their new shadowing by a vast electronic cloud
> (determining our localized preferences if not our geographic position), the onetime
> etymon of the verb survey (the sighting of sur-veiller) has itself become, half a
> millennium after its introduction into English, a nearly dead metaphor. Monitoring is
> no longer necessarily rooted in things over-seen, super-vised. This new idea of
> surveillance taps a generalised source of anxiety about what can instead be intercepted
> in its coded digital form mined, tabulated, aggregated. Privacy has found new ways to
> be violated, both by military-industrial and by corporate prying, all eyes aside
> (Stewart, 2015, p.XI).

In the visual media of film and television this becomes a particularly vicarious experience for

the audience, in which the viewer assumes a dual voyeuristic role, simultaneously watching

the diegetic surveillance of subjects within the narrative, as well as observing characters and

actions through the extradiegetic camera. It is this final point that will form the central basis

of my study of the proposed genre – investigating the way hacking and surveillance are

represented on screen, the impact it has upon the hacker figure and wider society around

them, and how each of these points have developed over time.

Whilst I have identified examples of hacker and surveillance films and television series as

early as the 1930s, it is only in the films and television series produced in the 1970s that the

hacker figures and their methodologies and technologies start to become central to the

narrative, and only in films produced in the 1980s, and particularly the 1990s, that computer technology assumes a more prominent role. Therefore, the timescale I will focus on to trace the emergence and development of my proposed genre will begin with *The Conversation* from 1974 and run through to 2015, focusing on selected examples of the genre. Several earlier examples (that are outlined in Appendix A) instead position the hacker figure and hacking technology at the periphery of the action, establishing them as supporting elements in a larger narrative. One major case in the 1960s and 1970s is the character of Q in the Bond film series, who serves as a technical support figure on the periphery of James Bond's espionage adventures. Rather than assuming an active role in the Bond films, Q serves as a supporting character who empowers Bond to maintain his heroic role. Because these hacker figures, and their acts of hacking and surveillance, are the focus of my study, these have been key criteria in identifying and selecting appropriate case studies for detailed analysis. Equally, the evolution and expansion of computer technology in the real world over time has inevitably led to an increasing presence of this technology on screen in more recently produced films and television series. Whilst earlier examples in the 1970s and the 1980s begin to immerse the viewer in a world of technology and gadgetry, the introduction of computer technology and its augmentation of surveillance systems offers the film-maker the opportunity to create a generic verisimilitude in which these technological capabilities can be expanded and enhanced even further; rather than just depicting the reality of this technology, the hacker film can present the hacker and hacking technology as possessing near omniscient and omnipresent qualities. Although it is unsurprising that new technology is built and developed around existing practices to expand human capabilities, on screen this augmentation operates on a dual level to enhance the perceptions of both the diegetic hacker figure, as well as on an extradiegetic level to extend the perspective of the viewer.

One of the major ways in which hacking and surveillance technology is portrayed in fiction and film is the way it is used by, and impacts upon, the hacker figure, and, in this way, this study will have a dual focus on the representation of the technology and the people who utilise it. In terms of describing the central hacker and surveillance characters, I will group them under the broad term of 'hacker figure'. This definition naturally incorporates the computer hacker, but I will also consider the figure of the wiretapper, the surveillance expert and the spy as spiritual precursors and contemporary counterparts to computer hackers, particularly as the distinction between these character types begins to blur over time. The scope for the definition to expand is demonstrated by the breadth of potential hacker and surveillance films I have identified in Appendix A and it seems natural that this definition could become much broader as the genre continues to progress with new advances in technology and new social concerns arising as to how this equipment could be (mis)used. For the purposes of this study, however, I will impose some parameters to maintain some degree of focus. The wiretapper and surveillance expert uses technology in much the same way as the computer hacker, assuming a voyeuristic perspective that intrudes into the personal space of their targets; the primary difference is that the surveillance expert uses his or her equipment to capture and record data through voice recordings, photographs and surveillance videos, whilst the computer hacker infiltrates computer systems to acquire existing files. As Lyon proposes 'what electronic technologies facilitate is the deeper penetration of surveillance' (Lyon, 1994, p.38) and it becomes clear in films like *The Conversation* that hacker figures like Harry Caul do begin to develop a sense of voyeuristic attachment and intimate involvement in the lives of their targets because they have invaded their target's privacy and gained access to their personal space. In a sense, this will form the foundation of my analysis of the portrayal of both hacking as an activity and the hacker as a figure over time, tracing the way in which technology is built around existing processes and procedures.

Rather than an entirely new phenomenon, computer hacking represents the evolution of technology around existing working practices and techniques. The technology merely serves as an extension of the human body, allowing the hacker figure to extend the reach of their eyes and ears to monitor their targets from a greater distance.

Given the wealth of potential hacker genre films and television series that I have outlined in Appendix A and Appendix B, I have selected a small number of hacker genre examples from across the 1974 to 2015 period, each chosen as they demonstrate common threads, but also exemplify different approaches to the production of hacker genre films that are affected by the social issues and anxieties of their period of production. Thus, genre theory and adaptation theory will be used to frame and structure my analysis of a small selection of hacker genre films and television series, examining each film uses generic features to present their hacker figure characters, how they intertextually draw on previous examples and how they go on to influence future productions. This will allow me to consider how a range of films and television series present the hacking and the hacker in both similar and in different ways and how this changes over time. To facilitate the selection and grouping of these case studies, I will use genre theory to map out common generic features and characteristics. This approach will allow me to chart the similarities and differences between my selected case studies, as well as positioning them in the wider context highlighted by the list of films in Appendix A and the list of television series in Appendix B.

As I will outline in detail in the main body of each chapter, the nature of hacking and surveillance technology can be seen to evolve over time, but the way the hacker figures use it to conduct surveillance and monitoring of a specific target largely remains the same.

Therefore, as well as focusing on the technology and how it is foregrounded and fetishised in various films and television series, I will also focus on the various hacker figures who are depicted using this technology and how they interact with the world. It is this human element that remains an integral part of hacking and surveillance and remains the viewer's connection to this world.

1.2 <u>Literature Review</u>

As this study draws heavily on genre theory to identify and analyse generic features that are common to hacker films and television series, a significant portion of this literature review will consider literature on genre theory. Ultimately, I am arguing for the recognition of a new film genre, and therefore I need to identify the core components that form a genre. As I have touched on, the clear majority of the literature that has been written on hacking and surveillance in film and television has approached the topic from a technological perspective, exploring the mechanics of this technological representation. In terms of the various films and television series themselves, the reviews of each film or episode of a television series will prove useful in understanding how these films have been received by the viewer and by critics. Moreover, there are various articles and chapter that have been written on each of the individual hacker genre films and television series, but most of these articles do not focus on the hacker and surveillance generic elements that I will be illustrating in more detail. Thus, this literature review will begin with an overview of genre theory, before moving on to consider adaptation theory and then specific works on each of the hacker genre films and television series.

1.2a) Defining Genre as a Concept

There have been extensive studies that have considered the question of genre, yet it continues to be a significant topic of debate and discussion. Key to the discussion of any theoretical concept is defining the meaning of the term. The Oxford Dictionary of English (2015) defines the term as 'a particular style or category of works of art; esp. a type of literary work characterised by a particular form, style, or purpose' (Oxford Dictionary of English, 2015) and thus genre as a basic concept allows producers, audiences and critics to categorise and group together different works of art. The origin of film genre theory is rooted in literary genre theory, beginning with Aristotle's outline of basic literary genres that have served to influence the development and study of all subsequent genres across various media forms. However, beyond this basic definition, genre can be understood in a variety of different ways and on several different levels.

Thomas Schatz suggests that 'simply stated a genre film … involves familiar, essentially one-dimensional characters acting out a predictable story pattern within a familiar setting' (Schatz, 1981, p.6). This definition implies that all genre films operate in a very similar fashion, but fails to take into account the differences and unique qualities of each individual film that offers a 'new' experience for the viewer. On a similar note, Rick Altman proposes that genre as a term encompasses wider issues of production, structural formulas, critical interpretation and audience expectation:

> According to most critics, genres provide the formulas that drive production; genres constitute the structures that define individual texts; programming decisions are based primarily on generic criteria; the interpretation of generic films depends directly on the audience's generic expectations. All of these aspects are covered by the single term genre' (Altman, 1999, p.14).

This increased focus on the mode of production offers a further dimension of understanding the concept, allowing us to consider genre as a process of both production and reception, as opposed to merely a set of criteria.

Barry Langford considers the idea that genre does not merely help to categorise meaning and understanding, but produces meaning for film and creates new approaches to film-making:

> thinking about why we might 'need' genres means thinking about the uses to which we commonly put genre concepts and the value we derive from doing so. Thus we can focus on genre's role as an active *producer* of cultural meanings and film-making practices alike (Langford, 2005, p.1).

As a result, he highlights the fact that genre provides producers, viewers and critics of films a shared mechanism to understand and discuss films. Equally, Langford goes on to emphasise that 'for scholars, genre provides a historically grounded method of establishing 'family resemblances' between films produced and released under widely differing circumstances, and of mediating the relationship between the mythologies of popular culture and social, political and economic contexts' (Langford, 2005, p.1).

Barry Keith Grant proposes that 'put simply, genre movies are those commercial feature films which, through repetition and variation, tell familiar stories with familiar characters in familiar situations' (Grant, 2007, p.1). Genre as a concept, as Grant goes on to argue, 'helps us to see the unique properties of individual works by permitting comparison of them with others that have similar qualities. As well, films, like all works of art, can only be judged in relation to other works' (Grant, 2007, p.2), which emphasises the shared features of genre films that fall under the category of a particular film genre but also reiterates this notion of the value of the individual genre film and how it engages with the traditions of a given film

genre. To take this idea one step further, films, like all other works of art, are naturally intertextual entities, drawing on the collective culture of their antecedents and influencing all works that follow them. This is precisely the nature of my proposed hacker film genre, which demonstrates how individual genre films react to, and influence, one another over time[3].

1.2b) Using genre theory to map out the core components of a genre

Each genre critic takes a different view on how to approach genre and Rick Altman argues that 'the debate over genre has consistently taken place in slow motion' (Altman, 1999, p.1). Genre theory, like individual film genres, has continued to develop and evolve over time but this has been a slow process. More importantly, we need to recognise that genre is ultimately a theoretical construct designed to help us group together pieces of work, and thus it is unsurprising that it remains a point of on-going discussion and debate.

Thomas Schatz proposes that genres should be considered on three levels, 'those characteristics shared by virtually all genre films (and thus by all genres), those characteristics shared by all films within an individual genre, and those characteristics that set one genre film off from all other films' (Schatz, 1981, p.21). Thus, I will consider genre as a concept before moving on to the specifics of the hacker genre and then consider how individual hacker films engage with the hacker genre. For this reason, I outline a list of the core generic features later in this Introduction, have prepared lists of hacker genre films and television series in Appendices A and B respectively, and will consider individual hacker genre films in more detail in Chapters One to Five to explore the emerging differences and evolution of these tropes.

Furthermore, Schatz highlights a vital difference between literary genre study and film genre study by suggesting that literary genres have been 'virtually imposed on works of fiction' (Schatz, 1981, p.15) and in doing so they have been disconnected from the producers and consumers of this fiction. In contrast to literary genres, Schatz argues that film genres emerge as a result of commercial filmmaking, in which popular narratives are reworked and re-imagined as long as there is an audience demand and they continue to prove profitable for studios (Schatz, 1981, p.15). Consequently, new film genres instead arise from industrial foundations in which successful films (which may well be adaptations or intertextual re-workings of previous narratives) offer generic blueprints for subsequent productions. This media shift from generic 'imposition' in literature to generic commercialisation in film allows greater variability in film genre, but also the potential for more creativity and experimentation in the production of each new genre film. Rather than offering a prescriptive foundation, film genres possess a flexible and reactive quality that allows individual genre films to pursue creative difference and to adapt their generic features to react to contemporary concerns of the period of production. Therefore, as I will go on to explore in more detail in individual chapters, contemporary social concerns can be seen to clearly influence the development of hacker film genre characteristics and the positive reception of films by the audience leads to replication of successful models in future productions.

Equally, Schatz argues that 'ultimately, [the genre critic] is concerned with recognizing, appreciating, and articulating *differences* among these movies' (Schatz, 1981, p.20)[4] and this notion of differences between films takes genre beyond the confines of repetition. Instead, Schatz indicates that 'we understand genre films because of their similarity with other films,

but we appreciate them because of their difference. Therefore, an outline of a basic grammar of genre filmmaking should precede any critical analysis of individual films within a genre' (Schatz, 1981, p.20) to provide a foundation for understanding a given film genre, as well as how each genre film either follows or deviates from previously established forms. As he continues to explain, when one thinks of a film genre one 'won't think of an individual Western or musical or gangster film, but rather of a vaguely defined amalgam of actions and attitudes, of characters and locales' (Schatz, 1981, p.18) and thus the 'essence' of a film genre is those generic traits that create this impression in the public consciousness. These are key points to understanding and defining genre, which again reiterates that it is essential to outline an understanding of genre in general terms before considering a specific film genre. It is critical to explore the breadth of potential difference between hacker genre films; for this reason, I have selected films and television series that demonstrate such variation.

Similarly, Schatz underlines that 'any viewer's familiarity with a genre is the result of a *cumulative process* ... [and that] with repeated viewings ... the genre's narrative comes into focus and the viewer's *expectations* take shape' (Schatz, 1981, p.11).[5] Thus, the first viewing of a genre film can be more difficult to understand and engage with; however, through repeated engagement with films of a particular film genre, viewers 'steadily accumulate a kind of narrative-cinematic gestalt or "mind set" that is a structured mental image of the genre's typical activities and attitudes' (Schatz, 1981, p.16). As film genres are established over time and over the course of several genre films, this is another reason I have selected films from a wide timeframe to track the development of my proposed hacker genre. Moreover, an understanding of a specific film genre's characteristics and features takes time to form. This cumulative process also extends to the production of genre films, so it is unsurprising that the number of hacker genre films produced in the 1990s and 2000s is

significantly higher than during the 1970s and 1980s. This is also part of my reasoning for a largely chronological approach to this study, as the cumulative effect allows us to chart the evolution of generic tropes with the production and reception of more genre films.

Schatz also stresses that a central element of all genres is the resolution of different conflicts and that 'if we see genre as a problem-solving strategy, then, the static nucleus should be conceived as the problem and the variety of solutions (narrative resolution) as its dynamic surface structure' (Schatz, 1981, p.31). The continued relevance of this conflict portrayed in a film genre is critical to maintaining the genre's popularity and thus a key part of genre is the variety of different solutions, of different answers to the question of how to resolve the conflict at the heart of genre. Schatz goes on to discuss the 'problem solving' role of films and proposes that there are two distinctive generic forms related to the narrative space in which a film's conflict takes place:

> As a rule, generic resolution operates by a process of reduction: the polar opposition is reduced, either through elimination of one of the forces (in genres of determinate, contested space) or through the integration of the forces into a single unit (in genres of indeterminate, civilized space. The contest in determinate space generally is physically violent. Frequently, up until the resolution, there is more tension than action. The violent resolution usually helps the community, but only rarely does the hero assimilate its value system. In fact, his insistence that he maintain his individuality emerges as a significant thematic statement. As such, these films usually involve a dual celebration: the hero's industrious isolationism offsets the genre's idea of social order (Schatz, 1981, p.32).

Schatz's focus on the generic conflict, and, in particular, his approach to viewing genres through the resolutions of the conflicts that either establishes 'social order' or 'social integration' (Schatz, 1981, p.32), does allow effective comparison between different films and different genres, offering an additional level to genre theory. Returning to Schatz's argument of viewing genre on three levels, these additional categories do allow us to consider characteristics shared by all genres; however, the limitation of Schatz's two categories is that

he presents us with opposing categories when films typically deal with both social order and social integration in their resolution of conflict. Thus, I would argue that rather than definitive labels, Schatz's notion of genres of social order and social integration instead offers us a spectrum against which to measure a given film genre and its constituent genre films. Whilst Schatz argues that the conflict at the heart of a film genre is static, I too would argue that this view of a singular conflict is one-dimensional and does not take into account the multiple conflicts at play; for instance, whilst the western may primarily focus on the conflict of contested physical space, the genre can also offer other conflicts in terms of the hero's internal struggle to maintain his individuality whilst being drawn to integrate with society and the interpersonal conflicts between individual characters over the course of the narrative. Building on the links to the horror tradition, the hacker genre film also introduces the sensation of uncertain and temporary resolutions at the end of the film.

In a similar vein, Schatz also argues for a greater interest in the wider social context of the production of genre films:

> Genre study may be more "productive" if we complement the narrow critical focus of traditional genre analysis with a broader sociocultural perspective. Thus we may consider a genre film not only as a filmmaker's artistic expression, but further as cooperation between artists and audience in celebrating their collective values and ideals (Schatz, 1981, p.15).

Therefore, a film genre, as well as its constituent individual genre films, is pertinent to the audience because the subject matter and the way in which the films approach this topic hold relevance to contemporary society. Whether this is by direct reference or by analogy, genre serves to frame films for the audience to allow them to connect to the material on a more personal and, quite often, a more visceral level. As this study considers the generic development of films from 1974 through to 2015, the period involves significant historical

moments and periods of sociocultural change, ranging from the Watergate Scandal and the Cold War, through to the 9/11 terrorist attacks, each of which have a significant impact on the world, raising concerns that are reflected on screen.[6]

Altman approaches genre theory as a 'problematic area' and so argues for a 'semantic/ syntactic approach' to genre, suggesting that 'just as individual texts establish new meanings for familiar terms only by subjecting well known semantic units to a syntactic redetermination, so generic meaning comes into being only through the repeated deployment of substantially the same syntactic strategies' (Altman, 1984, p.16). He continues to underline this notion of genre operating on multiple levels in proposing that 'we need to recognise that not all genre films relate to their genre in the same way or to the same extent. By simultaneously accepting semantic and syntactic notions of genre we avail ourselves of a possible way to deal critically with differing levels of genericity' (Altman, 1984, p.12). This brings us back to the idea of genre operating on multiple levels, as well as considering different films genres and individual genre films as simultaneously interconnected and distinctive entities. Accordingly, Altman suggests that 'while each individual text clearly has a syntax of its own, the syntax implied here is that of the genre, which does not appear as a *generic* syntax unless it is reinforced numerous times by the syntactic patterns of individual texts' (Altman, 1984, p.16). This semantic/ syntactic approach provides a framework for understanding different film genres and to analyse the ways in which different genre films engage with wider genres. It also specifies that generic syntax is intertextually built over the course of multiple genre films reproducing and reinforcing generic characteristics. This is certainly the case for my proposed hacker genre, as the generic characteristics emerge and develop over time, and is the primary reason for this study focusing on such a broad time-frame.

In his later book, *Film/Genre,* Altman continues to engage with the 'problems' associated with genre theory by considering different forms that have emerged and developed over time. As Altman suggests, 'there is a certain duality to genre theory, with some theorists subscribing to the notion of fixed generic boundaries whilst others consider the idea of blurred generic boundaries that reflect 'human multiplicity and complex reality' (Altman, 1999, p.7). Rather than viewing film genres as 'pure' entities, Altman instead argues that we should consider them to be an interconnected and hybrid phenomenon. Linked to this concept of generic hybridity and interconnectivity, Altman highlights two approaches to establishing the 'corpus' of a genre, either to create an unwieldy list of films that would fall on the 'inclusive' list, or to stick to a familiar 'canon' with an 'exclusive' list that is comprised of key examples of the genre (Altman, 1999, p.89). My own view is that a hybrid approach is required to demonstrate the potential range of a genre, hence my list of potential hacker films in Appendix A to exemplify the breadth of hacker films that have been produced, but in terms of detailed analysis I have selected a small sample of case studies that I analyse to explore the development of the genre. Whilst this small sample of films only begins to consider the breadth of potential development of hacker genre characteristics, it nevertheless demonstrates how these generic features have been developed and refined over time, and suggests the potential for future development.

Similarly, as Altman emphasises, the field of genre overall, and individual genres as part of the generic system, are part of a fluid and dynamic system that is constantly undergoing transition and development rather than a static or fixed system. As Altman continues to argue,

genres were always – and continue to be – treated as if they spring full-blown from the head of Zeus. It is thus not surprising to find that even the most advanced of current genre theories, those that see generic texts as negotiating a relationship between a specific production system and a given audience, still holding to a notion of genre that is fundamentally ahistorical in nature (Altman, 1984, p.8).

Such an approach is something I will strive to avoid and thus it is important to position my proposed genre within a suitable historical context. Examining how genres are interconnected and intertextual allows us to begin to contextualise their development. Thus, it is also crucial to consider where the hacker genre has developed from, which, as I will go on to consider in more detail, has evolved from genres like crime films, thrillers, horror films and science fiction. These generic precursors offer the beginnings of the hacker film genre characteristics, which evolve with the subject material and the sociocultural background of the individual genre film's period of production. Another crucial point that Altman considers is that any genre study is subjective, relying on defined concepts and a limited viewpoint. However, Altman attempts to reconcile this instability by comparing the development of genres to the development of languages, constantly expanding and developing, building on what has come before (Altman, 1999, p.24). This is precisely the case for the hacker genre, and, consequently, I consider how other genres have influenced the emergence and development of my proposed hacker genre to provide some context for my analysis.

In considering the emergence of genres, Altman indicates that 'before they are fully constituted through the junction of persistent material and consistent use of that material, nascent genres traverse a period when their only unity derives from shared surface characteristics deployed within other generic contexts perceived as dominant' (Altman, 1999, p.35). Furthermore, Altman contends that 'until a cycle is consecrated as a genre by industry-wide recognition, it remains a cycle' (Altman, 1999, p.82). Altman argues that settling on a genre is similar to the settling of a civilization (p.212-213), in which 'nomadic' genre

theorists move from being 'raiders' and 'poachers' of a pre-existing civilization to becoming

the established civilization that then becomes the subject of other raiders and poachers.

However, whilst this metaphor could be interpreted in a bleak fashion, it also reflects

historical progress and development, with older ideas influencing newer thoughts to build our

understanding and comprehension; genres offer cultural learning and shared experience that

influence and inspire further generic development. Thus, at this stage the hacker genre would

be classified as a 'cycle' that I am arguing has now developed into a genre.

Building on some of these ideas, Steve Neale advocates the idea that 'genres can be

approached from the point of view of the industry and its infrastructure, from the point of

view of their aesthetic traditions, from the point of view of the broader socio-cultural

environment upon which they draw and into which they feed, and from the point of view of

audience understanding and response' (Neale, 2002, p.2). Neale calls for 'thinking of genres

as ubiquitous, multifaceted phenomena rather than as one-dimensional entities to be found

only within the realms of Hollywood cinema or of commercial popular culture' (Neale, 2000,

p.28) and it is clear that such thinking is required to define a new genre:

> Whilst challenging traditional definitions of genre, it is worth noting that remains a
> degree of common ground between speech-act-oriented theorists like Pratt, Hirsch,
> Derrida and theorists like Tudor and Rydall. All agree that genre is a multi-
> dimensional phenomenon and that its dimensions centrally include systems of
> expectation, categories, labels and names, discourses, texts and corpuses of texts, and
> the conventions that govern them all. Some stress the primacy of expectations, others
> the primacy of texts, still others the primacy of categories, corpuses, the norms they
> encompass, the traditions they embody and the formulae that make them. What seems
> clear is that all these dimensions need to be taken into account. What also seems clear
> is that they need to be distinguished one from another (Neale, 2000, p.25-26).

Considering this range of different approaches, it is unsurprising that the debates on genre

theory have moved slowly and that various theorists have become overwhelmed with the

depth and breadth of preceding theories. Nevertheless, Neale's recognition of this 'multi-

dimensional' nature of genre underscores the need to begin any analysis of genre by identifying and outlining these levels of genericity. As a result, I outline lists of hacker genre films in Appendix A and hacker television series in Appendix B, and outline generic features later in this introductory chapter. As I explore the specific hacker genre films and television series in individual chapters, I will also consider the notions of expectation, categories, labels and names and discourses.

Neale also reflects on the notion of iconography and explains that the term is derived from art history and 'tends to mean the objects, events and figures in films, as well as their identification and description' (Neale, 2000, p.14). As a concept, it offers a methodology for establishing generic meaning through key visual signifiers associated with a genre. These signifiers indicate that a film is part of a particular genre and were viewed to be particularly relevant to the visual medium of film. As Neale goes on to highlight 'it is actually very difficult to list the defining visual characteristics for more than a handful of genres, for the simple reason that many genres … lack a specific iconography' (Neale, 2000, p.16). Therefore, whilst some genres like the western or the gangster film have specific clothes and props that epitomise the genre, others rely on different generic characteristics. Although the visual cues of iconography hold relevance to film genres, iconography offers only a piece of the puzzle by taking into account key visual elements, yet fails to consider other generic characteristics such as cinematography. As I will demonstrate throughout this thesis, the visual cues of the hacker film genre are typically technological, and the appearance of this technology changes over time. Therefore, there is a lack of consistency on these visual cues, which makes it difficult to identify hacker genre films though iconography. Where some of the iconography begins to come through is through consistent trends in hacker genre film

advertising. Nevertheless, the fact that technology is increasingly associated with computers will undoubtedly build up a greater sense of iconography over time.

Another key point that Neale examines is verisimilitude and its role in building up a film genre and the expectations of the audience. As Neale highlights, genres 'also consist of specific systems of expectation and hypothesis … that help render individual films, and the elements within them, intelligible and, therefore, explicable' (Neale, 2000, p.31). As Neale goes on to underscore, 'these systems of expectation and hypothesis involve a knowledge of, indeed they partly embody, various regimes of verisimilitude – various systems and forms of plausibility, motivation and belief' (Neale, 2000, p.32). These systems of verisimilitude vary in terms of the context of each film genre, such as the inclusion of songs to express feelings and thoughts which is appropriate, and even expected, in musicals, but would feel out of place in the context of a thriller film. Similarly, 'negotiating the balance between different regimes of verisimilitude plays a key role in the relations established between spectators, genres and individual films' (Neale, 2000, p.35) in that 'they help provide a generic framework within which to comprehend films' (Neale, 2000, p.39). In short, film genres frame individual genre films in a particular 'version' of fictionalised reality that allows both the producer and the viewer to contextualise narrative events. This verisimilitude frames the characteristics of each genre film, so understanding the generic verisimilitude is also central to understanding the generic characteristics of a film genre and how the individual film echoes or varies existing generic patterns. Grant also considers the notion of verisimilitude by asserting that generic 'conventions function as an implied agreement between makers and consumers to accept certain artificialities, but such artificialities work in specific contexts' (Grant, 2007, p.10). For my proposed hacker genre, I will consider how a hacker film creates such artificialities and how the audience has come to accept these artificialities within the

context of the genre; fear and excitement are core elements of the hacker genre, and thus the films generate a reality in which the technology can pose a more intense threat.

Neale goes on to argue that genre theories 'tend to fall into two basic groups – those which deal with the aesthetic components and characteristics of genres, and those which deal with their social and cultural significance' (Neale, 2000, p.207). In this study, I am adopting a dual approach to genre theory, considering both the aesthetic components of the hacker film genre, alongside the social and cultural connection to each genre film's period of production. When considering the aesthetic tradition, Neale particularly challenges Schatz's contention that genre characters are one-dimensional, arguing that the such figures instead often exhibit a certain duality by combining stereotypical genre character traits with opposing qualities; Neale cites the hero of the western as an example of a protagonist that needs to mediate the opposing forces of civilization and wilderness who thus 'must possess as least two sets of traits, and these traits must exist in actual or potential conflict with one another' (Neale, 2000, p.208). In the same vein as Altman, Neale also contests the notion of predictable genre story patterns by arguing that whilst the ultimate resolution of a genre film may be 'requisite and therefore predictable … the paths to these climaxes and resolutions vary considerably' (Neale, 2000, p.209). Therefore, whilst the destination of the film's narrative may be set, the narrative routes taken to reach this destination allow creativity and variation. Neale argues against Schatz's notion of different genres dealing with 'determinate' and 'indeterminate' space in light of some genres not falling into these categories and that some hybrid genre films blur the line between the two (Neale, 2000, p.221-223). Neale's position more accurately reflects the multiple levels of conflict at play within an individual genre film. Hacker genre films present a combination of determinate and indeterminate space, offer different routes to the climax of the narrative and offer more fully-fledged characters.

On the other hand, Neale considers the socio-cultural spectrum of genre theory, advocating Altman's model that charts 'the ritual approach' and the 'the ideological approach' (Neale, 2000, p.208). Altman argues that the ritual approach gives 'authorship to the audience, with the studios simply servicing, for a price, the national will' whilst the ideological approach demonstrates 'how audiences are manipulated by the business and political interests of Hollywood' (Altman, 1987, p.94). Whilst the ritual approach offers some creative input from the audience, the fact that these hacker genre films are ultimately products of industry seems to confirm the ideological approach. Neale goes on to propose that 'genres are ... best understood as processes ... [which] may, for sure, be dominated by repetition, but they are also marked fundamentally by difference, variation and change' (Neale, 2000, p.165). He also points out that 'the process-like nature of genres manifests itself as an interaction between three levels: the levels of expectation, the level of the generic corpus, and the level of the "rules" or "norms" that govern both' (Neale, 2000, p.165). Therefore, I will need to consider these three levels when looking at my proposed film genre as a whole, but also when analysing individual genre films. The expectation level is considered through identifying and classifying the generic characteristics, whilst the generic corpus is the list of hacker genre films outlined in Appendix A. As I will go on to argue, hacker genre films negotiate the connections between these three levels.

On a similar note, Barry Langford also engages with this concept of genre operating on different levels, advocating caution when viewing genre films through the lens of a particular genre:

> Genre … is a tool that must be used wisely but not too well: defining the individual artefact in generic terms can be helpful but shouldn't be pursued at all costs. Not every aspect of the genre text is necessarily or purely attributable to its generic identity, hence there is no need to invent absurd refinements of generic denomination, or to make the mesh of the classificatory or definitional net so fine as to allow no light through (Langford, 2005, p.7).

Nevertheless, I would argue that such a methodology still needs to be approached with a critical eye; although it is true that not all aspects of a genre film will relate to a specific film genre, any noteworthy features of an individual genre film could exhibit a critical difference to other genres films within the same film genre. As I have previously considered these differences between genre films are crucial points of comparison from a critical perspective, allowing us to chart change and development within the wider film genre. In terms of the hacker film genre, this study looks at genre films across different time periods, all of which demonstrate similarities, but also generic developments in terms of how each genre film engages with the characteristics of the hacker film genre, and how they react to other hacker genre films. Therefore, a relatively small component of a specific genre film could provide significant insights into the wider film genre, how it has progressed and how it could potentially evolve through future genre films.

Barry Keith Grant goes on to emphasise that 'genres are neither static nor fixed. Apart from problems of definition and boundaries, genres are processes that are ongoing. They undergo change over time, each new film and cycle adding to the tradition and modifying it' (Grant, 2007, p.34). Thus, each new genre film engages with the features and characteristics of the wider film genre in a different way, altering and updating those features by drawing on intertextual influences, socio-political considerations of the time of production and, perhaps most importantly, through the filmmakers trying to create a new experience for the audience.

This is very much the definition of adaptation, and, in particular, the definition of intertextuality.

Grant also discusses the ability of genre films to assume a 'mythic' quality, which is often emphasised by presenting a 'mythic representation of the [generic] hero' (Grant, 2007, p.30). Grant focuses on the example of *Shane* (1953) as depicting a mythic Western hero who stands above his peers with greater speed and skill, who is presented to the viewer from the viewpoint of a child to reinforce his mythic qualities and heroic presence (Grant, 2007, p.30). Arguably all film genres present character types in this fashion, such as the villain of a horror film who assumes a more 'monstrous' presence within the context of the horror genre. This notion of a 'mythic' genre hero for a film genre offers a discussion point for my proposed hacker genre; as the hacker figure is a natural focal point for the hacker film, I will need to consider how the hacker character is presented within the context of the hacker genre. In many respects, as I will go on to discuss in more detail in Chapter One, Harry Caul from *The Conversation* (1974) is such a 'mythic figure' for the hacker film genre. Caul is established as such a 'mythic' figure in his interactions with Moran, who has heard tales of his legendary wiretapping skills. Given the intertextual allusions to *The Conversation* in *Enemy of the State*. Gene Hackman's character of Brill inherits some of Harry Caul's mythic quality.

1.2c) Generic adaptation, development and evolution – theorising generic evolution across genre films

One of the crucial developments in more recent genre theory is the notion of genres being fluid and dynamic phenomena which develop and evolve over time. In considering how a

film genre develops over time, one must consider precisely where genres come from, and as Tzetan Todorov indicates new genres are derived 'quite simply from other genres. A new genre is always the transformation of an earlier one, or of several: by inversion, by displacement, by combination' (Todorov, 1990, p.15). This is the first step in identifying and understanding a new genre, undertaking the process of determining what other genres are its generic antecedents and how the new genre has transformed existing generic characteristics to serve new purposes. Gary R. Bortolotti and Linda Hutcheon's adaptation theory considers the way in which the process of adaptation parallels Darwin's theories of evolution in nature:

> As a biologist and a literary theorist, we decided to look to the possibility of new questions-and answers-for narrative adaptation theory by investigating the relevance to cultural adaptation of the insights about adaptation in post-Darwinian biology Therefore, we would like to propose for the sake of argument and the purposes of debate a homology – not an analogy, not a metaphoric association – but a homology between biological and cultural adaptation. By homology, we mean a similarity in structure that is indicative of common origin; that is, both kinds of adaptation are understandable as processes of replication. Stories, in a manner parallel to genes, replicate; the adaptation of both evolve with changing environments (Bortolotti and Hutcheon, 2007, p.444).

Whilst Bortolotti and Hutcheon refer specifically to adaptations, new genre films essentially 'adapt' the narratives and generic markers of previous genre films to create new forms.

Drawing upon his earlier point on the three levels of genres, Schatz argues that an individual 'genre film represents an effort to reorganize a familiar, meaningful system in an original way' (Schatz, 1981, p.19) by drawing upon existing generic features and varying them to offer a new experience. As Schatz goes on to propose 'genre filmmakers are in a rather curious bind: they must continually vary and reinvent the generic formula. At the same time, they must exploit those qualities that made the genre popular in the first place' (Schatz, 1981, p.36). He also argues that 'there is a sense, then, in which a film genre is both a *static* and a *dynamic* system' (Schatz, 1981, p.16). Therefore, all films conforming to a particular genre

share a familiar formula of narrative and stylistic elements, but, at the same 'changes in cultural attitudes, new influential genre films, the economics of the industry, and so forth, continually refine any film genre. As such its nature is continually evolving' (Schatz, 1981, p.16). This evolution is a key part of understanding both a film genre and its constituent genre films. If each film genre draws intertextually on previously existing forms, then each individual genre film's engagement with generic traits will naturally shape the direction of future productions. Any subsequent genre films will react to all preceding genre films, either by imitating successful traits or by rejecting unsuccessful approaches. This is clearly the case for the hacker film genre, as *The Conversation* influences subsequent productions with its narrative tone and visual style.

As I previously stated, the differences between individual genre films allow us to track the evolution of a genre. In considering generic development, Schatz also questions 'whether this evolution represents mere cosmetic changes in the surface structure (equivalent to fashionable clichés or idioms in verbal language) or whether it reflects substantial changes in the deep structure (the generic system itself)' (Schatz, 1981, p.20). Again, Schatz present us with diametrically opposing absolutes, suggesting that generic development either relates to 'surface' or 'deeper' changes, when the reality reflects a more spectrum-based approach. As I will explore in Chapter One, *Enemy of the State* (Scott, 1998) marks a number of generic evolutions from *The Conversation* (Coppola, 1974). Some of these evolutionary points are 'surface' changes, such as the representation of new technology and how that allows the narrative surveillance to be framed on screen, whilst others, such as the hacker's development into a more dynamic figure, are 'deeper' changes. This would appear to be a natural way for genres to develop – through a combination of 'surface' and 'deeper' changes as social concerns change over time.

Similarly, one of the key points Altman makes is that genres do not simply emerge from nothing, but rather develop from other genres, evolving and transforming to fit in with new times and new concerns. Instead, and building on Todorov's point, Altman considers the point at which a new film genre progresses from merely being a subset of an existing genre to instead branch off to become a new form in its own right. Altman argues that all new genres begin their existence as a hyphenated version of another genre – such as the musical comedy, which over time progress with distinct features to develop their own generic identity until finally they are accepted as a separate form. In this respect, generic development reflects human development, undergoing change as it matures and develops; Altman emphasises the importance of 'patterns of generic change – genre origins, genre redefinition and genre repurposing – along with the more traditional topics of generic stability and structure' (Altman, 1999, p.208). In many respects, a new film genre is itself an adaptation of one or more previously existing film genres, drawing on existing forms to create a new, yet somewhat familiar, experience for the audience. Moreover, Altman highlights how the audience actually affects the ways in which genres develop by revealing its preferences through the purchase of tickets for films they are interested in seeing (Altman, 1984, p.9). Ultimately film-making is a business and film genres allow the categorisation of films as marketable products to determine commercial success and future viability.

Returning to Bortolotti and Hutcheon, they propose that stories are like memes that can be passed on to future productions:

> Like the idea of the meme, a story too can be thought of as a fundamental unit of cultural transmission: "a basic unit of inheritance allowing the accumulations of adaptations." As our culture had added new media and new means of mass diffusion

to our communications repertoire, we have needed (or desired) more stories. What we have in fact often done, however, is retell the same stories, over and over again – on film and television, in video games and theme parks (Bortolotti and Hutcheon, 2007, p.447).

Again, whilst Bortolotti and Hutcheon are connecting biology with adaptation theory, this argument extends to the intertextuality of genre films. What comes through as crucial to their argument is Darwin's notion of 'replicators', the idea that narratives are copied repeatedly through time into new formats and new experiences. This is precisely the nature of genre films, copying successful elements from previous films to create new commercial properties for film audiences to buy into. This study will endeavour to identify the generic traits that serve as these 'replicators' for hacker genre films.

In fact, viewing genres as static systems suggests a stale form that is repeated to the point of dissolution. Drawing on adaptation theory offers an insight into a healthier engagement with a film genre, combining the familiar with new ideas to reinvigorate the genre. Linda Hutcheon highlights the notion that 'adaptation is how stories mutate and evolve to fit new times and different places' (Hutcheon with O'Flynn, 2013, p.176) and this same point applies to film genres. Equally, just as 'an adaptation is not vampiric: it does not draw the life-blood from its source and leave it dying or dead' (Hutcheon with O'Flynn, 2013, p.176), new genre films do not draw the life from a film genre to the point of destruction. Instead, in the same way an adaptation can 'keep that prior work alive, giving it an afterlife it would never have otherwise had' (Hutcheon with O'Flynn, 2013, p.176) so do new genre films offer continued life to a film genre, reinvigorating the format and infusing the genre with new features or new approaches to existing characteristics. Like all forms of adaptation, genre offers intertextual influences, but part of the beauty of a new story is the way it combines the familiar with the

unexpected. Thus, each new entry into a genre can combine pre-existing generic features with new forms, or offer a new approach to a familiar pattern. However, the notion of intertextuality only serves to raise further questions when considering the development and progression of genres, and underlines the interconnectivity of genre films. Nevertheless, intertextuality allows us to make connections between different films, and, by extension, different genres, as they develop and evolve from film to film.

Linked to this idea, Neale also compares genre films to production industries as 'in the film industry, as in many other industries, multiple copies are made of each item, but the items copied are all unique, all to a greater or lesser degree distinct from one another … the items within as well as across different ranges have to be different' (Neale, 2000, p.231). As he goes on to highlight genres serve a number of economic functions:

> They enable the industry to meet the obligations of variety and difference inherent in its product. But they also enable it to manufacture a product in a cost-effective manner, and to regulate demand and the nature of its output in such a way as to minimize the risks inherent in different and to maximize the possibility of profit on its overall investment (Neale, 2000, p.231-32).

Thus, from an industrial perspective, genres allow filmmakers to generate a marketable product. Ultimately, the production of films is a business and this form of categorisation frames this process of creating something to sell to consumers.

1.2d) Criticism on technology, surveillance and hacking

In his article on 'The Work of Art in the Mechanical Age of Reproduction' (1935) Walter Benjamin discusses the role of technology in the human experience and perception of art works, particularly looking at the development of this relationship with the emergence of

cinema as a new mode of expression. As Benjamin suggests, the 'mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is organised, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well' (Benjamin, 2008, p.8). Whilst this raises questions for the hacker's interaction with the world that is mediated through their technology, Benjamin's concept of the 'aura' of an 'original' work of art being lost when it is mediated through the 'reproduction' on film also pertains to the process of adaptation.

Similarly, Benjamin proffers the notion that technology can alter our perception of the world around us – in this way, given the central role of computers to our everyday lives, they arguably have begun to construct our reality, generating our sense of reality and how we interact with it. As technology has developed over time, we have essentially developed new mechanical 'senses' with which to perceive the world around us. Benjamin's notion of a work of art possessing an 'aura' could also be extended to an individual's sense of 'self' – in an age in which so much of ourselves has become computerised, either stored electronically or in some cases even generated electronically, this 'aura' has essentially become electronic data, which is readily accessible and that can be manipulated at will. This becomes increasingly relevant to hacker genre films over time, particularly as the technology, and how we can engage with it, changes. Such data 'ghosts' within the electronic frontier, through data records, photographs, messages, will only continue to increase with the rise of social media that capture moments of our lives and reproduce our thoughts and feelings for the world to see.

Christine Geraghty's article 'Foregrounding the Media: *Atonement* (2007) as an Adaptation' considers how different media are presented in the film version of *Atonement*, with writing, film and television all being foregrounded during the different stages of the film. As Geraghty underlines 'of course, the film deploys the mechanisms and formal devices of cinema throughout; the foregrounding of the media in different sections precisely invites us to oscillate from that base into an awareness of other modes of storytelling' (Geraghty, 2009, p.96). Geraghty highlights the way the typewriter is used to signify writing in the first section of the film, with the camera focusing on the character typing and words appearing on the page. The wartime section of the film focuses on film, extradiegetically utilising more extravagant filmic techniques but also presenting cinematic footage within the narrative. Perhaps most crucial for my purposes is Geraghty's analysis of the final section of the film and how it foregrounds the medium of television, focusing on the television camera and the intimacy of a television interview. As Geraghty argues 'the mechanics of television are emphasized through the rewinding and repetition [of the interview footage]' (Geraghty, 2009, p.105) and this foregrounding of the mechanics of recording and (re)viewing the footage directly links to hacking into a computer or undertaking surveillance in that the hacker figure can use the technology to control their viewpoint of their subject. The hacker or wiretapper can review the data they have gathered on their subject, gleaning new understanding and new details with each viewing. This foregrounding of the mechanics of recording and playback technology is particularly apparent in *The Conversation*, but continues to be foregrounded in hacker genre films presenting the action through the lens of hacking and surveillance equipment.

There has been considerable work on surveillance carried out by numerous academics and considering the different angles of how it is represented in film. David Lyon's work that

explores the theory of surveillance is relevant as the evolution of my proposed genre parallels

the development of hacking and surveillance in the real world. As Grant underlines 'whatever

their politics, genre movies are intimately imbricated within larger cultural discourses as well

as political ones' (Grant, 2007, p.6) and thus a key aspect to understanding the hacker genre

is understanding how hacking and surveillance have an impact upon the wider society. As

Grant goes on to argue, 'genre movies take ... social debates and tension and cast them into

formulaic narratives, condensing them into dramatic conflicts between individual characters

and society or heroes and villains' (Grant, 2007, p.16). One particularly pertinent point Lyon

makes about surveillance technology is that since September 2001 it is 'meant primary to

predict and pre-empt danger' (Lyon, 2003, p.62) and that 'already existing consumer and

related data are being mined to predict terrorist activity' (Lyon, 2003, p.94).

Likewise, Clay Calvert engages with the relationship between surveillance and voyeurism,

particularly in terms of the notion of what he dubs 'mediated voyeurism':

> Mediated voyeurism refers to the consumption of *revealing images of and
> information about others' apparently real and unguarded lives, often yet not always
> for purposes of entertainment but frequently at the expense of privacy and discourse,
> through the means of the mass media and Internet* (Calvert, 2004, p.2-3).

Calvert's idea of creating mediated intrusions into a target's life brings surveillance, and by

extension hacking, into the realms of entertainment. This raises questions over protection and

privacy, highlighting the debate over the need to protect the State against the rights of the

individual. Similarly, Helen K. Gediman refers to 'surveillance stalking' (Gediman, 2017,

p.xxxiv):

> Surveillance stalking has become increasingly common in connection with the current
> increase in computer hacking and widespread invasion of privacy by the government,
> by start-up companies, and countless others. Surveillance stalking range then, form

everyday cyberstalking, up through state-sanctioned staking in the interest of both terrorism and counter-terrorism (Gediman, 2017, p.xxxiv).

Thus, this concept of 'surveillance stalking' covers the activities undertaken by the State as well as that carried out by a range of organisations. What seems clears is that this is institutional surveillance, conducted by teams within organisations who are continually monitoring the activity of the individual. This tension between offering protection to society as a whole and the rights of the individual continually arise within hacker genre films, including *Sneakers* (Robinson, 1992), *The Net* (Winkler, 1995) and *Enemy of the State* (Scott, 1998), which all present surveillance and hacking technology that is used to remotely access computer systems and infiltrate people's personal space. The representatives of the State in each of these films argue for the need to use this technology to protect the general public from threats, yet each of these films indicate the loss of freedom in surrendering this power to the State.

Moreover, J Macgregor Wise begins his book on Surveillance and Film by observing how a scene in *Escape From Witch Mountain* (Hough, 1975) makes use of CCTV in a casual manner:

> I begin this book about surveillance and film with this scene not because it is exceptional, but precisely because it is not. In 1975, CCTV was enough of a common technology not to merit too much notice. It becomes a simple plot point in a family film to emphasize the power and immorality of the villain, and the tightening noose of control encircling the children (Macgregor Wise, 2016, p,2)

He goes on to consider how surveillance systems 'have come to be understood as meaning power, usually power to control' (Macgregor Wise, 2016, p.2). These questions of power and control persist through surveillance films and hacking presents an additional dimension to this kind of film. As I have highlighted previously, this thesis does not focus purely on surveillance, but there is an irrefutable connection between surveillance and hacking that

hacker genre films continually demonstrate. As a result, there is an increasing presence of computer hacking equipment, and computer hacker figures in both film and television.

In all of his considerations of the issues surrounding surveillance, Macgregor Wise nonetheless concludes that 'in the contemporary surveillant imagery, we are watchers as well as watched' (Macgregor Wise, 2016, p.150). As a result, we are all complicit in the act of surveillance, simultaneously assuming the role of watcher as we are all targets of this technology. Perhaps most critically, Macgregor Wise suggests that 'our films and television series that feature surveillance are no mere reflections on realities, anxieties and fantasies of power, but help produce those same constructions of reality, relations of power and structure of feeling that shape our everyday' (Macgregor Wise, 2016, p.152).

John E. McGrath approaches the subject of surveillance with the suggestion that 'the word comes pre-loaded with imagery and emotions … [but] few of the connotations are positive' (McGrath, 2004, p.1). Nevertheless, McGrath goes on to consider how 'in contemporary Western society we have largely embraced surveillance … [as] a burgeoning of electronic surveillance is accepted as making the world safer' (McGrath, 2004, p.1). This tension between providing protection and undermining privacy is a point of ongoing debate around real world surveillance technology, so it is unsurprising to note that a number of surveillance films engage with this issue. Considering the links between surveillance and hacking, it is therefore inevitable that these issues also continually come to the fore in hacker genre films.

Thomas Leitch follows the same process of trying to identify a genre in his article 'Adaptation, the Genre', which argues that film adaptation in itself constitutes a genre. In this article, Leitch identifies four dominant characteristics that form the basis of his adaptation genre. In mapping out the characteristics of his proposed adaptation genre Leitch's argument offers a methodology for identifying and presenting a case for a new genre that I will draw on as I present the case for my own proposed hacker genre. Leitch also tackles the broad genre of the crime film in his book *Crime Films*, considering the depth and breadth of the genre.

What is more, Ken Gelder stresses that 'two key words for understanding popular fiction are *industry* and *entertainment'* (Gelder, 2004, p.1). Although Gelder refers primarily to genre fiction rather than genre films, it is nevertheless critical to keep these points of industrial production and audience reception in mind when tracking the emergence and development of a genre. The approach to production and how the system markets the film as a product frame how the viewer is expected to receive the film. I will go on to consider the influences of the film industry and the practical elements of film production in tracing the construction and development of my proposed hacker genre as I analyse specific hacker genre films in each chapter of this thesis.

In her book *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet*, Margaret Wertheim considers the idea of cyberspace as being another parallel space to the physical space of our reality. Wertheim contends that such a 'virtual reality' was already realised by Dante in writing *The Divine Comedy*, imagining different planes of existence. However, she argues that whilst cyberspace offers an 'escape' from our everyday existence, Dante connects his 'virtual world' to the real world around him:

Yet *The Divine Comedy* is more than a work of literature, and there is an important difference between the world Dante invokes and those of today's VR mavens. The crucial point is this: The "virtual worlds" being constructed on computers today usually bear little or no relationship to the world of our daily experience. For most VR pundits, *escape* from daily reality is precisely the point. Dante, however, was not trying to escape daily life; on the contrary he grounded his "virtual world" in real people, real events and real history. Rather than trying to escape reality, he was obsessed with it… Rather than enticing us into an escape from reality, Dante invites us to see it whole, in all its dualistic scope (Wertheim, 1999, p.51).

This raises the interesting question of parallel realities connected to our own: who has control over the spaces, how people connect to these spaces and how they interact with one another within these spaces. If cyberspace is the growing space of our electronic records and interactions with the rest of the world, it raises questions as to who controls this space, how we connect to it and how we interact with one another via this space. Hacker genre films at the very least begin to tackle these issues, but this is part of the social anxiety in that these questions remain in flux.

Considering the role of women in the hacker film, Laura Mulvey's work on the male 'gaze' (Mulvey, 1999, p.810) and the differences between men and women in cinema offers insights into how different genders engage with this technology and with each other though the medium of this technology. The male 'gaze' has a particular diegetic relevance in films involving hacking and surveillance, as male hacker figures typically observe female targets through their technology, but the role of female characters in the hacker genre films also significantly evolves over time between 1974 and 2015.

In his 2015 book *Closed Circuits: Screening Narrative Surveillance*, Garrett Stewart groups together films focusing on surveillance specifically, considering how this depiction of surveillance has progressed over time and specifically exploring *The Conversation* and

Enemy of the State in relation to other surveillance films. In many respects, my work could be deemed to be focusing on surveillance, as hacking is itself a form of surveillance.

Jeremy Strong argues for the 'team film' a category which 'involves groups working towards objectives' (Strong, 2008, p.44) and, in doing so, maps out a generic formula for this group of films. In doing this, Strong identifies the 'shared family resemblances that amount to an identifiable formula' (Strong, 2008, p.44), including clear stages in the narrative that are common to each of these films. This is the process I am undertaking in mapping out and arguing for the hacker film genre. Furthermore, as the genre evolves, and the hacker figures begin to work collaboratively with one another, hacker genre films become more like Strong's team films.

As I consider earlier in this Introduction, there have been numerous studies into hacking as a cultural phenomenon and a number of studies considering the mechanics of hacking on screen. Although these studies do not directly tie into this thesis, they do offer some background context on hacking as an activity and how this could influence the production of hacker genre films, which has proven useful to identify some of the connections between the various hacker genre films I look at in this thesis.

In *Dark Market: Cyberthieves, Cybercops and You,* Misha Glenny considers the increasing rate of cybercrimes online, arising from our growing reliance on 'cyberspace' to manage our everyday lives. As Glenny highlights, 'computers guide large parts of our lives as they regulate our communications, our vehicles, our interaction with commerce and the state, our

work, our leisure, our everything' (Glenny, 2011, p.1). At the heart of Glenny's book are the anxieties around so much of ourselves being incorporated into this virtual space, and how this data could be used for surveillance, to commit crimes against us, and to manipulate and control our actions (Glenny, 2011, p.4). Although he focuses on real world cases, the social anxieties he highlights offers insights into the hacker film genre's engagement with these concerns. These concerns remain an on-going part of hacker genre films and perhaps what is most disconcerting is that fact that the battle for the 'electronic frontier' is never-ending; as technology continues to evolve, simultaneously, so do the methods of protecting our information and the ways to overcome security measures.

Kevin Mitnick's book *Ghost in the Wires: My Adventures as the World's Most Wanted Hacker* offers insights into the mind-set of the hacker, suggesting the hacker is motivated by the challenge of overcoming barriers and safeguards to demonstrate his or her skill. In this way, hacking is portrayed as a 'game', a battle of wits and skills between individual hacker and the target they are trying to infiltrate. This tallies with Cliff Stoll's *The Cuckoo's Egg*, in which he recounts his story of tracking a hacker who infiltrated his computer system, which is presented as a battle of wits and a lengthy, step-by-step process to identify the perpetrator.

The Conversation (Coppola, 1974) was released in the wake of the Watergate Scandal and marks an early step into genre films moving their focus to hacker figures as central to the narrative. The press book for the film offers significant insights into how the film was initially framed as a 'horror' film. Richard Dorfman considers *The Conversation* in comparison with other conspiracy films, highlighting Harry Caul's misunderstanding of the nature of the conspiracy discussed in the titular conversation (Dorfman, 1980, p.438).

Similarly, Anders Albrechtslund draws attention to the issue of surveillance and ethics, comparing *The Conversation* with Alfred Hitchcock's *Rear Window.* However, whilst Albrechtslund makes reference to several key points that have formed my understanding of some of the generic traits of my proposed genre, he does not focus on the construction of those traits but rather the ethical implications of the surveillance being undertaken and how characters react to those situations. Equally, Sean Singer argues that the film has a dual focus of audio surveillance but also of audio production through Harry Caul's playing of jazz music. In this way, the film explores public and private space, invading both to expose characters' secrets (Singer, 2010, p.119-120). Once again, although he is not approaching the film from the perspective of genre, Singer's argument offers insights into how *The Conversation* presents its subject matter:

> It successfully navigates people's uneasy feelings about private conversations and public access to them, an increasingly topical idea in the age of electronic repetition of binary code, blogging, Twitter and social networking. The obsessive nature of its 'hero' and the camera eye itself are methods by which the audience is also implicated in their voyeuristic knowledge of private talk' (Singer, 2010, p.127).

Thus, Singer identifies the sense of thrill, fear and even 'horror' associated with not only *The Conversation* as a hacker genre film, but also the wider hacker film genre as whole. Nico Dicecco considers the relationship between *The Conversation* and *Enemy of the State*, proposing 'the ambiguous relationship between the films… [is] a limit-case of adaptive repetition' (Dicecco, 2015, p.161). *Enemy of the State* has often been compared to *The Conversation*, given their similar subject matter and the fact that the film intertextually references the earlier film throughout the narrative.

TV drama *Tinker Tailor Soldier Spy* (1979) was produced shortly after the release of le Carré's novel. With the release of the 2011 film *Tinker Tailor Soldier Spy*, several reviews

refer to the 'documentary realness' of the television series in comparison to the recreation of the 1970s setting in the 2011 film. In approaching *Tinker Tailor Soldier Spy* much of the material on the 1979 television adaptation focuses on the series as an example of spy fiction and the political backdrop of the Cold War. In contrast, my discussion of the 2011 film adaptation draws upon heritage film criticism, exploring how this film stands against many of the typical approaches I have observed in other hacker films and instead reflects many traits of the heritage tradition. Being a recent film adaptation, the main source of criticism on this adaptation is film reviews, but viewing the film through a heritage lens offers insights into how it approaches the material to create a period piece. Although I will not focus too extensively on the debates of the heritage tradition, I will draw on the arguments of Belen Vidal and Andrew Higson to consider the relationship between nostalgic heritage films and national identity, in this case British national identity. In considering the heritage tradition it is not my intention to enter into the debate surrounding these films, but rather to use the definition of heritage films to consider how *Tinker Tailor Soldier Spy* has been adapted. Andrew Higson offers a definition of heritage films that I will use as a reference point in this thesis:

> In various ways, these films engage with subject-matter and discourses that have traditionally played a major part in determining how the heritage and identity of England and Englishness have been understood. These are films set in the past, telling stories of the manners and properties, but also the often transgressive romantic entanglements of the upper and upper-middle class English, in carefully detailed and visually splendid period reconstructions. The luxurious country-house settings, the picturesque rolling green landscapes of southern England, the pleasures of period costume, and canonical literary reference points are among the more frequently noted attractions of such films – although there are of course exceptions, costume dramas or period films that eschew such attractions.

> In this same period, cultural commentators identified what they saw as the consolidation of a heritage industry: a potent marketing of the past as part of the new enterprise culture, a commodification of museum culture. The English costume

dramas of the last two decades seem from one point of view a vital part of this industry. For this reason, I and other others have labelled them heritage films, though this is not a term that their producers or indeed many of their audiences would be familiar with or even approve of' (Higson, 2003, p.1).

Thus, this label of heritage films, according to Higson, allows critics to group these films together in much the same way that I am striving to group hacker genre films through shared features.

1.3 Using Genre and Adaptation Theory to Map Out the Hacker Genre

Whilst I have identified several lists of hacker films and television programmes, as well as various lists of characters categorised as hackers, at no point have I found a formal acknowledgement of these texts and films as a collection with shared generic traits. As Thomas Schatz suggests 'the filmmaker's inventive impulse is tempered by his or her practical recognition of certain conventions and audience expectations; the audience demands creativity or variation but only within the context of a familiar narrative experience' (Schatz, 1981, p.6). In terms of my group of surveillance and hacking films, I would argue that it began as a creative 'variation' of the thriller, incorporating technology and surveillance into the existing genre to create a different experience for the audience. However, over time this 'variation' has developed and progressed, adapting into a fully-fledged genre in its own right.

This study will endeavour to interrogate the breadth and depth of my proposed hacker genre, reflecting on a range of films and television series, some of which have been adapted directly from source texts, and some of which are cultural intertexts that draw upon the popularity and visibility of hacking in wider culture. To achieve this goal, I will limit my focus to a relatively small selection of case studies to allow me to explore how they have drawn upon

and contributed to the creation and development of hacking and surveillance on screen. I will shortly outline the reasons for my choice of case studies.

Most of my research has associated hacker genre films with the crime, horror and thriller genres, and so many of the generic characteristics are drawn from these three genres as precursors. Crime is such a vast umbrella term of sub-genres that it could easily form the basis of a number of different studies. However, the thriller offers more of a specific generic forerunner for my proposed hacker film genre. Martin Rubin considers the thriller as a genre in significant detail, arguing for its recognition as a genre in its own right. In particular, Rubin's conclusion considers all the problems associated with classifying a new genre under the headings of 'categorization', 'hybridization', 'emotionalization' and 'contextualization' (Rubin, 1999, p.259-268)[7], considering all the ways in which he has not been able to engage with the concept of the thriller as a genre:

> As noted from the start of this book, the thriller is a familiar, but imprecise concept: a genre that isn't a genre, or at least a genre that cannot be subjected to the same definitional precision as other, more delimited genres. The thriller is a vast, ill-defined region whose horizons are the marvellous realms of romance and adventure in one direction (traditionally the East) and the mundane, low-mimetic domains of comedy and melodrama in the other direction' (Rubin, 1999, p.259).

Whilst I concede that genre is indeed a fluid concept to classify and group films, and that my proposed hacker film genre may, like the thriller, be 'a genre that isn't a genre' (Rubin, 1999, p.259), the fact remains that there are intertextual links between these films, raising issues and concerns about hacking and surveillance technology and how it is used in our society. This is unlikely to change, given the increasing role of this technology in our everyday lives, but rather to continue to develop alongside the equipment.

In this study I am adopting a dual approach to genre theory, considering both the aesthetic components of the hacker film genre, alongside the social and cultural connections to each genre film's period of production. Altman and Neale both engage with the ideas of ideological and ritualistic approaches to genre, and once again, I would contend that the hacker film genre charts a blurring of these two approaches, combining the notion of audience authorship with the manipulation of audiences by business and political priorities within Hollywood.

1.3a) Proposed generic features

Given the multitude of varying approaches to genre it is important that I strive to determine the best methodology for my proposed hacking and surveillance genre. Key to understanding how a film genre operates is how its constituent genre films have been put together and how the viewer engages with and interprets the signifiers of the genre. Genre as a concept operates on multiple levels and so I have begun to consider issues relating to genres as a whole and will shortly move on to consider the central characteristics of my proposed hacker genre. Barry Langford engages with the paradoxical approach of a significant proportion of genre criticism, namely that 'most studies of this kind start out with a 'provisional' notion of the field they are working on that they then set out to define more clearly' (Langford, 2005, p.13). Although my initial list of hacker film genre features will only offer such a 'provisional notion' (Langford, 2005, p.13) of what constitutes a hacker genre film, it will nevertheless offer a starting point for analysing individual genre films and provide me with a basis for comparison. I will then move on to analyse individual hacker genre films within different chapters to explore how they engage with, repeat and vary the traits associated with the hacker genre.

Neale argues 'that it is not possible to write about genres without being selective, and that many of the deficiencies of a good deal of writing on genre stem from defining and selecting on the basis of pre-established and unquestioned canons of films' (Neale, 2000, p.161). For this reason, I outline a list of proposed hacker films as Appendix A and include a brief description as to how each genre film falls under the hacker genre, but as I have stated, the main body of this thesis will focus on an analysis of a relatively small selection of hacker genre films. As Neale states 'the elements and conventions of a genre are always *in* play rather than being replayed; and any generic corpus is always being expanded' (Neale, 2000, p.165). It is this sense of process and generic development that particularly interests me and for this reason I have structured my study to analyse different points of development within the hacker film genre. Each chapter will focus on different time periods, focusing on significant films as examples of hacker genre films from each respective period.

Furthermore, Altman takes great pain in underlining the fact that all genre theory is subject to certain assumptions, and that it is typical for genre theorists to overlook these assumptions. Altman also suggests that genre does not need to focus purely on the imitation of one text of another – what is equally important are the ways in which different pieces approach a subject, technique or character in new and diverse ways (Altman, 1999, p.50). As I previously mentioned, Schatz highlights that when one thinks of a genre, one does not think of an individual film but rather of a vague impression of its constituent parts and for this reason it is critical that I identify the fundamental elements of the hacker genre in order to use these characteristics as a benchmark for the various case studies I will examine.

A key facet of my examination of the hacker figure and the hacking process will be highlighting and exemplifying generic features associated with the hacker; as Grant argues, 'whether they are expensive epics or egregious exploitation, genre movies are composed of certain common elements. However we may define specific genres, the films we choose to include in any generic category necessarily share certain of those elements' (Grant, 2007, p.9). Equally, Schatz underlines how genres can be considered in terms of their central features:

> 'because it is essentially a narrative system, a film genre can be examined in terms of its fundamental structural components: plot, character, setting, thematic, style and so on. ... To discuss the Western genre is to address neither a single Western film, nor even all Western films, but rather the system of conventions which identify Western films as such (Schatz, 1981, p.16).

Therefore, I will begin by outlining some of my proposed generic features that are shared by films depicting the hacker figure and hacking as an activity, before introducing my proposed case studies and my reason for selecting them as key examples of the genre.

Feature 1: The hacker genre film has a contemporary setting

One of the primary elements of any genre is its setting; for example, a genre like the western garners much of its mood and ambience from the time and place it is set in. Thomas Schatz proposes that 'the determining, identifying feature of a film genre is it cultural context, its community of interrelated character types whose attitudes, values and actions flesh out dramatic conflicts inherent within that community' (Schatz, 1981, p.21-22). In terms of the hacker film genre, the common setting is the contemporary period of production, allowing the present-day viewer to easily relate to the characters and their narrative. The fact that the hacker genre film typically depicts its contemporary period of production (and, at least initially, its modern-day period of reception) only serves to make it more accessible to the

audience, highlighting that the situations and issues it portrays are personally relevant to them.

Feature 2: The hacker genre film foregrounds and fetishises the hacking and surveillance technology and processes

Another principal feature of the hacker genre is the foregrounding and fetishisation of technology and the representation of hacking and surveillance as an 'art' form, with inherent techniques and skills that must be learned and developed over time. In many cases, the audience perceives part of the narrative through the medium of the hacking technology, whether that is through the surveillance technology monitoring and recording the titular conversation in *The Conversation,* or watching Lisbeth Salander access files and information through her laptop in *The Girl with the Dragon Tattoo*. As David Lyon highlights 'what information technologies actually do is make more efficient, more widespread and simultaneously less visible many processes that already occur' (Lyon, 1994, p.40) and this is part of the reason this technology can be so disconcerting. Whilst this surveillance technology offers protection it also intrudes, invading personal space to capture and record our secrets. This directly connects with the contemporary setting of the hacker genre film, as the 'modern' technology, and its capabilities, are fetishised by filmmakers to create an exciting and thrilling experience for the viewer.

Feature 3: Hacker genre films come with an inbuilt expiry date and limited shelf-life

The focus on the contemporary setting and foregrounding 'state of the art' technology proves to be a double-edged sword for both the genre itself and its constituent genre film as it means

that hacker films are produced with an inbuilt expiry date. Like the modern technology that lies at the forefront of the genre, each film unavoidably becomes more and more dated as the technology it depicts is further developed to the point of becoming obsolete. This is a stark contrast to heritage films which celebrate and fetishise the period setting and context. Indeed, hacker films offer a snapshot of the here and now, a contemporary look and feel that will rapidly become a 'period' piece itself. Although some of the case studies I will be examining will be relatively recent, older examples such as *The Conversation*, *Tinker Tailor Soldier Spy*, *WarGames*, and even *Enemy of the State* from the 1990s, are clearly dated in comparison to the more recent works. As a result, it seems likely that both the hacker films and television series I will highlight in this study will inevitably become 'period' pieces themselves in the future. There is also the likelihood that each of these examples will move from objects of thrills and fear, to become laughing stocks as the technology not only becomes familiar but loses its ability to control and manipulate our lives.

Feature 4: The hacker is presented as a machine-like or cybernetic figure

There is a definite sense of the hacker being presented as a machine-like or cybernetic figure, which connects the hacker film genre with the horror tradition of depicting 'monsters' created by human science, such as Frankenstein's creature and Mr Hyde. The hacker figure's interaction with, and manipulation of, the technology used in the hacking process invariably leads to them adopting machine-like traits; as the technology augments the hacker figure, and their ability to 'hack' into and monitor other people, they effectively become cybernetic creatures. Consequently, he or she is presented as a logical, methodical figure that strives to disengage from their human emotions to achieve an objective viewpoint of the information they obtain and of the world they observe. However, at the same time there is clearly an ongoing struggle to subdue their own humanity, as the hacker wrestles with a range of

different emotions and with the imperative to become personally involved in their work. This presents a dichotomy that serves as the hacker's personal dilemma – the tension between maintaining an objective viewpoint against their human emotions.

Feature 5: The hacker figure is presented as isolated from the rest of the world

Linked to this notion of the hacker figure becoming 'dehumanised' is the feeling of their isolation from the rest of humanity. This isolation and disconnection is represented visually in terms of the character's physical isolation from other people, with their technology serving as their link to the outside world. Connected to this prevailing sense of isolation, there is also a distinct feeling of paranoia and sociophobia in the hacker figure; it is often the norm that he or she has chosen to isolate him or herself due to a lack of trust in the rest of humanity, but these characters nonetheless yearn to make human connections and become more integrated into society. As Lyon underscores 'these [surveillance] technologies fail to provide a satisfactory account of our lives let alone to infuse our relationships with a sense of meaningful interaction' (Lyon, 2001, p.107) and thus the hacker is presented as having an 'incomplete' existence in their isolation. This tension is a source of personal conflict within the hacker figure as they struggle between their paranoid instincts that keep them isolated yet at the same they yearn to integrate with the rest of society and make personal connections with other people. From a visual perspective, hacker genre films represent this isolation by presenting the action in small, enclosed spaces, emphasising the isolation of the hacker figure as they carry out their work.

Feature 6: The hacker genre film blurs the line between Thomas Schatz's notions of genres of social order and integration

Schatz's notion of genres of social order and genres of social integration presents an interesting challenge whilst considering the generic features associated with hacker and surveillance films. Whilst ostensibly these narratives could appear to follow the crime genre formula to involve social order, there is also a layer of social integration in the hacker figure's personal interaction with other people. Moreover, hacking and surveillance presents a conflict that blurs the line between Schatz's genres of order and integration. The former deals with an individual in a setting of contested space and externalised conflict that must be resolved by the elimination of the cause of that conflict, whilst the latter depicts a couple or collective in a setting of civilized space and internalised conflict that needs to be resolved through integration. I would argue that there is a discernible split in the hacker film, with the hacker's work following the genre of order model, depicting him or her as an individual operating in the contested space of cyberspace and needing to eliminate their opposition, whilst their social storyline follows more of the genre of integration model, integrating the character into human society and allowing them to connect to other people.

Feature 7: The hacker genre film is preoccupied with questions regarding the morality and ethics behind hacking and surveillance as activities

There are also prevailing questions of morality and the impression of ethical qualms of the hacker in the issues around their work. One of the primary moral questions is the invasion of privacy, considering the rights of the individual versus maintaining the security of the wider community; although the technology allows the hacker to intrude into an individual's personal space, the question remains as to whether they have a right to do so. This issue presents another point of conflict within the hacker genre and links back to Schatz's concept of the contested space in the western. However, the struggle for cyberspace presents the potential not for integration, but rather a subjugation, of the individual by the collective.

Surveillance technology empowers the collective to monitor and manipulate the individual in both the public and private spheres, creating a 'Big Brother' state.

Feature 8: The hacker genre film has a haunting presence of the past through technology

Moreover, there is a sense of the haunting presence of the past; various forms of technology are shown to have captured images, sounds and videos that generate an ethereal presence. These 'ghosts in the machine' continually haunt the characters and the narrative. The technology used to capture surveillance footage, or to review computer records allows the hacker figure, and by extension the audience, to review the available data to glean new details and new perspectives. A notable instance of this phenomenon is Harriet Vanger in the Swedish adaptation of *The Girl with the Dragon Tattoo;* although Harriet is assumed to be long dead for most of the film, her presence is felt through her photographs, staring out and appealing to Blomkvist (and the viewer) to seek justice for her supposed murder. The area of conflict in this case pertains to the unveiling of personal secrets from the past, such as Martin Vanger's history as a serial killer of women and his abusive relationship with Harriet.

Feature 9: Hacking is presented as an 'interactive experience' for the viewer

Hacking fiction is presented as an almost 'interactive' experience for the audience. In creating a mystery that the protagonist is investigating, these works create a (false) sense of audience participation and direct involvement in the investigation. The narrative follows the protagonist's perspective, revealing information to the audience as the characters discover it, and inviting the spectator to 'actively' engage with the material. The use of surveillance equipment effectively enables the viewer to view evidence 'first-hand', thus allowing him or

her to undergo the same investigative process that the hacker follows in the narrative. However, the point of conflict here is that his sense of interactivity is ultimately a falsehood.

Feature 10: Hacker genre films establish a particularly strong connection between the hacker figure and the viewer

Due to this sense of an interactive narrative for the viewer, the hacker genre film establishes a particularly strong connection between the hacker figure and the viewer. Whilst it is a common feature for films to endeavour to build an emotional connection between protagonist and viewer, and thus this feature is by no means unique to the hacker genre film, this relationship is much deeper because the viewer is afforded pseudo-hacker figure status and thus shares the hacker perspective with the hacker figure.

Feature 11: Hacker genre films conform to the verisimilitudinous genre format in presenting technology

Neale's work on verisimilitude offers significant insights into the hacker genre. Neale draws on the work of Noel Carroll to highlight the notion of verisimilitudinous and non-verisimilitudinous genres. The hacker genre would largely fall under the category of a verisimilitudinous genre, being set in the contemporary period of production and drawing on the technological reality of that time. Nevertheless, over time the genre also begins to blur the line of non-verisimilitudinous genres in the manner the technology is presented.

Feature 12: The hacker genre film lacks a clear or definitive resolution

The nature of the hacker genre denies the audience any sense of clear or definitive resolution. Rather than a clear victory for the protagonists, there is an ongoing sense of uncertainty, of doubt and of continuing conflict. Although secrets are uncovered, this resolution is merely one battle in an ongoing war. The hacker figure's struggle to integrate into society remains unresolved, the battles for control of cyberspace continue and the moral questions over hacking and individual rights linger in the background.

In many ways, my proposed genre draws on the conventions of pre-existing genres; the hacker genre shares the uncertain and uncivilized 'frontier' of the western, in which there can only be a sense of limited civilization and order – as a result, there is always potential for renewed conflict and danger on the technological frontier. Furthermore, like the western, the resolution of this conflict relates to Schatz's notion of restoring 'social order'. Moreover, the hacker genre relates to the horror genre in the manner it presents the horrors of technology, and, specifically the horror of technology taking over the mind and body of hacker characters; the trepidation towards science within the horror genre connects with the unease towards technology in the hacker genre.

<u>1.3b) Chapter structure</u>

In addition to identifying generic traits and features, Barry Keith Grant underlines the fact that 'fundamental to defining any genre is the question of corpus, of what films constitute its history' (Grant, 2007, p.22) and for this reason I will now outline my selection of hacker genre case studies and my reasons for choosing each of them. As I considered earlier, I have

identified a significant number of works that could be incorporated into this proposed

hacking genre, which has meant that I have had to be selective in choosing relevant case

studies for my argument. The texts I will introduce below have been selected as key examples

of various steps in the emergence and development of the genre, and, as a result, I will

endeavour to outline a roughly chronological progression of the genre through each of my

chapters. However, in stating this, some films have been grouped together (such as *The

Conversation* and *Enemy of the State*) to demonstrate generic development over time, due to

the links between them.

Chapter One primarily focuses on two linked films, the first being *The Conversation* from

1974 and the second being *Enemy of the State* from 1998. Francis Ford Coppola's *The

Conversation* is a precursor to the hacker genre and offers insights into the early form of

audio surveillance and hacking in the 1970s. Although the technology presented in the film

seems dated to a contemporary audience today, at the time of its release the film depicted

state of the art wiretapping capabilities. Although it would undoubtedly be possible to trace

the origins of my proposed hacker genre further back in time than the 1970s, I contend that

The Conversation offers significant insights into the representation of the hacker, and of the

technology he or she uses, within contemporary fiction. The film follows Harry Caul, a

surveillance expert operating at a time in which the public was only just becoming aware of

the surveillance technology's ability to 'hack' into people's lives, and thus stands as a model

for subsequent works. This becomes particularly clear when one considers the connection

between *The Conversation* and the 1998 film *Enemy of the State;* the latter film serves as a

thematic and spiritual sequel to the former, drawing upon and updating the 1970s film to a

1990s setting. Bringing the two films together will allow me to draw comparison between the

two respective eras and investigate how the representation of both hacking as an activity and

the hacker as a figure has developed over time. Equally, the presence of Gene Hackman as a hacker figure in both films will allow me to demonstrate that the Harry Caul wiretapper figure has evolved to incorporate computer technology into his working practices and become the Brill figure of the latter film. This chapter also draws on the film *All the President's Men* from 1976, considering the role of surveillance and wiretapping in the Watergate scandal.

Chapter Two focuses on the two screen adaptations of *Tinker Tailor Soldier Spy*. In a similar vein to *The Conversation*, the two screen adaptations of John le Carré's novel offer insights into the intricate procedures and methodologies of espionage; this includes monitoring and investigating targets, analysing evidence, following up on leads and acquiring evidence to substantiate suspicions. In this way, the spy serves as a spiritual precursor to the computer hacker, influencing the ways in which computer technology has been developed and is used to acquire information and infiltrate systems. In stark contrast to the television adaptation in 1979, the recent film version of *Tinker Tailor Soldier Spy* (2011) was intentionally adapted, produced, and inevitably received, as a 'period' film. Thus, the film also has an intrinsic link to heritage cinema. For this very reason, it demands attention in this study. In many respects, it seems strange that John le Carré's narrative has not been updated to a contemporary setting; whilst the Cold War backdrop of le Carré's work may make such an updated adaptation difficult, the conscious choice to retain and fetishise the 1970s context in this film offers an intriguing contrast to the contemporary standard of the genre. Similarly, looking at the period nature of this film offers an insight into the potential fate of all works of hacker fiction that will inevitably become 'period' pieces in the future. Whilst the 1979 television series offered glimpses into state of the art surveillance equipment, the 2011 film offers an alternative approach to the hacker film, which could serve as an indication of the future of the genre as a whole. Although the genre typically focuses on the contemporary period of

production, future genre films could follow this precedent by looking back in time to offer new experiences and new perspectives on hacking and surveillance.

Chapter Three focuses on the hacker genre in the 1980s and 1990s, the period leading to the end of the Cold War and the aftermath of the dissolution of the Soviet Union. Beginning in the 1980s, the emergence of teenage hacker and surveillance figures opened the field to a younger audience, but at the same time, the rise of video games and gaming culture begins to generate a hacker subculture. One of the key films that introduced a younger hacker figure was the 1983 film *WarGames*. The film portrays a teenage hacker who accidentally hacks into the government's NORAD computer system, which unintentionally leads to the computer taking countermeasures that could lead to World War III. *WarGames* (Badham, 1983) is arguably the beginning of major films that present computer hacking as an activity and as an integral part of a film's narrative. It also marks a shift in presenting a teenage hacker as protagonist that has since become a more common trend both in hacker film and fiction and in the real world. It is this film that also begins to offer extravagant computer screen visuals and grandiose depictions of technology, whilst also demonstrating an escalation of scale in the hacker film, moving from the level of personal implications of hacking to potentially global ramifications. This film, like so many that have followed it, conveys the sense of hacking being an easy process, downplaying the time and technical skill requirements involved. A noteworthy comparison to *WarGames* is *Hackers* (Softley, 1995), which exemplifies the emergence and development of a hacker subculture. In fact, *Hackers* offers an even more extreme representation of the hacker by delving into the hacker subculture to explore the hacker community and interaction between hackers. Building on the presentation of the teenage hacker in *WarGames*, *Hackers* depicts a group of young hackers who are targeted by the authorities and come together to partake in cooperative hacking to

prove their innocence. The film also takes the extravagant visual style and escalation of scale to extremes, striving to convey the flow of electronic information through transitional shots.

Chapter Four considers the hacker genre on television, particularly focusing on the genre in the wake of the 9/11 terrorist attacks. In contrast to the relatively short and contained narratives of films, television series typically follow characters over an extended period, charting their personal journeys as they grow and develop. Therefore, one of my chapters will be dedicated to the portrayal of the hacker and hacking in a selection of recent television series. *24* stands as a key example of post 9/11 counter terrorism investigation and intervention, depicting the combined efforts of intelligence analysis and practical fieldwork to achieve this end. The series depicts events in 'real time', with each 24-episode series corresponding to a twenty-four-hour period. On a similar note, the British television series *Spooks* offers a British perspective on hacking in a post 9/11 climate and within a counter-terrorism setting. Over the course of the series, it becomes clear that working for MI5 has a destructive impact on the spy's life, with many central characters either being killed in action for the greater good, or leaving the service in disgrace. Most notably, the lead character of Harry Pearce is shown to wield considerable power, using his personal and political connections to traverse the hidden world of the spooks. The *Person of Interest* television series offers several parallels to my other case studies. The concept of Harold Finch's machine, a computer system that can collate and analyse computer records and surveillance data to predict terrorist threats for the US Government, ties back into Lyon's notion of a 'surveillance society'. Furthermore, Finch's partnership with Reese to try to prevent the crimes against the 'irrelevant' targets, the smaller personal crimes against individual members of the public harks back to *The Conversation* and Harry Caul's perception that the

young couple are in danger of being murdered because he recorded their conversation for the young woman's husband.

Chapter Five looks at the screen adaptations of *The Girl with the Dragon Tattoo*. As part of a recently published trilogy of novels, alongside two recent film adaptations, *The Girl with the Dragon Tattoo* offers a female perspective on the hacker and the hacker experience through the character of Lisbeth Salander. Salander's narrative journey over the course of the story demonstrates the dichotomy of her position; although she is socially disempowered in Sweden due to being declared legally incompetent and assigned a guardian to manage her affairs, at the same time she empowers herself online by assuming the hacker identity of Wasp. This narrative also combines the personal narratives of two protagonists of Salander and Mikael Blomkvist with a family murder mystery, as the two protagonists try to uncover evidence to explain the disappearance of Harriet Vanger. Furthermore, the fact that *Dragon Tattoo* has now been adapted twice to film will allow me to compare how the two films have adapted Larsson's novel and the ways in which they contrast as examples of 'hacker' films, taking into account that the American adaptation is inevitably influenced by the Swedish adaptation.

The Conclusion uses an analysis of *The Net* (Winkler, 1995), a key example of the hacker genre film from the 1990s which positions a female hacker figure as the protagonist. This analysis offers an overview of the hacker genre, examining how *The Net* stands as an archetypal example of the hacker genre film during the 1990s period in which these films were beginning to draw some comparisons with one another.

1.4 Conclusion

The core argument of this thesis is that hacking does constitute a genre for film and television series. Hacking and surveillance have been, and continue to be, a continual inspiration for film and television series, as well as for narratives across other media forms. These films should be recognised together as a group and genre offers a framework to facilitate such a discussion of these films. There are clear generic markers that are identifiable in *The Conversation* that evolve over time and with repeated productions through to the 1980s, 1990s, 2000s and continue on to the 2010s. This exploration of genre and adaptation theory offers a methodology to chart the emergence and development of a hacker genre. My detailed analysis of a small group of hacker genre films and television series will demonstrate this progression. Whilst this study cannot possibly cover all the possible avenues of discussion pertaining to this broad term of a hacker film genre, my primary aims are to identify the key links between these hacker genre films and television series, to demonstrate how these films have influenced each other and developed generic features over time and to encourage further exploration and discussion of this potentially broad screen genre.

2) Chapter One: From Eavesdropper to Enemy of the State: The evolution of hacking between *The Conversation* (1974) and *Enemy of the State* (1998)

2.1 Introduction

As I began to discuss in the Introduction, mapping out my proposed hacker film genre needs a clear starting point, and for this reason I have selected Francis Ford Coppola's *The Conversation* from 1974 as a key precursor film that begins to form the generic characteristics of the hacker genre. Although I have traced earlier possible examples of hacker and surveillance films, as outlined in Appendix A, the growing interest in and awareness of the capabilities of the technology during this period offers a significant insight into the development of the genre. Coppola's film stands as a spiritual forerunner to my proposed hacker genre as it begins to take shape around the developing surveillance technology of the time, and being released in the wake of the Watergate scandal gives the film a specific social relevance. Whilst the film was not directly influenced by these real-world events, it was nevertheless publicly received during the aftermath of the scandal. More importantly, *The Conversation's* role as a precursor to more modern hacking films becomes more prominent when drawing comparison to its semi-sequel, adaptation and homage, 1998's *Enemy of the State*. The latter film demonstrates the progression of the technology, the figure of the hacker, and the emergence of my proposed hacker film genre during the 1990s. As Rick Altman proposes, 'one of the founding principles of genre study is the importance of reading texts in the context of other similar texts' (Altman, 1999, p.81) and for this reason I will draw comparisons between the two films to chart the evolution of hacker genre characteristics from the 1970s and 1990s respectively.

2.2 The Conversation (Coppola, 1974)

Whilst my list of potential hacker genre films in Appendix A does include earlier examples of possible hacker genre films, *The Conversation* stands as a key example in which both hacking technology and the hacker figure assume a central role rather than standing on the periphery of the narrative. Produced and set in the 1970s, Francis Ford Coppola's *The Conversation* follows Harry Caul (Gene Hackman), a surveillance expert who 'hacks' into and records private conversations to capture and expose people's secrets for his own profit. In a discussion of the film, Quentin Falk underlines how 'often described as a "post-Watergate" drama, this compelling thriller about, among other things, invasion of privacy and loss of faith was actually hatched years before the Washington scandals' (Falk, 1998, p.3). As Bruce Sterling indicates, the contested space of the 'electronic frontier' (Sterling, 1992, p.xi) is far wider than just the realm of computers and it thus becomes clear that computer hacking as we know it today effectively began with telephony and audio equipment; using sound equipment to capture a target's words and private conversations was the most effective means of uncovering their secrets during this time.

The marketing materials for the film portray the dual sense of excitement and social unease with this technology. The promotional poster for *The Conversation* positions Harry Caul at the centre of the image, but also foregrounds his surveillance technology and his connection to it, using it as a medium to connect with the world around him. In many respects the technology is fused with the hacker figure here, as Caul wears his headset and is shown connected to the technology through wires. One of his surveillance targets, the young woman, is also shown through simulacra of Caul's surveillance camera technology, suggesting the

threat Caul and his technology pose to her. The text on the poster also highlights the danger Caul presents to society as an 'invader of privacy' and that 'three people are dead because of him'. Considering the links to the horror genre, the poster therefore depicts Caul himself as the 'monster', a creature corrupted by technology and stalking his targets as an outsider. Thus, Caul is hardly presented as a heroic protagonist, but rather an anti-hero or unlikely hero figure. Similarly, the trailer for *The Conversation* introduces the sense of suspense and thrill in the film, with the voiceover narration building up a sense of Caul's technical skill and detached demeanour. Technology is foregrounded and fetishised in quick, interspersed shots designed to elicit a sense of awe and fear from the viewer. It is here that the notion of Caul using the technology as a barrier is introduced, as the narrator indicates that 'they're not people to him, they're just voices' (*The Conversation* trailer, 1974). The first section of the trailer emphasises the idea of Harry posing a threat to his targets, as the technology is positioned as a threat to the young couple. However, the trailer then presents Harry himself as an unexpected victim of hacking and surveillance and plays up the idea of his fear of becoming hacked himself – in essence, the wiretapper 'monster' becomes the victim of hacking himself.
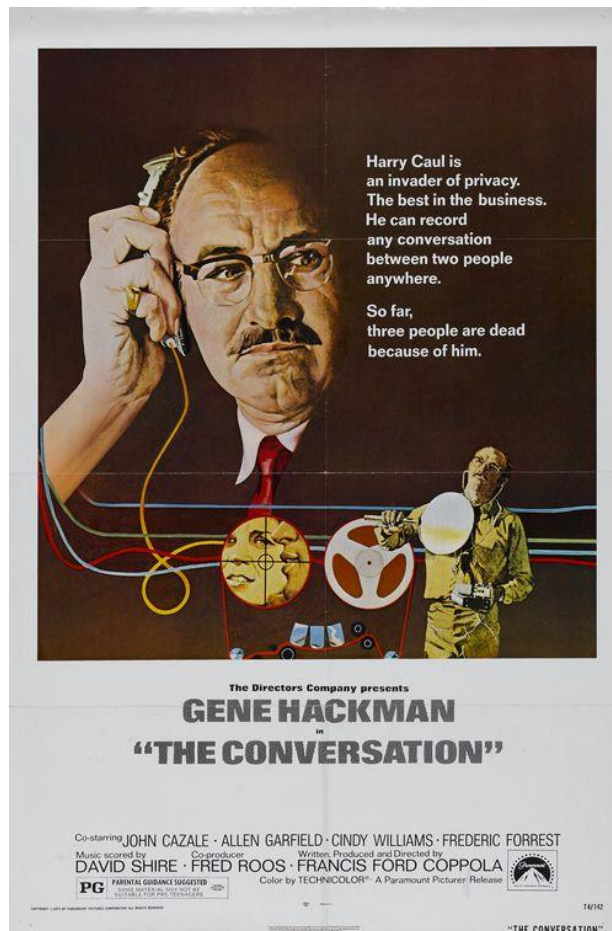
Figure 1 – *The Conversation* (Coppola, 1974) promotional poster.

The press book for *The Conversation* includes an interview with Coppola, discussing why he wanted to make the film and what he hoped to achieve through its production:

> I started work on *The Conversation* screenplay right after the opening of *You're a Big Boy Now* in 1966 and completed a first draft in 1969. … I don't remember how I first became interested in the subject matter, but right from the beginning I wanted to make a film about privacy, using the motif of eavesdropping and wiretapping, and centring on the personal and psychological life of the eavesdropper rather than the victims. It was to be a modern horror film, with a construction based on repetition, like a piece of music. … Ultimately I wanted the film to come to a moral conclusion. I had no idea what was to come in 1973. White House plumbers, Watergate, Ellsberg files, of course were unfamiliar phrases to me, even now I'm not completely sure of how these names and events relate to this film, despite such coincidences and prophecies (the Uher 5000 tape recorder). As I think about it now it's done, I realise I wasn't making a film about privacy, as I had set out to do, but rather, once again, a film about responsibility, as was *The Rain People* (Coppola, 1974).

The Watergate Scandal in the 1970s highlighted the possibility of government corruption and conspiracy and this film, albeit unintentionally and indirectly, further emphasises this possibility by depicting surveillance and audio hacking in action.

The Internet Movie Database website (IMDb) classifies the genre of *The Conversation* as 'drama', 'mystery' and 'thriller' and each of these generic links come through in different elements of the film. Intertextually, *The Conversation* links to other 'thriller' films produced during this period, such as *Klute* (Pakula. 1971), *The Parallax View* (Pakula, 1974), and *All The President's Men* (Pakula, 1976). Whilst these other films were produced both during the 1970s, and earlier in the 1960s, *The Conversation* positions Harry Caul as a hacker figure at the centre of the action, and foregrounds and fetishises the technology and processes of wiretapping. Although the influences from other films such as *Blowup* (Antonioni, 1966) are apparent in interviews with Coppola and through the similarities between the two films, the fact that *The Conversation* centres on Caul as hacker figure and how he uses his surveillance technology warrants the film's inclusion in this study as a point of influence and spiritual precursor. Showing the action from Caul's perspective embroils the viewer in the hacker's world and provides substantial insights into the act of hacking and surveillance, the potential impact on the hacker figure's targets and how this lifestyle impacts the hacker figure himself.

As I highlighted in the Introduction, a key feature of the proposed hacking film genre is the foregrounding and essential 'fetishisation' of hacking and surveillance technology and how it is used in the investigative process. Stylistically, the opening scene of *The Conversation* immediately positions the viewer as a distant observer of the objects of Caul's surveillance, offering the viewer a 'hacker's' perspective as the camera zooms in on the crowded square.

This effectively replicates the viewpoint of the 'snipers' Caul has set up around the square to capture the sounds and images of the young couple's conversation. This initial encounter with the young couple and their conversation is distorted and fragmentary, emulating the limited experience for each individual microphone, which becomes an on-going feature of the film as it takes great pains to mediate our experience of characters and events. Such mediation operates on both a diegetic and an extra diegetic level as 'the almost permanent external presence of the camera ensures a vantage point for the spectator, which continually tends to dissociate itself from and supersede that of the various characters involved in the action' (Deleyto, 1996, p.222). Just as we view the titular conversation through Caul's technology, we also view Caul's storyline through the extradiegetic camera, which duplicates the surveillance experience to essentially position the viewer as a 'hacker' figure intruding into Caul's private space. Thus, when the camera shifts to focus in on Caul as he departs the square in the opening scene, it serves to emphasise the fact that we, as viewers, will be 'hacking' into his life, penetrating his interior space and uncovering his buried secrets.

Equally, the inclusion of the scenes at the convention allows the film to explore the growing market for this technology that was beginning to form in the 1970s. Although the whole film fetishises surveillance technology, the convention allows the characters to 'market' the technology, portraying the commercial potential for this technology. These convention scenes also exhibit the range of technology available during this time, as we watch Caul visit different stalls to discuss different gadgets and how they could be utilised in surveillance activities. This commerciality is part of what drew me to look at *The Conversation* as a key forebear of the hacking genre; the fact that this technology is being advertised and sold to the public within the narrative of the film only serves to further foreground and fetishise this technology. Moreover, the technology being made available to the public as 'amateur

hackers' is also juxtaposed with Caul and Moran as professional hacker figures. Whilst the technology is a tool that facilitates hacking, it is only with the expertise to utilise it effectively that the hacker can gain access to key information, and the film continually reiterates the skill needed to refine recordings and to discern new snippets of information from static and interference. One specific example of this fetishisation is Moran's demonstration of his telephone bug to eavesdrop on his targets through their home telephones. This presentation is for the benefit of the convention attendees on a diegetic level, but on an extradiegetic level this demonstration offers a step by step insight into the use of the technology for the benefit of the viewer. As the diegetic audience at the convention watches, Moran talks through the process of setting up and using his bug, emphasising its simplicity of use. The inclusion of this scene immerses the viewer in this technological climate, giving us an insight into how the technology could be used, but in presenting it in the form of Moran's sales pitch we too become potential 'customers'. On an extradiegetic level, this scene also helps to 'sell' the idea of the capabilities of this technology to the viewer, underscoring the ease in which such a bug or surveillance device could be placed on us.

Figure 2 – Surveillance technology on show at the convention. *The Conversation* (Coppola, 1974), film grab.

Closely linked to the foregrounding of the hacking technology is the fetishisation of the processes used by Caul as he undertakes his work. It is here that the 'art' of the hacker figure comes into play; it is only when Caul splices together the recordings from different tapes that he can fully (re)construct this conversation. During this process, the film continually reveres and fetishises the technology of recording and (re)playing. Just as Christine Geraghty highlights in her article on the foregrounding of media in *Atonement* (Wright, 2007), *The Conversation* demonstrates a constant preoccupation with the technology that is used to record, (re)construct and playback the young couple's conversation, showing Caul continually tinkering with his equipment to refine the recording. Caul's continual replaying and manipulation of the recording also emphasises the fact that it is merely an artificial reconstruction of the original conversation. The pace of these scenes is also painstakingly slow and methodical, as Caul tinkers with tapes A, B and C in turn to reconstruct his recording until he is satisfied with its quality. Whilst watching this section of the film I found myself drawing comparisons between Caul's ability to manipulate the recording of the titular conversation and my own analysis of *The Conversation* through my own DVD copy. As Caul has the ability to pause, rewind and focus on different sections of the conversation, so am I able to manipulate my own experience of the film to draw different conclusions. This capacity to manipulate the experience of the conversation, both on a diegetic and an extra diegetic level, also reinforces the sense of artificiality in that the spectator (be it Caul within the film or the viewer watching Caul's story) experiences and engages with the conversation through a technological medium. This fetishisation of the technology and detailed scenes of Caul's methodology serve to demystify how it is used by the hacker figure and suggest it can be used in a constructive manner. However, the looming, ethereal threat to Caul himself presents an ongoing conflict, one that he is unable to overcome by the end of the film.

Figure 3 – Caul tinkers with the recording. *The Conversation* (Coppola, 1974), film grab.

Figure 4 – Caul's demonstrates his 'art' by refining his recording with his equipment. *The Conversation* (Coppola, 1974), film grab.

Similarly, the film simulates the audio experience of Caul's surveillance activities, and later work to refine the recordings, to effectively (re)create this process for the viewer. There are

multiple audio distortions as Caul replays the recordings, and we as viewers hear the same words he is able to glean from the recordings as he rigorously attempts to hack through the interference to discern the hidden words beneath the distortion. As Caul rewinds and repeats the titular conversation to filter out the sound of the drums that were playing in the park to allow him to hear the words 'he'd kill us if he got the chance', the film invites us to try to make out the line, teasing us with the hidden meaning. In many respects, we 'become' wiretappers for the duration of the film. Like so many other works of crime and detective fiction, we assume a role in the investigative process, actively 'participating' in the narrative by trying to piece together the information available to us to discern the truth. However, this becomes a meticulous procedure that the viewer must follow as Caul undertakes it. The pace of the narrative remains agonisingly slow for the modern viewer who has come to expect a more dynamic protagonist, but this is the point; this process is time-consuming and the only way to reflect this for the spectator is to make them live through the lengthy, step by step process. This sense of a step by step process is further reiterated in the manner that we, as viewers, learn new points with each repeated viewing of the titular conversation. This notion of perspective serves to highlight the 'art' and skill behind hacking and surveillance, as well as the notion of the narrative seemingly being an 'interactive' experience for the viewer. Likewise, Stanley's audio commentary on the titular conversation, as Caul attempts to refine the recording, poses similar thoughts and questions that could be in the viewer's mind as he or she watches the film and encounters the replayings of Caul's recordings. This commentary again foregrounds the media and the technological mediation of the titular conversation. In positioning Caul, and by extension, the viewer, to seemingly have control over this technology and thus over the 'electronic frontier' (Sterling, 1992, p.xi) itself, the film lulls the viewer into a false sense of security, before destabilising this sense of dominance and reinforcing the sense of horror and thrill by the end of the film. It is unclear who controls this

frontier of technology, and this ethereal presence remains unknown and unclear – the human 'monster' of the hacker figure is merely an instrument to use this technology, does not have the power to control it and is instead subject to it. Whilst the film diminishes the viewer's unease of this technology by aligning our perspective with that of wiretapping expert, it reintroduces this fear when it becomes clear that Caul does not have control over the technology.

Connected to this fetishisation of technology and the 'voyeuristic' vantage point afforded to the spectator is the depiction of Harry Caul's isolation and his sense of paranoia, alongside the barriers he strives to create to protect himself from the rest of the world. The human hacker figure, and his interactions with, and through, this technology allows us to 'experience' the impact of hacking and surveillance on the people using this equipment. Roger Ebert describes the film as depicting 'a man who has removed himself from life, thinks he can observe it dispassionately to an electronic remove, and finds that all his barriers are worthless. The cinematography … is deliberately planned from a voyeuristic point of view (Ebert, 2001). Nevertheless, it becomes very clear over the duration of the film that Caul chooses to distance himself from the rest of humanity, rather than having this isolation imposed upon him. A number of other characters – Amy, Stan and Meredith – all at different points in the narrative ask Harry to trust and confide in them, but Caul is continually shown to be reluctant to trust them. In a contemporary review of the film, Alexander Walker underlines how the paranoia of the film is a sign of the times:

> It's not just its technical cleverness we admire … Even more, it's the feeling that, as so often happens, a film has decisively summed up the mood of our times, the pervasive conspiracy, the impending crisis, the treacherous reality, the engulfing illusion, the self-fulfilling prophecy that men without convictions wish on themselves. And on others (Walker, 1974).

Stylistically this paranoia and resulting self-imposed isolation is conveyed by Caul retreating to small enclosed spaces, or 'protecting' himself with some form of 'barrier, such as the 'cage' he uses as his workspace to physically seclude himself from others. These barriers serve a dual purpose of simultaneously protecting Caul from the rest of the world, but at the same time confining him and preventing him from establishing connections with the people around him.

Figure 5 – Caul physically separates himself from the rest of the group at the party. *The Conversation* (Coppola, 1974), film grab.

The early scenes of *The Conversation* quickly establish Caul's distinct sense of paranoia and his fear that he could himself become the target of surveillance. In a review of the film, Jay Cocks comments on Caul's obsession with his privacy and personal security:

> Harry Caul (Gene Hackman) has a pathological passion for his own privacy. That has its vocational advantages, of course – "the best bugger on the West Coast" ought to be as anonymous as possible. Beyond this though, Caul's insulation if a way of sealing himself off from his own guilt' (Cocks, 1974).

The imagery of Caul creating barriers is continually brought to the fore, which is only reinforced in the depiction of him engaging with other people through a technological medium. This manifests in a number of visual scenes in which Harry uses keys to open or lock doors, creating a physical barrier between him and the outside world. His technology is another barrier, an instrument through which he can control his interaction with other people. In short, Caul, the audio hacker, is always afraid of becoming knowable, and therefore disempowered and vulnerable, to the rest of society. The film elicits a sense of tension from the viewer, through the manifestations of Caul's concerns and his attempts to create barriers. However, this tension is somewhat time-limited, as technology advances and new viewers approach the film from a more informed position, and with greater experience, of this technology.

Figure 6 – Caul locks away notes and plans during the party scene in his workspace. *The Conversation* (Coppola, 1974), film grab.

The use of physical space also serves to create distance between Caul and other characters within the film. At various points in the film Caul is shown to physically move away from other characters, using this distance to create a barrier between himself and other people. One example of this is demonstrated during the party scene in Caul's workspace, as he physically separates himself from the rest of the group. The fact that Caul's workspace occupies only a small portion of the available space also emphasises his attempts to conceal his operation; rather than expanding out to fill this floor space with more equipment and paperwork, Caul keeps this workspace relatively compact, manageable and easier to protect from potential rivals. The wire barriers and locks used to contain and conceal his paperwork and plans also demonstrate his secrecy and constant attempts to protect his work.

Linked to this idea of space and barriers is the presentation of Caul as a small figure in wide shots in large, public spaces. In addition to creating a sense of anonymity this sense of Caul being a small figure also emphasises his lack of empowerment in these large, uncontrolled spaces. Whilst he has a degree of control in his small, enclosed workspaces in which he can use his technology, once he ventures outside in large public spaces he is instead exposed and disempowered. The presentation of the young couple in large crowds generates a sense of anonymity, which is then invaded as the camera zooms in to focus on close-up shots of them. The same effect is used on Caul as he is shown from a distance in a wide shot before the camera zooms in to focus on him. The primary difference between the invasion of the privacy of the young couple and that of Caul is that the young couple retain a large degree of anonymity until the end of the film. Whilst both the viewer, and Martin Stetts, are able to penetrate Caul's interior space, Caul never penetrates the interior space of the young couple but merely uncovers elements of their conversation in a public space. Instead they use Caul's

surveillance of them to manipulate the Director to their planned location for his murder; Caul's position as hacker is inverted as his targets are able to hack into his personal space.

The irony of Harry Caul's paranoia is that the film indicates that it is well-founded; at several points in the film, Caul himself does become the subject of surveillance as his secrets are 'hacked' into by other parties. Martin Stetts' telephone call at the end of the film reveals that Harry has been an ongoing target of surveillance over the course of the film; Stetts' recording of Caul playing jazz in his apartment aurally alludes to his earlier tinkering with the recording of the conversation, but also turns his area of expertise against him. The same is true when Moran records Harry's conversation with Meredith through the bugged pen he planted on him at the convention; this simple trick effectively demonstrates that even Caul as a surveillance expert can be 'hacked'. Dennis Turner rightly observes that 'read as a kind of Orwellian morality play, *The Conversation* sermonizes on the danger of a naïve faith in technology, particularly when, as in Caul's case, it is used as a shield against "human" contact' (Turner, 1985, p.6). Caul comes to realise that his technological shield turns against him as his position shifts from that of a 'Big Brother' figure to the subject of 'Big Brother's' gaze. The barriers he creates are essentially futile, as the technology is already becoming increasingly invasive, penetrating personal space. From a socio-political and sociocultural standpoint, the film also reflects the manner in which President Richard Nixon and his staff were implicated through recordings and surveillance.

Despite the presence of Caul's barriers, the viewer assumes a pseudo-hacker role in the fact that the extradiegetic camera allows us to penetrate Caul's personal space during two 'confession' scenes in which he reveals his concealed guilt over his work. Thus, in terms of Laura Mulvey's male 'gaze' (Mulvey, 1999, p.810), Caul is simultaneously the gazer, remotely watching other characters as a hacker figure, and the object of the gaze through both Martin Stetts' surveillance and through the extradiegetic camera penetrating his interior space. In one scene Caul confesses his sins to a Catholic priest, whilst his dream scene projects a haze of fog between him and the young woman. Both scenes once again demonstrate Caul's use of barriers, yet we as viewers are able to overcome these barriers to 'hack' into Caul's personal space and uncover his secrets. These scenes illustrate the fact that Harry is unable to directly confront or confess his guilt to another human being. In isolating himself from the rest of humanity he has positioned himself as an outsider who can only lower these defences when he feels his anonymity is protected, in this case concealed in the confessional or in a foggy dreamscape. The viewer's ability to penetrate Caul's interior space is further echoed when the extradiegetic camera captures him playing his saxophone in his apartment. These scenes of Caul playing jazz music are rare moments of his personal expressions and emotion in which the 'tortured soul' uses his musical instrument to convey his feelings of guilt and melancholy. Although he struggles to express his moral dilemma in words, his musical expression allows him to convey his repressed emotions. The fact that Martin Stetts is able to not only listen into, but also record, Caul's private moment of musical expression is a major intrusion into his personal space. This invasion prompts Caul's destruction of his apartment in an attempt to uncover the hidden surveillance device; for Stetts this is an indisputable hacking victory over Caul, but for the viewer, the act of hacking the hacker conveys the potential 'horror' of the technology, in that any of us could unknowingly be the subject of this level of surveillance. If an expert in the field can

unwittingly become the target of surveillance, then anyone could, and this fear continues to be developed and brought to the fore in later hacker genre films.

Closely linked to this sense of Caul's isolation and sociophobia is the notion of him adopting machine-like traits to become something of a cybernetic figure. He actively strives to become better connected with his technology in the seeming attempt to become a better 'machine' himself. Caul continually strives to dissociate himself from his emotions and humanity to continue with his ethically questionable work. However, although there are numerous scenes in which Harry is shown to be struggling to become cold and logical, the film clearly depicts his enduring humanity; one of the most notable scenes is Caul's near 'breakdown' with Meredith in which he reveals his guilt to her and she tries to reassure him that 'it's just a job, you're not supposed to feel anything'. Detaching himself from his humanity and his emotions serve as another form of barrier and protection. However, the film continually reiterates the tension between Caul's desire to detach himself from his emotions and his inability to actually do this. This dilemma of emotion brings the focus back to the human character, rather than the technology, and expresses the connection the viewer can make with these films, through the conduit of the human hacker figure. Hacking and surveillance provides an exciting experience for the viewer, enticing us with the possibility of surreptitiously invading the privacy of others and the potential to achieve a position of power through the medium of technology. However, *The Conversation* also deals with the ethical dilemma faced by the human character, confronting the viewer with the prospect of the repercussions of exposing a target's secrets. As I discuss later in this chapter, *Enemy of the State* continues to engage with this concern, both diegetically in terms of the proposed bill, but also on an extradiegetic level by portraying the misuse of this technology by government agents.

The foregrounding and fetishisation of the recording technology is also used to portray the ethical dilemma faced by Caul as a hacker. The recording and playback technology allows Caul to replay the titular conversation repeatedly, which reflects the way he is continually haunted by his guilt. As Sean Singer underlines, *The Conversation* 'uses repetition to voice judgments about wiretapping, ethics, responsibility (privacy's many arms), and musical expression: each of these themes is the pearl of understanding – how information maintains power, and how belief is a mist over a twin called perception' (Singer, 2010, pp.119-120). In short the film foregrounds the media of audio-recording and surveillance to raise a multitude of questions. Ethically we are confronted with the implications of invasion of privacy and offered a glimpse into the darker human impulses of the young couple, but we also invade Harry Caul's privacy, penetrating his personal space to expose his secrets. Moreover, the continual repetition and implied meaning behind the titular conversation ultimately makes the revelation that the young couple had intended to murder the Director a more powerful and visceral experience for the audience. Because our perspective is aligned with Caul, the film elicits a sense of foolishness in the audience; the film implores us to share Caul's empathy for the young couple, and thus we share his feelings of horror and resentment. As Jay Beck highlights 'Harry's ultimate refusal (or inability) to recognize what the reconstructed voices are saying challenges the existence of empirical truth by revealing the fallibility of interpretation' (Beck, 2002, p.158)[8]. Retrospectively, the repeated playing of the conversation offers clues as to the true intentions of the young couple, but we either miss or misconstrue them in the same way that Caul does. In this way, Coppola's film seemingly elevates both Caul, and the audience, to a position of seeming omniscience of the fictional world, only to strip us of this empowered position by reinforcing our role as passive spectators for the duration of the film.

Another characteristic that emerges from the continual replaying of the titular conversation is the feeling that the young couple 'haunts' the narrative for both Caul and the viewer; the tape, and Caul's manipulation to refine the recording, also directs the audience's experience and interpretation of the overall story of the film. In most scenes, there are fragments of these eerie, disconnected voices looming over Caul and the audience. This sense of echoes of the titular conversation 'haunting' Caul is also illustrated in the scene with Harry's girlfriend, Amy Fredericks; when she sings the song the young woman had been singing earlier in the day, this sense of the titular conversation, and its potential implications, constantly haunting Caul manifests itself once again. The only other time Caul, or the viewer, engages with the young couple is during a few short sequences when Caul bumps into or passes by the two of them individually in the Director's building. This generates a greater sense of mystery around the young couple, which only further develops both Caul, and the viewer's, reliance on the recordings of the titular conversation to try to understand the situation faced by the young couple.

As I considered in the Introduction, this isolation of Caul as the central character, alongside his sense of paranoia and sociophobia, presents a blurring of Thomas Schatz's genres of 'order' and genres of 'integration' (Schatz, 1981, p.32-34) in the resolution of the film. Whilst Caul's professional narrative regarding the recording of the young couple would seem to fall under the 'genre of integration' category, Caul's personal narrative of isolation and disconnection relates more to the genre of integration. The wire-tapping plot, depicting Caul's struggle as an 'individual male protagonist … who is the focus of dramatic conflicts within a setting of contested space' (Schatz, 1981, p.34) to ascertain the meaning behind the

titular conversation follows Schatz's model of order. In the same vein 'the resolution in [this film] is somewhat ambiguous … [as Caul] does not assimilate the values and lifestyle of the community but instead maintains his individuality' (Schatz, 1981, p.34). Nevertheless, the film refuses to eliminate the threat against Caul posed by Martin Stetts and his surveillance of Caul's apartment; the space remains contested.

Also blurring the film's position in terms of the genres of order and integration is the manner in which Caul's personal journey is internalised and emotional in spite of his attempts to bury his emotions. This parallel narrative strand 'trace[s] the [failed attempt at integrating] the central [character] into the community … through romantic love' (Schatz, 1981, p.34). Early in the film it is implied that Caul has tried to control his first romantic partner, Amy Fredericks, by watching her and listening in to her telephone calls, which results in their separation. However, it initially seems that Caul's subsequent relationship with Meredith has the potential to achieve his integration into the wider community; he is shown to make an emotional connection with her, revealing his sense of guilt regarding his work. Caul's potential integration becomes disintegration following Meredith's betrayal in stealing the recordings of the titular conversation. As a result, Caul remains isolated and increasingly paranoid and 'sociophobic'.

As I indicated in the Introduction, another feature of my proposed hacker genre is the sense of a seemingly 'interactive' narrative for the audience, which emerges as the film aligns the audience viewpoint with that of Harry's and allows us to (somewhat falsely) become an 'interactive' interpreter of the events of the film. Although Caul is the effective 'narrator' for the viewer, the fact that the titular conversation is broken and fragmentary also allows the

audience something of an opportunity to (re)write their own interpretation of this mysterious situation. Caul spends the first half of the film trying to piece these fragments together, cleaning up the audio in an attempt to glean all the available information to allow him to make sense of what was being discussed between the young couple. Like Caul, the audience member finds him or herself striving to piece these elements together into a coherent whole to understand what has occurred. However, for the film audience watching *The Conversation,* Harry's personal journey in gleaning information from the tapes is on one level an intertext that the audience uses to '[look] through, like a window on the source text [of the titular conversation]' (Leitch, 2007, p.17). For all intents and purposes, Harry Caul 'adapts' the 'source text' of the titular conversation for the audience, offering the spectator a (re)presentation of what occurred that is based on his own interpretation.

Another key feature in *The Conversation* is the establishment of a deeply intimate relationship between the protagonist and the audience. Although such a visceral connection between audience and character is a common occurrence in popular fiction, the hacker genre strives to achieve this on a very personal level; we are drawn into the protagonist's life and share their perspective to the point that we want to uncover the truth. In the same vein, 'because the viewer is only permitted to know what Caul knows, when he knows it, we are as surprised as he is when his recording reveals nuanced information about the conversation he has recorded' (Singer, 2010, p.120). In this way, the audience establishes a particularly strong connection with Caul and actively participates in his quest to discern the true nature of the titular conversation. We share Caul's personal journey here and find ourselves following the same path he did – guilty of eavesdropping and intrusion, but also misled to believe the false narrative (re)constructed by Harry. As a result, we are also implored to establish the connection with the young couple that Harry himself has tried to deny. However, like Caul,

we discover this bond is a fallacy, as it has been established with an illusory construct of the young couple through the medium of Harry Caul's tapes and photographs. Neither Caul, nor the viewer, is permitted to see the truth of the young couple's intentions, and therefore their true natures, until the end of the film when it is revealed that they have actually murdered the Director. As Ebert suggests, 'like the film viewer, Harry fills in the narrative gaps and ambiguities, supplementing what is visible and audible with what he believes to be the truth' (Ebert, 2001). Despite striving to (re)construct the 'perfect' recording, Caul, and by extension the spectator, ultimately falls prey to human fallibility by misinterpreting the true meaning behind the titular conversation. Caul's emotions guide the viewer, and these emotions betray him to cloud the objectivity of both hacker figure and spectator.

2.3 *Enemy of the State* (Scott, 1998)

As I began to consider at the start of this chapter, *Enemy of the State* stands as a semi-sequel, loose-adaptation and visual homage to *The Conversation*, whilst also marking significant steps forward in the development of the hacker genre. The most notable development is the transition of the hacker from passive observer to active participant in events, which results in a shift in pace, tone and mood. Although a number of films produced earlier in the 1990s follow the fast-paced, thriller model utilised by *Enemy of the State*, the fact that the film alludes to *The Conversation* allows us to draw more overt comparisons between the decades and track the emergence and development of the hacker genre. In this way, the films exemplify Barry Keith Grant's notion that 'genre helps us see the unique properties of individual works by permitting comparison of them with others that have similar qualities' (Grant, 2007, p.2). The promotional poster for the film emphasises Robert Dean (Will Smith) as the target of surveillance, emulating the technological perspective of the surveillance

technology that is utilised to monitor Dean. By presenting the images of Dean and Brill (Gene Hackman) in a photograph reel form, the poster itself foregrounds and fetishises surveillance technology and the vantage point it provides. IMDb classifies the genre of *Enemy of the State* as 'action' and 'thriller', which again tallies with the genre classifications of other hacker genre films. The trailer for *Enemy of the State* quickly introduces the idea of the speed and interconnectivity of the technology. Like the trailer for *The Conversation*, the tension is built rapidly and the film is framed as thrilling and threatening. Fear is elicited as the power of the hacking and surveillance technology is demonstrated to shatter Robert Dean's life. As the narrator indicates 'it's not paranoia, when they're really after you' (*Enemy of the State* trailer, 1998) and in this way the trailer plays up the sense of fear and horror in the power of this technology.
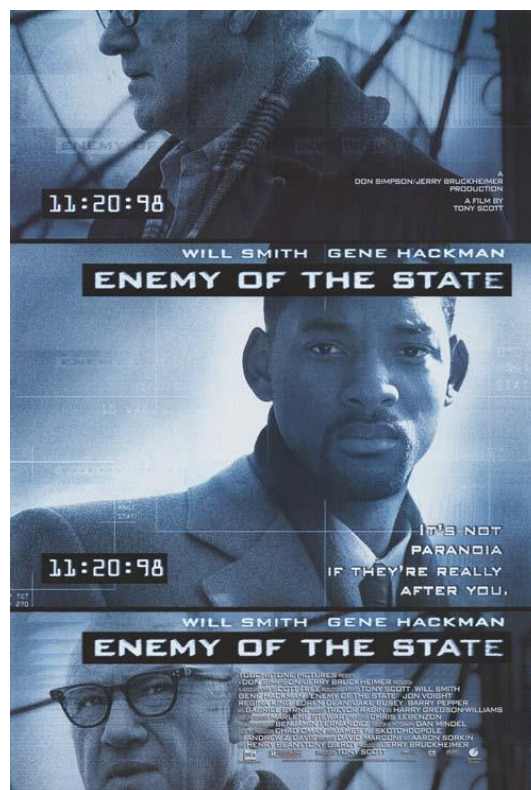
Figure 7 – *Enemy of the State* (Scott, 1998) promotional poster.

As Thomas Schatz indicates 'each genre seems to manifest a distinct visual and compositional identity' (Schatz, 1981, p.41) and in addition to this each individual genre film also exhibits its own distinct visual and aural character. Considering the film was produced in the 1990s at the height of the emergence of the hacker film, it is unsurprising that *Enemy of State* exhibits a very distinct visual identity of its own that simultaneously connects it to other hacker genre films whilst also establishing its individual style. Whilst it was produced when the hacker film genre had become more established as a form, I contend that the hacker film genre's focus on the contemporary period of production requires that the visual and compositional style needs to constantly evolve with the technology it depicts. There can be no singular visual style that all hacker genre films can adhere to as the visual and aural approach needs to be constantly updated to reflect the contemporary period of production and the look and feel of current technology to immerse the viewer in the technological world of the time-period. Whilst it is true that all hacker genre films share a number of common features, one of which is the foregrounding of hacking technology, the fast-paced development of this technology necessarily means that its visual style is constantly evolving. Although there are similarities, each hacker genre film nevertheless offers its own visual style. Thus, hacker genre films need to reflect this changing technological development on screen, utilising visuals and sounds to convey how this technology is utilised for the benefit of the viewer.

Given Gene Hackman's role as hacker figure in both *The Conversation* and *Enemy of the State* one can trace the development of the hacker character between the decades. In many respects, Hackman is playing the same character type in both films, a hacker who has positioned himself on the periphery of society to assume the role of observer, tracker and to trade the secrets his activities are able to uncover. Consequently, there is a sense that

Hackman's two characters align with Schatz's view that 'the static vision of the generic hero … helps to define the community and to animate its cultural conflicts' (Schatz, 1981, p.26). However, the most noticeable difference when comparing the two films is Harry Caul's passive stance of merely watching and listening to his targets compared to Brill's active intervention in events. Brill confronts Robert Dean, removing several of the tracking devices that have been planted on him; although he is shown to have removed himself from the world, he manages to step out from his cage-like jar. This is the major transition in the character archetype as the hacker emerges as a more dynamic figure that uses his or her skills to take action and affect the world around them rather than just observing it. Although the hacker figure archetype retains certain qualities over the twenty-four years between the release of the two films, the shift in the character exemplifies the shift in the technology; the technology of observation has evolved to allow the user to affect his or her environment, empowering the hacker to use a computer to actively cancel credit cards or plant illicit funds in a target's bank account. According to the *Enemy of the State* DVD commentary, this was a self-conscious attempt to capitalise on the film's ability to demonstrate these capabilities in the technology.

Whilst all hacker genre films foreground and fetishise hacking and surveillance technology, this technology constantly evolves over time, and thus the visual and aural depiction of this technology also develops over time, providing a familiar, yet different experience for the viewer. Therefore, in the same vein as *The Conversation*, *Enemy of the State* strives to emphasise the processes and inner-workings of the technology, alongside the hacker's techniques to follow their target. Throughout the film the camera directs the action through the perspective of technology, whether it is satellite images from above zooming into a target area, or smaller scale security camera images sweeping a room or a street, but the

extradiegetic camera continually mimics this perspective for the viewer. Like the earlier film, the impact of this perspective is to draw the viewer into the hacker's viewpoint, giving the audience an insight in the hacker's world and the processes he or she uses as part of their work. In a DVD featurette, 'The Making of *Enemy of the State*, the 'Tech Advisors' Steve Uhrig and Marty Kaiser comment on the fact that they suggested adding in more technical elements upon reading a draft version of the script; Steve Uhrig comments 'when I first read it, I though they can do a whole lot more with technology that they have' (*Enemy of the State* DVD Extra, 1999) and that he and Marty Kaiser 'made a million notes where electronics could make it more interesting' (*Enemy of the State* DVD Extra, 1999). Thus, the film strives to use technology for maximum effect, aiming to create a thrilling, and somewhat terrifying, experience for the viewer.
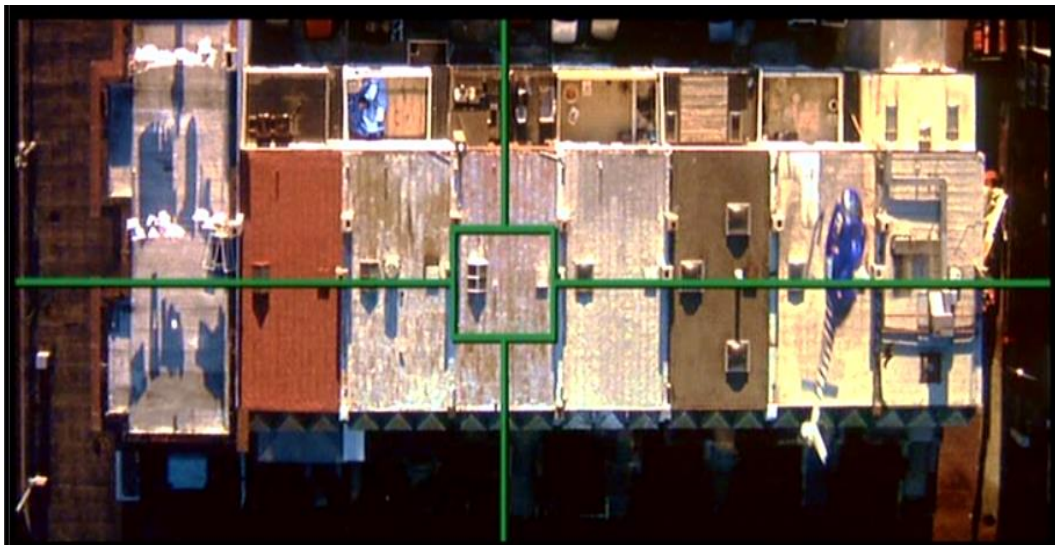
Figure 8 – The extradiegetic camera shows the satellite's perspective tracking a target. *Enemy of the State* (Scott, 1998), film grab.

Figure 9 – Robert Dean's interview with NSA agents is observed by agents at their office.

Enemy of the State (Scott, 1998), film grab.

Furthermore, the film plays with the audience's expectations of both surveillance technology

and surveillance experts. In many respects the act of surveillance is no longer covert; the

hacker figure often wants his or her target to know they are being watched, demonstrating

their capabilities by showing their target the video feed of surveillance cameras on their

television. This approach is employed by Robert Dean and Brill in their 'guerrilla' hacking

tactics against Thomas Reynolds, in which they want to make him aware, and clearly

demonstrate, that they are watching and manipulating his affairs in the same way he did to

Dean. In this film hacking is no longer about gaining information but rather about

demonstrating and exploiting one's power over the 'electronic frontier' (Sterling, 1992, p.4).

The early stages of the film demonstrate a shift from individual hackers to institutional

hacking, as Thomas Reynold's team of NSA agents undertake surveillance of private citizens.

The chase scenes between the NSA and Zavitz, as their target, demonstrate the capabilities and resources this technology provides to the NSA. The majority of these scenes follow Zavitz's movements through the feeds from satellites and surveillance cameras, creating the illusion that the viewer is assuming the role of the hacker. A similar series of scenes follow the NSA's surveillance and pursuit of Dean as he tries to elude them. Similarly, the film's ability to follow the targeting of people or objects through surveillance cameras emphasises this sense of a 'Big Brother' state. Another example of this visual style takes place during Dean's telephone call to Carla's friend, in which the film shows the spectator the audio signal and strives to represent the process by which the NSA agents have intercepted the signal, tapping into it so they can eavesdrop on this conversation. Building on the foundations of films like *The Conversation*, *Enemy of the State* continually aims to build up a picture of this ethereal electronic space to contextualise this site of conflict for the viewer; this preoccupation with visualising this space becomes more apparent with other films in the 1990s like *Hackers* (Softley, 1995) and *The Net* (Winkler, 1995), which I discuss in detail in Chapter Three and the Conclusion respectively.

Another aspect of the fetishisation of technology in *Enemy of the State* is its emphasis on the progression and development of hacking and surveillance technology. This becomes particularly apparent after the character of Brill physically enters the narrative; once he has been established as a former NSA expert he assumes a position of 'teacher' and informer, diegetically to Dean as the audience proxy within the narrative of the film and extradiegetically to the audience watching the film. The juxtaposition of Brill as an experienced hacker and surveillance expert with the relative naivety of Dean serves as a narrative justification for some of this fetishisation of technology in the film. Several scenes depict Brill instructing Dean in the capabilities of some of his hacker equipment, such as his

explanation of how they can use a laptop and modified cell phone to hack into Congressman Albert's calls. Such scenes of instruction serve to foreground and fetishise the technology and the processes of the hacker figure.

On a similar note, the film plays upon our expectations of bugging when Fake Brill shows Dean only one of the many bugs that have been planted on him to gain his trust. This plays on Dean's, and the audience's, assumption that a hacker would need to use only one tracking device to monitor his movements. This supposition is quickly proven to be false when the real Brill collects several bugs that have been planted on Dean. In each of these scenes, both Brill and Fake Brill respectively are depicted as pausing to show the bugging devices to the camera, and thus the audience. Although this is ostensibly to show Dean the bugs that have been planted on him, at the same time this also fetishises these devices in a manner reminiscent of the convention scenes in *The Conversation*. In showing this series of bugs to Dean, and interspersing these shots with shots of the NSA agents using the technology to monitor and track him, the film underscores the progression of the technology and the development of the supporting intelligence infrastructure to effectively utilise this technology. This is no longer a case of an individual hacker, such as Harry Caul, undertaking a small-scale operation but has progressed to become an extensive intelligence infrastructure. Once again, this foregrounding serves to teach both Dean as a character and the viewer watching the film. These devices are nevertheless bulky and less sleek in the eyes of a contemporary viewer watching the film in 2017, which again reiterates the limited shelf-life of *Enemy of the State* specifically, but also hacker genre films in general.

Figure 10 – Brill pauses to show the bugs to the camera. *Enemy of the State* (Scott, 1998),

film grab.

Like the titular conversation in *The Conversation*, a number of conversations between

different characters in *Enemy of the State* are at least partially viewed through the hacker's

technology. The film continually replicates the perspective of the hacker for the viewer to

influence the way in which we view characters and events, but also to fetishise the

technology itself; an example of this is when the extra diegetic camera overlays the

viewfinder of a camera over the image of Rachel and Dean as the NSA monitor their

meeting. The point of these scenes is not to just progress the narrative but to show us the

capabilities of the technology. Arguably any conversation we watch in a film is from the

standpoint of an eavesdropper, but the repeated fetishisation of technology in the hacker

genre film, and this sense of viewing events through the 'eyes' of technology makes the

viewer conscious of their eavesdropper role. This film strives to immerse us in the world of

surveillance by continually presenting the action through the lens of the hacking and

surveillance technology.

Figure 11 – Robert Dean and Rachel seen through the camera's viewfinder as the NSA agents monitor their conversation. *Enemy of the State* (Scott, 1998), film grab.

Furthermore, the sense of hacking being almost a form of 'art' is continued in *Enemy of the State* in the scene in which the NSA hackers plan their surveillance approach to record the conversation between Dean and Rachel in Mount Vernon Square. This scene stands as a visual and aural parallel to the opening scene of *The Conversation*, but the planning scene in which the viewer is privy to the hacker's discussion of the processes and procedures they plan to use to approach this surveillance allows us to understand the background of how the hacker works. Just as Caul needed to develop and implement a plan to capture the young couple's conversation, so does the NSA surveillance team need to map out and plan where their agents will be positioned with microphones and recording equipment to ensure they capture all of the conversation between Dean and Rachel. The subsequent scene depicting both Dean and Rachel's conversation, and the NSA's surveillance of them, thus allows the viewer to witness the execution of these plans and procedures. The visual allusions to *The Conversation* only serve to further foreground and fetishise the 'art' of hacking; in many

respects the latter film reproduces Caul's tactics from *The Conversation*, with 'snipers' and strategically placed agents on the ground who follow a young couple's conversation as they walk around a public space. In this way, the film demonstrates how the tactics of surveillance have continued to follow a similar format, only utilising more sophisticated equipment and technology to execute the surveillance of targets. However, in introducing and expanding institutional hacking and surveillance, there is also a sense of devaluing and diminishing the skill associated with hacking and surveillance. As these skills become more common, they naturally became less spectacular. Consequently, there is a need to offer something new to viewer, some new kind of experience or thrill in new hacker films.

Likewise, the mise-en-scène of the various hacker workspaces creates a certain visual style for the film. Brill's 'jar' is reminiscent of Harry Caul's workspace in *The Conversation*, designed for an individual or small team to work on small projects. In contrast, the NSA agents' base of operations is a state of the art, multi-tasking operation that includes a vast array of equipment, personnel and resources. Although a contemporary audience would readily accept this as natural, the change in the scale of hacking activities becomes more apparent when compared to *The Conversation*. This facility parallels the NORAD facility depicted in *WarGames* (Badham, 1983), as well as Plague's workspace in *Hackers*, both of which I will look at in more detail in Chapter Three.

Figure 12– Brill's hacker workspace. *Enemy of the State* (Scott, 1998), film grab.

Equally, *Enemy of the State* depicts the social isolation of several characters, particularly with regard to Dean and Brill as the central characters. Brill is shown to have accepted self-imposed exile after the death of his partner, Rachel Bank's father, striving to keep himself off the grid and remove himself from society. Nevertheless, it should be noted that a major difference between Harry Caul and Brill is the fact that that the latter is more resistant to becoming a machine-like character. Whilst Caul remains firmly detached from society, Brill is protective of Rachel and then reluctantly connects with Dean, imparting some of his technological and hacking expertise to Dean as his 'protégé' to help Dean reclaim his life. Nevertheless, procedures are central to Brill's life and work, such as the way in which he utilises a strict system for his contact with Rachel, with codes and signals on mailboxes and a designated drop-off point on the ferry for the information exchange. Like Caul he strives to mediate and control his interaction with others. Brill is shown to hide in small, enclosed spaces, retreating from the wider world to a self-imposed isolation where he avoids human contact. Furthermore, the character remains unseen for the first half of the film, maintaining

anonymity. The film frames his avoidance of surveillance when the NSA highlight that he conceals his face, and therefore his identity, by never looking up. Dean, on the other hand, always retains his connection to his humanity, constantly striving to return to his wife and son. Brill's emotional barriers remain largely effective, but the implication is that the knowing, 'free' hacker figure must remain anonymous and unknown. Thus, the film advocates the compromise of acknowledging and accepting the loss of some civil liberties in the name of maintaining a connection to the rest of society.

Brill's paranoia, and by extension that of Harry Caul in *The Conversation*, is shown to be justified when the film shows the extensive intelligence and analytical capabilities of the NSA to the spectator. Brill's caution is shown to be warranted, and to pay off, when the NSA agents are unable to identify him from the footage of his meeting with Dean on the rooftop because he never looked up and so never exposed his face to the satellite feed. In contrast, Dean's naivety proves to endanger both characters when the NSA are able to track the location in which he made a telephone call to Carla's friend and find security camera footage of Brill to visually identify him in conjunction with databases containing records on US citizens. The scenes of the NSA operations, and the technology they wield, clearly projects an image of the USA as a global superpower, almost invulnerable to attack due to the extensive surveillance and hacking networking at its disposal. It is ironic, considering *Enemy of the State* was released in 1998, only a few short years before the 9/11 terrorist attacks, and the impact of these incidents are felt acutely in the representation of the US as a global power in film and television productions, which I discuss in greater depth in Chapter Four.

Like Harry Caul, Brill is depicted as creating barriers between himself and the rest of humanity. Brill's warehouse that he dubs 'the jar' serves as a metaphorical 'cage' against the rest of the world. In visuals that allude to Harry's Caul's workspace in *The Conversation*, the viewer is shown Brill's hidden workspace. Although he explains that the copper wire is used to block radio signals, the visual connotations of this workspace are clear; Brill's 'jar', like Harry Caul's workspace, is a prison cell that simultaneously protects and isolates him from the rest of the world. The destruction of this workspace, although largely employed to emphasise the action of the film, also serves to liberate Brill, as a hacker, from this confined workspace. Procedures also serve as a barrier for Brill, as well as a measure of control for his interactions with other people. However, given the unusual circumstances faced by Robert Dean, Brill is also forced to develop unconventional thinking with these procedures, which leads to him becoming a more dynamic hacker figure. Given the developments in the technology, the hacker becomes much more mobile, being able to use portable devices for their activities and assume a more dynamic stance in the conflict for control over the electronic space.

This sense of isolation becomes even more apparent when comparing Brill and Robert Dean as characters and how they are shown to live their respective lives. Whilst Brill has effectively retreated from the world some time before we first encounter him in the film, Dean is shown to be living a vibrant and active life, enjoying his family life, work life and wider social life. The film takes great pains in establishing the breadth and depth of Dean's connections with the rest of the world before he becomes the titular 'enemy of the state', which makes the depiction of his disconnection from this life all the more poignant. In being given a flavour of Dean's previous life, the audience establishes a more visceral connection with him so that we are made to feel his loss almost as keenly as he does. Equally, in

presenting Dean as an 'everyman' figure, the film plays on the fears and concerns of the viewer, suggesting that anyone could become the target of such a conspiracy. The initial presentation of hacking comes from the NSA's disruptive hacking of Dean, beginning with cancelling his credit cards and placing him under surveillance, to framing him for murder. Given the intertextual allusions to *The Net*, *Enemy of the State* plays on the idea of increased reliance on technology to manage our interactions with the rest of the world, underlining how our personal security is increasingly at risk.

Whilst the invasion of the privacy of the young couple in *The Conversation* is presented as an operation requiring planning and timing, the focus on satellites and their ability to track down targets in mere moments means that the public spaces feel much smaller in *Enemy of the State*. In contrast to *The Conversation*, *Enemy of the State* rapidly moves between different physical spaces, as the NSA track down and close in on their targets. When both Zavitz and Dean are being targeted, the NSA agents are in close pursuit, with a strong build-up of tension and a real sense of threat. Speed and momentum are emphasised throughout these scenes, generating a visceral sense of thrill for the viewer.

One of the central moral dilemmas of the film is the debate over the need for, and validity of, the proposed Telecommunications Security and Privacy Act. In this way, the film illustrates Barry Keith Grant's point that 'whatever their politics, genre movies are intimately imbricated within larger cultural discourses as well as political ones' (Grant, 2007, p.6); the debate over the rights of the individual against the protection of the state permeates throughout the film. On an extradiegetic level the abuse of hacking technology by Thomas Reynolds engages with this debate. As Schatz proposes 'if genres develop and survive

because they repeatedly flesh out and re-examine cultural conflicts, then we must consider the possibility that genres function as much to challenge and criticize as to reinforce the values that inform them' (Schatz, 1981, p.35). In this case the hacker film demonstrates the dangers of our own reality becoming an Orwellian 'Big Brother' state, in which figures like Reynolds are able to infringe upon the individual's civil liberties in the name of maintaining the peace. Therefore, whilst there is a definite sense of resolution at the end of the film in both Dean and Brill reclaiming their former lives, the film nonetheless offers an ambiguous ending as the debate over the proposed bill is implied to continue, alongside the visually ominous shots zooming out to show one of many satellites in orbit to indicate the looming threat of the potential hackers and surveillance experts who could infringe on everyone's privacy.

In a similar fashion to *The Conversation*, *Enemy of the State* uses the extradiegetic camera to penetrate the interior space of specific characters. This is particularly true in the case of Dean, where we follow the joint perspectives of Dean as the target of surveillance, and the NSA agents who are undertaking surveillance of him. The technology is shown to have become much more invasive as the NSA agents' infiltration of Dean's personal space is depicted on screen.

Robert Dean's previous relations with Rachel Banks serves as a haunting presence of the past as their records are used to piece together the details of their relationship. The hints of their previous affair permeate throughout the film, brought back through photographs, recordings and computer files to haunt Dean's relationship with his wife. The NSA agents' ability to use Dean's telephone and banking records to identify and track his relationship with Rachel

demonstrates the fact that the data held in computer files chronicles our past and that these records can resurface to haunt our present. Similarly, the NSA create tension between Dean and Carla by sending her photographs of his meeting with Rachel, exploiting the vulnerability in their relationship to isolate Dean and make him an easier target to track and capture.

In indoctrinating Robert Dean into the art of hacker 'guerrilla warfare' Brill takes the final step from passive observer to dynamic influencer. The hacker becomes a powerful figure, using his skills to affect the world around him. Brill and Dean affect the real world to achieve their ends, capturing video evidence to blackmail the senator and manipulate Reynolds. This ultimately proves successful as Robert is able to reclaim his life and Brill is able to slip away to a beachside retirement. The shift in the role of the hacker to that of an active manipulator also results in a much faster and dynamic pace. There is a continual sense of immediacy, of the need to move quickly. This does lead to a more action-oriented feel for the film, but also shows a trend in the development of the genre; the hacker film has evolved to incorporate more action and adventure than a slow-paced and thorough investigation. In effect, 'once the story is repeated and refined into a formula, its basis in experience gradually gives way to its own internal narrative logic ... as the genre develop[s] it gradually [takes] on its own reality' (Schatz, 1981, p.36). Thus, as it was produced much further along in terms of generic development, *Enemy of the State* begins to exaggerate the speed and accuracy of the surveillance equipment and hacking capabilities for dramatic effect. This connects the film with the wider developments in the depiction of technology in the 1990s, which I will also explore in greater detail in Chapter Three.

Considering Schatz's notion of genres of order and integration, *Enemy of the State* also falls in the middle of the spectrum. On the one hand, there is even more of a sense of a contested space in terms of the technological warfare between the NSA agents as representatives of the state and Brill and Dean as individuals. Nonetheless, on the other hand, both Brill and Dean are depicted to be striving to (re)integrate into the wider community; Dean's narrative struggle is to reclaim his family life with his wife and child, which is at least partially threatened by his former affair with Rachel Banks, whilst Brill is implied to reconnect with humanity by retiring to a sunny beach in an undisclosed location. Rather than accepting disempowerment at the hands of the Government surveillance system, Brill achieves liberation and escapes the confines of this system. The depiction of his self-imposed exile therefore shifts to a more positive 'escape' from the surveillance society.

The sense of interaction between hacker and 'hackee' is also shown to have progressed significantly due to the film's approach of showing the action from the dual perspective of both Robert and the NSA agents. Throughout the film we see events from both Robert's and the NSA's viewpoint, interchanging between the two in most of the scenes. As a result, there is a sense of a 'battle' through the technology; Dean, largely with Brill's support, also becomes a 'hacker'. As a result, there is almost a 'dialogue' between the two parties. This is a major shift from *The Conversation* in which the young couple remain largely anonymous figures, haunting Caul's story as photographs and disconnected voices on a tape rather than active participants in the narrative.

It should be noted that the age of the film does become apparent when the technology from the 1990s is shown on screen. One of the most notable points is the user interface on Zavitz's

computer, as well as the video tape Robert shows to Pintero. The presence of a VHS video tape forces the modern viewer to acknowledge the rapid technological advancements that have taken place in only a few decades; a video recording would now be stored on a portable device, such as mobile phone or flash drive rather than a video tape. Another instance is Zavitz's computer screen as he examines the footage of the Hamersley murder. Although the software and interface he uses in these scenes would have been standard in 1998, the image now appears dated.
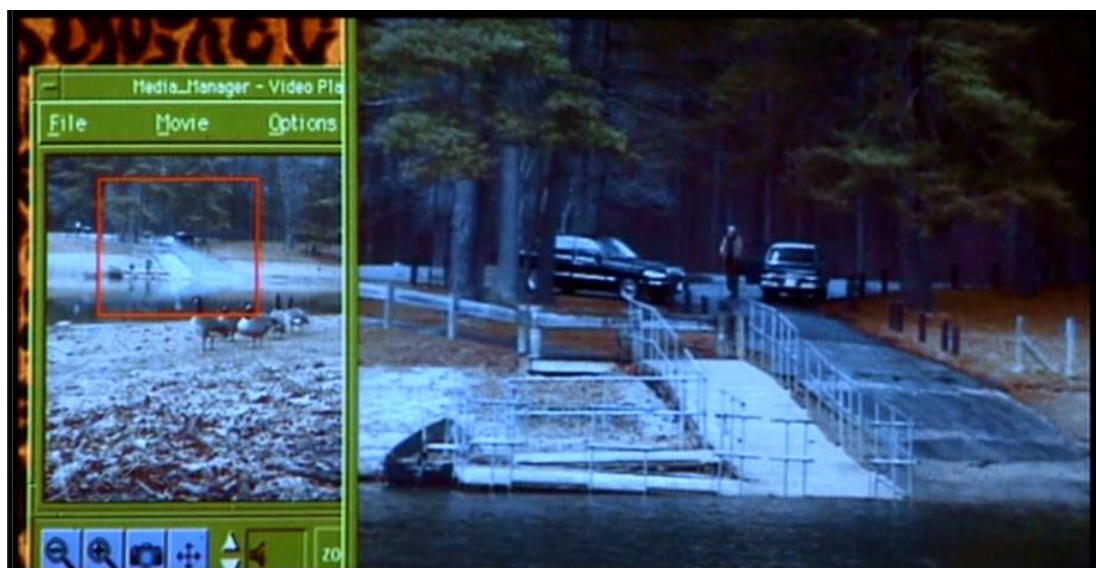
Figure 13 – PC interface on Zavitz's computer shows the film's age. *Enemy of the State* (Scott, 1998), film grab.

Technology has progressed significantly over the last few decades to the point that we now all own these gadgets, and the appearance of older technology does become noticeable in older films. In the same way that *The Conversation* appears dated compared to *Enemy of the State*, so does *Enemy of the State* now appear dated when compared to more contemporary films like *The Girl with the Dragon Tattoo*. This 'limited shelf life' is at the core of the hacking genre; as technology progresses to look sleeker and more sophisticated, the earlier

models look and feel more and more dated. As a result, in many respects, this chapter has looked at 'period' pieces, which raises the question as to whether the hacker film becomes a 'period' piece when its shelf life 'expires'. This is something I will look at in more detail when I discuss the recent adaptation of *Tinker Tailor Soldier Spy* (2011). More relevant to this discussion of *The Conversation* and *Enemy of the State* is this sense of a limited 'shelf life' of the hacker genre film; like the technology at the heart of the films, each stands as a testimony of a specific time period, which looks more dated and becomes less relevant to the audience as time passes and technology progresses. Nevertheless, in terms of production and commerciality, there will always be space for new hacker films as technology advances and new gadgets are created that can fetishised by film makers on screen.

Figure 14 – the technology in the film appears dated by today's standards. *The Conversation* (Coppola, 1974), film grab.

Returning to the connections with the horror and thriller genres, the role of women in each of these films is largely that of victims or 'damsels in distress'. In *The Conversation*, female characters are portrayed to be the objects of surveillance. Caul's 'relationship' to the young woman is mediated through his recording of her conversation and he becomes fixated on the potential threat to her life caused by his action. His repeated replayings of the recordings focus on her voice, and his dream 'confession' scene allows him to interact with her. Equally, *Enemy of the State* presents Rachel Banks as a victim of institutional surveillance and hacking. Whilst this technology poses a threat to all of humanity, the films pay particular attention to the danger posed to women and equate the technology with Laura Mulvey's male 'gaze' (Mulvey, 1999, p.810). Hacking technology is a male tool of voyeurism and the invasion of private space.

2.4 Conclusion

A comparison of these two films clearly demonstrates that 'genre is a process rather than a fact, and one in which different perspectives, needs and interests can and do deliver widely varying outcomes. Genres are not born they are made' (Langford, 2005, p.5). Each film connects to the features of my proposed hacker film genre, yet there are subtle differences between them in terms of how they represent the features of the genre that demonstrates Gary R. Bortolotti and Linda Hutcheon's notion of Darwinian generic evolution and progression over time. As a precursor to the main corpus of the hacker genre, *The Conversation* demonstrates the generic beginnings of the hacker genre before it emerges in the 1980s, before expanding exponentially in the 1990s. In many respects, *Enemy of the State* sheds light on the dated nature of *The Conversation* as a film by fetishising its own technology as state of

the art. However, in doing so, the film also draws attention to its own limited shelf-life. The technology of 1998 now looks very dated to the modern viewer.

Both films have their own visual and aural styles to depict their technology, replicating the effects of the equipment from their respective periods. Equally, there is a sense of generic character development over time, which is particularly evident in the transition of the hacker figure from Caul's passive observation to Brill's dynamic intervention in the events he is witnessing. Some of the developments that emerged during the intervening years between the two films will be explored further in Chapter Three, which will consider the generic developments in hacker and surveillance films in the 1980s and 1990s.

Nevertheless, despite the clear steps of generic development, the focus on the hacker figure remains central to both hacker genre film, and both remain preoccupied with how Caul and Brill engage with this equipment, and how they use their technology to simultaneously connect and disconnect from the rest of the world around them. For the hacker, technology offers a tool to control their interactions with others, but as more people gain access to the position of power, it incites a greater struggle for control over the virtual space of this technology, and, as I will go on to explore in upcoming chapters, this conflict continues to grow as the hacker genre develops.

3) Chapter Two: Tinkering with the Details – the Spy as Hacker in Adaptations of *Tinker Tailor Soldier Spy*

3.1 Introduction

As I discuss in Chapter One, the 1970s wiretapping and surveillance tradition depicted in *The Conversation* provides significant insights into the modern world of computer hacking, allowing us to see how the technology and techniques that are used in the present day have emerged and developed over time. In the same way, I would argue that spy fiction also offers substantial insights into both the processes and the methodologies utilised by the modern hacker, demonstrating the way in which computer and surveillance technology has been developed around previously existing working practices. The adaptations of *Tinker Tailor Soldier Spy* particularly demonstrate the connections between espionage and hacking. The BBC television series produced in 1979 clearly aligns with key features of my proposed hacker genre, depicting the spy and his practices from a contemporary 1970s perspective. However, this television adaptation becomes even more interesting when viewed in conjunction with the 2011 film adaptation; in contrast to the television series, the film strives to recreate the past to represent a Cold War espionage narrative, incorporating elements of the heritage tradition in an attempt to immerse the viewer in the 1970s setting. Whilst the series follows the usual trend of hacker fiction, looking outward to the present and ahead towards the future, the film instead offers a retrospective experience that look back to the 1970s and uses it as a lens to view the present day. Furthermore, as this film was produced in 2011, the 9/11 terrorist attacks and ensuing military conflicts loom in the background of this

later adaptation. These diverse approaches to the same text afford us glimpses in the development of the spy film in line with my proposed hacker film genre.

The spy operates in the realm of information and secrets, which directly connects to Bruce Sterling's notion of the 'electronic frontier' (Sterling, 1992, p.1) Spies infiltrate other organisations to gain access to information, to sabotage operations and strive to gain power over rival organisations. Although the Bond film series is undoubtedly a more prominent example of spy fiction in popular culture, the narrative of *Tinker Tailor Soldier Spy* is more closely aligned with the generic traits of my proposed hacker genre. Furthermore, whilst *The Conversation* was released in the wake of the Watergate scandal, *Tinker Tailor Soldier Spy* (1979) was released during the height of the Cold War. Just as the Watergate scandal loomed over the initial reception of *The Conversation*, so does the Cold War loom in the background of the writing and production of *Tinker Tailor Soldier Spy*.

3.2 *Tinker Tailor Soldier Spy* (Irvin, 1979)

Produced in 1979, the television series version of *Tinker Tailor Soldier Spy* conforms to many the conventions I have identified as being part of my proposed hacker film genre, serving as a spiritual precursor to hacker genre films. Although this adaptation takes the form of a television series rather than a film, the fact that this is a miniseries of a fixed narrative offers a similar 'filmic' experience. Whilst the Bond films offer a fast paced and action-oriented experience for the viewer, *Tinker Tailor Soldier Spy* indulges in a far more intricate plot, offering a slower paced narrative of step by step investigation and analysis that gradually unfolds in front of our eyes. Given the pace of le Carré's novel, as well as the facets

of the police-procedural tradition in George Smiley's investigation, it is unsurprising that the first screen adaptation of *Tinker Tailor* took the form of a television series. The step by step process used by Smiley in his investigation readily lends itself to the episodic format of a television series; each episode focuses on a specific thread of Smiley's systematic mapping out of background information and leads, whether it is interviewing Connie Sachs or Jerry Westerby, or delving into flashbacks like Ricki Tarr's relationship with Irina or even Smiley's own recollections of the beginnings of Operation Witchcraft. By dividing the narrative into these segments, the television series offers the audience the opportunity to join Smiley on this journey, piecing together the various strands of evidence. This episodic structure also clearly identifies the different strands Smiley pursues, outlining the systematic discovery and investigation of different leads. In this way, Tarr's testimony initially leads Smiley to interview Connie Sachs about Polyakov and to send Guillam back into the Circus to retrieve the record of incoming calls on the date specified by Tarr to corroborate his testimony. This effectively summarises the format of his investigation, to first gain information and then conduct an investigation of other leads to confirm it before taking further action and following the next investigative thread. The Internet Movie Database website classifies the genre of the series as 'drama' and 'thriller', again identifying this focus on thrill and excitement in a hacker genre television series. A promotional image for the series positions Smiley firmly at the centre of a 'game of chess', manipulating pieces on the periphery of the board, which reflects his position on the 'outside' of the Circus espionage circle.
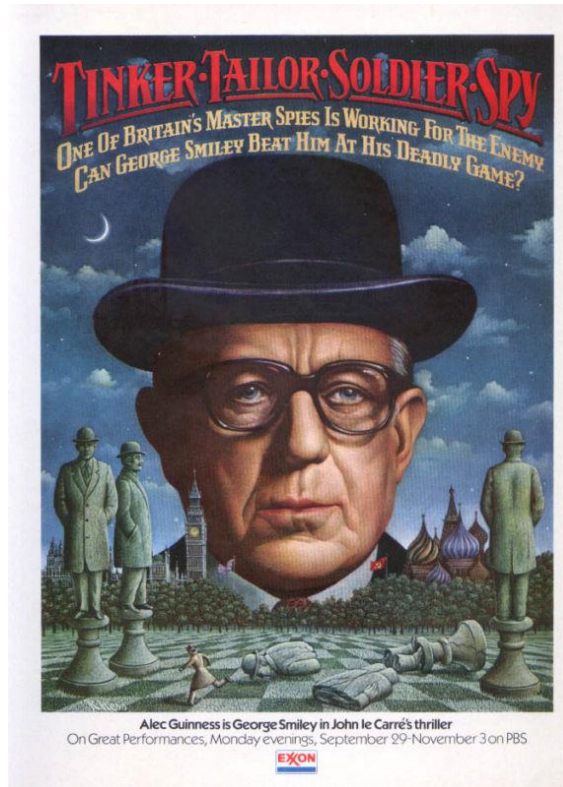
Figure 15 – Screen grab from *Tinker Tailor Soldier Spy* (Irvin, 1979) promotion.

Whilst the majority of hacker genre films and television series foreground and fetishise technology to a far greater extent, *Tinker Tailor Soldier Spy* instead focuses more on the processes and methodologies of the spy. At the core of the narrative of is the idea of espionage being an 'art' form for the spy. In his discussion of spy fiction Robert Lance Snyder comments on how it is 'characterised by a labyrinthe plot wherein the protagonist struggles to decipher some central enigma while authorial concealment and protraction defer its resolution' (Snyder, 2011, p.7). Rather than being focused on the outcome of the investigation, *Tinker Tailor* continually offers the audience glimpses into the realities of this kind of work as 'Smiley … questions and analyses the story's other narrators' (Goldstein, 1995, p.221). In a stark contrast to the Bond film series, the practical and minute details are central to the spy's work in *Tinker Tailor* and the series strives to replicate this experience for

the audience; the spies in this world cannot rely on gadgets and gizmos to solve their problems, but rather must depend on their wits, instincts and training. Smiley's methodology instead takes the form of interviews and intelligence gathering to piece together the narrative of the Gerald mole within the Circus. The series (like le Carré's source text) continually reiterates that 'well organised institutions, not tough, violent men, win supremacy' (Goldstein, 1995, p.221), advocating the need for discretion and discipline against such a blurred and insidious adversary. Whilst spy characters like Bond would operate in the open, actively challenging his opponent, the *Tinker Tailor* series makes it clear that Smiley's strategy of operating within the shadows is necessary to overcome an unseen and uncertain enemy. Such an approach is also reflected in the post 9-11 television series that I will discuss in further detail in Chapter Four, as some of these hacker figures need to operate covertly in the shadows, rather than out in the open. Therefore, Smiley is effectively 'hacking' back into the world of espionage, using agents like Peter Guillam to help facilitate his access to the Circus' data.

In an interview with the producer of the television series, Jonathan Powell, he highlighted his view that 'We needed to believe that we were seeing it through Smiley's eyes as he put together the clues and drew nearer to his arch enemy, the man who had cuckolded him – Bill Haydon' (Powell, 2013)[9]. The series was produced to replicate this on screen and aligns the viewer's perspective with Smiley to engross us in the investigation and this process. Like the modern computer hacker, Smiley obtains and analyses data to make his determination, but the key element here is the analysis undertaken by Smiley as a hacker figure.

Following the model I have identified for other works of hacker fiction, the television series draws on the contemporary reality of production. As a result, there is a very natural feel to the sets, costumes and other elements of mise-en-scène in the series as they have drawn on the reality of the 1970s. In the same way that a comparison of *The Conversation* with the subsequent *Enemy of the State* sheds new light on the earlier film, an examination of the 2011 film version of *Tinker Tailor* offers an alternative vantage point on the 1979 television series. As Sam Jordison highlights in an article on the film, 'where the film's 70s mirk seems contrived, on the TV series the muted colours and awful clothes give it a documentary realness' (Jordison, 2012) and this sense of reality becomes more prominent due to the artificial recreation of the period within the 2011 film. When I questioned Jonathan Powell about this observation of 'documentary realness' he highlighted that during production such realism was

> very important. The book is about betrayal – personal betrayal, and betrayal of class, of country and of Empire. We felt that it was vital to express Smiley's (or le Carré's) England because it is a story about loyalty to country. Thus, the locations in the TV series are almost all those of the book, (with some exceptions – Ricki Tarr is in Hong Kong in the novel: Portugal in the TV series for budgetary reasons), but many of the locations are the same. The exterior of the circus is Cambridge Circus: Smiley's home was filmed in the same street in the TV series as is mentioned in the book: the hotel where they base themselves is filmed in Paddington: Connie Sachs house is in Oxford and was filmed in Oxford and the countryside – Thursgood's are all designed to reflect the qualities of the novel. We went to great trouble to capture the atmosphere and the landscape of the novel in order to reflect Smiley's world – even to the extent of filming in Piccadilly Arcade (Powell, 2013).

Hence, it can also be argued that the television series also foregrounds and fetishises the contemporary reality of the 1970s period of production, emphasising the sense of reality and the notion that these events could be taking place around the viewer. By extension, this 'natural' approach to production also serves to fetishise the scenery and locations of 1970s Britain, such as Cambridge Circus, Connie Sachs' house in Oxford and the British countryside in the scenes with Prideaux. Although the series could not be described as a

heritage film, it nonetheless shares the indulgence in and celebration of national cultural identity that I discuss later in this chapter with regard to the 2011 film adaptation.

The opening episode serves to initiate the viewer into the methodology of a 'mole hunt', creating a seemingly 'interactive' experience for the viewer. As Control explains his 'Tinker Tailor' plan to expose the mole to Jim Prideaux, each of the suspected moles is formally introduced to the viewer by way of a photograph, creating a sense of suspicion in the viewer but also starting him or her on the same lengthy journey that Smiley himself will undertake over the course of the series. This sequence presents the background facts to the viewer in the same way the investigator (in this case Jim Prideaux) receives the information, which also generates a false sense of an interactive experience for the viewer.

Figure 16 – Control's 'Tinker Tailor' mapping on a wall. *Tinker Tailor Soldier Spy* (Irvin, 1979), film grab.

In many respects Jim Prideaux and Ricki Tarr's flashback scenes in the opening two episodes give the viewer a glimpse into the spy as hacker in a foreign country; these scenes build on the representation of the spy as hacker, offering an insight into the spy's process of infiltration and acting undercover. Tarr's scenes in particular, due to his recounting of his own narrative to Smiley, offers the viewer a breakdown of the approach a field agent takes to his work, showing us the construction of a false identity, the surveillance of a target and the manipulation and seduction of Irina to attempt to gain a source of intelligence. In showing us these scenes at length, the series immerses us in Tarr's fieldwork experience and parallels similar scenes depicted in the Bond films. This episode also demonstrates Linda Hutcheon's 'showing' mode (Hutcheon with O'Flynn, 2013, p.50) by allowing us to view Tarr's experiences as 'primary' evidence, continuing this notion of a seemingly 'interactive' experience.

Furthermore, throughout the series the action is presented within small, enclosed spaces. Rather than presenting the action in grandiose, artificially recreated sets, the series positions the character in realistic environments, such as offices, meeting rooms, living rooms and even bedrooms, constantly positioning the action in familiar locations to the audience. In many respects, these scenes could be taking place in the viewer's own reality. This generates an atmosphere that is simultaneously intimate and claustrophobic, which ties in with Jordison's notion of the television series presenting 'documentary' realness. One example is the small meeting room in which Alleline's new regime meets at the Circus, which is a small, unremarkable room that could be found in any office building. Rather than viewing extensive chase sequences in exotic locations or lavish public meetings, the action is largely presented in the form of small meetings or one to one interviews in small rooms. The result of this is a striking feeling of intimacy and clandestineness, in which the audience's perspective

through the extradiegetic camera feels intrusive and voyeuristic - effectively 'spying' on the spies as they hold their secret meetings. Just as the camera in *The Conversation* offers the viewer a hacker perspective on Harry Caul, so does the camera in *Tinker Tailor Soldier Spy* offer us a similar intrusive perspective on Smiley's investigation.

Figure 17 – The meeting room at the Circus is small and realistic. *Tinker Tailor Soldier Spy* (Irvin, 1979), film grab.

Similarly, Guillam demonstrates the spy's position as a physical precursor to the virtual hacker using a computer in that he must physically enter the Circus building to access paper records, firstly to try to obtain details of the call that Ricki Tarr alleges to have made to the Circus relating to Irina's testimony, and later when he retrieves a file on Operation Testify. In the first instance, he is shown using deception and misdirection to conceal his illicit activities, traversing the different floors of the Circus in the same manner that a computer hacker would traverse a file structure in a computer system. In the way, Guillam serves as a 'hacking'

instrument for Smiley to access this information, allowing him to penetrate the filing system of the Circus and infiltrate its secrets. Equally, the diversionary tactics employed by Guillam to retrieve the Operation Testify file also shows the viewer some of the practices of the spy. The telephone ploy, coordinated with Mendel, demonstrates the art of deceit and sleight of hand, which serves as a forebear to the technical deception of the computer hacker; just as the computer hacker works to virtually gain access to files, either by downloading or copying files from remote computer, Guillam physically accesses the file structure, stealing the file and replacing it with a decoy. The process is the same, emphasising how the virtual world of computing replicates the physical world.

Figure 18 – Guillam has to physically 'hack' into the filing system of the Circus. *Tinker Tailor Soldier Spy* (Irvin, 1979), film grab.

Whilst the opportunities to fetishise technology on a diegetic level within this television series are limited, the hacker perspective afforded by the extradiegetic camera is nevertheless foregrounded and fetishised through the series, allowing the viewer to penetrate the secret spaces inhabited by the spy. Although surveillance technology does not assume a continual

central focus in the television series, the final episode in the safe house does foreground and fetishise the recording equipment that Smiley uses to gather conclusive proof of the identity of the mole. This limited use of the technology makes its appearance more profound, whilst also fitting in neatly with Smiley's step by step approach to gathering information for his investigation; after piecing together the different narrative strands to determine the best way to flush out the mole, the technology is used as part of Smiley's trap to catch the mole.

The television series makes particular use of the flashback as a device, taking the opportunity to show the viewer some of the scenes that le Carré's novel merely recounts in dialogue. This is particularly evident in the presence of Control at the heart of the narrative, starting the mole hunt process in flashbacks that Smiley continues in the narrative's present day. In incorporating flashbacks into the narrative, the viewer becomes more drawn into both the narrative and Smiley's investigation, following the trail from 'first hand' experience by actually viewing events rather than having them recounted in dialogue. In addition, these flashbacks are often examples of Smiley drawing on the memories of the people he is interviewing; here, human memory serves as an ethereal source of information that Smiley needs to access, following the right leads and using the right questions to penetrate the interior space of his subjects and access the information they have.

What is more, like other hacker figures I have identified in the course of my study, Smiley adopts a detached, machine-like approach to his work, striving to remain unemotional and objective as he investigates the possibility of a mole at the heart of the Circus; Alec Guinness's portrayal of Smiley maintains a professional and detached air throughout the series, calculating how the pieces of the puzzle all fit together. However, just as Harry Caul is

shown to be emotionally vulnerable in *The Conversation*, Smiley's attempts to disconnect himself from his emotions for the sake of professional objectivity are hindered by his failed relationship with his wife Ann. On a number of occasions, other characters give '[their] love to Ann' in an attempting to manipulate Smiley and his reactions to different situations. Both Haydon and Smiley comment on how this manipulation worked to misdirect Smiley, reinforcing the notion of the spy-hacker needing to maintain emotional objectivity to monitor and understand their targets. In a similar fashion to the other hacker figures I have been looking at, Smiley is depicted as isolating himself from the rest of humanity. In the opening episode Smiley tries to avoid both Guillam and Roddy Martindale when he sees them on the street. Although the character later justifies this as his attempt at 'forgetting' the past and embracing his quiet retirement, later scenes in the series imply that his self-imposed isolation stems from the betrayals he suffered at the hand of both his estranged wife and his former colleagues at the Circus. Like Harry Caul and Brill, Smiley is depicted as a character who assumes that people are untrustworthy and seeks confirmation that they can be trusted before he will put his faith in them. For this reason, he also acts at the periphery of the action, using Guillam as his agent interact with people in the open whilst he remains secluded in the shadows. Smiley's use of barriers continually comes to the fore as he is continually presented in small, enclosed spaces, and acts from the shadows, rather than directly tackling his opponents.

Drawing on the parallels between the US and USSR as Cold War superpowers, the television series and its sequel series underlines the parallels between Smiley and his nemesis, Karla. Moreover, the television series, alongside its sequel series *Smiley's People*, underlines the similarities between the characters of Smiley and Karla that lead to the two forming near mirror-images of one another, which develops Smiley's role as a cold, detached figure in the

manner in which he forces Karla to defect to the West. In the same way that Karla manipulated Smiley through his failed relationship with Ann, Smiley exploits Karla's humanity to subdue him. Emotional attachments are implied to be weaknesses for the spy, inhibiting his ability to effectively 'play the game'. Just as the journey of *Tinker Tailor* required Smiley to emotionally detach himself from the people involved to achieve his objective, the defeat of Karla requires Smiley to become cold and ruthless to manipulate his enemy by threatening the safety of Karla's daughter.

Connie Sachs' role as a female hacker figure also comes to the fore in the television series, far more so than in the 2011 film adaptation. Whilst Smiley meets with her in retirement, Beryl Reid's portrayal demonstrates her own machine-like qualities and underscores her investigative and analytical skills that rival Smiley's; she is depicted as being almost a living computer, storing, analysing and interpreting information presented to her. Smiley uses her in the same manner that one would use a computer encyclopaedia, entering search criteria which results in information being given on a particular subject. Overall, Connie presents a strong female presence in the series, offering her vast knowledge of intelligence, encyclopaedic ability to recall data and analytical skills that provide significant leads to Smiley in both *Tinker Tailor Soldier Spy* and the sequel series *Smiley's People*. Whilst she remains a supporting figure, she nevertheless represents as a step forward from the female characters serving as victims in The *Conversation* (Coppola, 1979). Her recounting of listening to recordings of Polyakov also brings the technology she used to the fore, reiterating her active role in Circus operations.

The use of small, enclosed spaces for most of the narrative also furthers this notion of physically isolating the hacker figure from the rest of the world. Like the other aspects of production, this use of small spaces emphasises the sense of reality, but also conveys the notion of the spy operating almost in a parallel reality from the rest of the world. In holding government secrets and intelligence, the spy character is afforded a position of power and influence but also forcibly disconnected from the rest of humanity. Although the spy may at least partially choose to maintain a distance from other people, the fact that his or her work requires a degree of secrecy necessitates that they operate on the fringe of society. This becomes clear in various scenes, such as Smiley's interviews with Prideaux in a car, not only avoiding meeting in a public place but actually engaging in a clandestine meeting to attempt to conceal Smiley's investigation from potential prying eyes. Similarly, the series incorporates several scenes between Smiley and Guillam (and by extension the viewer) to review the testimony of each source and consider how the information they have provided contributes to the bigger picture. Given the intimate nature of these conversations, which follow the format of taking place in small, enclosed spaces, there is a sense of the viewer 'spying' on the spies, and thus being privy to the intricate detail and thought process of Smiley's investigation. Smiley's position as an outsider looking in also serves to include the viewer, as we share in Smiley's experience of gathering details of events after his imposed retirement from the Circus.

Figure 19 – Smiley interviews Prideaux in the enclosed space of his car. *Tinker Tailor Soldier Spy* (Irvin, 1979), film grab.

A number of the characters interviewed by Smiley as part of his investigation are former spies who have retired from active service, yet even as former spy figures they still remain largely isolated from the rest of humanity. One example is Connie Sachs, who is shown to have a relatively lonely existence in a small house, just as Jim Prideaux lives a solitary existence in his caravan. Thus, when viewed in conjunction with the depiction of Smiley's own retirement, one of the principal effects of working as a spy would seem to be an intense sense of paranoia and sociophobia; living in the world of spies and being aware of their capabilities seems to leave these people unable to healthily engage with the rest of society, always remaining on the fringes of society and distrustful of others learning their secrets.

Returning to this point on the isolation of the hacker figure is the series' depiction of the lonely lifestyles of retired spies and the difficulty they experience in acclimatizing to

'normal' life. This continues with the short interview scene between Smiley and Connie. However, whilst some of the former spy characters are depicted as striving to become a part of the real world, Connie voices her desire to escape the 'real world' in favour of returning to her secluded position within the Circus as a detached observer of human behaviour and activity. There seems to a be an element of elective detachment from the world and a sense of solidarity between spies within their 'parallel reality' of espionage; in this world, the spy finds kindred spirits and thus a sense of belonging and community, which is torn away from them once they leave the service.

In addition, the fact that Smiley is retired, and thus stands outside of the Circus, allows him to actively spy on the other spies. Lacon turns to Smiley as an 'outsider', who despite Control's suspicions of him is exonerated by virtue of his imposed retirement, to make discreet enquiries. This position of outsider allows Smiley to operate without interference from the Circus and his past connections allow him to draw on other 'outsiders' to draw upon their insights and information. The position of outsider also affords Smiley a relatively objective viewpoint of the people and sequence of events he is investigating. Presenting Smiley as an outsider also allows the viewer to connect with his perspective and generate a deep connection with him as a character. Just as we share Harry Caul's tinkering with the recording of the young couple's conversation to learn more about their situation, we equally undertake Smiley's investigation into the mole within the Circus.

Like Gene Hackman's hacker figures of Caul and Brill, the spies in *Tinker Tailor* display acute paranoia and sociophobia. Smiley and Control are particularly depicted with both of these traits during the course of their respective investigations, suspecting everyone and

everything of possible betrayal or falsehood. This sense of paranoia is particularly evident in the scene immediately after Smiley and Guillam meet with Esterhase, and both feel that someone is either watching or following them. Living and working as spies causes these characters to perceive the world in a different way; they see potential betrayal at every turn, and question every fact. It seems that distrust is one of the spy's key qualities, which directly connects with the paranoia and projection of barriers in Caul and Brill in *The Conversation* (Coppola, 1979) and *Enemy of the State* (Scott, 1998) respectively.

Questions regarding the ethics of both the spy and his methods run throughout the series. A major example is Smiley's manipulation of Ricki Tarr, withholding the information regarding Irina's death to ensure Tarr helps them finish the mole hunt, as well as making reference to the movements of Tarr's daughter and her mother as a tactical move to gather more information from him. Although the series, like le Carré's novel, focuses more on the systematic process of investigation in favour of action scenes, there is nevertheless a real sense of danger to both individuals in the narrative and to Britain as a whole; as a result, such ethically questionable tactics are highlighted as serving the 'greater good', protecting the general populace from the espionage and political tribulations taking place around them. The spy, in this case Smiley, is forced to make difficult decisions, even to the point of violating the country's ethical code in order to protect it. These questions of ethics continue particularly in the post-9/11 television series that I discuss further in Chapter Four.

Smiley's meetings with, and interviews of, other characters offer the viewer glimpses into past events and these threads from the past continually haunt the narrative. The entire narrative deals with uncovering the details of past events through memory, documentation

and piecing together a complete picture from fragmented sources. In particular, through the flashbacks, Control himself becomes a spectral figure that haunts the narrative, leading Smiley down the same path that he himself had begun to follow before his death. The ominous line that Smiley keeps repeating 'there are three of them, and Alleline' serves to inspire Smiley's pursuit of the truth, just as his 'Tinker Tailor' plan directs Smiley's attention to the four senior personnel of the Circus. Whilst le Carré's novel describes Control through dialogue, the television series utilises flashbacks to include Control as a character at the heart of the action, haunting both Smiley and the audience to offer clues on the next steps of the investigation. This becomes clear as Smiley recalls, and comes to understand, Control's warning that 'there are three of them and Alleline', which allows him to determine that Alleline, Haydon, Bland and Esterhase are the mole suspects. This, in turn, informs his next step to interview Sam Collins and confirm his suspicions that Haydon possessed more information on the failure of Operation Testify than Collins would have provided to him.

Given the length and format of the television series, the experience and sense of process that form part of the investigation are replicated for the viewer; in many respects we join Smiley on his investigative journey, following the same leads and the same trail that he does. The episodic nature of the television series largely presents the action from Smiley's perspective, aligning the viewer with his standpoint. As a result, there is a sense of the viewer being invited to speculate on the implications of the information Smiley gains during his meetings and interviews with other characters.

3.3 *Tinker Tailor Soldier Spy* (Alfredson, 2011)

The 2011 film version of *Tinker Tailor Soldier Spy* largely stands in opposition to the contemporary nature of the other hacker films I have been (and will be) looking at during this study. Rather than emphasising the reality and technology of the contemporary period of production, this version of *Tinker Tailor* finds its roots more closely aligned with the heritage film tradition. In this way, the film connects with the 'powerful undercurrent of nostalgia for the past conveyed by historical dramas, romantic costume films and literary adaptations' (Vidal, 2012, p.1). In many respects, being an adaptation of a novel written in the 1970s, *Tinker Tailor* is a prime candidate for being classed as a heritage film, yet the 1970s timeframe of the film has not traditionally been associated with such a sense of nostalgia. Thus, in terms of the wider hacker film genre, this move could be indicative of an early step towards nostalgia within the hacker film genre; such a development suggests that the typically limited shelf life of the hacker film could find renewed life in nostalgic remakes that explore the past through the 'rose tinted glasses' of the heritage filmic tradition. Rather than framing the technology as cutting-edge and thrilling, this marks a move towards fetishising the nostalgia for older forms of technology. Whether other hacker genre films follow this trend in the future remains to be seen, but this offers the potential for rejuvenation and renewed life for these films.

The promotional poster for the film focuses on the cast starring in the film, framing Smiley at the centre of a complicated network of different characters and different plot points. The images of most of the characters are presented in a 'surveillance' style format, appearing like surveillance photographs. This image also evokes a sense of a covert web connecting these characters, drawing on the espionage focus of the narrative. Despite the retention of the 1970s

narrative setting, this image generates a sense of technological connections, in a form that is reminiscent of social media interfaces. Smiley's connection to and interaction with most of these characters remains remote and virtual, which has a 'virtual' and technological feel. In this way, the film also expresses the 1970s storyline in a more relatable format for the 2011 viewer. The Internet Movie Database website categorises the film as a 'drama', 'mystery and 'thriller', which corresponds to the genre classifications of other hacker genre films.

Figure 20 – promotional poster for *Tinker Tailor Soldier Spy* (Alfredson, 2011).

Whilst the 1979 television series offers a sense of realism and fetishises the processes and methodologies of espionage, the film version of *Tinker Tailor* is fixated on the period setting of the 1970s, recreating and immersing the viewer in the narrative setting of the past. The result is a depiction of the narrative in lavish settings that overtly evoke a feeling of celebration and heritage. Some key examples of this recreation are the (re)constructed set

pieces such as the sound-proof meeting room used by the senior personnel in the Circus. This extravagant set stands in stark contrast to the subtle and understated meeting room depicted in the 1970s television series, substituting gritty realism for an over-inflated sense of secrecy and importance and generating a sense of grandeur. However, this extravagant set that engenders a sense of awe and a of a large-scale operation does connect the film with the NSA sets in *Enemy of the State* and the NORAD sets in *WarGames* (Badham, 1983) that I will consider in more detail in Chapter Three. Thus, this 2011 film can be seen to draw on the sense of scale depicted in other hacker genre films.

Figure 21 – the sound-proof meeting room for senior Circus personnel. *Tinker Tailor Soldier Spy* (Alfredson, 2011), film grab.

Following the same pattern of other hacker films this version of *Tinker Tailor* strives to foreground the technology used by the spy, alongside the techniques and approach he or she uses in his or her work. However, the major difference in this fetishisation is the fact that the film recreates and indulges in the mise-en-scène of the 1970s period, rather than being

engrossed in contemporary technology. As I have mentioned, this stands in opposition to the contemporary look and feel of the other hacker genre films and television I have examined, opting instead for a heritage film approach. Like other examples of heritage films, the film uses visual signifiers to immerse the viewer in the historical period, but as a significant part of the action is based in offices this includes using period equipment such as telephones, the 'British' red telephone box, and large bulky recording equipment. The impact of showing this technology is less to evoke fear and excitement, but rather to indulge in the period setting.

Figure 22 – Connie's flashback shows her viewing footage of Polyakov on period technology. *Tinker Tailor Soldier Spy* (Alfredson, 2011), film grab.

Another distinction to the gritty realism of the 1970s series is the film's utilisation of various scenes to convey the sheer scale of manpower required to operate the Circus. In the opening scenes in which Control and Smiley depart the service, their exit route takes them, and by extension the viewer through the different layers of the Circus, demonstrating the number of people required to administer the secret service. This is a stark contrast to the

compartmentalised offices of the television series, which builds on the notion of the film portraying a grand 'heritage' tradition. Just as heritage films typically depict stately homes and vast estates, this version of *Tinker Tailor* offers the audience a grander scale of office workspaces and urban landscapes. What is more, the physical office space of the Circus presents the surveillance and analysis technology used by the service during this time. When Mendel makes the pre-arranged call to Guillam at the Circus, the viewer is afforded a unique perspective of the sheer scale of this version of the Circus' operations. In addition, during these scenes depicting Guillam's tactics of misdirection, the film also interposes shots of a woman listening in to the telephone call to again show the surveillance and to continue developing the sense of surveillance and recording technology at work. At every opportunity, the film endeavours to offer a grander, more elaborate version of events, which is very much in line with the heritage film tradition. However, this generation of grand visuals is subverted by the manner in which the film presents a sense of decay and deterioration of these institutions and the decline of the pristine image of Britain.

Figure 23 – the camera pans out to show the scale of the Circus records archive. *Tinker Tailor Soldier Spy* (Alfredson, 2011), film grab.

This connection with heritage films seems to stem from a desire to (re)present the classic image of 'Englishness', which aptly comes through as icons of London are presented in the background of various shots. One notable example is the inclusion of Big Ben in the background of Smiley's meeting with Lacon and the Minister, which in spite of the anonymous location of the warehouse they meet in, instantly places their meeting as taking place somewhere in London. Yet at the same time this image is somewhat unsettling as the sense of security and intrinsic Englishness associated with the British film does not bring comfort or certainty to the viewer.

Figure 24 – Big Ben in the background as Smiley meets Lacon and the Minister. *Tinker Tailor Soldier Spy* (Alfredson, 2011), film grab.

In essence, *Tinker Tailor* is an example of how 'the heritage film's simultaneous investment in authenticity as well as reinterpretation reflects its time and place in society' (Vidal, 2012, p.2). Therefore, the film presents a (re)constructed version of the 1970s, which becomes an

amalgam of the 1970s and the present day of production. For example, the presence of a mole and the scenes of the spy as infiltrator and illicit meetings of small groups allude to the constant fear of terrorist cell attacks in the wake of 9/11. As Pam Cook stresses 'the past in such fictions is never simply the past: they look backwards and forwards at the same time, creating a heterogeneous world that we enter and leave like travellers in constant movement of exile and return' (Cook, 2006, p.73). This is an apt description of how the film operates, simultaneously looking back to the 1970s, but also infusing the narrative with contemporary concerns regarding terrorism and the ambiguity of fighting a battle against an uncertain enemy. What the film achieves here it to raise the question as to how similar the uncertainty of the 1970s period setting is to that of the 2011 period of the film's production and release.

Part of this simulation of the period is a seeming absence of colour, creating an almost sepia colour tone throughout the film. That is not to say that the film entirely lacks colour, but rather that the mise-en-scène of the film focuses on neutral colours to imbue scenes with a historical feel. Where there are examples of striking colours in the film, these seem designed to emphasise British cultural features, such as the classic red telephone box used by Ricki Tarr. These elements of mise-en-scène serve both as cultural signifiers as well as underlining the recreation of the time period.

A striking visual technique used by the film on a number of occasions, is to present the characters through a window, showing the action in a small enclosed space, whilst still retaining the grander scale of the film's stage. For instance, this technique is used when Smiley begins his interview of Jim Prideaux, speaking to him in his caravan as the camera (and by extension the viewer) peers in. The effect of this approach is to artificially recreate

the sense of intimacy and covert meetings that the television series effortlessly produced. This technique is also utilised to depict various conversation between Smiley and Guillam as they evaluate the information they have gathered. These shots have the effect of allowing the audience to become a hacker spy figure, eavesdropping on private conversations, becoming privy to classified information and 'engaging' in the practice of the spy by virtue of the voyeuristic camera work. Equally this technique frames the 'stage' of the action, illustrating the artificiality of this 1970s period recreation.

Figure 25 – Smiley and Guillam's meeting is voyeuristically viewed through a window.
Tinker Tailor Soldier Spy (Alfredson, 2011), film grab.

As I have considered, although *Tinker Tailor* conforms to a number of conventions of the heritage tradition it nevertheless also plays with the convention of the heritage film. As Vidal underlines 'the heritage film would … encourage a nostalgic look back to the certainties and the visual splendour of the national past' (Vidal, 2012, p.9), which is often the traditional representation of the history in works like the adaptations of Jane Austen's novels. However, *Tinker Tailor* looks back to a period in which national identity was becoming increasingly

uncertain and under threat, representing a time in which a number of the characters are themselves looking back to a time of conviction in national identity. In this way, the film's heritage feel becomes increasingly ironic, undermining audience expectations, which has the dual effect of offering a different kind of hacker film and a different kind of heritage film. Nevertheless, the film's sense of national uncertainty ties into the modern viewer's own increasingly transnational experience; Smiley and Guillam nevertheless offer the audience sympathetic protagonists who are able to overcome the immediate threat to national security, demonstrating the benefits of their methodical, vigilant investigative process and reasserting a sense of British victory on the world stage. In this manner the film does reassert a sense of national 'certainty' for the viewer, proving that there are individuals within the Circus who do stand for such values and will continue to defend them.

Like other hacker figures in hacker genre films, Smiley is presented as a machine-like figure who adopts a methodical approach to his investigation. He is regularly shown going through records, documents and testimony, continually striving to glean every critical detail from the evidence available to him. Nevertheless, Oldman's Smiley presents a more emotional performance compared to that of Alec Guinness in the 1979 television series, exposing the character's vulnerability. Linking to the notion of heritage fiction amalgamating the past and present, this Smiley allows his 'stiff upper lip' to quiver, making the viewer's role of voyeur more intrusive into his personal space. This parallels Rooney Mara's more emotionally vulnerable portrayal of Lisbeth Salander in *The Girl with the Dragon Tattoo* (Fincher, 2011) that I will explore further in Chapter Five.

Moreover, the film conveys the notion of the hacker as a solitary figure; Smiley stands as the most obvious precursor hacker figure in the film, and thus it is unsurprising that the film strives to convey his personal isolation. This is most noticeable in the fact that although he appears from the start, Smiley does not speak for the first eighteen minutes of the film. Instead we see a series of scenes of the minutiae of his solitary everyday life, from visiting the optician to sitting alone in his lonely house. Although the television miniseries hints at Smiley's isolation, the film builds on these hints; in doing this, especially so early in in the narrative, the film instantly creates a lonely and disconnected ambience, which over time demonstrates Smiley's isolation as being both necessary and an effect of his espionage work.

Prideaux's interaction with his student, Bill Roach, also offers the viewer another example of the spy-hacker being an isolated figure. However, rather than focusing on the negative effects Prideaux highlights the manner in which the 'loner' is afforded a strong position to watch and understand the actions of those around. This viewpoint offers an interesting angle on the isolation of the hacker character, suggesting that rather than being an effect of hacking, isolation is a requirement; thus, this perspective on the hacker figure indicates the he or she needs to maintain a distance from the rest of humanity to maintain objectivity. The close (and implicitly sexual) relationship portrayed between Prideaux and Bill Haydon is a prime example of personal relationships distracting the hacker's skills of observation. Prideaux's proximity to Haydon is implied to have clouded his judgement and therefore blinded him to Haydon's betrayal of the Circus. The same applies to Smiley and Haydon's interactions, which were purposefully affected by Haydon's affair with Ann, serving to distract Smiley from the clues of Bill's status as a mole. Both instances depict a learning curve for the respective hacker characters, as both Prideaux and Smiley come to avoid human attachments and instead rely on their detachment to hone their hacker skills and methodologies.

Notably, the film's version of Ricki Tarr openly states his intention to avoid such a solitary, isolated existence in his attempts to secure a future with Irina. Although this relationship exists within both the novel and the television adaptation, the film removes Tarr's former lover and daughter to place a stronger emphasis on his relationship with Irina. This allows Tarr's choice to retire from the service for a family life with Irina to assume particular significance in the film, standing as an alternative to the other spy characters that choose the service over their personal relationships. The failure of this relationship due to Irina's death has two opposing implications; on the one hand, it implies that the solitary existence of the spy comes as a result of them choosing the service over personal relationships, but, on the other hand, it once again demonstrates that the spy as hacker is never able to escape the world of espionage. Tarr, like Smiley, is doomed to be alone, with the only companionship being his 'comrades in arms'.

A small, but particularly noteworthy addition to Guillam's personal narrative is the implication of a homosexual relationship, which he breaks off when Smiley advises that he should 'settle [his] affairs' before they conclude their mole investigation. The inclusion of this subtle narrative strand adds a layer of paranoia and sociophobia to Guillam's character. The inclusion of his illicit relationship with another man gives Guillam something else to hide, and something that any potential enemies in the world of espionage could exploit. Smiley's own relationship with Ann stands a testament to the manner in which conventional personal relationships can be utilised for manipulation and misdirection. Furthermore, given the period setting in which homosexual relationships would not have been readily accepted, this addition to Guillam's character simultaneously forces him to adopt a false public image,

whilst also giving the viewer a deeper connection with, and insight into, his character due to the voyeuristic standpoint of the camera.

Like the 1970 television series, flashbacks are integral to the plot and narrative structure of the 2011 film. Nevertheless, whilst the television series features specific segments of the narrative dedicated to flashbacks, the film jumps between the present and past, inter-mingling memory and present reality in an almost fluid fashion. The result of this in the film is that the narrative shifts between timeframes with each scene. Building on the approach of the 1979 television series, the film strives to position the memory of Control, through flashbacks, at the heart of the action. However, whilst the Control of the television series is confined to certain moments of flashback, Hurt's version of Control assumes a recurring haunting presence, reappearing throughout the film. This flashing between past and present continues this heritage film idea of nostalgia for the past on a narrative level; contrasting between images of the Circus under Control in the past with the present under Alleline's regime illustrates a decline in the Circus itself. The vision of a united Circus 'family' celebrating at a Christmas party is interspersed with images of Haydon detained as a mole and later assassinated by his former friend (and implied lover) Prideaux, scenes that undermine the heritage 'memory' presented to the viewer. In this way, the film achieves some degree of the television series 'documentary realness' by unpicking the ostensible image of a united service and instead revealing the corruption and treachery beneath the surface.

Like both the novel and the television series Smiley himself is also a haunting presence for Alleline and his new regime at the Circus. He is brought back into play by Lacon as someone outside the current regime, who can probe the potential issue of the mole within the Circus.

Nonetheless, the film strives to further develop this notion of Smiley as a ghostly presence himself, depicting the character as being anonymous and detached in the majority of scenes in which he appears. In many respects this stresses the 'ghostly' nature of the hacker figure, looming on the edge of society as an observer, but remaining isolated, disconnected and unknown.

Corresponding to both the novel and the television series, the film invites the audience to speculate on the identity of mole, raising suspicions as to which of the suspects could be leaking information to the Russians. As Dave Calhoun highlights in his review of the film 'this spy story is all about the journey – the process – and the byways of the route, not the grand finale' (Calhoun, 2011) and this is an apt summary of the film's (as well as the television series and the novel's) approach to Smiley's narrative. However, whilst the television series takes us on a lengthy journey over seven episodes, in a similar fashion to the marked differences in pace between *The Conversation* and *Enemy of the State*, the film picks up the dramatic pace to create a greater sense of urgency.

3.4 Conclusion

Throughout this chapter I have demonstrated how a comparison of the two adaptations demonstrates the manner in which a period recreation sheds new light on an earlier piece of work; in this way, the viewer is afforded a new perspective by viewing the 1979 television adaptation of *Tinker Tailor Solider Spy* through the lens of the 2011 film. The film's quasi-'heritage' approach to the narrative, continually striving to recreate the look and feel of the 1970s highlights the realism of the television series. As a result, the film's indulgence in the

carefully planned mise-en-scene, using the camera to attempt to immerse the audience in extensive set pieces, comes to feel much more artificial when viewed against the gritty documentary style of the series. Similarly, whilst the television series offers a clear outline of Smiley's methodical approach, focusing on the intricate details of his step by step investigation, when compared to the film's faster pace and compressed narrative demonstrates the shift in audience 'participation' in the narrative; although the film requires the viewer to pay attention to follow the details of the plot, the television series demands so much more of its audience - more time, more focus and more investment in the intricate details. The 1979 television series readily connects with the model of a contemporary setting of hacker genre films and television series. Likewise, the series' focus on foregrounding and fetishising the details of processed and the step involved in an investigation provides significant insight into the world inhabited by the spy figure, which serves to influence the depiction of the computer hacker figure in later productions. In contrast, the 2011 film simultaneously looks backwards and to the contemporary period of production; the film is both an adaptation of le Carré's novel, the 1979 television series and various other films and television series produced up to its 2011 production and release.

4) Chapter Three: Evolution of Hacking in the 1980s and 1990s - *WarGames* (1983) and *Hackers* (1995)

4.1 Introduction

The 1980s and 1990s mark a significant time in which technology began to assume a more prominent role in both film and television. A considerable number of potential hacker genre films were produced during this period, exploring the range of the hacker film genre. Chapters One and Two have considered the emergence of the hacker film genre in the 1970s through the examples of *The Conversation* and *Tinker Tailor Soldier Spy* and how the genre has progressed through comparisons to later films in the late 1990s and 2010s. However, it was during the 1980s and 1990s that computers began to become a part of everyday life, and the technological connections to cyberspace became integrated into the domestic setting; this real-world phenomenon was reflected with an increasing presence and preoccupation with computers in film. As computers began to become part of home and family life, the technology of hacking and surveillance began to move from the realm of the professional to this domestic and family setting. As a result, hacker genre films begin to shift away from focusing on the 'professional' hacker figure to concentrate on more amateur figures during this period, and began to see a transition from older to younger hacker figures. As Douglas Thomas indicates, two films, *WarGames* and *Hackers*, 'had a disproportionate influence on hacker culture, creating two generations of hackers and providing them with cultural touchstones that would be, at least in part, the basis for their understanding of hacking' (Thomas, 2002, p.xv). Therefore, whilst there are several other significant hacker genre films

in the 1980s and 1990s that I identify in Appendix A, '[these other films] are often evaluated on their factual accuracy or technical sophistication rather than as cultural touchstones for hacker culture' (Thomas, 2002, p.xv). Consequently, this chapter will focus primarily on *WarGames* and *Hackers* as key examples of hacker films and the impact the introduction of such a younger hacker figure has had on the representation of hacking in hacker genre films on the whole.

A substantial number of hacker genre films were released during the 1980s and 1990s, which radically progressed the generic features of the hacker film genre. During the 1980s, there was much greater focus on the horrors of technology and the growing fear of artificial intelligence as a rival hacker figure and likely threat to humanity. Thus, films like *Electric Dreams* depict an artificial intelligence taking on this hacker figure role. The 1990s saw an explosion in the production of hacker genre films and a stronger influence on these films from the 1970s thrillers like *The Conversation* (Coppola, 1974). 20 hacker genre films from my list in Appendix A were produced and released during the 1990s. In light of this, it may be said that the depiction of hacking and the hacker figure evolves significantly during this time, as film-makers strive to inspire interest and excitement in this subject matter to attract audiences to want to see the films. Whilst films like *The Lawnmower Man* (Leonard, 1992) continue to play with the notion of fear and horror associated with computer technology, other films like *Sneakers* (Robinson, 1992), *Mission Impossible* (De Palma, 1996) and even *Jurassic Park* (Spielberg, 1993) continue to focus on the surveillance and espionage thriller elements of computer hacking. Given the sheer number of films produced during this decade, it is unsurprising that I have already looked in detail at *Enemy of the State* (Scott, 1998) in Chapter One and will go on to look at *The Net* (Winkler, 1995) in the Conclusion Chapter.

4.2 Evolution of Hacker Generic Features in 1980s and 1990s Films

As part of the timeline of my proposed hacker genre, I contend that these hacker genre films from the 1980s and 1990s mark a significant shift in the representation of some of the central generic features. As I touched on in my introductory chapter, Thomas Schatz argues that an individual 'genre film represents an effort to reorganize a familiar, meaningful system in an original way' (Schatz, 1981, p.19) and in this manner both *WarGames* and *Hackers* represent major shifts in the features of the hacker film genre as each film strives to offer a new filmic approach to hacking. Tracing such generic evolution is part of understanding the emergence and development of a new genre, so I will now outline the manner in which some of the existing generic features I have identified in *The Conversation* and *Tinker Tailor Soldier Spy* have continued to evolve and expand in *WarGames* and *Hackers*. In the same vein, as Rick Altman underscores 'like a train, genre is free to move, but only along already laid tracks' (Altman, 1999, p.22) and therefore any variation in generic features inevitably builds on previously established generic traits, developing these pre-existing characteristics to reach new destinations. These generic shifts are far from exclusive to *WarGames* and *Hackers*, as the other hacker genre films released during this period also exemplify similar developments in hacker genre features and characteristics. *Hackers* particularly demonstrates extreme developments in some of the generic characteristics

Feature 1 – The fetishisation of technology develops to include an extravagant visual style: One of the main characteristics I have identified in *WarGames* and *Hackers* is a flamboyant visual style that is used to depict the technology utilised by the hacker figure, which often makes the technology both more appealing and more accessible to the viewer. Given the typically mundane and unexciting visual reality of both computing and hacking, it

is not surprising that Hollywood strives to (re)create hacking as a more elaborate and engaging activity that appeals visually and aurally to the audience. This links in with the fetishisation of technology I have identified in the wider hacker film genre but these films take this fixation to extreme levels by hyperbolising the representation of computers and their capabilities. Thus, rather than merely depicting the reality of computer technology, these films immerse the viewer in virtual computer environments and 'futuristic' bases of operations, or even present the computers as becoming personified with voices and virtual avatars. In effect, the technology begins to become a 'character' in many of these hacker genre films. This extravagant visual style is also evident in other films during this period, such as *Tron* (Lisberger, 1982), *Johnny Mnemonic* (Longo, 1995) and *The Matrix* (The Wachowski Brothers, 1999).

Feature 2 – The hacker genre films emphasise speed and sleekness over a lengthy, intricate process of investigation: Another key develop in hacker genre features is the sense of ease and speed in the hacking process; rather than showing an intricate, detailed process hacking is instead presented in a swifter, more stylish fashion. As a result, rather than foregrounding and fetishising the intricate details of methodology and process, thrill and spectacle take precedence to create a sense of urgency and immediate danger to the protagonist. This ties in quite nicely with the generic shifts I have traced between *The Conversation* in 1974 and *Enemy of the State* in 1998 in Chapter One, moving from a slow intricate process in which the hacker observed his target from a distance, to a more dynamic hacker figure who actively participates in the action. Therefore, as technology develops to allow the hacker to become a more dynamic figure it is unsurprising that the representation of hacking in film chooses to emphasise this sense of speed to develop the notion of hacking being a vibrant activity. Equally, as Steve Neale argues, genre's 'systems of expectations and

hypothesis involve a knowledge of … various regimes of verisimilitude – various forms of plausibility, motivation and belief [and] entails notions of propriety, of what is appropriate and therefore probable (or probable and therefore appropriate)' (Neale, 2000, p.32) and this is what is at work with the increased sense of speed in these hacker genre films. Neale also underlines the manner in which such tendencies in genre fiction 'provide spectators with means of recognition and understanding' (Neale, 2000, p.31). These hacker films create such verisimilitude, in which the viewer comes to accept, and to expect, the hacker film genre narrative to depict hacking as a sleek and speedy process. In many ways this sleekness and stylishness becomes a new object of preoccupation for hacker genre films.

Feature 3 – Over the course of these films the isolated hacker becomes increasingly integrated into, and connected with, wider society: Moreover, the hacker figures depicted in each of these films are not presented as being socially isolated from the rest of the world and in fact are portrayed as becoming more integrated into wider society during the course of the narrative. Instead, the hacker figure in these films seems to be portrayed as more of an average, 'everyman' figure, encouraging the notion that almost anyone could become a hacker. As a result, the hacker begins to adopt a different approach to hacking; rather than being a solitary endeavour, hacking becomes a communal activity of shared experience, skills and equipment. This also includes the sense of an emerging hacker community and subculture, as multiple hacker figures are shown on screen – although a sense of rivalry continues to appear, there is increasingly a sense of hacker camaraderie and community as hackers are shown to cooperate with one another toward common goals. Returning to Thomas Schatz's notion of genres of social order and social integration that I considered in my introductory chapter, these films begin to offer the possibility of the hacker integrating into wider society during the course of the narrative. Consequently, the somewhat pessimistic

premise of the hacker being doomed to social isolation begins to be substituted for the hacker establishing relationships and making connections with other people, offering a more positive outlook on hacking as an activity and further empowering the hacker figure in the process. A noteworthy point here is that many of these films adhere to Jeremy Strong's concept of 'team films' (Strong, 2008, p.44); just as Strong argues for films depicting the building of teams, so do these hacker films see teams being formed to undertake group hacks. This is increasingly reflected in other hacker genre films such as *Sneakers* (Robinson, 1992), which presents a group of hacker figures working together to commit a heist, whilst *Mission: Impossible* (De Palma,1996) shows Ethan Hunt forming a new espionage team to carry out a mole hunt. What is more, this sense of integration signals an increased emotional vulnerability and exposure in the hacker figure that can be exploited by their rivals and enemies, which continues to develop in post-9/11 productions.

Feature 4 – There is an escalation of scale in hacker genre films: These films present their narratives on a much grander scale than some of the earlier case studies I have been looking at. This works on two levels: the first being larger implications of hacking and surveillance on a narrative level, as the hacker is involved in major disasters or nuclear threats to the entire world rather than threats to individuals; the second is that the physical space the hacker inhabits becomes bigger, forcing him or her out of small enclosed spaces on to a larger stage. Once again, the shifts in this feature ties in with my observations of the hacker starting out as a passive figure and then becoming a more proactive character between *The Conversation* and *Enemy of the State*.

Feature 5 – The depiction of the hacker as a machine like character evolves into blurring the division between man and machine: Whilst I have identified that the hacker is depicted as a machine-like figure in several hacker genres films, the case studies I will consider in this chapter take this notion one step further in blurring the distinction between human and machine; This links in with the emphasis on lavish visual effects, as while the hacker continues to adopt some machine-like traits, the machines and technology also become personified. As a result, hacking becomes increasingly presented as a much more cybernetic experience, fusing together person and machine in different ways. Consequently, these films begin to verge on science fiction premises to rationalise the representation of technology, creating a verisimilitude of hackers and cybernetics in the process.

Feature 6 – Hacking becomes increasingly associated with video games and competition: Douglas Thomas considers computer hacking to be 'the movement … of "boy culture" into the age of technology. Mastery over technology, independence, and confrontation with adult authority … all figure predominantly in the construction of hacker culture' (Thomas, 2002, p.x). Taking this idea into account alongside the emergence of video games during the 1980s and 1990s it is unsurprising that the gaming world overlaps with the act of hacking on film. Video games provide a much richer visual and aural experience for the film viewer than an intricate process of text documents or computer code. The sense of competition is also apparent in both *The Conversation* and *Tinker Tailor Soldier Spy*, as Caul competes with other wiretappers like Moran, whilst Smiley competes both with Alleline's new regime at the Circus and with Karla. However, *WarGames* and *Hackers* present a much greater emphasis on hacking as a recreational activity rather than a professional one. This emphasis on gaming and competition also links in with the notion of the hacker becoming a more proactive figure, as hacking becomes a more dynamic activity of interaction rather than

simply observation and recording. Rather than a slow, intricate 'game of chess' between master players, this 'game' becomes more urgent and dynamic, requiring the hacker figure to become more mobile and to physically take action in events themselves.

Feature 7 – Female characters begin to evolve from targets and unwitting accomplices to proactive figures in hacker genre films: Just as the hacker figure himself becomes increasingly more proactive over time, so do the female characters evolve in hacker genre films. In fact, female empowerment assumes a central role in the development of the hacker film genre, as female hacker figures begin to emerge in their own right, as opposed to characters like Meredith in *The Conversation*, whose actions are merely serving the interests of a rival male hacker figure.

4.3 *WarGames* (Badham, 1983)

Released in 1983, *WarGames* offers several notable insights into the progression of hacking and surveillance on screen. Like other hacker genre films, *WarGames* demonstrates a number of hacker film characteristics, but also offers alternative vantage points on both the representation of hacking as an activity and the hacker as a figure. First and foremost, the film centres on a hacker figure, namely David Lightman, and aligns the viewer with his perspective and his experiences. Likewise, the film is one of the first examples to focus on a younger teenage hacker figure, as David Lightman takes centre stage as the principal hacker figure in the narrative. Placing a teen hacker at the centre of the film offers a different perspective on hacking; unlike Caul and Smiley, Lightman is not a professional 'hacker' trying to obtain information as part of his work, but rather an amateur hacker infiltrating

computer systems for recreation and personal gain. Moreover, the film exemplifies the growing sense of concern and trepidation in society with the growing role of technology in our daily lives and in gaining control over our systems of government and military action. As this technology becomes incorporated into the family home environment it poses a direct threat to the safety of the domestic setting. The promotional poster for *WarGames* reflects this focus on the younger protagonist and suggests the strong connection with video game culture with the graphics in the background and the tic tac toe game image. Logically, this drive towards a younger protagonist makes the film more marketable and opens it up to wider audiences. The trailer for *WarGames* focuses on the notion of Lightman playing games and using his skills for his own benefit, before unwittingly hacking into the wrong computer system and losing control. It is here that the film's narrative is framed as one of fear, in this case the fear of automation in defence systems and how this could be misused.

Figure 26 – *WarGames* (Badham, 1983) promotional poster.

Several films produced in the late 1970s through to the 1980s focus on the horror of artificial intelligence gaining sentience and posing a threat to humanity. These films, like *Demon Seed* (Cammell, 1977) and *Electric Dreams* (Barron, 1984) focus much more on the nature of artificial intelligence. Whilst this topic opens up a number of possibilities for further study, the primary focus of this thesis is to examine human hacker figures and how their conflicts with other human characters are depicted on screen. Nevertheless, as the technology is so foregrounded in hacker genre films, I will consider the role of the artificial intelligence in the film.

WarGames presents one of the earliest examples of actual computer hacking, as opposed to espionage or surveillance as precursors to computer hacking. In fact, Douglas Thomas actually puts forward the case for '*WarGames* as the prototypical hacker film' (Thomas, 2002, p.30), which I would agree with in part. Although I am arguing for a wider hacker film genre that also incorporates wiretapping, surveillance and espionage as antecedents to computer hacking, in many respects *WarGames* does stand as a prototypical computer hacker genre film and has undoubtedly had an intertextual influence on all subsequent productions. As Thomas also highlights 'the new-school hacker was introduced into the popular imagination through the 1983 release of … *WarGames*, featuring Lightman … as a curious kid exploring computers and computer networks' and this idea that the film introduced the concept of hacking to the popular audience is a strong case for the film's inclusion in this study. Likewise, Stephanie Ricker Schulte underlines how *WarGames* was 'the first mass-consumed, visual representation of the internet [which] served as both a vehicle and a framework for America's earliest discussion of the internet' (Schulte, 2013, p.16).

In many ways, *WarGames* marks the first step toward connecting hacking with youth culture because, as Dan Gordon highlights, it 'has created a specific and powerful mythology regarding the nature of the hacker showing hackers to be young men who can hack into any computer system from the privacy of their own bedroom' (Gordon, 2010, p.25). This presentation of the hacker figure is considered in more detail by Schulte, who proposes that the media had already created a cultural impression of the hacker in the early 1980s:

> Like the figure of the teenaged gamer, that of the teenaged hacker was already firmly established in American popular culture by the early 1980s, even as the representation of the hacker was neither simple nor static. All major magazine and newspaper reports on hackers in the years before *WarGames* release engaged at least one of the following tropes: the hacker as an innocent and intelligent every-teen, the hacker as a menacing trouble-maker or criminal, and the hacker an icon of a generation (Schulte, 2013, p.34).

Schulte's argument also aligns with Rick Altman's idea that 'genres succeed and endure because they are properly aligned with real world institutions. Whether or not genres derive from specific cultural rituals, they clearly serve a memorial function, commemorating key aspects of collective history' (Altman, 1999, p.189). Thus, it is unsurprising that *WarGames* should emulate the technological and cultural developments taking place in the real world; this cultural perception of the teenaged hacker certainly comes to the fore in *WarGames*, as I will go on to explore in more detail. This picture of a teenaged hacker firmly begins to develop the notion of the rise of amateur hackers, as the younger characters stand in stark contrast to the more seasoned, experience portrayals of hacker figures such as Harry Caul in *The Conversation* (Coppola, 1974) and George Smiley in *Tinker Tailor Soldier Spy* (Irvin, 1979).

Like other hacker genre films, one of the major features of *WarGames* is the distinct sense of the technology being foregrounded and fetishised throughout the film. The first shots of the 'North American Aerospace Defense[10] Command' (NORAD) facility use the camera to bring the viewer in through a series of corridors before expanding out to reveal the NORAD Control Centre and the technological arsenal at its disposal, visually emphasising the size and scope of the organisation and its technological capabilities. One example of this is an early scene that presents wide shots of the vast rooms filled with computers that are used to store and analyse intelligence data from across the world, giving the viewer an insight into the space dedicated to this equipment. Like the 2011 film version of *Tinker Tailor Soldier Spy*, *WarGames* takes the time to show scenes of characters coming into and penetrating the extensive set of the NORAD facility, whilst the camera pans around to show the viewer the full extent of the operation. The same is true during the 'tour' scenes of the NORAD facility, giving the staff the opportunity to explain more about how the technology works and how the organises utilises the equipment; McKittrick and his staff are given the opportunity to explain in a dialogue exactly what information is processed by their computer system and precisely how data is analysed by the War Operation Plan Response (WOPR) supercomputer. The film also fetishises the secrecy of the US Government's installations and the manner in which the camera can infiltrate and explore both these installations and the procedures associated with them. This is mirrored in the film's initial scenes that take the time to show each stage of security by which the two military officers gain entry to the missile base, demonstrating the intricate procedures involved, whilst also emphasising the scale of US Government operations. These scenes are juxtaposed with scenes in Lightman's bedroom depicting his home computer and hacking equipment, comparing the vast computer capacity of the Government system with the personal computer in the family home. In *WarGames,* the camera constantly strives to convey the size and scope of the computer technology to

generate a sense of awe in the viewer. The 1980s marked the closing years of the Cold War and thus *WarGames* firmly expresses the USA's position as a global superpower, rivalled by the USSR. With the 1990s and the dissolution of the USSR, the USA is increasingly depicted as an unrivalled and invulnerable global superpower.

Similarly, Lightman's home computer system is designed to elicit a sense of awe and wonder in the contemporary viewer by demonstrating what an amateur hacker could potentially achieve from their own bedroom and exactly what kind of technology is available for use by private individuals. By juxtaposing the vast set and extensive computer system in place at NORAD with that in Lightman's bedroom the film emphasises the potential of home computer systems when operated by a skilled user. In addition, the scenes between Lightman and Jennifer allow him to explain how he uses his computer and telephone line to hack into other computers, clarifying how he can use the technology to access other systems remotely. In this way, the film also fetishises the description of how the technology works by going into the intricate details of exactly how the technology operates and how Lightman as a hacker can use the equipment to achieve his goals. As Schulte indicates, 'Lightman demystifies the computer networking process, making it less threatening and confusing for [Jennifer, and by extension the viewer] by slowly and deliberately explaining how the technology works and how he connects his computer to other computers' (Schulte, 2013, p.30). During Lightman's description of how the technology works, the camera lingers on each piece of equipment and elicits a sense of awe and wonder by using Jennifer as the viewer's proxy; she stands as the uninformed 'every-woman' who learns exactly what the equipment is and precisely what it can be used to do.

Figure 27 – the giant NORAD Control Room monitors exemplify spectacle. *WarGames*,

(Badham, 1983), film grab.

Figure 28 – Lightman's home computer system in his bedroom. *WarGames*, (Badham, 1983),

film grab.

Nevertheless, in addition to foregrounding and fetishising the technology, *WarGames* also presents elaborate visual effects for this computer technology, particularly in terms of the lavish NORAD set and its extravagant computer images. Despite the limitations of computer technology in the 1983 period of the film's production, *WarGames* nevertheless uses striking visuals to elicit tension from, and to convey it to, the viewer. Spectacle becomes particularly significant in the scenes set at NORAD, in which a collection of large computer screens and monitors are used to present information and the film takes great pains to show the viewer the sheer scale of the operation. The entire NORAD set is designed to convey a sense of a 'high-tech' environment that the viewer is able to covertly monitor through the extradiegetic camera. This becomes even more extreme during the climax of the film in which the WOPR supercomputer runs through a series of possible nuclear war scenarios on the giant screens, infusing the scene with tension and viscerally engaging the viewer in the action as it unfolds. These shots are designed to create a sense of awe in the viewer, immersing us in the secret world of a Government agency and giving us access to its inner workings.

Although *WarGames* is arguably a key example of a hacker genre film exemplifying spectacle, a closer examination of the film also highlights elements of an in-depth investigative process and methodology being used by David Lightman to gain remote access to the WOPR computer system. Although he exploits a simple 'backdoor' password to bypass the system's security, the film strives to underline that the process to determine this password requires a great deal of time, effort and research on his part. The process he undertakes involves a detailed exploration of how to tackle the problem, and then conducting research into the background of Stephen Falken as the system's original creator. Therefore, it is hardly a simple task, as Lightman needs to consult two hacker friends on their views of the limited data he was able to glean from the system. These characters make him aware of the

programmer's 'backdoor' password into systems they have designed, which then requires that he undertake extensive research into Falken's work to understand the man behind the software and gain an insight into what this backdoor password could be. As Vlad Jecan observes 'our main character learns everything there is to know about the system's developer Professor Falken and understands his creation, which [enables] him to find a simple solution to a complex problem' (Jecan, 2011, p.104); although the seeming simplicity of this solution does not convey the time and effort that has gone into Lightman's research, it does illustrate the hacker's role as problem solver. As Jecan goes on to underline, 'in this matter, Lightman's actions appealed to the hacker community [because] he illicitly obtained in-depth knowledge of the system which revealed a simple solution – these are, as we have seen, the requirements for an appreciated hack' (Jecan, 2011, p104). The research conducted by Lightman, following a detailed and methodical process akin to that of Harry Caul or George Smiley, is reflective of the wiretapper or spy figure; therefore, Lightman's simple solution is actually the result of an in-depth investigative process. Visually the film marks an attempt at focusing on the results of an investigation rather than the process itself, thus the film presents a montage of Lightman researching articles, videos and other resources on Falken and his work before he presents a summary of this research. The effect of this shift in focus is an emphasis on the idea of the hacker as slick, informed and in a position of power and control.
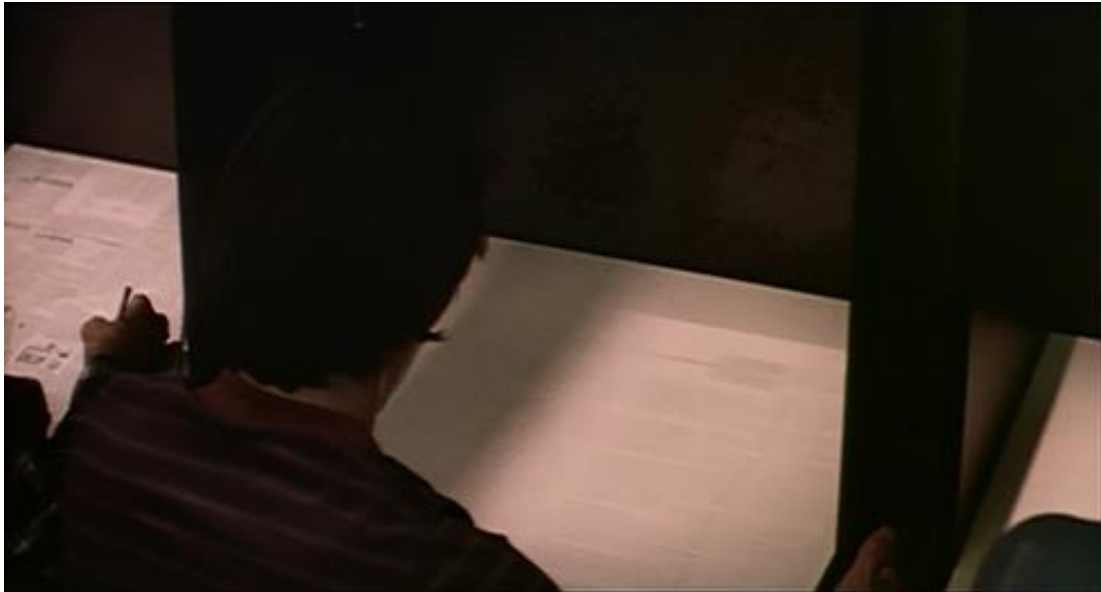
Figure 29 – Lightman conducts research into Falken. *WarGames*, (Badham, 1983), film grab.

Equally, Lightman's utilisation of a hacker process is illustrated in the manner he accesses the password for the school's computer system. In this case, the simple fact that he knows where the passwords are written down, alongside his plan to engineer being sent to Principal's Office to be disciplined, gives Lightman the opportunity to access the new password. Like his approach to finding Falken's 'backdoor' password into the WOPR system, this is an example of simple but effective hacking technique. Furthermore, as Jecan argues, the film was generally well received by actual hackers due to the elements of realism in Lightman's process of hacking. In this way, '*WarGames* appealed to the hacker community mostly because it portrayed their activity not with hyperbole, but with fair accuracy … Lightman … performed a by the book hack consisting of simplicity, in-depth knowledge (mastery) and illicitness' (Jecan, 2011, p.105). Lightman's technique to gain access to this password is demonstrative of hacker 'sleight of hand'. This technique is also reminiscent of Peter Guilliam's espionage tactics to retrieve files and information from the Circus in *Tinker Tailor Soldier Spy*, conveying a sense of hacker style and finesse. Computer

hacking, like surveillance and espionage, is represented as an 'art' form, one that requires the development and honing of a set of skills. Once one has mastered these skills, it becomes possible to make the process seem much simpler, and the hacker figure can be presented as sleek and stylish due to his or her technical prowess.
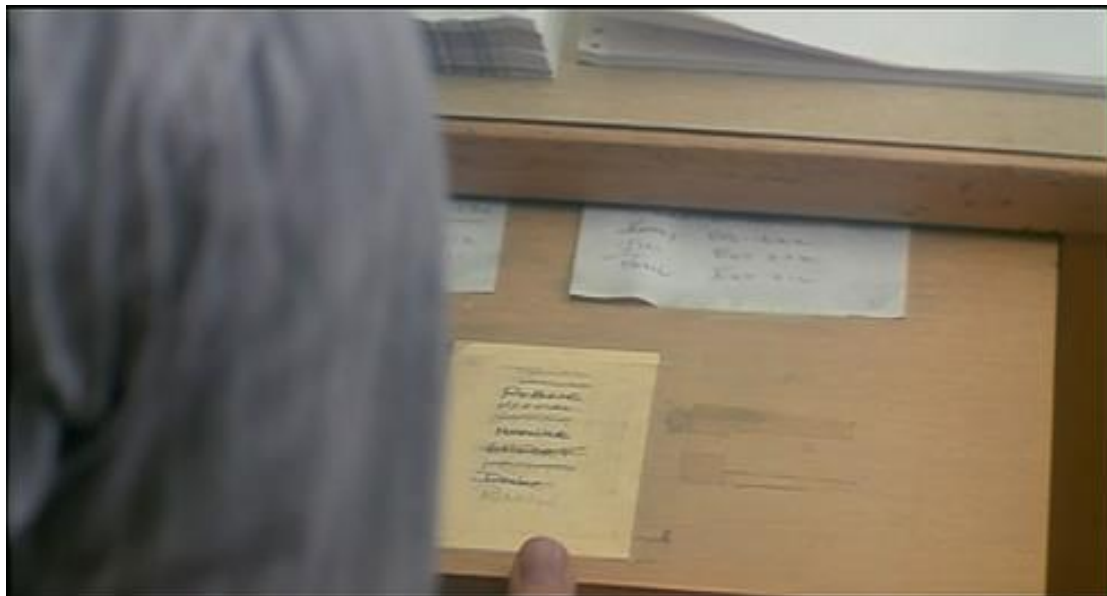
Figure 30 – Lightman finds the latest password in his school office. *WarGames*, (Badham, 1983), film grab.

Like other hacker genre films, the use of physical space in *WarGames* represents the manner in which the hacker engages with the wider world around them. *WarGames* initially presents Lightman in the small, enclosed space of his bedroom filled with information and communication equipment. However, over the course of the film, Lightman is forced out of this enclosed hacker space into the NORAD facility and open, public spaces. Furthermore, the film juxtaposes the small, enclosed space of Lightman's bedroom with the vast space of the NORAD facility. In many respects, using the small, enclosed space of his bedroom early

in the film underscores the fact that the initial scale of Lightman's hacking is purely for personal gain. In contrast to Caul and Smiley who undertake surveillance and espionage for business reasons, Lightman hacks into his school's computer to change his grades and tries to hack into Protovision's system to access their new game software.

As the film progresses, it demonstrates an escalation of scale in terms of both the scope of the threat of global thermonuclear war and by positioning Lightman on a larger stage of public settings and ultimately within NORAD itself; this is far from a personal narrative, but rather poses a threat to the whole world. It is therefore fitting that film moves between multiple different locations. The fact that the film's focus begins with NORAD also symbolically aligns the viewer with Lightman's perspective as we too penetrate the Government's secrets, assuming pseudo-hacker status by voyeuristically monitoring their activities. By presenting Lightman in larger, open spaces, he becomes more vulnerable, but simultaneously is forced to become a more proactive character to protect himself.

Equally, Lightman's hacking symbolises a transitional point between Harry Caul's passive observer in *The Conversation* from the 1970s and Brill's dynamic hacker in *Enemy of the State* from the 1990s. Whilst Caul is a passive observer and recorder of information and secrets, Lightman is shown to use his equipment to infiltrate and interact with other computer systems to effect changes, such as altering his school records. However, he is far from the dynamic hacker figure Brill is shown to be in the 1998 film *Enemy of the State* as he only interacts with computer systems to effect minor changes for his own amusement; in contrast Brill turns the technology against his opponents and utilises equipment to take offensive action. Nevertheless, this is by no means indicative of a limitation of the film or Lightman as

hacker figure, but rather demonstrates the interim phase that Lightman as a hacker figure and *WarGames* as a film represents. *WarGames* stands as a key example of hacking history, conveying the emergence of a more proactive style of hacking that will continue to come to the fore in later films such as *Hackers, The Net* and *Enemy of the State*.

Whilst other hacker characters, like Harry Caul and George Smiley, are represented as isolated and somewhat socially awkward, Lightman is depicted as a relatively well-adjusted and average American teenager, who just so happens to possess technical skills and an interest in computers. *WarGames* strives to emphasise that Lightman has a wider life than just using his computer by physically showing him in other spaces, such as his school and at the arcade playing video games. The film stresses the fact that Lightman is part of the broader community by positioning him in public places and showing him in crowds of people. Rather than serving to isolate Lightman in a solitary existence, hacking instead offers him advantages over his peers. On a similar note, the film's portrayal of Lightman's relationship with Jennifer sets him apart from both Harry Caul and George Smiley as he is shown to start and maintain a healthy relationship with a female character and to consciously choose to share his hacking secrets with her. The film depicts Lightman bringing Jennifer into his private hacking space and sharing his hacking journey over the course of the narrative. Given the personal and intimate nature of this hacking space, and the manner in which both *The Conversation* and *Tinker Tailor Soldier Spy* emphasise the need to maintain secrecy, this change demonstrates a significant shift in the characterisation of the hacker figure towards a position of sharing secrets and trusting others. However, the obvious pitfall for the hacker figure maintaining a connection with others is the potential vulnerability that their enemies could use against them. Whilst this possible weakness is not used against Lightman in

WarGames, this vulnerability is utilised against Dade Murphy in *Hackers* (as I discuss later in the chapter) and is exploited to undermine other hacker figures in other films.

Whilst *WarGames* does not depict the breadth of the hacker subculture exemplified in *Hackers*, as I will go on to discuss later in this chapter, there are nonetheless the beginnings of hacker collaboration and partnerships as Lightman is shown consulting his hacker friends Jim and Malvin to gain their views on the data he acquired from the WOPR computer system. These two characters represent a more 'professional' hacker culture by showing them coming together to work for what appears to be a computer company, but they are also more reminiscent of the socially isolated figures of Caul and Smiley. In introducing these characters in a short scene, *WarGames* marks the distinction between the socially awkward hacker figure and Lightman's 'every-teen' hacker figure. Just as Jeremy Strong's team film depicts the 'gathering' (Strong, 2008, p.44) of a collection of individuals, so does Lightman begin to bring together his allies in the form of Jennifer, Stephen Falken and later gains the trust and support of McKittrick and other staff at NORAD.

The film spends a great deal of time trying to humanise the computer technology presented over the course of the narrative. Firstly, the WOPR supercomputer is given the name 'Joshua' to connect it to its human creator as a pseudo 'child'. In addition, Lightman's interaction with the computer become vocalised as he effectively gives Joshua a voice to 'humanise' the computer as a 'character' that participates in the action of the film. This also has the effect of transforming the interaction between human and machine from typed instructions and code to actual dialogue between two characters. Although Lightman justifies this as being the result of using a computer programme to synthesise the computer's text to sound, in giving Joshua a

voice the film begins to develop the computer as a character, portraying it as a naïve child simply trying to play games. This notion of a parent-child relationship is furthered by the fact that the actor playing Dr Falken, John Wood, also voices Joshua and serves to blur the line between human and machine. This continues throughout the film as Joshua is presented as developing a distinct personality beyond its original programming, trying to maintain contact with Lightman to continue playing their game but most significantly during the closing scenes in which Lightman helps it to understand the concept of a 'no-win' scenario. Furthermore, Joshua 'himself' becomes something of a hacker figure in trying to track down Lightman, who he believes to be Falken due to the former's use of the backdoor password to access the system. This notion of machines becoming more human like ties back to the horror genre, as the creation of science becomes a threat to humanity and artificial intelligence hacker could easily supersede the human hacker in terms of effectiveness and efficiency. Such depictions of the potential 'horrors' of artificial intelligence are presented in films like *Demon Spawn* (Cammell, 1977), *Tron* (Lisberger, 1982), *The Matrix* (The Wachowski Brothers, 1999), and *The Lawnmower Man* (Leonard, 1992), to name but a few.

What is more, there is a strong sense of video game culture becoming visually associated with the hacker figure. As Schulte highlights 'representations of computer networks as an exclusive and elusive technology were enhanced by the notions that it was the domain of teenagers and that the *technology itself* was teenaged'[11] (Schulte, 2013, p.33) and Lightman is shown playing video games at several points during the film, but this feeling of competition permeates through most of the film. This begins to raise the notion of hacking as a game or competition, in which the hacker needs to overcome obstacles or complete a series of tasks to gain access to information. Once again, this does tie into the competitive nature of Harry Caul's work as a surveillance expert and George Smiley's world of espionage, as they both

are engaged in conflict to establish control over the electronic space of communication; in each of these fields the hacker figure is competing with their target, striving to gain access to their secrets, albeit through different means. The use of video games allows this sense of competition to be visually represented on screen, allowing the viewer to connect with the material in a more visceral fashion. Moreover, as Schulte underlines 'hacking itself was imagined as a kind of video game and therefore innocent, not malicious' (Schulte, 2013, p.33) and, as a result, the film's representation of Lightman as hacker focuses on him as an innocent teenager as opposed to being a malicious criminal. Events are largely presented from his perspective to align the viewer with his position.

Visually the film emphasises the parallels between playing video games and computer hacking, which is most prominent in the shots of both computer and video game screens in which Lightman's reflection can be seen. The similarities between these shots can make it difficult to distinguish which is the game and which is computer screen, a point also reflected in 'Joshua's' inability to distinguish a simulated war from a real one. In showing Lightman's image on the screen, the film emphasises the manner in which he is effectively absorbed by the technology, immersing himself in the technology. These links with video games are further exemplifies by other films during this period, such as *Tron* in 1982 and *The Matrix* in 1999.

Figure 31 – Lightman's reflection appears in the technological screen as he plays video

games. *WarGames*, (Badham, 1983), film grab.

Figure 32 – Lightman's image on the computer screen mirrors that on the game screen.

WarGames, (Badham, 1983), film grab.

Likewise, the central conflict and tension of the film arises from the fact that the Joshua computer system continues to play the titular war game, creating the illusion of an imminent nuclear strike from the USSR that the US government needs to defend against. In many respects, *WarGames* demonstrates Schatz's genre of order in that the film presents a hacker figure in conflict with wider society and with the Government in particular. Like the hero of the Western, Lightman stands as an individual who is in conflict with the authorities and trying to convince them that he is not a Soviet Spy and that the WOPR computer is presenting data on a simulated Soviet attack. However, the film also exemplifies Schatz's genre of integration in terms of a teenage hacker figure gaining the respect of the adult figures representing the Government. Lightman is shown to mature over the course of the film, evolving from a teenage rebel to become a more heroic figure who takes responsibility for the mistakes caused by his hacking. In physically transporting Lightman from the small, enclosed space of his bedroom to the outside world, the film also visually represents his personal development over the course of the film, growing and maturing into a more effective figure.

Both Chapters One and Two have considered how the hacker is represented as something of an outsider figure in that he or she is socially isolated, paranoid and shown to adopt machine-like traits; whilst Caul and Smiley are presented as machine-like figures due to their methodical approaches to hacking, Lightman is instead presented as a more casual hacker figure. However, *WarGames* does present a similar situation to *Enemy of the State* in the fact that Lightman is identified as a threat to national security and becomes the target of surveillance for his perceived hacker crimes. Like Robert Dean, Lightman is pursued and detained by the authorities and forced to elude his captors to clear his name. The fact that Lightman is assumed to be a Soviet spy also links *WarGames* to other hacker films. In the

same way as *Tinker Tailor Soldier Spy,* the film is presented against the backdrop of the Cold War and deals with the ongoing ramifications of that looming threat of an all-out conflict between the USA and USSR. Lightman also comes into conflict with NORAD when agents are sent to capture him once they trace his hacking activity and believe him to be a spy; the Government agents trace Lightman's other hacking activities and question why he has booked plane tickets and accessed a bank system. Consequently, he is forced out of his private space and needs to venture out into the larger space of the physical world to seek the help of Falken to clear his name and prevent nuclear war.

Like other hacker films, *WarGames* presents a haunting presence from the past in the form of Stephen Falken. He is initially presented as an ethereal figure through videos, photographs, records and his legacy in creating the WOPR computer system. However, this haunting presence assumes a physical presence in the film part-way through the narrative, as Falken is revealed to be alive and Lightman seeks his help to prevent the WOPR system from carrying out the nuclear strike as part of the war-game simulation. In fact, Lightman has to seek help from this digital 'ghost' to prove his innocence and to confirm that 'Joshua' is playing out a simulation rather than presenting data on a real attack. More significantly, Lightman's own computer hacking activity serves as a haunting presence for him; this activity creates records on the digital frontier that become traceable by the Government agents and raise difficult questions over his motives. This potential for data 'ghosts' and electronic footprints presents increasing social anxieties on screen as our personal data becomes integrated within the electronic space.

Figure 33 – Falken on video. *WarGames*, (Badham, 1983), film grab.

4.4 *Hackers* (Softley, 1995)

In many respects, *Hackers* represents the culmination of the development of the 'Hollywoodisation' of hacking from the 1970s up until its 1995 year of release. Like *WarGames*, *Hackers* represents a key point in the development of the hacker figure, as well as of the hacker film genre as a whole. However, whilst *WarGames* suggests that Lightman as an amateur hacker figure is somewhat unique amongst his peers, *Hackers* instead presents an entire hacker subculture comprised of a group of teen hacker protagonists who come together to work collaboratively over the course of the film. Consequently, while Dade Murphy assumes a pivotal role in the narrative, he also shares the spotlight with Kate Libby, Ramon Sanchez, Emmanuel Goldstein, Paul Cooke and Joey Pardella, who are all presented as skilled hacker figures. Therefore, in many respects, this is the exemplar hacker 'team film' (Strong, 2006, p.44). The leaps forward in technology between 1983 and 1995 are also made apparent as the film takes advantage of the improvements in visual displays to foreground

and hyperbolise the capabilities of 1990s computer technology. Whilst the other hacker genre films I have examined in previous chapters have stressed a sense of process utilised by the hacker to achieve his or her goal, *Hackers* instead focuses on hacking as a demonstration of technical skill and prowess as individual hackers compete against security systems and against one another. The representation of hacking in *Hackers* suggests that it has become a game or competition in which the hacker must overcome cyber-security in order to infiltrate different computer systems. Rather than aiming to acquire access to information, the hacker conducts illicit hacks to demonstrate their technical skills and gain recognition from their peers, using viruses and other software to bypass the security measures of other computer systems.

The promotional poster for *Hackers* presents Dade Murphy and Kate Libby as the central protagonists. The faces are shown with electronic text and code flashing across them, conveying the central role technology plays in their lives. However, whilst Harry Caul is shown with a technical interface to his equipment, Murphy and Libby are instead immersed within the technology in the image, effectively becoming part of cyberspace. The trailer for *Hackers* announces that 'hidden beneath the world we know, is the world they inhabit' (*Hackers* trailer, 1995), presenting cyberspace as an effective parallel plane of existence that is inhabited the hacker subculture. Whilst earlier films convey hacking and surveillance as an activity, the trailer declares that 'it's not just something they do, it's who they are' (*Hackers* trailer, 1995), further reinforcing the notion of hacking becoming an inherent part of these characters, as opposed to merely a hobby or job.
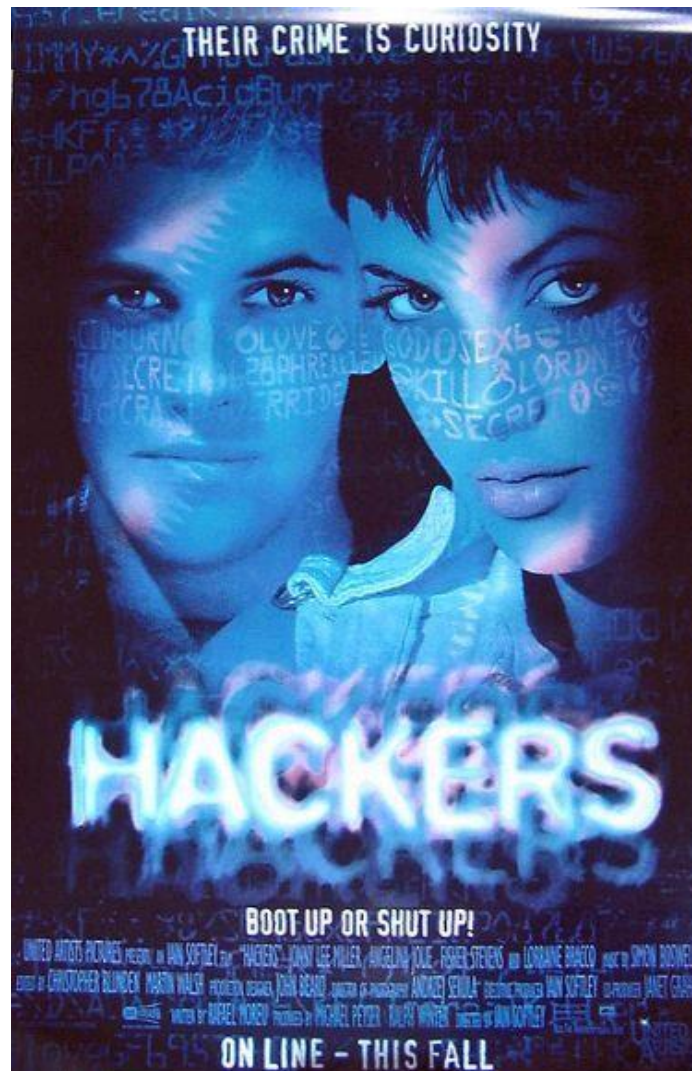
Figure 34 – *Hackers* (Softley, 1995) promotional poster.

Like other hacker genre films, *Hackers* fetishises the computer technology and processes

used by the hacker figure. However, whilst *WarGames* emphasises the size and scope of the

computer technology that fills entire rooms, *Hackers* accentuates the sleek design of 1990s

computer technology and how portable it has become at this point in time. This fetishisation

extends to the group of hackers examining Libby's new laptop in a scene in her room. Each

of the teen hackers discusses the technical specification of the laptop, describing how they

would use the equipment in hacking. Although the film underlines the technical skills of each

hacker figure it also draws attention to the technical specifications of the equipment and the
need for the hacker to have the right kind of technology for effective hacking.

Similarly, like *WarGames, Hackers* also depicts an extremely hyperbolised version of
computing technology and its abilities but takes this extravagance to even more extreme
levels. Whilst other hacker genre films produced in the 1980s and, to an even greater extent,
in the 1990s strive to hyperbolise the representation of computer technology, this is
particularly apparent in *Hackers*. In many respects the focus becomes the lavish visuals of
computer software rather than the technological hardware, drawing the viewer into the virtual
world of cyberspace. This is particularly apparent in the depiction of the Plague's workstation
and hacker workspace which is presented as advanced and futuristic in comparison to the
reality of 1990s computer technology. Like the NORAD screens in *WarGames*, Plague's
computer screens at Ellingson are vast windows to effectively immerse the user, and by
extension the viewer, in the virtual world of computer files. In this way, the practical reality
is suspended in favour of action and spectacle.

Figure 35 – Plague's futuristic workstation and hacker workspace. *Hackers*, (Softley, 1995) film grab.

On a visual level, the film also attempts to convey a sense of speed and to show the viewer a technological viewpoint. Thus, the film 'takes' the viewer into the technology, offering the audience the electronic signal's perspective as it travels through the 'information superhighway' between different computer systems. This (re)creation of a technological viewpoint on screen alludes to the manner in which the extradiegetic camera assumes the perspective of surveillance cameras in both *The Conversation* and *Enemy of the State*, as the action is presented to the viewer through the technology; however, whilst surveillance cameras monitor a physical target, the target in this case is ethereal strands of data stored in computer files. This perspective is continually shown throughout the film, drawing the viewer into the hacker's world and striving to convey the hacker's journey as they hack into different systems. In this fashion the film celebrates the progression of the technology and emphasises how state of the art the technology has become. Moreover, *Hackers* immerses the hacker figure's image within the virtual world of data, conveying how he or she becomes

symbolically immersed in the act of hacking. These visuals also strive to make hacking sleek and sexy for the viewer, once more generating a sense of tension and awe for the viewer. Similarly, these visual sequences evoke a sense of frequency, speed and quantity in terms of the information being transmitted between machines. At various points during the film the camera shows us information travelling along the information superhighway, striving to draw the audience into an exciting, thrilling experience by immersing the viewer in a fictionalised representation of data transfer.

Figure 36 – technological viewpoint takes the viewer into the computer system. *Hackers*, (Softley, 1995) film grab.

Figure 37 – Murphy's image immersed in data. *Hackers*, (Softley, 1995) film grab.

This sense of hyperbolised reality also emerges in the communication and interaction

between different hacker figures in the film. Therefore, rather than just interacting via email

or online chat, Dade and Kate 'spar' through elaborate text messages on one another's

screens, which are interspersed with video clips of various duels and battles that serve to

heighten the viewer's sense of their virtual conflict and create a more visceral experience for

the viewer. Likewise, Murphy also receives a video message from the film's antagonist, the

Plague, on a laptop with an offer for the two of them to work together. The way Plague's

video appears on the screen of the laptop also conveys a sense of ethereal and omnipresent

capabilities of the hacker, able to extend his or her reach to anywhere at any time through

their technology. In essence, the increased mobility of the hacker in the real world extends to

cyberspace, meaning that he or she can virtually appear anywhere at any time with the touch

of a few buttons. Thomas underscores the notion that '[*Hackers*] indicates the manner in

which Hollywood film translates every aspect of hacker style, even the most basic social

interactions, into technology' (Thomas, 2002, p.159) and thus the film continually presents

interaction through, or in relation to, different aspects of technology. The reality, in which the

computers of the period of the film's production in 1995 are capable of comparatively basic

text messages and archaic interfaces (in the eyes of a modern audience), is only occasionally

glimpsed and usually glossed over. Instead the film focuses on presenting a glamorous,

hyperbolised version of technology that strives to draw in the audience. In short, the major

generic shift exemplified by *Hackers* relates to spectacle taking precedence over the

substance of the hacker process, as the film focuses on visuals and relaying this hyperbolised

representation of software rather than the practicalities of how the technology is used. It is at

this point that hacker genre films creep further into science-fiction territory, abandoning

contemporary reality in favour of thrill and intrigue. This phenomenon can also be traced in

The Net (Winkler, 1995) which I will analyse in greater detail in the Conclusion, just as it can

be identified in other films like *Johnny Mnemonic* (Longo, 1995), *Disclosure* (Levinson,

1994) and *The Matrix* (Wachowski Brothers, 1999).

Hackers also stresses the central role of computers and technology in the hackers' lives by

reflecting the glare from the screen over their faces. The impact of this visual is to reiterate

the significance of the technology on the hackers' lives, but also illustrates the manner in

which the act of hacking has begun rewriting their images and led to these characters defining

themselves as hacker figures. Linked to the notion of the emerging hacker subculture, these

characters actually acknowledge and embrace their roles as hackers, expressing this to the

rest of the world by adopting a distinctive hacker style. This is a marked development from

Lightman's image blurring in with the text on his computer screen, as here the text and

images from the computer begin to emerge from cyberspace to affect the real world,

signifying the increasingly dynamic nature of the technology over time.

Figure 38 – glare from PC screens on Murphy's face. *Hackers*, (Softley, 1995) film grab.

Equally, the intertextual influence of other films such as *Tron* (Lisberger, 1982) is also clear in the construction of the virtual file environment. Rather than depicting the hack as an intrusion into file systems, the film portrays an incursion into a virtual 'city' that the hacker can navigate through, in which computer file directories become virtual buildings that house secrets. Like *Tron, Hackers* interprets and conveys computer systems as virtual realities to be traversed, which again has the effect of creating a more elaborate visual experience for the viewer. The impact of this approach is to immerse the hacker, and by extension the viewer, within the experience of hacking, translating the act of hacking into a more understandable and more visceral experience that the viewer can connect to. Similarly, the use of these visuals continues to generate a greater sense of speed and mobility, allowing the viewer to monitor the situation through the computer technology and creating tension and excitement.

Like *WarGames*, *Hackers* offers hints and glimpses of an investigative process being undertaken by the hacker figure but focuses more on the results of hacking; thus, the film

often skips ahead to the answers rather than detailing the intricate step by step process that is involved, but nevertheless shows elements of this process. As with Lightman in *WarGames*, Murphy in *Hackers* is presented as needing to gain a code or password to access certain systems. One such example is one of the early scenes in which he telephones the television network and poses as an employee to acquire the modem number to connect to it. Although the film emphasises the glamour and technical wizardry of the hacker's world, it nevertheless acknowledges some of the practical requirements of hacking. When the hacker group decide to hack the Ellingson supercomputer, they also need to go through the company's trash to find discarded printouts. Similarly, they need to physically access the system to place technology in the building to allow them to access the system remotely. Paul Cook also tries to identify a user password to give them access by posing as a visitor and using his photographic memory to remember the keystrokes as employees log into the system. Whilst the film does continually focus on the more glamorous results of this work, it nevertheless at least acknowledges the steps taken by the hacker, which echoes the surveillance and espionage techniques utilised by characters in earlier hacker films, such as Peter Guillam in *Tinker Tailor* and Harry Caul in *The Conversation.*

The film also conveys the time and process undertaken by Murphy when analysing and interpreting the data Joey obtained from the Ellingson garbage files and how it relates to the Da Vinci virus file. The film visually signifies the time shift transition as the sun goes down and rises again, speeding up the frames to fast forward to the point when Murphy has finished his analysis. Although this could be interpreted as simplifying the hacking process, it nevertheless reiterates the time needed to analyse and interpret the data. However, these scenes do not delve into specific details as to how Murphy completes his analysis or what processes are involved; instead the film presents a montage of shots of Murphy at his screen,

interspersed with extravagant visuals to represent data and then Murphy offers a summary of the results in dialogue.

Like Lightman in *WarGames*, Murphy diverges from the isolated figure observed in the depictions of Harry Caul and George Smiley, yet *Hackers* takes this idea of social integration in a different direction by building an entire hacker community around the central hacker figure. Murphy begins the film as an isolated character, a new starter at a new school living in a new place. Over the course of the film he becomes accepted into the hacker subculture and eventually becomes part of that community. Thus, rather than integrating into mainstream society the hacker figures actually build up their own distinct community with which to make connections to other hackers. As a result, the hacker remains segregated from wider society but instead becomes embedded in this hacker subculture. This seems to confirm Schatz's concept of genres of social integration (Schatz, 1981, p.32-34), as Murphy finds his connection to wider society through the hacker subculture and through his relationship with Kate Libby.

In stark contrast to the isolated figures of Caul in *The Conversation* and Smiley in *Tinker Tailor Soldier Spy*, *Hackers* depicts a narrative with multiple hacker protagonists at its core, bringing them together to work cooperatively towards a common goal and conveying a sense of an emerging hacker subculture they inhabit. As Douglas Thomas indicates 'these hackers are not isolated loners or misunderstood teens; they are cutting edge, techno-fetishists who live in a culture of 'eliteness' defined by one's ability to hack, phreak and otherwise engage technological aspects of the world (including pirate TV and video games)' (Thomas, 2002, p.161). Whilst *WarGames* shows Lightman as a hacker beginning to establish links with

other hackers, *Hackers* portrays the phenomenon of hacker alliances, collaboration, competition and even hacker warfare. Within the context of this film hacking has become a shared experience, in which individual hackers share their hacking feats and strive to demonstrate their hacking skills.

This hacker subculture is even housed by a shared hacker space in the nightclub Cyberdelia, bringing different hackers together to impart their stories and have a shared recreational experience. This space embodies the sense of gaming and competition, but also imparts the larger scale of hacking and the sense of interaction between hackers. The representation of the hacker subculture is largely based on youth culture, focusing on recreation, socialisation and games. Furthermore, part of this subculture is the hacker demonstrating his or her technical skill by infiltrating complex and high-profile computer systems. This is not a matter of acquiring information or secrets for either profit or political agendas but rather a case if hackers proving their ability to gain access to such complex systems. Again, this stands in stark contrast to the serious work ethic of Harry Caul and George Smiley. The sense of style also emphasises the subculture angle; each of the hackers strive for an extreme fashion style, emphasising a futuristic look and feel to pair with the sleek technology. Another facet of this sense of hacker style is the adoption of hacker aliases to create a distinct hacker identity. All of these elements serve to in integrate a hacker figure into this hacker subculture.

In the same vein as *WarGames*, the influence and prominence of video games and competition also comes to the fore throughout *Hackers.* Gaming, and in particular competitive gaming, is shown to be a substantial part of hacker culture, as the characters consider gaming prowess to be indicative of someone's skills as a hacker. Visually, there is a

strong association between the different strands of technology and games become an integral part of the hacker subculture depicted in *Hackers*. Closely linked to this notion of a hacker community and subculture is the concept of hacker competitions, and by extension, hacker alliances and hacker warfare. Whilst characters like Harry Caul and George Smiley are portrayed as solitary figures acting covertly in the shadows, Murphy and his group of hackers are continually shown to be sharing their hacker experiences. The film's climax shows hackers from around the world collaborating to create a virtual diversion, whilst Murphy's group tries to gain access to the incriminating evidence in the Plague's system. However, the film presents this hacker collaboration in a hyperbolised form, so that is presents not just a small group of hackers coming together, but unites hackers from across the globe together under a shared cause.

For a large portion of the film Murphy resists becoming involved in the hackers' attempts to analyse and understand the nature of the files Joey downloaded during his hack out of fear of the potential impact on his mother. When he finally agrees to help, the film emphasises the benefits of hacker cooperation and collaboration, showing the hackers working together and successfully achieving their goals. Visually the technological immersion of the core group of hacker figures in the stream of data begins to blur together in a montage, conveying the technology's ability to connect each of them together to combine their efforts.

Figure 39 – Murphy isolated and alone in his private hacker space. *Hackers*, (Softley, 1995) film grab.

Figure 40 – Cyberdelia nightclub as a shared hacker space. *Hackers*, (Softley, 1995) film grab.

What is more, *Hackers* also demonstrates the escalation of scale, both in terms of physical space as well as greater stakes arising from hacking. As with other hacker genre films the

early scenes in *Hackers* present Murphy in his bedroom illicitly accessing other systems. However, over the course of the film *Hackers* continues this trend of shifting from small, enclosed spaces to larger, more open locations. The film takes great pains to emphasise the larger scale of hacking in the 90s. The film repeatedly shows the New York skyline to convey a sense of vast space. Likewise, the film presents Murphy on busy streets, in crowded corridors, in vast public spaces. In emphasising the breadth of physical space, the film also reiterates the extended range of the hacker through their technology; hackers can now remotely access other systems all over the world, connect with one another online and extend their influence all over the world. Furthermore, there is an emphasis on mobility of the hacker – he or she is no longer tied to their workstation or hacker space, but increasingly using laptops and hacking from different locations. This again ties in with this idea of the hacker becoming a more proactive figure, and aligns the hacker teens with Brill's offensive style of hacking in *Enemy of the State*. Their mobility empowers them as hacker figures, allowing them to attack their targets rather than just observe them.

Although Plague is presented as a character who is working for a company and thus has access to a 'futuristic' workstation to monitor their cyber security, he also has access to a small, enclosed hacker space from which he plots - here he is shown hacking into the FBI files to falsify files to frame Murphy's mother and to design the Da Vinci virus. Similarly, Plague and Wallace are shown on an escalator conspiring about the worm and Da Vinci virus. Although several other scenes portray them conspiring in a small, enclosed space, this escalator scene once again reiterates the sense of hacking on a larger scale and hacking becoming a more mobile activity. Movement becomes increasingly associated with the hacker figure and hacking as an activity, reiterating the idea of a more proactive endeavour.

Equally Plague invades Murphy's private hacker space in his bedroom to blackmail him. In the same vein as Brill and Robert Dean in *Enemy of the State*, it is only when Murphy steps out of this private space onto the wider stage to ally himself with the other hackers that he is able to effectively challenge Plague. This also occurs with both Joey and Phreak, who are both arrested by Richard Gill and his Government agents. Thus, the small, enclosed space inhabited by the hacker is no longer a secure or safe place for their hacking activity. As a result, part of this transition to larger spaces is to gain anonymity amongst larger crowds. This culminates in the collaborative hack at the end of the film, which is coordinated from the public space Grand Central Station. Likewise, the film's depiction of Murphy's hacker competition with Kate Libby takes advantage of the technology being more mobile, showing them hacking into different systems from a variety of locations. There is a continual emphasis on hacking as a mobile activity. This theme of hacker mobility continues to be presented in the manner that all the major hacker figures are shown using roller-blades, conveying the notion of hacking as a fast-paced activity and presenting the hacker as a more active figure.

There is also a sense of blurring the line between human and machine as the hacker figure becomes immersed in the act of hacking but the film visually blurs them within the technology and the computer graphics to emphasise how hacking consumes their lives. *WarGames* shows several scenes in which Lightman's reflection appears on his computer screen as he is playing games or reviewing the results of his hacking program connecting with a series of computer system, yet *Hackers* takes this even further to intermingle the image of the hacker with the visuals of computer code on their screens. Furthermore, Murphy is shown wearing a headset during the collaborative hack towards the end of the film which

invokes images of cybernetic creatures; these shots indicate that simply typing away at his laptop keyboard is insufficient and that he needs to incorporate technology into his physical makeup in order to better connect with the equipment and to effectively make it an extension of his own body. As I alluded to earlier, although several films endeavour to 'humanise' computers and artificial intelligence, *Hackers* merges the human hacker figure with their technology to immerse them in cyberspace.

Presenting a female hacker protagonist also offers a different angle to the hacker figure and to the hacker film genre as a whole. As Thomas underscores 'there are relatively few girls who participate in the hacker underground, and those that do so oftentimes take on the values and engage in the activities of boy culture just as readily as their male counterparts' (Thomas, 2002, p.x), which is arguably the case for Kate Libby in *Hackers*. Like her male counterparts, she strives to prove her hacking prowess, capability in achieving high scores in video games and to prove her ingenuity and creativity in hacking. Stylistically, female hacker figures are presented as more androgynous characters, adopting somewhat masculine traits to compete with male hacker figures. The transition of female figures in hacker genre films warrants further study in its own right to investigate the development of female hacker figures, arising from positions of victims and instruments of male figures, to allies, nemeses and even protagonists.

Furthermore, the competitive dynamic between Murphy and Libby means that the film's conflict is not just a 'genre of order' conflict for contested cyberspace between the hackers and Plague, but also includes a 'genre of integration' dimension to the conflict between Murphy and Libby; the film continually focuses on their attempts to resist their mutual

attraction and instead demonstrate their hacker prowess. The film strives to emphasise their compatibility and their equal standing as hackers. Thus, whilst female characters in *The Conversation*, *Tinker Tailor Soldier Spy* and even *WarGames* stand as bystanders, targets or tools used against the male hacker figure, Libby represents a hacker ally who proves her hacking capabilities in her virtual 'battle' against Murphy early in the film. Their hacker competition serves to solidify Libby's hacking credentials to both the viewer and Murphy, as well as confirming their romantic compatibility – whilst Caul and Smiley are betrayed by their lovers, *Hackers* presents a more positive potential for a trusting relationship.

In addition, the moral standpoint of the hacker seems to have transgressed from morally ambiguous to more overt malicious intent. As Jecan underlines 'Dade is completely different from Lightman, he is not presented as a harmless and curious hacker who only seeks to play games, but instead it is revealed from the very beginning that he is a malicious hacker (he caused damage)' (Jecan, 2011, p.106), striving to draw the audience into an exciting and thrilling experience. These hackers are dangerous to computer systems but the film endeavours to portray them in a more sympathetic light. Although the film emphasises that the teen hacker protagonists are not mere observers but actually seek to cause virtual damage with viruses, the film also strives to differentiate between the actions of the teen hacker and the Plague. I have already traced the development of hacking in terms of the hacker becoming a more dynamic figure and undertaking a more proactive activity by comparing *The Conversation* (Coppola, 1974) and *Enemy of the State* (Scott, 1998) but introducing *WarGames* and *Hackers* into this discussion offers insights into the intermediate steps in the evolution from a passive observer to an active participant in events.

4.5 Conclusion

Both *WarGames* and *Hackers* represent key steps in the progression of the hacker film genre, demonstrating the evolution of generic traits that express the hacker figure's development from a passive observer to an active participant in events. Furthermore, there is a real sense of evolution between the two films, as *Hackers* continues to progress the development of generic features initially depicted in *WarGames*. Whilst *WarGames* focuses on the size and scope of the technological hardware and Government installations, *Hackers* instead focuses on the hyperbolised portrayal of software to generate a virtual cyberspace environment that is navigated by the hacker. This sense of extravagant visuals is mirrored by the escalation of space as the hacker is increasingly forced out of small, enclosed spaces to instead inhabit larger, public spaces. Likewise, both *WarGames* and *Hackers* mark a shift from the isolated, paranoid hacker to instead promote the need for joint working and sharing knowledge and experience; in this way, the film conveys the sense of cooperation and collaboration as being keys to success. The conclusion of *Hackers* underlines that it is only when Murphy joins forces with Libby and the other teen hackers that they are able to collectively infiltrate the Plague's system. In stark contrast to *The Conversation*'s final scenes of Caul's paranoid, and ultimately unsuccessful, ripping apart of his apartment in search of bugging devices, *Hackers* instead provides a positive conclusion that portrays the empowerment of a hacker collective. Similarly, the focus on video games and competition in both *WarGames* and *Hackers* also indicate different stages in the progression of more active hacking and surveillance. The hacker 'warfare' in *Hackers* stands as a striking precursor to *Enemy of the State*'s offensive hacking by demonstrating the potential for speed, mobility and a tactical approach to engage, rather than merely observe a target.

5) Chapter Four: Hacking on Television in a Post-9/11 World - *24, Spooks* and *Person of Interest*

5.1 Introduction

My previous chapters have tracked the development of generic features in hacking and

surveillance films from the 1970s through to the 1990s that demonstrate a move from passive

observation and infiltration to a more dynamic approach to hacking over time. At the same

time, these chapters have also considered the socio-historical and socio-political context of

the period of production, such as the post-Watergate climate of *The Conversation* and the

Cold War backdrop of *Tinker Tailor Soldier Spy*. In the same vein, the 9/11 terrorist attacks

in 2001 marked significant changes to the cultural and political landscape of the world by

signifying the looming threat of terrorist cells as a hidden and unclear threat. Wheeler

Winston Dixon underlines the manner in which United States citizens rallied behind this

notion of reprisals against the terrorist other:

> Unlike the Vietnam war, which was hotly contested throughout the United States, the
> attacks on the World Trade Center[12] in New York and the Pentagon in Washington
> have galvanized the American public into a call for action, although the enemy being
> fought is both illusory and highly mobile, spreading throughout the world in
> numerous clandestine cells. (Dixon, 2004, p.1)

As a result, the depiction of hacking and surveillance began to shift from infiltration and

uncovering secrets towards using hacking as a means of predicting and preventing threats.

Kim Akass and Janet McCabe comment on the manner in which 'forms and formats get

recycled to give representation to current ideological struggles rather than offering something

radically new' (Akass and MacCabe, 2007, p.293-294) and this reflects the way post-9/11

television represents hacking and surveillance as a site of conflict to actively predict and

prevent terrorist attacks. As opposed to simply being used to acquire information, hacking

and surveillance increasingly becomes a tool to use data to predict threats so that measures

can be taken to prevent them. This chapter will focus on three television series as examples

of hacking and surveillance in the early twenty-first century, *24*, *Spooks* and *Person of*

Interest. Each of these television series exhibit this shift towards using hacking and

surveillance technology to predict crimes, violence and terrorist attacks before they can take

place. For the purposes of this chapter, I will focus primarily on analysing the first episode of

each of these television series to determine how these episodes introduce the viewer to the

series and its core generic features. This closer analysis of the first episodes will allow me to

focus on some specific examples as to how each of these series is introduced to the viewer, as

well as the establishment of the hacker generic traits in each of these series.

As I have considered in previous chapters, the focus of this study is on film and television

programmes that present hacking and surveillance, as well as hacker figures, as central to the

narrative rather than as supporting figures, and I have thus selected television series that

reflect this focus on hacker figures. I am particularly interested in the more 'cinematic'

television series for this chapter, particularly those with a distinctive visual style that will

allow greater comparison with my film case studies. Whilst there are a vast number of

potential hacker genre case studies in television, which I have outlined in Appendix B, I have

selected three television series to focus this chapter on. *24* focuses on the investigations of

Jack Bauer and the Counter Terrorism Unit (CTU) in Los Angeles as they strive to prevent

terrorist threats to the United States. *Spooks* offers an updated depiction and experience of the

British spy that parallels *24*, which also serves as a twenty-first century counterpart to *Tinker*

Tailor Soldier Spy. *Person of Interest* presents hacking and surveillance as the central focal

point of the narrative. The series initially focuses on two principal hacker figures, John Reese

and Harold Finch, who operate on the periphery of society and infiltrate the life of the titular 'person of interest' that the Machine sends them to investigate in each episode. Offering some critical and cultural context for each of these series is the backdrop of the 9/11 terrorist attacks. Each of these series focus on the impact of these attacks. *24* was initially produced in 2001, so was screened during the aftermath of the attacks, and *Spooks* was also released in early 2002 in this aftermath. What also becomes increasingly evident is the fact that the site of conflict in these series is itself an unclear and uncertain factor – this is not a clearly defined physical space with clear borders, but rather an indeterminate space that remains unspecified and ill-defined. Whilst the space of conflict in hacking and surveillance has always been somewhat unclear, this becomes even more apparent in post-9/11 films and television series.

Towards the end of the twentieth and the beginning of the twenty-first century, hacking has assumed an ever-increasing presence on television, to the point that a significant number of television series now incorporate a hacker character, which I outline in detail in Appendix B. This has ranged from supporting hacker figures such as the Lone Gunmen characters in *The X Files* (1993-2002) and Willow in *Buffy the Vampire Slayer* (1997-2003) to increasingly more prominent figures such as Chloe O'Brian in *24* (2001-2014) and Chloe Sullivan in *Smallville* (2001-2011). The fact that so many television series have developed to include this hacker archetype in some form, emphasises the way in which computer and surveillance technology assumes such a vital role in contemporary society. What remains key is that these hacker figures offer access to information and intelligence, empowering the people with whom they work with the information to defeat threats, overcome security and fulfil goals. These hacker figures are usually presented in a positive light, depicted as team players who support common goals and play a key role in preventing crimes, terrorist threats and uncovering corruption. This mirrors the increasing role of technology in society and exemplifies the

manner in which television and film reflect real world issues. Many of these television series incorporate hacker figures as sidekick characters, who are there to offer support to more action oriented protagonists. The incorporation of these hacker figures emphasises the increased role of this technology in our everyday lives, but also indicates the need for support and cooperation to achieve goals. Rather than a solo figure indulging in hacking and surveillance, these hacker figures continue the trend of becoming connected with others and more incorporated into wider society.

5.2 *24* (2001-2010)

24 was initially broadcast in the US in November 2001 in the immediate aftermath of the 9/11 terrorist attacks. Although the first series was well into production by the time of 9/11 terrorist attacks, and therefore the first episode was not produced in the wake of these attacks, the series as a whole later responds to 9/11 and its cultural impact. The series' premise of following the investigations and interventions of Jack Bauer and the Counter Terrorism Unit (CTU) in Los Angeles directly links to the impact of 9/11 on both the United States and the rest of the world. As Dixon underlines, 'With the events of 9/11, America truly entered the twenty-first century, an era marked by uncertainty and danger, in which wars are conducted not by nations but by terrorist cells' (Dixon, 2004, p.3-4) and *24* conveys this sense of uncertainty and ongoing danger from mysterious threats that need to be investigated to be uncovered. As Steven Peacock indicates 'Season One of *24* premiered only days after the terrorist atrocities of 11 September 2001. The series takes a 'no holds barred' approach to reflecting and commenting on the atmosphere, post-9/11, of America's role on the world stage' (Peacock, 2007, p.7). Therefore, the series reflects the dual states of anxiety and mobilisation in the wake of 9/11, indicating the fear of future attacks, the desire to demonstrate strength and resilience in the face of such threats and the uncertainty as to how

to respond. This also marks a point of vulnerability for the USA on the world stage, which is a clear contradiction of depictions of the USA as an 'invulnerable' superpower in earlier films and television series.

As a series, *24* presents itself in a largely cinematic fashion which has the effect of increasing the scale of the action and creates a greater sense of immediacy and tension for the viewer. As David Chamberlain and Scott Ruston underline, 'like most contemporary Hollywood films, *24* is also free of the constraints of the stage. Approximately 70 per cent of the programme is shot on location, generally in locations in or near Los Angeles (Bankston 2004: 43)' (Chamberlain and Ruston, 2007, p.16). Furthermore, as Chamberlain and Ruston go on to highlight, 'even in those scenes shot on the stage, broad interior shots depicting office activity are juxtaposed with extreme close-ups in manner that tends to emphasise the cinematic' (Chamberlain and Ruston, 2007, p.16). Thus, the series continually reiterates this sense of the cinematic, which continually intensifies the scope of the series and increases the scale and impact of this conflict between CTU and the ambiguous terrorist threat. The presentation of action in large, open spaces also reflects the mobility of the terrorist threat. Quite simply, the terrorist threat could come from anywhere or anyone.

The series' emphasis on presenting 'events occurring in real time' conveys the ongoing sense of urgency and immediacy involved in the narrative. Moreover, this use of the 'real time' format forces the viewer to follow all events as they take place and to follow the step by step investigation required to uncover secrets within the series. Just as the *Tinker Tailor Soldier Spy* television series forces the viewer to follow George Smiley's methodical approach to his mole investigation, so does *24* align the viewer with Jack Bauer's journey over the full

twenty-four hours. Similarly, this real-time format also increases the viewer's sense of interactivity in the investigative process – we uncover leads as the television series reveals them to us. As Peacock highlights the emphasis on the real-time format of the series indicates that 'we are to be caught and carried in a relentless momentum, a sustained movement forward, towards an inescapable end point, without prior knowledge of the shocks and surprises to befall us on the way' (Peacock, 2007, p.3). This underscoring of speed and mobility stems from an imperative to act and react quickly to threats and to follow up on leads to counter them. This concurs with the socio-political backdrop of the 2001 period of production, during a time of fear and perceived vulnerability, in which the US sought to re-establish its sense of security.

In a similar vein to other hacker genre films and television series, *24* demonstrates the foregrounding and fetishisation of technology throughout the series. The fact that the camera shows a satellite in orbit in the pilot episode intertextually references *Enemy of the State,* indicating the constant presence of technology in orbit that is able to track activity all over the world. This scene also parallels how films like *Hackers* and *Enemy of the State* take the viewer along the 'perspective' of data as it is being transmitted over the Internet, showing the viewer these connections to make them explicit and demonstrate exactly how the technology works. The early shots of the opening episode follow the signal transmission from the agent in Kuala Lumpur, to the satellite in orbit, and then back to the agent in the US. Peacock goes on to suggest that 'having seen this image once, we do not need to see it again to sense its significance: we are being watched, from afar, caught in a web of twenty-four-hour surveillance' (Peacock, 2007, p.4) and in many respects this assertion is correct. The power of this image of the satellite in orbit is conveyed in its single appearance in this first episode.

Equally, the use of multiple camera angles presented on a split screen simulates the experience of multiple surveillance cameras and their different perspectives of events. At various points the screen splits into different camera angle shots of the same scene, to the point that the viewer's television screen effectively becomes a surveillance monitor with a collection of different camera feeds. This immediately positions the viewer as a hacker figure that is privy to these multiple streams of information, placed in a position of power akin to surveillance experts of CTU.

As with *Enemy of the State*, there is a simultaneous focus on both the hacker figure and their target as *24* continually presents events from multiple character perspectives. As the pilot episode demonstrates, there is a continual shift between Bauer and the CTU agents and Mandy on the plane. Chamberlain and Ruston argue that '*24*'s use of split-screens … evokes television news and live sportscasts. Both of these forms use the split-screen to emphasise simultaneity of experience, whether during a crucial point of the game, or to unite geographically distant guests of a news programme' (Chamberlain and Ruston, 2007, p.17). In many respects this recreation of a sports game perspective emphasises the sense of competition between CTU and the terrorists. Both sides are operating on an equal footing, utilising similar technology, tactics and technical expertise. Moreover, given the backdrop of 9/11, it is uncertain that the protagonists will succeed in preventing all the terrorist attacks or if they will be able to save everyone. The pilot episode effectively conveys this uncertainty in the explosion of the plane during the closing moments of the pilot episode, and the manner in which the mysterious Mandy figure eludes capture.

The split screen also emphasises the viewer's ability to remotely view events occurring in different locations and to monitor two sides of the same conversation at the same time. This is an extension of previous technology, building on the surveillance capabilities presented in earlier hacker genre examples. As a result, *24* strives to generate a sense of omniscience and omnipresence in the viewer. Nevertheless, like *The Conversation*, *24* also underlines the fact that this sense of omniscience and omnipresence is illusory, as the viewer's perspective is still aligned with that of a specific character, or set of characters, at any given time. Thus, we only uncover pieces of the puzzle as the protagonists do. This is particularly clear in the depiction of Mandy, who is initially presented as an innocent bystander, but by the end of the episode is revealed to be part of the conspiracy to assassinate Senator Palmer. The technology offers multiple 'eyes' and 'ears' but the data it captures nevertheless requires analysis and investigation to put it into context. The cuts between different scenes suggest that the German man she is seated next to is likely to be the terrorist threat, based on the CTU profile of their suspect and the manner in which the episode plays up the notion of Mandy as an innocent bystander. She stands as a female infiltrator who has become a rival to the male hacker figures and an unseen and unclear threat who is able to conceal herself in plain sight.

Figure 41 – Split screen in *24* depicts three major characters in different frames. *24* (Hopkins, 2001), screen grab.

Chamberlain and Ruston further suggest that 'there is also an apparent correspondence between *24*'s appearance and an Internet web page aesthetic. In both cases, the screen bombards the viewer with information' (Chamberlain and Ruston, 2007, p.17). Once again, this 'bombardment' of information serves to foreground the technology in revelling in its ability to present multiple sources of data at the same time. In many respects this also challenges the viewer to maintain their focus on each of the narrative strands and to endeavour to make their own connections, continuing this sense of an almost interactive narrative. This is quite fitting in a post-9/11 context with the rise and increasing prominence of the Internet offering us access to a vast wealth of information at our fingertips.

This use of the split screen serves a dual purpose of emphasising distance between characters and demonstrating the technology's ability to connect them over this distance. For instance,

the series emphasises the distance between Bauer and Teri, his wife, by showing them on a split screen to depict the opposite ends of their conversation and to convey the manner in which these storylines begin to diverge. Simultaneously, however, *24* stresses the technology's ability to keep these characters connected. Throughout this pilot episode, Bauer and Teri are continuously shown to stay in contact through their telephone conversations. Whilst the split-screen serves to convey the physical distance between them, it also represents their virtual connection through the technology. Their storylines begin to diverge as Bauer's work literally pulls him away from the family, whilst Teri investigates Kim's whereabouts. This technological connection emphasises the increasing physical distance between the characters; their interaction instead takes place in the 'electronic frontier' (Sterling, 1992, p.xi), within the virtual space between them.

Furthermore, the presentation of the CTU workspace parallels that of NORAD and the NSA in *WarGames* and *Enemy of the State* respectively. Rather than a small-scale operation, the CTU space is presented as housing a well organised, efficient and well-connected agency, promoting the idea of teamwork and cooperation to acquire and analyse intelligence. Whilst in *The Conversation* Harry Caul works alone or with a small team of agents, Bauer is able to draw on the skills of multiple teams working together towards a common goal. Equally, in shots that parallel the introduction to the NORAD workspace in *WarGames*, the camera takes us into this workspace as Bauer arrives at the building, effectively taking us through the security measures he needs to follow to access the building. Like *WarGames*, these shots emphasise the sense of the view infiltrating a secret government building and are designed to elicit a sense of awe and intrigue. Nevertheless, this increase in scale of the CTU operation also creates a sense of tension and distrust with the possibility of moles infiltrating this larger scale operation. This also echoes the sense of distrust in *Tinker Tailor Solder Spy* that is

generated by the sheer scale of the Circus operation. Like Smiley, Bauer is forced to make alliances with those people he trusts the most, such as Nina Myers, so that he can undertake his investigation into who has infiltrated the CTU operation and who he can actually put his trust in. Whilst the series emphasises a sense of increased space, Bauer continually retreats from the larger space into smaller enclosed spaces like his hacker and surveillance antecedents. This sense of paranoia and distrust that was so prominent in *Tinker Tailor*'s Cold War setting is once again pertinent in the post-9/11 setting of uncertain enemies and uncertain conflicts. This episode also introduces a sense of paranoia in Bauer as a character and elicits a sense of paranoia in the viewer watching all of this activity unfold on screen. Throughout the episode it is difficult to know which characters to trust, which ties back to earlier hacker film examples I have looked at in previous chapters. By generating a sense of distrust and paranoia, the series also continues to develop a feeling of interactivity for the viewer.

Despite the emphasis on CTU being a larger organisation comprised of multiple agents working as a team, *24* nonetheless conveys a sense of lurking threats from within the organisation. In a similar vein to *Tinker Tailor Soldier Spy*, Bauer needs to move away from the larger, more open workspaces into smaller, enclosed spaces for his secret meetings. Bauer's private meeting with Walsh at CTU sets him on a mole hunt to find a rogue element within his own agency that is working against Palmer. This one to one meeting takes place in the small, enclosed space of the CTU meeting room, following a wider briefing with the other members of Bauer's CTU team. The series continually emphasises a sense of paranoia, as our perspective is often aligned with Bauer's, so like him, we as the viewer are uncertain as to who to trust. Therefore, Bauer's conversation with George Mason brings Bauer's suspicions

of duplicity to the fore. This underlines the sense of uncertainty at this time, as the threat of terrorism remains anonymous and unclear.

Figure 42 – Bauer and Walsh's illicit meeting in a small, enclosed space. *24* (Hopkins, 2001), screen grab.

In contrast to the majority of hacker figures, *24* initially presents Jack Bauer as a family man in the domestic setting of his home with his wife and daughter. However, the series quickly makes it clear that his work is continually pulling him away from his family and this personal setting. As the first series progresses, Bauer is continually striving to bring his family back together, yet the perils of his work repeatedly drive them apart, which culminates in the murder of his wife Teri in the final episode. This tension between his working and private lives permeates throughout the series, but the pilot episode effectively establishes this ongoing tension by editing scenes to emphasise that fact that Bauer's work incessantly pulls

him away from his family life, particularly in the closing moments when Bauer resolves to join his wife in the search for his daughter, but he is drawn back by the plane explosion. As the series progresses, there are consequences for Bauer as a hacker figure operating in this realm of espionage and terrorism, as his wife is murdered in the final episode of Series 1 by Nina Myers.

Likewise, *24* also emphasises the need to follow an investigative process and the need to utilise resources to identify and follow up leads. However, the series often depicts Bauer needing to undertake torture and extortion to force information out of his targets, largely due to the time constraints and sense of immediacy presented by the series. The pilot episode demonstrates this through Bauer's drugging and blackmailing of Mason. In this way, the series reflect the desperate measures taken by the US following 9/11.

The general sense of 'excess' in *24* does correspond to the generic development I have traced in the hacker film genre; as I outlined in Chapter Three, there is a general trend of expansion and increase in scale in the development of hacker genre traits. As a result, *24*'s emphasis on events taking place on a larger stage, conveying a sense of mobility and more extravagant visual effects correspond to the similar development in *WarGames*, *Hackers* and *Enemy of the State*. In shifting between different locations and character situations, the series quickly generates a sense of an extensive, international narrative space. This is an environment of mobility in which Bauer moves between different spaces to carry out his investigations. Speed is also conveyed through these scenes. Several scenes also emphasise the vast expanse of the urban landscape, continually reminding us the scale of the narrative of the series, the

extent of hacking and surveillance technology and that the various character strands occur on a large stage.

Another interesting point related to space is the series' use and presentation of time. The real-time format creates a sense of urgency and suspense for the drama of the series, but this also generates a sense of confinement for both the characters and the viewer that directly relates to the small, enclosed spaces I have identified as a hacker genre trait. Rather than a small, enclosed space, this is effectively a 'temporal confinement', tying the characters and the viewer to follow this strict twenty-four-hour period over the course of the series. As a result, we cannot skip ahead to the relevant plot points but must follow the step by step process of the characters. The frequent presence of the digital clock and its accompanying ticking sound serve as a reminder of the race against time faced by the characters and the immediacy of the threats posed to them. Once again, this temporal confinement elicits a sense of vulnerability, both for the characters and for the viewer in the wake of the 9/11 attacks. As Lynn Spigel highlights, 'in the days following the attacks, the Bush administration spoke often of the eternal and "essential goodness" of the American people, creating a through-line for the American past that flattered a despairing public by making them the moral victims of a pure outside evil' (Spigel, 2004, p.245). Spigel goes on to discuss how various television programmes sought to focus on the victims of the attacks, particularly emphasising the suffering of female victims to elicit sympathy (Spigel, 2004, p.245).

This series continually plays with the idea of who could possibly be a threat, particularly against the anonymous political backdrop of terrorist cells infiltrating a country's defences to carry out attacks from within. The scenes on the plane initially suggest that the photographer

is the threat against Senator David Palmer. The editing of all of these scenes is designed to implicate the photographer, as opposed to the 'innocent' American girl sitting next to him. The viewer is introduced to the plane scene immediately after Walsh tells Bauer about his suspicions of someone within CTU working against Palmer, in which the framing of the scene implies that the photographer with a non-American accent fits the likely profile of the assassin. In a similar vein, Nina Myers is presented as an ally figure for both Bauer and the viewer as she is presented as a point of view character that we identify with and whose perspective is shared and adopted by the extradiegetic camera. Bauer's conversations with Nina Myers often feel intimate and enclosed, symbolising a sense of trust between the characters, but also building a sense of trust between the viewer and Myers as this episode establishes the character as someone we can place our trust in. This ultimately proves ironic by the end of the first series, as Myers is unveiled as a mole, which places distrust in the institution of CTU. The fact that both of these co-conspirators are women serves to play against the notion of women being presented as 'victims' in the wake of the 9/11 attacks. Whilst this demonstrates the empowerment of these female characters, it also presents them as ruthless and corrupt.

The overall format for each series of *24* allows it to form a largely contained narrative, in which Bauer and his team are able to restore social order by resolving the terrorist threat of that particular day. However, the series makes it clear that this threat is just one of many. As a result, social order can never truly be restored, but only momentarily re-established once a given threat has been subdued. The episodic nature of television conveys this sense of an ongoing struggle of vigilance to combat these threats – rather than this conflict being resolved to completely restore social order, there is a sense of merely reasserting dominance of this space and establishing a tentative order.

Equally Bauer's personal narrative of social integration is also unfulfilled in the first series, as his attempt to reclaim his family life fails with the ultimate murder of his wife. Teri's death in a small, enclosed space within the wider institutional CTU building generates a sense of distrust in the institution and demonstrates the ongoing uncertainty as to what the real threat is. This becomes a running thread through subsequent series, as Bauer undertakes a number of failed relationships that suffer due to his work.

5.3 *Spooks* (2002-2011)

In a similar fashion to *24, Spooks* premiered in May 2002 against the backdrop of the response to the 9/11 terrorist attacks. This series operates under a similar premise to *24,* following the counter terrorism investigation and interventions of MI5 Section D, but against a British cultural and political backdrop. The pilot episode, entitled 'Thou Shalt Not Kill', focuses on Section D investigating an anti-abortion terrorist cell targeting abortion doctors with bombs. In the DVD commentary for this first episode, David Woolstencroft (*Spooks* Series 1 DVD commentary, 2003), the series creator, comments on the fact that the scripts had already been written, but were amended following the 9/11 attacks, making the influence and impact of 9/11 explicit. Equally, the press pack released to coincide with the launch of the series stresses how the 9/11 attacks opened up further narrative possibilities for the series:

> Bizarrely, the team behind *Spooks* were way ahead of world events. The scripts were written, and the project green-lit, well before September 11 last year. Perversely, the events of that day gave an extra dimension to the show. 'It really pushed the boundaries of what was credible,' explains Series Producer Jane Featherstone from Kudos Productions. 'We had to up the ante in some of the storylines in response to the audacity of the al-Qa'ida attacks.' As Executive Producer and Kudos Chief Executive Stephen Garrett puts it: 'A year ago no one would have believed that a bunch of

bearded men in caves could wreak havoc on the western world. Now anything is possible.' (Spooks Press Pack, 2002, p.2)

Like other hacker genre examples, the technology, and how it is used by the spy characters, is continually foregrounded and fetishised in this series. The series strives to present the action through the technology, replicating the technological perspective for the viewer. In a similar vein to *24* and *WarGames* before it, *Spooks* shows Quinn and Reynolds infiltrating the Grid workspace through the 'futuristic' security doors, showing the security camera perspective monitoring them accessing this space to reiterate the ever-looming presence of the surveillance technology. Like the other examples, this again creates a sense of the viewer penetrating this secret space of espionage and hacking, empowering the viewer with the ability to monitor these masters of secrets at work in their environment. Similarly, the scenes depicting the bugging of Kane's safe house constantly zoom in on the bug devices being planted in light switches, telephones and alarm clocks. Throughout these scenes, the camera zooms in to focus on the technology, showing only a gloved hand planting these devices in a smoke alarm, in a clock and in a radio. These items are then a focal point for the camera as the MI5 officers listen into Kane's conversations. Moreover, the series emphasises how secrets are increasingly captured and stored electronically, particularly in the scene in which Quinn interrogates Kane and presents her with an audio recording of her sexual encounter with one of her fellow pro-lifers.

Like *24*, *Spooks* also utilises the split-screen technique to show the viewer multiple perspectives and multiple scenes at the same time, again replicating the viewpoint of multiple security camera feeds. However, *Spooks* takes this notion of using the split screen to immerse the viewer in espionage operations even further; the pilot episode demonstrates the viewer's

immersion in the action as the series replicates the audio connections to other agents and has characters speak into the camera as they would do to their fellow agents during a mission. Thus, the episode creates a greater sense of 'interaction' with the viewer by effectively 'including' us as fellow agents on the operation.

Spooks also follows a series of scenes that demonstrate surveillance and pursuit processes. One scene involves several MI5 agents targeting and following 'Osprey', Danny Hunter's source from the opening scenes, who then leads them to 'Falco' and eventually Mary Kane. The audio during this scene connects the viewer to the MI5 communication network, whilst the camera assumes a 'surveillance camera' perspective, to create an impression that the viewer is part of this operation. Although this scene continues the fast-paced approach of the series, the dialogue and camerawork makes it clear that this a step by step operation, with three agents working in tandem to track and monitor Osprey, then reprioritising to a target they dub 'Falco'. This scene also stresses the need for teamwork and cooperation between officers and their agents. In a similar vein to *24*, this scene utilises the split screen technique to present multiple shots, although the split screen in this scene offers different camera angles as wide shots of the street to replicate surveillance camera perspectives. Another scene involves Kane being pursued by agents and managing to elude them by using a decoy. Consequently, this episode exemplifies the fact that the terrorists are equally versed in hacker and surveillance tactics, making this a game of wits. These scenes also present an almost symbiotic relationship between humanity and their technological tools used to undertake hacking and surveillance operations.
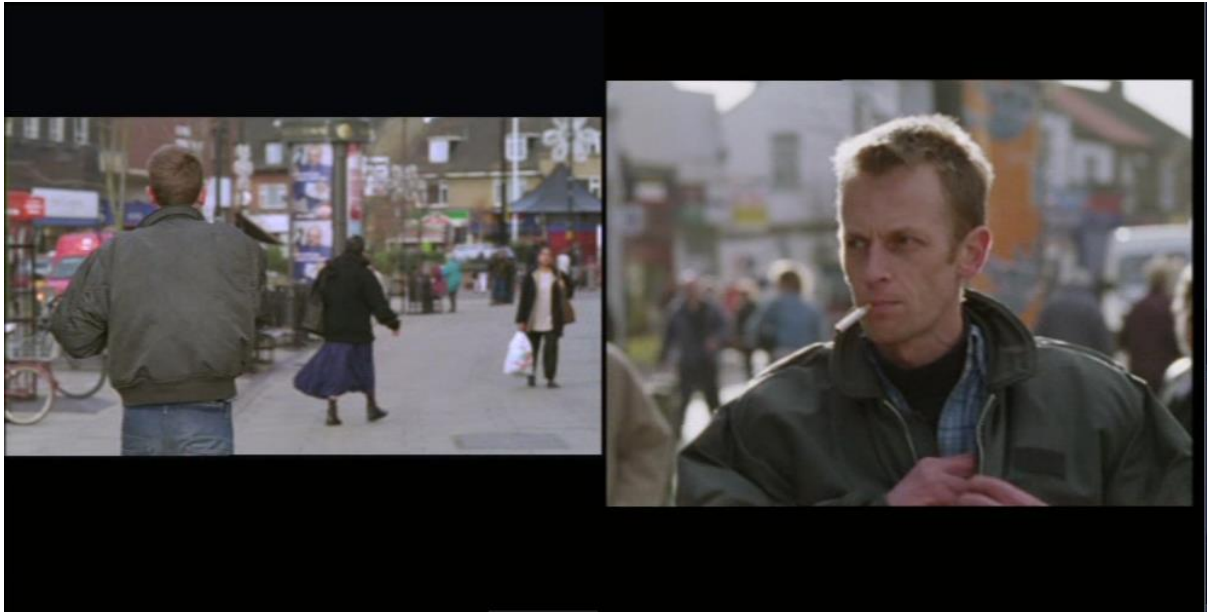
Figure 43 – Wide shots of MI5 surveillance and pursuit operation. *Spooks* (Nalluri, 2002), screen grab.

Paralleling a similar scene in *Enemy of the State* (Scott, 1998), the pilot episode of *Spooks* features a planning scene for the interception of Mary Kane, which is then followed by the execution of this plan. In spite of the fast pace of the episode, this scene corresponds to a similar scene in *Enemy of the State*, allowing the series to demonstrate how an organised agency can conduct planned surveillance of a target. The episode takes the time to explore all of these intricate details, immersing the viewer in this world. The scenes depicting Reynolds' undercover operation to pose as Diane Sullivan then play out with knowing looks for the benefit of the viewer, as Quinn and the rest of the team monitor her progress. Several MI5 agents are introduced to the viewer in advance so that we can recognise them posing as background figures during surveillance operations. The camera then lingers on these agents to highlight their role in the operation. Tactics of espionage are also continually brought to the fore throughout this episode. One such tactic is Reynolds' adoption of a mother persona

to approach Rachel in the park. She then follows a step by step ruse to bring Rachel to the hospital to confront her with the results of the bombing.

The sense of process is furthered by the fact that the MI5 team is able to track down Kane very quickly once she has been identified, but that they bug her safe house in an attempt to uncover her network. This further develops the idea of an ongoing site of conflict, as Kane as the surveillance target is only part of the terrorist threat, and the MI5 team need to track down the rest of her contacts to prevent further attacks. Likewise, when Malcolm brings Zoe the personal effects for her Sullivan alias, he talks her, and by extension the viewer, through what he is giving her. Like other hacker films and television series, Spooks instructs the viewer in the language and practices of the spy going undercover, talking us through this process and showing us the mechanisms and tactics that they use.

David Woolstencroft (*Spooks* Series 1 DVD audio commentary, 2003) also comments on the fact that real spies would be more covert in the acts of surveillance and monitoring a target, but that there is a need to make it clearer for the viewer on camera. Thus, agents on the street are shown to give Reynolds, and by extension the viewer through the extradiegetic camera, knowing looks as she passes by them. Similarly, agents in the hospital give each other knowing looks, with the camera 'incorporating' the viewer in this operation by 'making us' one of the agents.

Although the series focuses on a collection of different characters, the first series centres on the character of Tom Quinn in particular. The pilot episode introduces the dichotomy of his

private life and his working life. Like Bauer, Quinn is initially presented in the domestic setting with his girlfriend Ellie and her young daughter. By constantly shifting between Quinn in scenes in these two different roles, the episode represents his dual identities and the conflict between the two of them. Unlike the socially isolated figures of Harry Caul and George Smiley, Tom Quinn is presented as trying to balance his personal and professional lives. Like Jack Bauer, Quinn is initially presented in a domestic setting, but unlike Bauer, Quinn is living this domestic life under the alias of 'Matthew Archer'. As a result, the series strives to portray the character's emotional dilemma of trying to balance these two separate lives, as well as trying to maintain the façade of the Matthew persona with his girlfriend and her daughter. Thus, his work remains secret for most of the first series and the character's isolation is maintained. Part of his motivation in this episode, and throughout this first series, is to reveal his true identity to Ellie and allow himself to connect with her and thus achieve social integration. However, this integration eludes Quinn, and his colleagues, whilst they continue to operate with the sphere of espionage.

Throughout the episode Quinn's personal life, like Bauer's in *24*, is continually interrupted by his professional life, with phone calls and pages pulling him away from the prospect of a 'normal' family life. This technology begins to build up a barrier between Quinn and Ellie. Quinn's 'legend' as Matthew also serves a barrier between him and Ellie, a constant lie that prevents her from knowing his true self. This episode establishes that each MI5 officer operates multiple legends and this their real identity remains concealed from most of the people in their lives. The first episode emphasises the manner in which Quinn's relationship with Ellie is based on lies and falsehood. Whilst Jack Bauer's wife is well aware of his occupation, Ellie does not even know Quinn's real name. In the one brief scene depicting Quinn's own flat, the space is presented as empty and cold, feeling like the small, enclosed

workspaces of other hacker figures. Quinn's silent rejection of this space emphasises his desire for social integration through his relationship with Ellie. Instead he retreats to the Grid workspace to put away the items associated with the Matthew alias.

Moreover, the Grid workspace of MI5 is presented in a similar fashion to CTU in *24*, conveying a sense of an organised, well-staffed operation that allows the spy figures to work cooperatively. This space feels large and open, fostering the sense of agents working together. The fact that this workspace is housed within the larger space of Thames House also reiterates the notion of Section D being part of a larger scale operation. The presentation of the Grid and bringing the team of characters together within this space emphasises the fact that Quinn is not an isolated figure at work. The manner in which the space engenders a sense of cooperation and collaboration emphasises this notion of teamwork. This sense of trust and teamwork is a major development from Smiley's small, illicit circle presented in the adaptations of *Tinker Tailor Soldier Spy.*

Like *24*, *Spooks* immediately sets itself upon a large stage, with multiple characters and numerous locations introduced in the opening scenes to convey a sense of a large-scale operation. In the opening scenes, it is impossible to know who to trust, and in a similar vein to *24*, this episode plays with this uncertainty. Similarly, like *24*, and other hacker genre productions, *Spooks* also strives to convey a sense of large scale operations and mobility for the hacker characters. At various points, the characters are shown meeting in large public spaces. Quinn and Pearce meet on the rooftop, meeting in a secluded set, but getting out into the open air. This move towards meetings in larger, open spaces emphasises an increasing

distrust of small, enclosed spaces and the need for the hacker figure to become a more proactive, dynamic figure.

Even so, there is a continued sense of small, enclosed spaces in the MI5 meeting room, which feels 'contained' and controlled. This space elicits a sense of infiltration and eavesdropping. The same is true of the surveillance van, which serves as a mobile small, enclosed workspace. Equally, Danny Hunter's meeting with Osprey in Liverpool is presented in the small, enclosed space of the safe house, introducing the notion of safe houses being hidden across the UK that are utilised by the unseen network of resources available to MI5. Whilst these hacker figures have moved towards increased collaborative working, there remains a need for secret meeting places and enclosed, protected spaces for these characters to carry out their surveillance and sharing of secrets. The tour being conducted in Thames House also reiterates this sense of infiltration of the spy's secret space. At the same time, this tour also serves as the viewer's introduction to MI5 and the world of espionage that this series will explore. The tour guide's dialogue gives us an introduction to this world, but also sets the tone of this first episode as it introduces the characters, workspace and their methodologies.

Whilst the series does not face the ticking clock format of *24*, the pace and urgency of the series nonetheless is reflected in constant movement of the camera, and rapid cuts between scenes. The way in which this opening episode jumps in between different character in different settings in the opening scenes before the title sequence also generates an intense sense of anxiety. These characters are all mysterious and unknown, and therefore the viewer has no context in which to identify who is the protagonist, who is the threat and who is the potential victim.

Like other hacker genre examples, *Spooks* presents a combination of Thomas Schatz's genres of order and genres of integration. The first series focuses on Tom Quinn's struggle to strike a balance between his work in espionage and his private life. However, like Bauer, Quinn's work is constantly pulling him away from his relationship with Ellie and the pilot episode strives to convey this at several points. Whilst the work of the Section D team endeavours to restore social order, Quinn's personal story focuses on his attempts to achieve social integration through his relationship with Ellie. This first episode effectively showcases this tension of Quinn striving to achieve social integration with Ellie as he tries to open up to her, yet he remains alone. One key example is the scene in the restaurant when Quinn receives a call from Zoe and needs to offer advice on the bugging operation. During this telephone conversation he retreats to a small, enclosed space, physically segregating himself from the party. Ironically despite his attempts to 'integrate' into wider society through his relationship with Ellie, ultimately the conflict between his work and private lives leads to his dis-integration from society. The end of the character's overall arc leads to his retirement from the service in order to achieve this integration into wider society.

Moreover, even the team's attempt to achieve social order is shown to be merely a temporary victory. Although the team are able to thwart Kane's pro-life terrorist cell, there is nonetheless an emphasis on an ongoing conflict and multiple threats to combat. In fact, like *24*, this first episode establishes that this conflict can never be truly resolved, but rather that there is a need to keep building the resilience of hacking and surveillance systems to protect against further attacks in the future. Consequently, the episodic television format is

compatible with the ongoing nature of this conflict, as each episode is able to focus on the team dealing with a new threat.

5.4 *Person of Interest (2011-2016)*

Like *24* and *Spooks, Person of Interest* presents hacking and surveillance against the backdrop of a post-9/11 world, albeit from a more distant perspective as *Person of Interest* began production in 2011. However, whilst *24* and *Spooks* focus on agents operating within organised Government agencies, *Person of Interest* instead centres on two former agents who are now operating outside the official system. The overall premise of the series ties back to the 9/11 terrorist attacks in that it emphasises the need for surveillance and intelligence to prevent such disasters from occurring again in the future, building on the culture of increased security and surveillance that developed in the US and the Western world in the wake of the attacks. David Wiegand comments on how '*Person of Interest* separates itself from the gimmick pack, not only because of superbly nuanced characterization and writing but also because of how it engages a post-9/11 sense of paranoia in its viewers' (Wiegand, 2011). Another major shift in *Person of Interest* is that Finch and Reese target the 'irrelevant' people flagged by the Machine that will be involved in violent crimes that are not related to terrorism.

Person of Interest fetishises both the technology and processes of hacking and surveillance which is continually demonstrated in the pilot episode. The series presents a particularly distinctive visual style in terms of the use of the technology, showing events through the viewpoint of surveillance cameras. However, what does not become clear until partway

through this opening episode is that the camera is actually presenting events from the perspective of 'the Machine', Finch's artificial intelligence software that identifies a 'person of interest' through its analysis of hacking and surveillance technology. As Finch explains how the Machine operates to Reese, the camera shows us the Machine's perspective to demonstrate its capabilities, showing the viewer how it can listen into and see events as they unfold, monitor and track targets and predict events based on people's behaviour. Whilst both *24* and *Spooks* make use of the split-screen technique to present multiple sources of information to the viewer, *Person of Interest* takes this even further when it presents the Machine's perspective with quick cuts between multiple surveillance camera perspectives. This becomes even more extravagant during the scene in which Finch explains how the Machine works to Reese. As he explains how the Machine is everywhere, and has access to multiple 'ears and eyes' the extradiegetic camera shifts to the Machine's perspective to demonstrate how it can visually track and 'listen' in to their conversation through the surveillance technology.

Figure 44 – The Machine's ability to track a conversation is demonstrated. *Person of Interest*, (Semel, 2011), screen grab.

Furthermore, the transitions between scenes are presented through the Machine's technological perspective, shifting through surveillance feeds to redirect the camera's focus to a new location by way of the nearest surveillance camera. This method of editing between the scenes fetishes the use of the technology, demonstrates the extensive records that this technology can search through, and also presents events to the viewer through the technological medium. At the same time, this approach to scene transitions demonstrates the widespread surveillance network utilised by the Machine, and thus the US Government, as well as highlighting the extensive electronic records available for cross-referencing. Equally, the Machine is able to 'rewind' footage and flashback to previous events to depict them on screen. Once again the viewer is afforded the perspective of the Machine, as it searches through and reviews surveillance records. This corresponds with the way in which hacker

genre films have introduced a haunting presence of the past through surveillance and hacking technology.

In the same vein as *The Conversation* and *Enemy of the State*, the camera simulates the hacker experience by showing the viewer the hacker's perspective through binocular lenses and a camera lens to simulate the perspective of monitoring a target through this equipment. The extradiegetic camera allows the viewer to assume the simulated role of hacker. The pilot episode also introduces the viewer to Reese's surveillance tactics after Finch introduces the target to him. The following scenes, accompanied by Reese's voiceovers, then describe and demonstrate his surveillance tactics for the viewer. These shots, alongside the corresponding audio explanation from Reese, also serve to provide the viewer with specific details of Reese's methodologies to build up their understanding of how he operates. As a result, we learn how he breaks into the target's personal space, accesses their email, hacks into their cell phone to track them and effectively wiretap them using the phone's microphone to eavesdrop into their conversations, as well as using wireless surveillance cameras to monitor their activities.

In addition to the human hacker characters the series also presents 'The Machine' itself as a hacker figure and essential 'character' in its own right. In utilising the camera work of each episode to allow the viewer to experience events from the perspective of the Machine, viewing action through CCTV cameras, analysing sound recordings or feeds and presenting the Machine sifting through available data. This becomes further developed over the course of the first series (as well as in subsequent series) as Reese learns more about the Machine.

This 'humanisation' of the Machine continues the trend of blurring the line between humanity and technology that is depicted in films like *WarGames*, *Tron* and *The Matrix*.

Like the hacker figures of Harry Caul, George Smiley and Brill, both Finch and Reese are presented as isolated hacker figures who are disconnected from the rest of society. Both are visually represented to be separated from society – often operating in enclosed spaces, watching from the shadows, or meeting in secluded places. As both characters have previously worked with the US Government and have experience of the world of espionage, hacking and surveillance, they particularly parallel the character of Brill in *Enemy of the State*, as both have effectively retreated from society. Whilst the two begin to work together to investigate the person of interest flagged by the Machine, they nonetheless remain on the periphery of society.

The depiction of Finch particularly resembles the portrayal of earlier hacker figures, as he is presented as a mysterious, reclusive figure in the pilot episode, who possesses knowledge from hacking and surveillance technology but lacks the ability to physically intervene in events. In this way, *Person of Interest* creates a sense of a symbiotic relationship between the characters, emphasising the need for the two of them to work together to effectively intervene in events. It is only when they pool their skills that they are able to successfully become proactive hackers. This parallels Brill's relationship with Dean in *Enemy of the State* that I discuss in Chapter One, as the two characters pooling their skills and resources are able to become proactive hackers to physically affect the world around them. This continues the sense of symbiotic relationships being developed but here the symbiosis occurs between two human characters. The relationship between Reese and Finch also echoes that of other hacker

and spy partnerships, such as M and Bond, as Finch uses his connection to the Machine and his abilities as a hacker to acquire information on the target, which he then provides to Reese who serves as his physical instrument of intervention.

Reese and Finch are often presented in large spaces and crowds, suggesting that they are 'hiding in plain sight'. This parallels *Spooks* in that the characters get out into this open space for their conversations, building on this sense of mobility and proactivity. This presentation of the two of them in the crowd also affords them a degree of anonymity. The big shift from *24* and *Spooks* is the fact that Reese and Finch are not affiliated with an official organisation but instead they work outside of formal systems. This fact continues the notions of hackers being 'outsiders' and being disconnected from the rest of society and signifies a return to hackers acting on the periphery of society. The notions of distance and closeness are juxtaposed on screen as Reese and Finch are shown making connections with the titular 'person of interest' through surveillance technology. Whilst the technology gives them significant insights into their target's life, the series also highlights how this information can be misinterpreted. Nevertheless, the series emphasises how they remain physically distant from the rest of society.

This impression of Reese and Finch as outsiders looking in is conveyed in the scene depicting Finch and Reese's first meeting take place in an open space close to the river on the outskirts of the city. The physical barrier of the river also serves to express the physical distance between these two hacker figures and the rest of the society. The fact that Finch arranges for Reese to be escorted to this meeting symbolises how he has chosen to share his unique hacker perspective with Reese. The following scene in which Finch brings Reese back into a

crowded street in New York continues this notion of him sharing his hacker perspective and demonstrating his knowledge of potential threats to his list of people of interest.

Whilst Reese and Finch are shown to be hiding in plain sight in public spaces, there is nonetheless a continuation of depicting hacking and surveillance in small, enclosed spaces. Finch's hacker workspace in the disused library echoes other hacker workspaces. The space is secluded and feels like a small, enclosed workspace. The fact that it is disused emphasises its seclusion and the manner in which it offers protection from the rest of the world. Like Caul and Brill's space, Finch creates a protective barrier for his workspace to conceal himself. Similarly, Reese meets with Fusco in the small, enclosed space of his car to conduct his furtive meetings to recruit Fusco in his investigations of corruption within the Police force. Like Bauer's mole hunt in CTU, Reese and Fusco must be taken out of the formal space of the Police Station and retreat to a small, enclosed space to begin this investigation.

Reese invades the personal space of the person of interest, connecting to their phones, going through their email, and often physically entering their personal space. The Machine also invades personal space, as does the viewer on an extradiegetic level. In this way the series particularly emphasises how this technology can be utilised to penetrate a person's privacy and personal space, on one level through Reese and Finch's technological intrusions, but even more so in terms of presenting the Machine's ability to predict violent crimes through surveillance and computerised data.

Following the generic trend of hacking becoming a more dynamic activity, hacking in *Person of Interest* is not just presented as a means of accessing information, but becomes a more proactive activity as the Machine predicts violent crimes so they can be prevented. Finch initially recruits Reese in the pilot episode to assume this active role of intervention, whilst he retains the passive role of observer and investigator. However, over the progression of the series Finch is forced to become a more active hacker figure himself, as Reese is otherwise engaged or the two of them need to work in tandem to achieve their goals on separate fronts.

The twist of the series is that Reese and Finch need to investigate the person of interest to understand why they have been flagged by the machine; it is entirely possible that the person of interest the machine has flagged could be a potential victim of a crime or a potential perpetrator. *Person of Interest* plays with the premise by presenting several 'persons of interest' as potential victims, only for them to be revealed as perpetrators. We share Reese and Finch's limited perspective of each person of interest, learning about their targets at the same time as they do. In a similar fashion to *24* and *Spooks*, the pilot episode quickly raises uncertainty over who to trust and who could pose a threat. The key example in the pilot episode is Diane Hansen, who initially appears to be a potential victim, but is later revealed to be the perpetrator. The scenes depicting Reese and Finch's surveillance of her suggest that she is the potential victim of a violent crime, as she is only initially perceived through photographs and the surveillance technology. It is here that the series also emphasises the need for an investigative process to put the information gained into context. The scene of Hansen in the alleyway conveys a sense of her vulnerability and exposure to threats. However, this again is ironic given the fact that Hansen is immediately revealed to the perpetrator in control of rogue elements of the Police Force. The revelation of Hansen's true nature directly parallels the young woman in *The Conversation*, as this episode plays with our

visceral connection with these characters, elevating us to a position of seeming omniscience, only to then underscore both the viewer's and Reese's misreading of the situation.

Like other works of hacker fiction, *Person of Interest* incorporates haunting presences that emerge through the technology. The most prominent haunting presence is the lingering impact of the 9/11 terrorist attacks on the modern world. The Machine itself has been built in response to these attacks, specifically to predict and prevent any such future attacks from occurring. Furthermore, Reese's flashbacks depict his relationship with his girlfriend which coincides with the timeframe of 9/11 and hint at how he was motivated to remain with the military in response to those attacks. Similarly, Jennifer serves as a haunting presence for Reese, and it is his guilt at failing to save her that motivates him into his self-imposed social exile. The depiction of his flashbacks to his memories of his time with her use a white flash as the instrument of transition stresses a sense of organic memory as opposed to technological data recall. Finch plays on this guilt when he strives to motivate Reese. Furthermore, there is marked difference in the flashbacks when comparing Reese's vague memories with the precision of the Machine's records. Whilst Reese's memories appear organic and unspecific, the Machine's flashbacks through technology are specific, recorded data.

One key example of this is the sound recording Finch uses to feign a woman's murder when recruiting Reese. The sounds of the woman's desperate cries are used to motivate Reese to take action to protect her. In those initial moments, as the viewer shares Reese's point of view, the screams and the danger to this unknown woman appear real. Finch's wall of Social Security numbers, and the corresponding persons of interest they refer to, also serves a haunting presence for both Finch and Reese in terms of the missed opportunities to intervene

to prevent violent crimes. The photographs of those people that Finch failed to save are an ongoing reminder of the results of merely observing events and failing to take action. Equally, the audio recording of Hansen's unwitting confession comes back to haunt her in the courtroom at the end of the episode when Reese arranges for this recording to be switched with a piece of evidence Hansen had submitted for her case.

In an interesting shift, *Person of Interest*, certainly in the pilot episode and the early series, marks a shift from world–altering hacking and surveillance to smaller-scale hacking and surveillance of the individual person of interest in each episode. Whilst the Machine does indeed identify terrorist threats that are classified as 'relevant' numbers, this series focuses on the 'irrelevant' numbers and thus take hacking and surveillance back to the smaller scale efforts of targeting and monitoring an individual.

The episodic format allows for each episode to resolve the situation for each person of interest, as Finch and Reese are shown to investigate their target, discover the nature of the impending crime and then usually prevent it. However, there is a sense of never-ending conflict – the field of hacking and surveillance is a constant site of conflict. Like *24* and *Spooks,* the series emphasises the need for Reese and Finch to work together to achieve their ends, which fulfils Schatz's genre of order resolution by allowing them to prevent a violent crime from occurring. However, the ongoing nature of the series means that the battle for this contested space is never entirely won. Still, this is unsurprising given the smaller scale focus of the hacking and surveillance to focus on an individual person of interest. As Reese and Finch are focused on an individual, namely Diane Hansen in the pilot episode, the generic

resolution is equally focused on the violent crimes associated with her. Although one violent crime can be prevented at a time, the urban landscape of the series remains a contested space.

At the same time, the episodic nature of the series defies the possibility of true social integration. Both Reese and Finch have lost their former romantic partners and remain outsiders looking in. Nevertheless, there is a sense of Reese achieving a degree of social integration in finding a purpose in life, namely to work with Finch to prevent the violent crimes predicted by the Machine. As the series progresses, Reese and Finch's team builds up to incorporate other allies and this serves to solidify their place in the world and thus further integrate them into society.

5.5 Conclusion

These three television series all demonstrate how the representation of hacking and surveillance shifts towards the prediction of future events, which ties directly to the socio-political climate in the wake of 9/11 terrorist attacks. As Jeff Birkenstein, Anna Froula and Karen Randell stress in their discussion of the impact of 9/11 on film and television, 'the day has been usurped by the post-9/11 discourse of trauma, uncertainty and revenge' (Birkenstein, Froula and Randell, 2014, p.4). As a result, the impact of the 9/11 terrorist attacks continues to be felt and both films and television series reflect the sense of vulnerability and fear of infiltration by unclear and unknown threats.

Perhaps even more so than in film, the television medium reflects the ongoing nature of the hacker conflict – as the technology progresses, this cyberspace/ surveillance setting becomes

increasingly a site of conflict, and the episodic format reflects the ongoing conflict. Although the protagonists are able to attain a degree of social order restoration, this order is tentative and temporary at best – the site of conflict remains contested. Furthermore, the hacker characters' attempts at achieving social integration remain problematic in each of these series, but this is simultaneously reflective of uncertain times and of the episodic nature of a television series. In uncertain times, the characters' lives continue to be interrupted as they remain in the struggle for this contested space and are unable to step back to become integrated into society. The episodic nature of the television medium also means that this struggle towards social integration is a slow, gradual process that will not be resolved in a single episode, or, indeed, series.

6) Chapter Five: Foregrounding the Media in Adaptations of *The Girl with the Dragon Tattoo*

6.1 Introduction

Although hacker films and television series produced and released during the 1980s-2000s demonstrate a shift towards more proactive and cooperative hacking, later productions from the 2000s and 2010s have begun to demonstrate a shift back towards focusing on individual hacker characters and the infiltration of personal space and secrets that was prevalent in films like *The Conversation* (Coppola, 1974). Whilst films like *WarGames* (Badham, 1983), *Hackers* (Softley, 1995), and *The Matrix* (Wachowski Brothers, 1999) all focus on global threats and the ever-expanding menace posed by technology, *The Girl with the Dragon Tattoo* marks a return to smaller scale narratives and invading the privacy of the individual in the vein of the detective investigating a mystery. Furthermore, *The Girl with the Dragon Tattoo* presents the viewer with two different hacker figures, who ultimately come together to work cooperatively to solve a 40-year-old murder case. Lisbeth Salander is a covert computer hacker, who penetrates people's computer systems to access secret, whilst the journalist Mikael Blomkvist represents a more 'old school' style of investigation; Blomkvist serves as a more 'traditional' detective using paper files and conversations to unpick clues, whilst Salander represents the technological detective who utilises equipment to capture evidence and facts. In addition, Salander stands as a powerful female hacker figure, who despite being subjugated in, and by, Swedish society, covertly uses her hacking skills to reclaim some of her personal power. Like other hacker genre films, the two film adaptations of *The Girl with the Dragon Tattoo* continue to demonstrate several shifts in the representation of hacking and

surveillance on screen. Whilst the two productions share a number of similarities, there are also several differences in terms of the presentation of Salander as a character.

In her article on Joe Wright's adaptation of *Atonement*, Christine Geraghty considers the manner in which various media are actually foregrounded within the narrative; ultimately Geraghty argues that the utilisation of each of these media serves as a commentary on the production of a narrative and the construction of Briony's different 'truths' as a narrator, indicating that the film's 'version [of television] ... can unexpectedly get at truth' (Geraghty, 2009, p.105). In much the same way, the computerised media is depicted as being able to arrive at truth; Salander's exploration of other people's hard drives gives her access to their personal data. Through emails, Internet histories, bank statements and various other assorted documents stored on hard drives, Salander is able to build up a vivid picture of people's activities and behaviour, uncovering their hidden 'truth'. As television is able to zoom in for a close up on people's faces, Salander is able to use the Internet and computer technology as a medium to 'zoom' in on their lives as reflected in their computer, revealing all the activity that lies within.

What is more, it is unsurprising that a series of stories that depict both a journalist and an investigative hacker as central characters takes great pains to consider the role of mediation in the representation and repackaging of information that both roles entail. Larsson's novels take great pains to replicate the look and 'feel' of different written documents and their respective formats, such as emails and reports, to allow the reader to simulate the experience of reading these documents first hand. Ana Westerstahl Stenport and Cecelia Ovesdotter Alm

highlight the way in which Larsson's *The Girl with the Dragon Tattoo* particularly

foregrounds written media and different written forms as part of the narrative:

> The novel ascribes to this understanding of information both rhetorically and
> aesthetically by including a multitude of different textual forms and genres. Reports,
> newspaper prose, tables, list, scrambled letter, court documents, email message,
> letters, book citations and archival material are offset from the narrative prose ...
> These documentary strategies disrupt the fictional account but contribute to its
> perceived social accuracy. They are also strategies for detachment and pretensions of
> impartiality (Stenport and Ovesdotter, 2009, p.172).

The impact of these 'documentary strategies' is to effectively allow the reader to replicate the

investigative process that Blomkvist and Salander are undertaking in the narrative. Like the

characters, the reader is able to experience the reading of these documents 'first-hand' in an

'unmediated' format. This allows the reader to essentially assume the role of the detective,

being given access to the same materials at the same time as Blomkvist and Salander,

adapting the reality of investigation into a fictional role-play that the reader can indulge in.

Whilst other hacker genre films clearly demonstrate such attempts to generate a seemingly

'interactive' experience for the viewer, seeing this approach in a novel format that has then

then adapted on screen adds another layer to the process of film adaptation and intertextuality

in the production of two film adaptations.

6.2 *The Girl with the Dragon Tattoo* (Oplev, 2009)

The Swedish adaptation of *The Girl with the Dragon Tattoo* was produced and released in

2009, alongside its two sequels, *The Girl Who Played with Fire* and *The Girl Who Kicked the*

Hornet's Nest. Although they are three separate films, they were produced and released as a

trilogy, and thus my analysis of the Swedish film will incorporate elements of the two

sequels. The Swedish film was actually produced for television, but proved popular enough

for a cinematic release. The Internet Movie Database page for the film categorises it under

the genres of 'crime', 'drama', 'mystery' and 'thriller', all categories which have ties to my proposed hacker film genre. In the Swedish promotional poster, there is a dual focus on Salander and Blomkvist, indicating their joint roles as protagonist. The poster presents the two characters together, alongside a photograph of the sixteen-year-old Harriet Vanger hanging above the fireplace. Salander is shown wearing a hood, one of her many barriers against the rest of the world. Whilst technology is placed at the forefront in many hacker genre film posters, it is remarkably absent from this poster, signifying the covert nature of Salander's hacking activities.
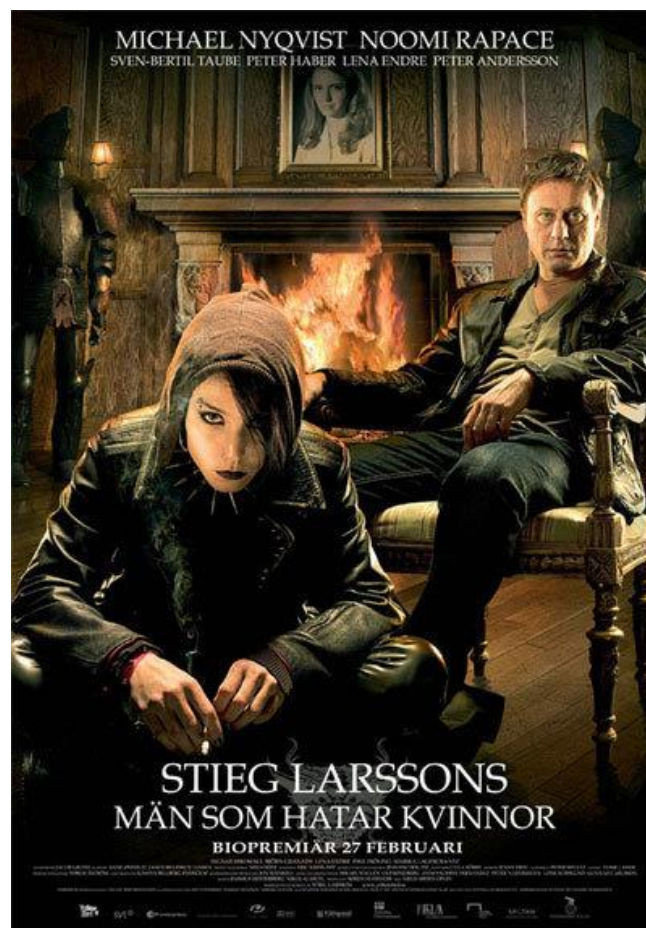
Figure 45 – Promotional Poster from Sweden for *Man Som Hatar Kvinnor* (Oplev, 2009).

In reworking the title for the English subtitled and dubbed version of the film, the marketing and promotion firmly redirects the viewer's attention to the titular 'girl with the dragon tattoo'. The poster for the film positions Lisbeth Salander in the centre of the frame, surrounded by black darkness. Half of her face is covered by the image of her dragon tattoo, conveying the mystery surrounding the character. Rather than showing the two characters together, this poster squarely shifts our attention to Salander. Again, technology and code are surprisingly absent from this poster, which indicates the secrecy of Salander's status as a hacker figure. Like other hacker film genre posters, there is almost a sense of Salander emerging from with a computer screen, a cyberspace character emerging on to the physical plane of our reality.

Figure 46 - *The Girl with the Dragon Tattoo* (Oplev, 2009) promotional poster.

Although Larsson's novels strive to foreground different media and to replicate the interactive process of criminal investigation, Oplev and Alfredson's Swedish films are able to take this simulacrum a step further due to their visual and aural nature. Both Larsson's novels, and to even greater extent the film adaptations, depict computers as possessing the ability to 'bring out those aspects of the original that are unattainable to the naked eye, yet accessible to the lens, which is adjustable and chooses the angle at will' (Benjamin, 2008, p.6). Although the novels present 'replicas' of documents within the text, the films are able to take this a step further by simulating the experience of viewing photographs, watching videos and 'surfing the net' for the audience, allowing them to more actively 'participate' in the experience. This is particularly evident in *Dragon Tattoo* in which the audience is 'actively' involved in the investigation into Harriet's disappearance, examining the same evidence as Blomkvist and Salander as Oplev teases us with the narrative possibilities behind this 'murder-mystery'. As Linda Hutcheon indicates, the written word is a 'telling' form, whilst visual media possesses the ability to 'show' the audience their stories, allowing them to connect with people, events and even ideas on a more instinctual level (Hutcheon with O'Flynn, 2013, p.50). It should be noted, however, that this 'replication' of the experience of different media in the films is adapted from Larsson's books; using the idea originally employed by Larsson in his books, the Swedish film adaptations showcase the wider array of media they can depict on screen, but the principle behind it remains the same.

In many respects the technological 'setting' and subject matter of Larsson's novels readily lends itself to screen adaptation. The act of using computers is a particularly visual and aural activity that the majority of the audience is familiar with. Although the novel format allows

Larsson to replicate part of the computer experience in 'recreating' emails and other text-based interactions, the medium of film allows Oplev and Alfredson to explicitly depict the visual nature of computers and the ways in which characters interact with them.

Some key examples of this foregrounding of computer technology as a medium are the sequences in each of the Swedish films in which the data on computer screens is overlaid over the cinematic image of Salander, literally serving as a momentary 'lens' through which the audience perceives Salander as a character. In *The Girl with the Dragon Tattoo*, Salander's computer screen is overlapped over the image of her face as she types, simulating the experience of Salander's hacking for the audience, but also blurring the image of Salander with an image of her technology. This visual blurring serves to quickly establish the significant role of computing in Salander's life, but also alludes to her technological symbiosis; even at this early point in the narrative, Oplev's film visually alludes to the idea that technology is an intrinsic part of Salander and that she has effectively become immersed in the 'electronic frontier' of cyberspace. Symbolically, this visual technique also signifies the fact that the films will be essentially 'hacking' in Salander's life, exploring her personal space and ultimately unveiling her own enigmatic past to the viewer. The same is true in *The Girl Who Played with Fire* in which Salander accesses Bjurman's computer to monitor his recent online activity; once again the image of her computer screen is overlaid over the image of Salander's eyes, allowing the viewer to see what she sees and share her unique perspective on people and the world around her. However, whilst *Hackers* (Softley, 1995) conveys a feeling of hacker figures being immersed in cyberspace in a seemingly science-fiction blending of human and machine, Salander's 'immersion' is more grounded in reality. With an eidetic memory, she functions like a machine, retaining and recalling information in a similar

fashion to a computer, but this technology remains a tool for her to manipulate, empowering her as a character.

When this same technique is employed in *The Girl Who Kicked the Hornet's Nest*, it conveys the sense of disconnection that Salander is experiencing whilst lying in a hospital bed after the almost fatal confrontation with her father in the previous film. In this sequence, it is Blomkvist's computer screen that is superimposed over Salander's image, immediately signifying the disempowerment of the character in her current state by making her the object of someone else's work as opposed to the active hacker figure she was presented as in *Dragon Tattoo* and *Played with Fire*. The image of her broken body also conveys her disconnection from the technology that empowers her; like a broken machine she is unable to function properly, but over the course of her recovery we see her re-establish her connection to both technology and the Internet.

Figure 47 – the text on Salander's screen is superimposed over and interwoven with her image. *The Girl with the Dragon Tattoo* (Oplev, 2009), film grab.
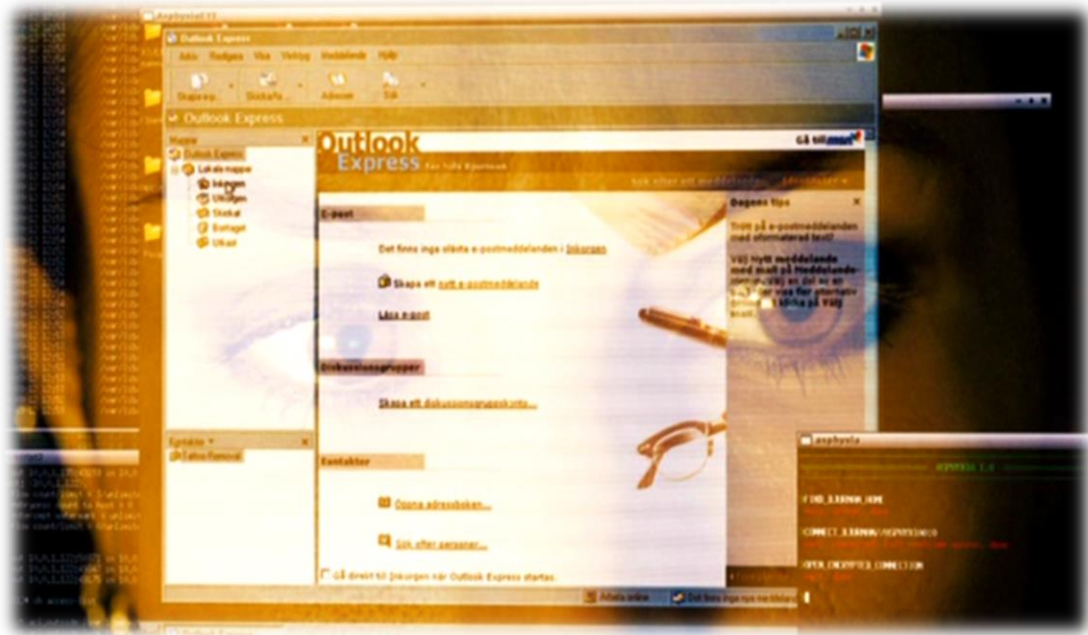
Figure 48 – Salander explores Bjurman's computer. *The Girl Who Played with Fire* (Alfredson, 2009), film grab.

Figure 49 – the text on Blomkvist's screen superimposed over the image of Salander. *The Girl Who Kicked the Hornet's Nest* (Alfredson, 2009), film grab.

Moreover, this visual technique in *Hornet's Nest* also acts as a representation of Lisbeth's social disempowerment caused by her being declared legally incompetent. The words are written over her image, signifying how the Swedish society dictates her fate. As a result, she is subject to the decisions made by the Swedish government, declarations of her mental state made by the likes of Dr Teleborian, and left at the mercy of the 'sadist pig and racist' Bjurman. Although her technical expertise affords her a degree of power to hack the system and penetrate barriers, she still lacks the legal recognition of her capability to manage her own life and so remains subject to the vaster 'machine' of Swedish society. Another central element of her personal journey is her gaining the ability to 'write' her own story and thus control her own fate. Once she regains her legal competency at the conclusion of *Hornet's Nest,* and has managed to liberate herself of the looming shadow of her father*,* Salander is shown to physically open her front door to Blomkvist, deliberately choosing to allow him back into her life. This moment conveys the sense that Salander has begun to move beyond her reliance on technology for interaction and has opened her mind to the possibility of ongoing human interaction. In this way, the trilogy of films portrays an individual reclaiming personal power, as well as a female character overcoming her patriarchal oppressors.

Similarly, the film foregrounds and fetishises the use of older technology to access records and files. One such instance is the utilisation of the film projector to show the footage captured on the day of Harriet's disappearance. In many respects, this use of antiquated technology reflects Geraghty's point on the use of technology to reveal 'truth', as Henrik Vanger provides Blomkvist, and by extension the viewer, a direct link with primary evidence to evaluate. The newer technology is able to enhance, and shed new light on, existing

evidence to reveal new truths and perspectives. This connects with scenes showing Blomkvist 'Googling' the Vanger family in the film, once again foregrounding a medium, which in this case is the Internet - specifically a widely-known search engine. The Internet, and in particular the Google search engine, have become such a significant part of our daily lives that Blomkvist uses it as key source of a significant amount of background information on the Vanger family, gleaning details on the family's activities in an attempt to determine who murdered Harriet. This search leads to a montage of photographs and information that depicts some of the history of the Vanger family, quite literally showcasing the vast wealth of data available to anyone with a basic Internet connection. Whilst Larsson's novel describes Blomkvist's investigation into the Vanger family's history, Oplev's film intermingles various sounds and images reflective of this vast interaction with history. More to the point, this 'techno-blast' of information reflects the sheer quantity available to users online. So much information is readily available to anyone with an Internet connection; however, the human factor is still required to analyse and interpret this information, with figures like Blomkvist and Salander being necessary components of a wider investigative machine. Like other hacker investigative scenes this montage covers a vast wealth of information and materials in a short time frame, demonstrating Blomkvist's investigative process. More importantly this sequence demonstrates the wealth of information recorded and retained in cyberspace.
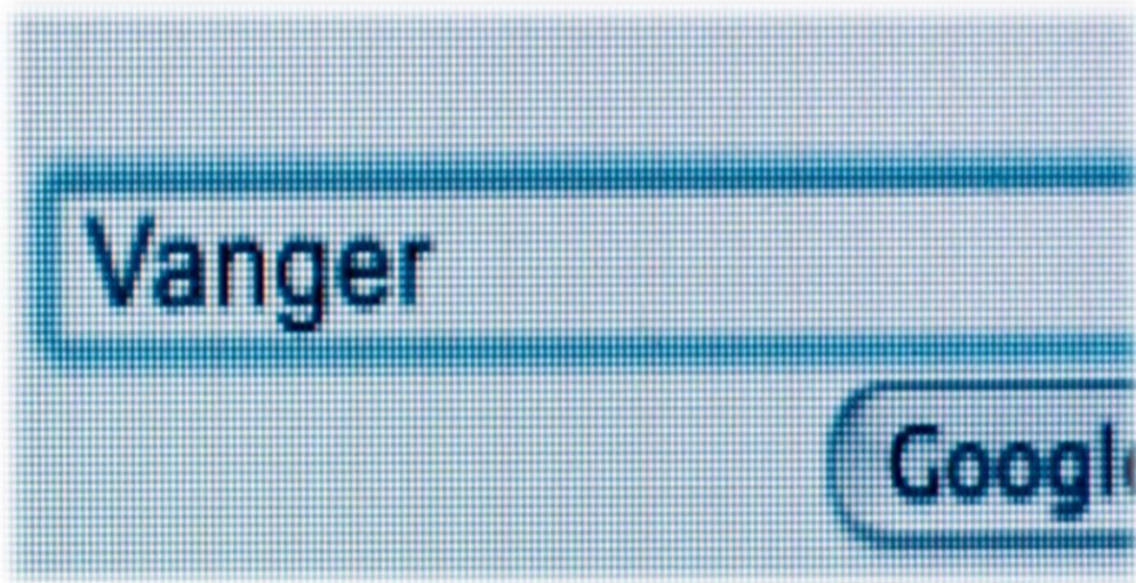
Figure 50 – Blomkvist 'Googles' the Vanger family. *The Girl with the Dragon Tattoo* (Nils Arden Oplev, 2009), film grab.

Continuing this theme of foregrounding the media is the flip side of the depiction of the power of technology in contemporary society, namely the demonstration of the horror of technology; this horror is largely represented by the video recording Salander makes of her brutal rape at the hands of her guardian, Nils Bjurman. This scene effectively subverts Laura Mulvey's notion of the 'male gaze' (Mulvey, 1999, p.8)10 to position the viewer, and later characters watching the recording of the violation, as passive observers unable to intervene. Although this scene in *Dragon Tattoo* is both shocking and horrific to watch, neither we, nor the other characters are ever allowed to forget this violation. Video technology has captured this scene and it continually resurfaces as an uncomfortable reminder of the desecration one human being can inflict upon another. This video stands as indisputable proof of Salander's victimisation at the hands of people in power. In short, this recording stands as testimony of raw, unadulterated power; although this video file shows Bjurman abusing his position of

authority to take advantage of Salander as a disempowered victim, it also provides her with leverage to use against him. However, whilst Harry Caul remains disempowered by the end of the film, Salander is able to reclaim her personal power by blackmailing Bjurman and shifting the dynamics of their relationship in her favour.

As I have already considered, the visual and aural nature of film as a medium allows the filmmaker to offer a more explicit depiction of computer technology as a medium in its own right. However, one of the most powerful examples of the impact of the film medium is in this discomfort it is able to elicit in screening the darker side of cyberspace and the darker side of humanity that this technology is able to capture and record. Whilst Larsson's *Hornet's Nest* novel describes the graphic nature of the child pornography found on Teleborian's hard drive, the film adaptation explicitly shows him accessing such images online whilst Plague monitors his activity after hacking into his computer through a wireless network. Once again, the visual medium of film allows the viewer to gain a greater insight into the situation.

Similarly, Berger's cyber-stalking sub-plot is merged with the central conspiracy storyline in the film adaptation of *Hornet's Nest*. Berger, who continues to work at Millennium throughout the adaptation, reveals that she has received two threatening emails, which we later learn are part of the mysterious 'Section's' plans to quell any threat posed by Millennium and prevent them from investigating Lisbeth's case any further. As with Larsson's novel, the anonymity afforded by cyberspace allows the Section to veil their threats, concealing their true origin from Berger. In the same vein, the 'virtual' threat sent electronically by email to Berger eventually manifests itself in the 'real' world as a physical threat to both Berger and Blomkvist, resulting in the attempt to assassinate the two of them.

What becomes clear from these incidents is that this technology can be as effective a tool for criminal purposes as it can be for criminal investigation. The indeterminate space of computer technology and cyberspace becomes increasingly difficult to manage and control.

In this way, Larsson, and later both Oplev and Alfredson as the directors of the films, use the video medium as a tool to shock and horrify other characters and the audience with the brutal truth of Lisbeth's Salander's violation at the hands of her guardian. As Geraghty suggests television to be the medium of truth on *Atonement*, the media - in this case the video evidence of Bjurman's brutal rape of Lisbeth –presents an indisputable truth that cannot be refuted. Bjurman's abuse of Salander stands as evidence of not only her recent mistreatment, but also the figurative rape of the character throughout her life. In the films, both the characters in the narrative and the audience as external observers of the action are continually forced to confront the harsh reality the visual and aural medium of film presents us with; although Larsson's novels do describe characters being confronted with this video evidence time and time again, Oplev and Alfredson utilise the nature of film as a medium to elicit feelings of shock and horror, and often focus on the reactions of characters to this stimulus to indicate how we should be reacting and feeling. This becomes a mutual experience of shock and horror that the audience can, and does, share with the characters within the story; this begins with Blomkvist, who discovers this video in Lisbeth's secret apartment in *The Girl Who Played with Fire*, followed by Giannini and the rest of the courtroom in *The Girl Who Kicked the Hornet's Nest*. Furthermore, our visceral reaction to this recording is both anticipated and directed by the reactions of the characters who are watching it; although the audience familiar with *Dragon Tattoo* have already witnessed Bjurman's assault on Lisbeth, these subsequent 'repetitions' are somewhat mediated through the conduit of the film. The camera focuses more on the characters' reactions to what they are seeing, eliciting the rush of emotion(s) –

shock, horror, outrage, pity, to name but a few – that are conveyed by the characters'
expressions.

Figure 51 – Giannini watches Lisbeth's DVD and elicits a response from the viewer. *The Girl Who Kicked the Hornet's Nest* (Alfredson, 2009), film grab.

Closely tied to this foregrounding and fetishisation of technology, Noomi Rapace's interpretation of the Salander retains a symbiotic relationship with her technology; in the same manner as Larsson's novels, the film adaptations make it clear that she is 'incomplete' without her computer and Internet connection, when her laptop is damaged in *Dragon Tattoo* and she lies recovering from her injuries in *Kicked the Hornet's Nest*. Visually Oplev and Alfredson are able to show the audience how Lisbeth utilises these devices as extensions of her body, cybernetic elements that she incorporates into her being. Without them she finds herself left vulnerable, yet once she is able to reconnect to her technology she rediscovers her personal power and is able to mount a defence for herself.

Figure 52 – Lisbeth covertly re-connects with technology as she recovers in hospital. *The Girl Who Kicked the Hornet's Nest* (Alfredson, 2009), film grab.

In the same vein, technology also serves as a 'lifeline' for Salander in the film trilogy, connecting her to the world around her, albeit through unconventional means. This becomes apparent as Lisbeth is shown hacking into Blomkvist's computer before physically meeting him in *Dragon Tattoo*. During one hacking instance, a message pops up on Salander's screen to indicate that 'no new activity' has taken place, which not only points out that this is not the first time she has hacked into his computer but also underscores the fact that she routinely checks up on his computer activity; like the novels' depiction this is how Salander connects to people, by going through the data on their computers, accessing their text messages and emails, viewing their bank statements and other personal data she can access online. However, the visual techniques of the film, coupled with Noomi Rapace's 'mechanical' performance in her interaction with other characters, emphasise this sense of computers serving as her lifeline connecting her to the rest of humanity; the character is clearly depicted as feeling more comfortable on her own, striving to retain control of her interaction with

other people, which her computer allows her to retain. In the same way as the novels, her hacking computer software, Asphyxia, allows her ongoing access to other people's computers, giving her the ability to remotely 'connect' with her targets and immerse herself in the persona manifesting from their virtual presence on this technological landscape. Once she has gained access to someone's computer, as we see with Blomkvist, she returns to check for new activity as and when she pleases, effectively gaining a 'Big Brother' ability to monitor someone's every move. This is also exemplified in the manner she monitors Bjurman's activity at the beginning of *The Girl Who Played with Fire*. In this way, Salander chooses to maintain a position of power in her relationships with other people, using her skills to gain an advantage of possessing information over them. Asphyxia is not just a monitoring tool for Lisbeth but is also an instrument of power and control.

Equally, the latter two films particularly emphasise Lisbeth's symbiosis with technology, particularly through her secret apartment with extensive electronic security measures. Like all hacker figures, Salander is presented as a character who uses various barriers as a defence mechanism and her technology serves as a physical 'firewall' that has manifested from the virtual world into the physical world that Lisbeth uses to protect herself from the outside world. Symbolically, in allowing Blomkvist access to her apartment by entering the security code herself in the film, Lisbeth begins to let down her defences, allowing Blomkvist to enter her own hidden environment. In many respects, the central storyline between Salander and Blomkvist centres on the establishment of a real relationship, in which Salander feels able to open up to Blomkvist and actually allow him to become part of her life. Nevertheless, Salander maintains a technological barrier between Blomkvist and herself.

Figure 53 – Salander watches Blomkvist enter her apartment through software on her phone and chooses to deactivate her security system. *The Girl Who Played with Fire* (Alfredson, 2009), film grab.

The Swedish film adaptations, in no small part due to their visual and aural nature, allow the audience to see the duality of Noomi Rapace's portrayal of the character to an even greater extent. Despite the fact she has strived to defiantly (re)construct herself as an 'inhuman' figure, the film audience is afforded glimpses into her humanity through the medium's cinematography and cuts. The most striking example of this, which all of the films continually force both the characters and the audience to relive, is the scene in which Bjurman rapes Salander. Her screams of fear, pain and outrage viscerally connect her to the audience; nevertheless, this is, once again, an artificial connection to the rest of humanity that is mediated by technology. Yet again, the extradiegetic camera allows the viewer to penetrate this private, enclosed space to expose secrets.

A number of sequences throughout the film aim to illustrate the manner in which Salander is physically isolated from others in society, showing her to be alone in a big city and therefore physically vulnerable. However, this version of the narrative depicts Salander as choosing to maintain a distance from others and effectively maintaining a technological 'firewall' in her interaction with the rest of society. Her hacking software, allows her on-going access to other people's computers, giving her the ability to download the contents of someone's hard drive in mere moments and to effectively gain a 'Big Brother' ability to monitor someone's every move. In this way, Salander chooses to maintain a position of power in her relationships with other people, using her skills to gain an advantage of possessing information over them.

As I have highlighted with other hacker genre films, *The Girl with the Dragon Tattoo* builds up an intimate connection between the viewer and Salander as the protagonist. Hutcheon's 'showing mode' (Hutcheon with O'Flynn, 2013, p.25) of film can immerse the audience more viscerally in Salander's world, allowing us to virtually 'connect' with her technological lifestyle and experiences. Although the films undoubtedly draw upon the technological focus that is already present in Larsson's novels, the adaptations are able to emphasise the impact of technology to a greater extent due to their visual and aural nature. As Hutcheon goes on to argue, one of the many clichés regarding adaptation from the telling to the showing is that 'interiority is the terrain of the telling mode' (Hutcheon with O'Flynn, 2013, p.58); however, as she duly notes, 'visual and aural correlatives for interior events can be created' (Hutcheon with O'Flynn, 2013, p.58) and both films and computers as a medium are shown to not only access but also reflect the interior space of Salander, alongside that of the numerous characters whose computers she is shown hacking into. This exploration of Salander's 'inner space' begins with one of the opening scenes of Oplev's *The Girl with the Dragon Tattoo*, which shows Salander immersed in the technological environment of her apartment,

surrounded by computers and other surveillance equipment that she has been using as part of her investigation of Mikael Blomkvist. Oplev uses this striking first image of Salander to immediately convey the significance of technology in her life; as with Larsson's novel the character has developed an almost symbiotic relationship with her gadgets, particularly her computer, to the point that these machines have become an extension of her body. For many of us in modern society, this image is becoming more and more commonplace; we are all increasingly reliant on pieces of technology - be it computers, mobile phones, or electronic organisers - to both manage and mediate our experience of the world around us. Whilst Larsson's novels describe this image of the character, the film adaptations are able to show the character in action. Although I would avoid blindly succumbing to George Bluestone's notion of literature and film possessing different capabilities and limitations specific to their medium, what I would like to highlight is that Larsson as a novelist, and Oplev and Alfredson as filmmakers, draw upon and emphasise the sensory impact of their respective media in their attempts to replicate experiences for their audiences. This early scene of Lisbeth depicts her home environment as a technological 'retreat' that she uses to virtually connect with the rest of the online world. As Heather Brooke suggests 'this isn't just about technology; it's about creating an environment of empowerment' (Brooke, 2011, p.21). For Salander, the purpose of technology in her life is to (re)create her as a more powerful person, a process that begins in her home environment; Oplev's film strives to immediately convey an impression of the character assuming an almost cybernetic persona, incorporating technology into every aspect of her life and home environment. For Salander, computers are not just tools, but are essentially a part of her very being.

The shift towards presenting hackers and the act of hacking in a more sympathetic light directly relates to the manner in which the other hacker genre films and television series

present the issue as a morally grey subject. Like Larsson's novels, Oplev and Alfredson's films touch on the question of morality in relation to hacking. However, whilst Larsson's novels continue to return to the moral ambiguity of hacking as an activity, the films tend to side-step this ethical questioning in an attempt to offer a degree of moral certainty. Instead the films focus on the concealed crimes of Bjurman, Teleborian and the various members of the illicit Section and their subversive threat to society as a whole; it is to tackle this hidden threat that the hacker's services are required. Characters like Lisbeth, and to a lesser extent, Plague, are needed to covertly gather evidence from the hidden depths of the hard drives of these seemingly 'upstanding' men. The relative moral uncertainty of Larsson's novels is adapted to instead offer a clear sense of the hacker as a protagonist, a positive figure striving to unearth dark secrets from the recesses of humanity.

Although the films allude to the hacker's 'criminal' status in society, they always refute the notion that Salander, as a hacker, could pose a danger to the other characters. Rather than condemning Salander for her overtly criminal behaviour, the other characters recognise Salander's hacking skills as a useful investigative tool. This slight shift in the portrayal of the hacker is precipitated by the narrative alteration of Salander solving the riddle of Harriet's telephone numbers and sending Blomkvist an email declaring 'read it and weep Kalle Blomkvist'. Building on the distinction between hacker and cracker, Noomi Rapace's Salander becomes a dynamic hacker, actively helping Blomkvist solve a crucial part of the Harriet mystery and in providing Blomkvist with documented evidence of Wennerstrom's corporate crimes. It is this proactive stance assumed by Salander that compels Blomkvist to involve her in his investigation, recognising her own sense of morality and desire to actively right wrongs committed against women.

Likewise, the morally ambiguous 'cracker' position that Lisbeth adopts when she defrauds Wennerstrom's bank accounts at the conclusion of *Dragon Tattoo* is screened in an equally positive light. Oplev's film builds on Larsson's novel to present this act as a female triumph against male oppression. Although, this crime does seem to be a step towards a moral decline for Salander, neither Larsson, nor Oplev or Alfredson as the directors of the films, ever directly tackle this. Instead there is a sense of accomplishment and victory in Salander's crime, suggesting a 'Robin Hood' mentality that her crime against a 'true' criminal is justified. This view of the 'ends justifying the means' is reiterated by the fact Blomkvist is interested in working with Salander because of the skill she has demonstrated in accessing his files. Rather than feeling outraged by her intrusion into his own private virtual world, he is drawn to her professionally due to her ability to uncover the hidden truths concealed by and within technology. In this way, the Swedish film series recognises and actively promotes the notion of the detective and the criminal as mirror images of each other; to an even greater extent than Larsson's novels, the films proffer the idea of hacker being a necessary figure in contemporary criminal investigation.

A particularly unique element of Oplev's *Dragon Tattoo* adaptation is the manner in which the film utilises the visual and aural nature of the medium to essentially bring Harriet Vanger's 'ghost' to life to haunt both the characters and the audience. The 'spirit' of the sixteen-year-old Harriet has been captured visually in photographs, and Blomkvist is shown to use technology to enhance the limited picture of the character that these photographs offer. Throughout the film, technology is foregrounded in the investigation into Harriet's supposed murder, (re)creating the past for Blomkvist, and later Salander, to analyse and evaluate in

substantial detail. The memory or 'ghost' of Harriet, as a disembodied 'character' has a continual presence in *Dragon Tattoo* through photographs, her diary and even the memories other characters have of interacting with her. The film repeatedly reaffirms her presence in the narrative by presenting her image in photographs, and incorporating her voice in voiceovers of her diary entries. Even the title of the film at the opening is superimposed over the sixteen-year-old Harriet's photograph; she is an intrinsic part of Larsson's narrative, but the film medium allows her ghostly manifestation to be interwoven with the other characters to the point that her sixteen-year-old self appears to have a physical presence. Harriet becomes a 'ghostly' presence who directs part of the action, pointing Blomkvist and Lisbeth to clues that eventually allow them to uncover the truth behind her disappearance, as well as the truth of both her father and her brother's crimes.

One of the most striking sequences of the film involves Blomkvist (re)creating a 'video' of Harriet from a collection of photographs that were taken on the day of her disappearance. The sheer number of photographs available allows Blomkvist to simulate a 'recreation' of the event, in which he comes to realise that Harriet saw her 'killer' at the parade, which led to her facial expression changing and her turning and walking away; this ties into Benjamin's argument that '[technical reproduction] can put the copy of the original into situations which would be out of reach for the original itself' (Benjamin, 2008, p.6). Although this scene is described in Larsson's book, in which 'the effect was jerky silent film in which each image was shown for two seconds' (Larsson, 2009, p.275), Oplev's film is able to capitalise on the visual nature of film to show us the sequence, allowing us to experience Blomkvist's revelation for ourselves. There is also a chilling moment as the patchwork film depicts Harriet's technological 'ghost' staring out at the audience, which in reality is the point she noticed her 'killer' and looked at him with disgust. As his investigation proceeds, Blomkvist

is able to construct a more complete picture of the day by tracing a young couple in the photographs whom he can see holding cameras; this allows Blomkvist to track these people down and get copies of the photographs they had taken on the day. Seeking these people out gives Blomkvist access to other perspectives and viewpoints to assemble a more complete picture of the events that led to Harriet's disappearance. Whilst this culminates in Blomkvist's discovery that the person Harriet was looking at was actually her brother, Martin Vanger, this preoccupation with technology demonstrates its ability to mediate our experience of the world around us. In the same manner that Geraghty observes with television in the film adaptation of *Atonement* (Wright, 2007), the camera has captured the hidden truth behind Harriet and Martin's relationship. A similar thing takes place with the photographs Lisbeth uncovers from the Vanger archives, in which the dates of the photographs indicate that Martin had begun to take over his father's legacy as a serial rapist and murderer.

Figure 54 – Harriet's expression changes as she recognises the face of her 'killer'. *The Girl with the Dragon Tattoo* (Nils Arden Oplev, 2009), film grab.

One interesting point to consider in an age in which not only has technology become such an integral part of modern existence, but has essentially become a conduit for the way in which we live our lives, is the belief in some cultures that technology used to capture our image, such as photographs taken with a camera, can 'steal' a person's soul. Linking into Benjamin's argument, in the same way that camera can capture an image or a performance, a computer's hard drive captures our cyberspace 'image', recording our activity to keep as a virtual copy of us. Although I do not wish to become embroiled in a theological discussion here, this fear does raise some pertinent questions when we consider the impact this extensive use of technology has, and continue to have, on our humanity. There is literally so much of us that we 'input' into technology, be it our images in the form of photographs and videos or our thoughts, ideas and feelings in emails, social networks and text messages that there is a risk that we could become 'ghosts in the machine', echoes of ourselves that only exist in the virtual environment. Such fears regarding the increasing role of technology in human lives has been a recurring concern in literature for a number of years; there has been an ongoing fear that technology could, and inevitably will, lead to a dystopian future in which humanity is struggling to survive. Harriet's ghostly manifestation within technology is representative of the potential for all of us to become 'ghosts in the machine'. Salander stands as an example of a character on the verge of losing herself to technology, of becoming a proverbial ghost in the machine simply because she lacks a substantial physical presence in the 'real' world.

6.3 *The Girl with the Dragon Tattoo* (Fincher, 2011)

Following the international success of Stieg Larsson's Millennium Trilogy, alongside the success of the Swedish film adaptations in the international markets, Hollywood fast-tracked an English language adaptation, helmed by David Fincher, for a December 2011 release.

Billed with the tagline of the 'feel bad movie of the year' (*The Girl with the Dragon Tattoo* promotional poster), the film was nevertheless well received critically. Although the film strives to offer fidelity to Larsson's source material, there are a number of narrative changes – most notably the resolution of the Harriet Vanger murder mystery plot. There are a number of similarities between the two films, but the film's commentary included in the DVD release discusses the manner in which the production team sought to give this version of the narrative its own distinctive signature to allow it to stand apart from the successful Swedish adaptations. In a review of the film, Chris Knight comments on the manner in which

> Fincher's remake is in the paradoxical position of being both immensely enjoyable and completely unnecessary. Niels Arden Oplev's *Dragon Tattoo* remains wonderfully watchable, and had the fringe benefit of catapulting its Mikael and Lisbeth into Hollywood roles, in *Mission: Impossible* and *Sherlock Holmes*, respectively. With Fincher's take, you can see it again for the first time. (Knight, 2011)

Thus, this Hollywood adaptation offers a familiar, yet somewhat distinctive experience for the viewer.

The promotional poster for this film squarely places the emphasis on Salander and Blomkvist as characters and suggests their prominence in the adaptation. In the DVD audio commentary for the film, David Fincher indicates that he saw the film as being primarily about the relationship between the two central characters and this is emphasised in this poster (*The Girl with the Dragon Tattoo* DVD audio commentary, 2012). At the same time, in positioning Salander in the background, the poster emphasises her physical and emotional distance from others. Once again, technology is conspicuously absent from the poster, concealing Salander's hacking skills.

Figure 55 – promotional poster for *The Girl with the Dragon Tattoo* (Fincher, 2011).

Like the 2009 Swedish film adaptation, the 2011 film foregrounds and fetishises hacking and

surveillance technology that is primarily used by Salander as a hacker figure. No discussion

of this film adaptation would be complete without considering the striking title sequence.

This film incorporates an almost Bond-like title sequence, offering the viewer a brief

synopsis of the film's narrative in a few short minutes. In the film's DVD commentary,

David Fincher describes this sequence as attempting to evoke a sense of how Salander's

nightmares might look (*Dragon Tattoo* DVD audio commentary, 2012). As a result, this

sequence builds on the Swedish film's approach of allowing the viewer to 'hack' into

Lisbeth's life and interior space. The images in this sequence intertextually draw on films like

The Matrix, depicting Salander as a cybernetic creature who is essentially absorbed by wires and cables, connecting her to a larger machine. This process is both violent and disempowering, as the recreation of Salander struggles to resist being engulfed by black oil. Whilst this sequence does fetishise the technology, this sense of absorption and engulfment presents a much darker view of technology than the Swedish film. In many respects, this title sequence gives the viewer significant insights into Salander as a hacker figure, and as a person.
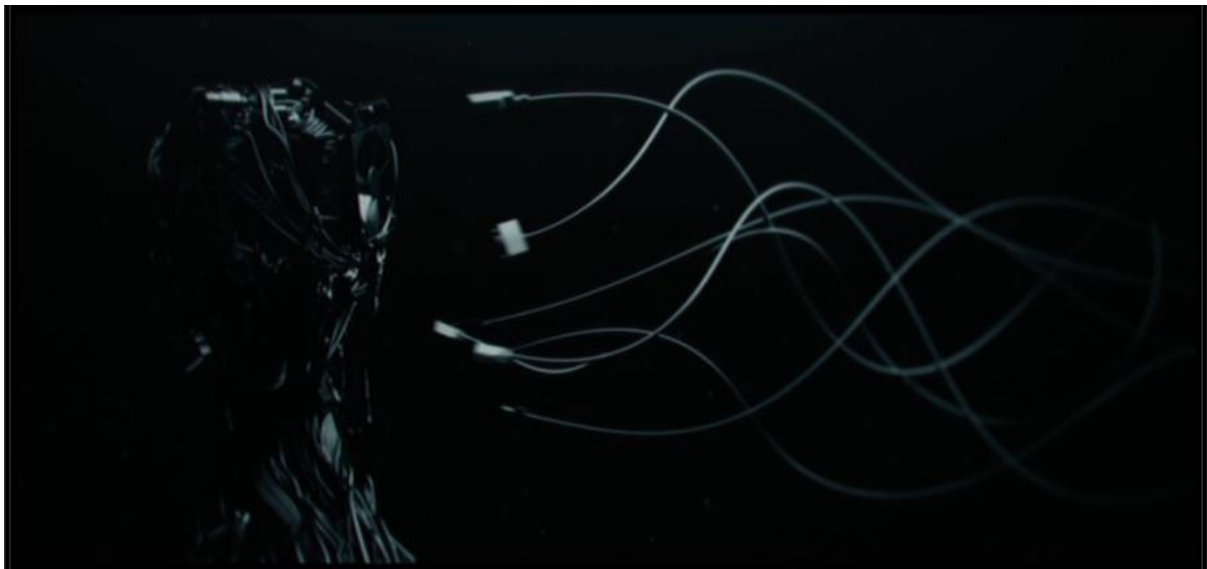
Figure 56 – technology depicted as invasive in the title sequence. *The Girl with the Dragon Tattoo* (Fincher, 2011), film grab.

Although the Hollywood film adaptation approaches technology in a subtler fashion, there is nevertheless a sense of technology being foregrounded and fetishised throughout the film, as computers and their application in the investigative process are continually brought to the fore. This adaptation emphasises the fact that Salander is a child of the technological age by contrasting her with Blomkvist's methodology. Throughout the film she is shown to perceive and capture her experiences through pieces of technology, such as taking photographs on a

digital camera to document evidence rather than taking notes. This becomes more transparent in Salander's interactions with Blomkvist as the film emphasises his reliance on description and perception as opposed to documented facts. In many respects, Salander's utilisation of technology as a medium of fact resonates with Geraghty's argument of television as a medium of truth. Whilst Blomkvist seeks to uncover different perspectives and perceptions, Salander remains focused on tangible facts. Rather than looking for interpretations and detailed analysis of targets, Salander's approach is emotionless and logical, needing concrete evidence to confirm a viewpoint.

A specific point of the fetishisation of processes in this film is the depiction of the methodology Salander undertakes to hack in Wennerstrom's system. The film takes pains to show her espionage of his company's computer system infrastructure, as the character enters the building to examine some of the technology and cabling in the basement. The result of these scenes is a greater insight into the details and technical processes of Salander's hacking, which this film foregrounds and fetishises as much as the technology; it becomes clear that hacking requires tactical timing and precision, rather than simply pressing a few keys as so many representations of easy 'Hollywood hacking' would have us believe. This return to a more grounded reality in depicting hacking marks a step back from the focus on speed and relative ease in 1990s productions.

Equally Salander's utilisation of surveillance technology following the attack on Blomkvist presents the viewer with the technology's perspective. As Salander sets up this equipment, the extradiegetic camera shifts to the perspective of her surveillance camera so the viewer can view events through the technology. Equally, like other hacker films, this allows *Dragon*

Tattoo to demonstrate how this technology works. Salander's laptop screen is presented as a window into the virtual world of cyberspace, connecting her to the rest of the world and allowing her to monitor the activities of other character. However, whilst 1990s films like *Hackers* (Softley, 1995), *Disclosure* (Levinson, 1994), *The Net* (Winkler, 1995) and *The Matrix* (The Wachowski Brothers, 1999) build up this virtual world and hyperbolise its representation on screen, *Dragon Tattoo* understates the technology as natural and part of the scenery. As with the Swedish film, the technology is instead foregrounded and fetishised as a tool of investigation.

Figure 57 – viewpoint of Salander's surveillance cameras. *The Girl with the Dragon Tattoo* (Fincher, 2011), film grab.

Figure 58 – Salander's laptop screen as a window into other people's live. *The Girl with the Dragon Tattoo* (Fincher, 2011), film grab.

As I have argued previously, technology is a source of power for Salander, and the loss of her laptops signals her disempowerment and vulnerability to others. When her laptop is damaged in an attempted mugging on the subway, Salander loses her ability to remotely monitor and influence the lives of other people. Tied directly to this notion of the loss of her laptop signalling the disempowerment of Salander as a character is her use of a video camera to reassert her power over Bjurman and assume a more dominant role in their relationship.

The sense of process becomes more prominent through the depiction of Blomkvist's character, who undertakes a detailed investigation of Harriet's disappearance, going through files, reports and meeting with key contacts with ties to the investigation. As part of this investigation, Blomkvist carries out a series of interviews, which are reminiscent of Smiley's

meetings in *Tinker Tailor Soldier Spy*, uncovering further leads from these discussions and from evidence these witnesses are able to provide.

A particularly noteworthy difference between the two adaptations is the manner in which each of them approaches Salander's isolation from the rest of society and how each of them depicts her vulnerability. Whilst the Swedish film version of the character is shown to continue to protect herself by maintaining a distance from other characters, Rooney Mara's depiction of Salander makes connections with people only to have them ripped away from her. This is exemplified by the character's relationship with her former guardian, Palmgren. Once again, although this relationship is present in both novel and earlier adaptation, Fincher's film shows the character's devastation on finding Palmgren in his apartment after having a stroke and takes great pain in representing the tender relationship between the two characters as she keeps going back to visit him. Whilst Rapace's Salander has already been hardened by experience and continues to choose to isolate herself as a defensive mechanism, Mara's portrayal shows a greater degree of vulnerability in the character in that she becomes isolated due to personal loss. The viewer's first impressions of Salander come from the reactions of people as she walks through the Milton Security offices to meet Armanksy. As Salander walks through the Milton Security offices, her back is facing the camera, obscuring her face so that the viewer is only presented with the faces of the people based in the offices who react to her presence as she passes by – therefore we share her perspective as she encounters these reactions to be given greater insight into her isolation. The fact that her outfit suggests a rugged, and hardened character also emphasises that she uses this appearance to project a barrier between her and the rest of the world.

Figure 59 – Salander's co-workers react to her 'war paint'. *The Girl with the Dragon Tattoo* (Fincher, 2011), film grab.

Building on this notion of Mara's Salander being a more vulnerable version of the character, another major difference between the two films is that the 2011 adaptation's greater focus on the relationship between Salander and Blomkvist. Whilst this relationship is a major part of the narrative in both the novel and the Swedish film, the later adaptation places a stronger emphasis on Lisbeth coming to trust and connect with Blomkvist, but ultimately coming to realise that he does not share her strong feelings for him. Like the other versions of the narrative, the two characters come together as outcasts investigating the Vanger case. However, whilst Noomi Rapace's portrayal of Lisbeth refuses to allow herself the liberty of falling in love with Blomkvist, Rooney Mara's depiction of the character clearly develops a deep connection with him. The result, at the conclusion of the film, is Salander's rejection of a connection to the rest of humanity, clearly having a deeper impact on the character's journey. How this character trait could and will be developed in potential adaptations of the sequels remains to be seen.

Figure 60 – Salander depicted as isolated and alone in a public space. *The Girl with the Dragon Tattoo* (Fincher, 2011), film grab.

This film adaptation makes significant use of physical barriers to signify Salander's isolation and desire to protect herself. At the meeting with Frode and Armansky, Salander positions herself at the far end of a large meeting room, creating physical distance between herself and others. The emphasis on Salander's physical barriers earlier in the film underlines how she begins to lower these defences and allows herself to open up to Blomkvist and allows him into her personal space. Several scenes demonstrate this shift, as Salander allows him to remain physically close to her. The film also strives to emphasise the manner in which Salander, and later Blomkvist, have both become outsiders in society and how this shared bond brings them closer together. However, Blomkvist's later reincorporation into wider society and return to Millennium leads to the breakdown of this intimate relationship.

Figure 61 – Salander maintains physical distance in her meeting with Armansky and Frode.

The Girl with the Dragon Tattoo (Fincher, 2011), film grab.

Continuing the theme of hackers being forced out of their small, enclosed workspaces, *The Girl with the Dragon Tattoo* presents these small, enclosed spaces as threatening and dangerous. Whilst small enclosed spaces are presented as the hacker figure's native territory in a significant number of hacker genre films, Salander becomes a victim in Bjurman's personal spaces of his office and his home. Similarly, Blomkvist is attacked and almost killed by Martin Vanger in the small, enclosed spaces of his home. This continues the notion of these small, enclosed spaces serving as virtual prisons for the hacker figure, but actually takes this a step further by presenting some of these spaces as being locations of violence that serves to emphasise the need to penetrate and expose secrets and truths about horrific crimes that have been committed.

In addition, the film conveys a sense of Salander's paranoia and sociophobia, but the events of the film also underline that she is justified to feel this way. At several points in the film Salander becomes a target of male violence, including Bjurman, the mugger on the subway and even Martin Vanger who expresses his intention to assault her. However, rather than discovering secrets and purely monitoring them, the film strives to present Salander as a proactive exposer of secrets.

The power dynamic between Salander and Blomkvist as hacker figures demonstrates the shift towards more proactive female hackers over time. Blomkvist is initially presented as the target of Salander's hacking and surveillance for the Vanger background check, and thus their relationship dynamic is firmly presented in Salander's favour; she has the power of the gaze in this relationship, and the film continually reinforces this idea as she more prominently utilises the surveillance equipment, she holds more information and she ultimately rescues Blomkvist. Whilst Laura Mulvey argues that 'the split between spectacle and narrative supports the man's role as the active one of forwarding the story, making things happen' (Mulvey, 1999, p.810), this film firmly presents Salander as the more dynamic figure who possesses power over the gaze.

Whilst Harriet becomes an ethereal presence throughout the Swedish film, the Hollywood film focuses more on memory and flashbacks. However, one is forced to question whether this is a deliberate choice considering the 'knowing audience' who are familiar with the book or previous adaptation and are therefore aware that this supposedly murdered girl is actually still alive. The colour scheme and lighting utilised to present the flashbacks also signify how each character remembers the past. As a result, Henrik Vanger's early flashbacks are

presented in a warm, almost sepia effect. However, Harriet's own recollections of that time at the end of the film are depicted with a much darker hue, evoking a sense of looming danger and violence that Harriet sought to escape. The use of lighting and colour also emphasises the difference between human memory and hard facts. Whilst there is a sense of Harriet haunting the narrative, the scene depicting Blomkvist creating the 'video' from photographs of the Children's Day parade does not carry the same emotional impact at Oplev's 2009 adaptation. Instead there is a sense Harriet being haunted by her 'killer'. Both films strive to recreate the novel's simulation of the investigative process, which presents documents to the reader embedded within the text. These include documents such as reports and emails that the reader can examine as primary 'evidence' in their own 'investigation'. In a similar fashion, the films depict computers as possessing the ability to 'bring out those aspects of the original that are unattainable to the naked eye, yet accessible to the lens, which is adjustable and chooses the angle at will' (Benjamin, 2008, p.6). Consequently, the films strive to simulate the experience of viewing photographs, watching videos and 'surfing the net' for the audience, allowing them to more actively 'participate' in the experience. This is particularly evident in the Swedish *Dragon Tattoo* in which the audience is 'actively' involved in the investigation into Harriet's disappearance, examining the same evidence as Blomkvist and Salander as Oplev teases us with the narrative possibilities; as a result, the viewer 'examines' photographs, video footage and documents that allow him or her to reach some of their own conclusions on the case. On the other hand, whilst the Hollywood film partially replicates this experience through photographs, there is a much greater emphasis on flashbacks and recalled memories as witness testimony for the audience to digest. Consequently, this version of the film looks and feels more like a 'classic' detective story, which incorporates technology as part of the investigation.

Given the focus of both films on foregrounding and fetishising contemporary technology it seems inevitable that both will ultimately fall prey to the limited shelf life that I identified as being part of my proposed hacker genre. Some of the other examples I have been looking at, such as *The Conversation* produced in 1974, and even *Enemy of the State* from 1998 now look dated in terms of the technology they present as part of their respective narratives. This inbuilt expiry date will continue to be an issue for all hacker genre films due to their focus on foregrounding and fetishising contemporary technology.

6.4 Conclusion

As I highlighted earlier, the two adaptations of *The Girl with the Dragon Tattoo* offer similar, yet at the same time very distinctive experiences for the viewer. As with the two adaptations of *Tinker Tailor*, these two versions of *The Girl with the Dragon Tattoo* allow us to see two hacker genre films based on the same narrative but developing in different ways. The fact that the two were produced so closely together does raise questions as to how different they could ever be, yet the 2011 film manages to focus more on the vulnerability of Salander as a character to explore her relationship with Blomkvist and how she lowers her barriers with him. This parallels a similar depiction of increased emotional vulnerability in George Smiley in *Tinker Tailor Soldier Spy* (Alfredson, 2011). The Swedish film particularly benefits from being part of a trilogy of films and following Salander's wider narrative and actually foregrounds the technology to a greater extent. It will be interesting to see how the Hollywood version of Lisbeth Salander could be further developed in the event of sequel films being produced in the future.

Perhaps most important is the fact that both of these films demonstrate a shift back to smaller scale hacking of individuals, as opposed to large scale technical assault on organisations. This shift draws more on the detective film tradition to offer a more personal thrilling experience for the viewer. Whilst the sense of horror still comes to fore, and there is a continued sense of the potential for this technology to dehumanise Salander as a hacker figure, both films nevertheless stress the glimmer of hope for her to (re)connect with the rest of the world. As a female hacker, she is clearly in a position of power over others, owning the 'gaze' (Mulvey, 1999, p.810) in her relationship with Blomkvist and possessing the skills to dominate her relationships with others. Hacking here is not all about fear, but rather suggests that cyberspace could be a land of opportunity.

7) Conclusion- 'Hack the Planet!'[13]

7.1 Introduction

Throughout this thesis, I have been arguing for a film genre centred on hacking and surveillance, exploring the breadth and depth of this potential genre. To this end, I have been mapping out a list of potential hacker genre films and television series, which are outlined in Appendix A and Appendix B respectively, but primarily through detailed analysis of a small number of different hacker genre examples. As I highlight in the Introduction, one of my primary goals for this research is to identify and recognise hacker and surveillance films and television series as a group, underlining the similarities and differences in how each of these films and television series portray these activities on screen. Whilst several articles have been written on hacking and surveillance films, none so far have grouped them together as a unique genre. Using genre as an analytical tool I have sought to map out the emergence and development of this proposed hacker film genre through its constituent genre films. The structure of the study has sought to look at this proposed genre in terms of chronological development from the precursors produced in the 1970s through to the emergence of computer hacker films in the 1980s and 1990s that has continued on to the present day, and as each of my chapters have emphasised, there is a distinct sense of generic development over time as hacker and surveillance films react to socio-political events and influences of the period of production. Consequently, I will refer to the 1995 film *The Net* throughout this conclusion chapter to emphasise the way the film epitomises the generic features of hacking and surveillance films and to revisit my list of generic traits. As I have considered, each of these hacker genre films demonstrates the social anxieties and tensions of their respective periods of production. This ranges from the impact of the Watergate scandal, through to the looming threat of the Cold War, to the rise of the home computer and the aftermath of the

9/11 terrorist attacks. Technology's impact on the human condition is also an ongoing concern; this directly connects with the fear of technology evoked in both real-life and various films depicting the rise and development of technology. However, the technological focus that the films draw on at the time of their release becomes diluted as time progresses and technology advances.

As I state in the Introduction, one of the key contributions to knowledge of the thesis is to indicate that a genre is not created, but rather that it evolves, and this is the first study to chart the emergence and evolution of the hacker film genre from the 1970s to the 2010s. This thesis also aims to identify the surviving characteristics of the genre, and track how these markers develop across individual hacker genre films across different time periods. A particularly noteworthy feature of this genre is the built-in short shelf life of the hacker genre film. Technology is fetishised for the fear it can elicit from the viewer, but this effect dissipates over time as the technology becomes familiar and eventually obsolete.

Whilst there is compelling evidence of shared generic features between the various hacker genre films, genre theory remains an area of discussion and debate. Ultimately, there is undoubtedly a case for the connections between these various films and their shared generic traits. As I considered in the Introduction, genre is by its very nature a problematic topic, subject to ongoing arguments and contention. Moreover, it has been clearly observed that genres are a fluid phenomenon, subject to adaptations over time in line with socio-political concerns of the period of production of each genre film. However, this fluidity ties in nicely with the ever-evolving nature of hacking and surveillance technology. One point that is clear is that my proposed hacker and surveillance film genre has drawn upon and grown from other

film genres, in particular the thriller, horror and crime genres. If there is insufficient evidence for a fully-fledged genre then there is at the very least an argument for a hacking and surveillance sub-genre, developing particularly out of the crime, thriller and horror genres.

The horror generic tropes particularly echo the fin de siècle horror fiction of the nineteenth century, in which scientific experiments and discovery often leads to creation of monsters, such as Mr Hyde and Frankenstein's monster. There is also undoubtedly a link to the crime film genre, as hacking is by its very nature a criminal act of intrusion. However, the major shift is that whilst 'crime films provide … chances to identify with powerful and competent heroes, and discussions of morality that are comfortingly unambiguous' (Rafter, 2006, p.9) the hacker genre film offers no such clear-cut moral certainty or security. Rather hacker genre films offer continual questions and uncertainties, as the looming threat of the hacking technology remains ethereal, unseen and unknown; the equipment captures our secrets, but that information becomes spectral itself, transformed into recordings and data records that are stored electronically. The landscape of the contested space of hacking and surveillance is continually evolving with the technology and therefore there is a constant change in the power dynamics. Although the hacker genre film presents protagonists such as Harry Caul and George Smiley, they are not clear 'heroes', nor do they fully restore order. As Gill Plain observes, 'Crime fiction in general, and detective fiction in particular, is about confronting and taming the monstrous. It is literature of containment, a narrative that makes safe' (Plain, 2001, p.3). Although Plain's argument refers specifically to crime fiction, this same issue applies to crime films and television series. Whilst hacker and surveillance films and television series often depict crimes, the shift from the certainty of crime films is that the monstrous technology, and its impact on hacker figures, cannot be fully contained – any

containment is only temporary, as the technology continually advances and evolves to overcome this restriction and reignite the conflict for this space.

Linda Hutcheon, in her discussion of film adaptations, considers the manner in which forms evolve over time, and this idea of 'evolution' is precisely how genres develop over time. Generic development is itself a form of adaptation, as films intertextually influence subsequent films and are influenced by socio-political concerns of their periods of production. Hutcheon effectively highlights this idea in her discussion of memes:

> adaptation is how stories evolve and mutate to fit new times and different places. Dawkins' postulating of the existence of those units of imitation or cultural transmission he calls "memes" seems to me to be potentially very productive. Memes are not high-fidelity replicators: they change with time, for meme transmission is subject to constant mutation. Stories too propagate themselves when they catch on; adaptations – as both repetition and variation – are their form of replication. Evolving by cultural selection, travelling stories adapt to local culture, just as populations of organisms adapt to local environments (Hutcheon with O'Flynn, 2013, p.177).

Although Hutcheon's argument centres on adaptations, each new genre film is effectively 'adapting' memes from preceding genre films and other intertextual influences. In terms of my proposed hacker film genre, the generic traits I have outlined throughout this study are the memes that develop and evolve over time, reacting to socio-political and socio-cultural issues and concerns that are then reflected in film.

What becomes clear through Appendices A and B is that there has been an explosion in the production of hacker genre films since the mid-1990s, which has continued to grow over time. Whilst the 1970s and 1980s includes only a small number of hacker genre films, such as *The Conversation* (Coppola, 1974), *All the President's Men* (Pakula, 1976), *WarGames* (Badham, 1983), *Tron* (Lisberger, 1982), and *Electric Dreams* (Barron, 1984), the 1990s

begins the mass production of these films; in addition to *Hackers* (Softley, 1995), *The Net* (Winkler, 1995) and *Enemy of the State* (Scott, 1998), films like *Sneakers* (Robinson, 1992), *Mission Impossible* (De Palma, 1996), *The Matrix* (The Wachowski Brothers, 1999), *Jonny Mnemonic* (Longo, 1995), *Disclosure* (Levinson, 1994) and even *Jurassic Park* (Spielberg, 1993) continually bring hacking to the fore. This expansion of hacking on screen continues well into the 2000s and 2010s, as even the *Die Hard* franchise delves into the world of hacking in *Die Hard 4.0* (Wiseman, 2007). Whilst some of these films have not achieved commercial success, as the figures in Appendix A demonstrate, the focus on hacking and surveillance has proven to have significant box office appeal. The case of *Die Hard 4.0* demonstrates that this film has the highest box office total of the five films in the franchise, further demonstrating Linda Hutcheon's argument of Darwinian adaptation. In this case, the action franchise adapts itself to fit in with the hacker film genre, whilst simultaneously appropriating these traits to breathe new life into the action film.

In selecting particular films to focus on and analyse as part of this study, I have inevitably introduced bias into this discussion. However, for any study there has to be a specific focus on specific examples and in selecting films and television series to analyse I have attempted to bring together examples that demonstrate both similarity and differences in the depiction of both hacker figures and hacking as an activity. Moreover, each of the examples studied have followed in the wake of key developments in society that have influenced both the production by film-makers and the reception by the audience. In an attempt to fully consider hacker and surveillance genre films in a wider context and endeavour to overcome this limited focus, Appendix A is comprised of a list of hacker and surveillance films, whilst Appendix B cover television series, with each list containing brief details as to how each film or television series confirms to the generic features of the hacker genre.

Throughout this study, I have used analysis of hacker genre films and television series to explore the evolution of the generic traits. To conclude this investigation, I will briefly consider some examples of the wider hacker genre, before I go on to use *The Net* (Winkler, 1995) as an example of a hacker genre film that epitomises the core generic characteristics. Produced in the mid-1990s, the film stands as a mid-point between 1974's *The Conversation* and the 2011 film adaptation of *The Girl with the Dragon Tattoo,* demonstrating the developments from the 1970s and looking ahead speculatively to the future.

7.2 Hacker Genre Features Revisited

Looking back to my original list of hacker generic tropes that are listed in the Introduction, there is a clear sense of evolution over time and in between hacker genre films. In some case, there are 'surface' changes, whereas others demonstrate 'deeper' changes (Schatz, 1981, p.20).

Feature 1 – The hacker genre film has a contemporary setting

This feature remains a common thread to the vast majority of hacker genre films and serves to 'ground' the hacker genre film in the viewer's contemporary reality. This setting allows the film to foreground and fetishise technology and how it can be used for hacking and surveillance. *Tinker Tailor Soldier Spy* (Alfredson, 2011) bucks this trend by recreating the 1970s setting to immerse the viewer in the narrative's past; however, the film simultaneously reflects contemporary concerns around terrorism and uncertain threats.

Feature 2 – Hacker genre films foreground and fetishises the technology and processes

This foregrounding and fetishisation of technology remains a common thread through hacker genre films, but there is a striking evolution of this representation becoming hyperbolised in the 1980s and 1990s to the point of excess in *Hackers* (Softley, 1995) in particular. Whilst this ventures into the realm of science-fiction and anticipating technological developments, the extreme representation of technology serves to date the film even more as time passes by. This feature continues to evolve to become more understated in the 2000s to the point it feels naturalised in the two adaptations of *The Girl with the Dragon Tattoo*.

Feature 3 – Hacker genre films come with an inbuilt expiry date

The focus on contemporary technology also builds in a limited shelf life for the hacker genre film. Whilst the films offer suspense, excitement and thrill with cutting-edge technology, this equipment increasingly becomes familiar and outdated very quickly. The excitement and fear elicited by this technology is drawn from its ability to awe the viewer with its capabilities, but we invariably become desensitised to these sensations as the particular models of equipment become obsolete. Thus, the lengthy, step-by-step processes followed by Harry Caul in *The Conversation* and George Smiley in *Tinker Tailor Soldier Spy* increasingly lose the interest of modern viewers.

Feature 4 – The hacker figure is presented as a machine-like or cybernetic figure

Another source of anxiety is the effect this technology has on humanity, effectively changing our state of being; this is part of the connection to the horror tradition, as the technology is essentially a 'monstrous' creation that poses a threat to humanity. Despite our increasing familiarity with this technology, it nevertheless remains a point of tension. Thus, the hacker figure is vilified as a criminal, thief, outsider and social misfit.

Feature 5 – The hacker figure is presented as being isolated from the rest of the world

Connected to this notion of hackers becoming cybernetic creatures is the way the hacker becomes isolated from the rest of the world. Whilst there was a surge of hacker culture building in films in the 1990s, perhaps most notably with *Hackers*, there is a sense that it has come full circle with hackers once again retreating to the shadows and their seclusion. However, there is a definite shift in the power scales, from Harry Caul who hid out of fear of being known, compared to Lisbeth Salander who conceals her hacking activities as her skills in cyberspace are a source of empowerment for her.

Feature 6 – The hacker genre blurs the lines between Thomas Schatz's notions of genre of order and integration

Given the dual focus on the conflict for the 'electronic frontier' (Sterling, 1992, p.1) and the hacker figure's personal journey, these films continually blur the line between narratives of establishing order over cyberspace and following the hacker figure's interactions with the rest of the world.

Feature 7 - The hacker film is preoccupied with questions about the morality and ethics of hacking

The ethical side of hacking remains a core component of hacker genre films, but the evolution here is that cyberspace increasingly becomes a site of conflict and resistance. Whilst institutions have vast networks of surveillance and data analysis, the individual hacker is able to resist this imposition and reclaim a degree of freedom in cyberspace. Equally, for every malicious hacker, there is a hacker protagonist to fight back against them.

Feature 8 - The hacker film has a haunting presence of the past through technology

This sense of haunting presences in hacker films only grows with time. From the echoes of the young couple's conversation captured forever on Caul's tapes, to Harriet Vanger's ghost haunting technology through photographs, to Angela Bennett's identity becoming cast adrift in the realms of cyberspace, there is so much of us that becomes electronic signals within this technology that it is unsurprising that ghosts begin to emerge. In the present day, social media captures so much of our daily lives that our profiles effectively begin to take on a life of their own. Linked to the notions of hacker isolation and dehumanisation, there is increasingly a sense of the hacker figures becoming 'ghosts in the machine', so entrenched in the world of cyberspace that they lack a physical connection or presence to the real world.

Feature 9 – Hacking is presented as an 'interactive' experience for the viewer.

Harking back to the crime or detective genre, hacker genre films offer a seemingly interactive experience for the viewer, inviting analysis of evidence and speculation into the mysteries raised by the hacking and surveillance. This ranges from Harry Caul's delving into the secrets behind the titular conversation in *The Conversation*, to following the intricacies of Smiley's mole hunt in *Tinker Tailor Soldier Spy*. However, as hacker genre films become more focused on speed and mobility, some of this seeming interactivity is lost, such as in *Hackers* where some of this work is condensed into a montage. However, the television series *24* and *Spooks* in particular return to following the intricacies of an investigation, with *24* offering a 'real time' experience for the viewer. Likewise, *The Girl with the Dragon Tattoo* is very much a detective story, in which the viewer 'participates' in the process with Blomkvist and Salander.

Feature 10 – Hacker genre films establish a particularly strong connection between the hacker figure and viewer

This notion of an especially strong connection between protagonist and viewer remains a core element of hacker genre films for the simple reason that the focus on penetrating personal spaces and secrets is foregrounded by the nature of these narratives; in watching hacker figures remotely monitoring their targets, we become more self-conscious of our role of 'hacking' into the interior spaces of these hacker figures. Whilst the penetration of the interior space of a film's protagonist is a common feature in almost all genres, these films foreground the fact that we gain access to characters who intentionally create barriers to protect themselves from such vulnerability. Of course, this 'connection' to the hacker figure

is itself an artificial link; like the hacker figures monitoring their targets, we as viewers penetrate the personal space of these characters through the medium of technology.

Feature 11 – Hacker genre films create a verisimilitude around the technology they present

Whilst hacker genre films are largely grounded in the reality of their contemporary period of production, by the 1980s and 1990s the films begin to embellish the capabilities of this technology and present more extravagant visual experiences for the viewer. This comes full circle in films like the two adaptations of *The Girl with the Dragon Tattoo* (2009 and 2011) which returns to smaller scale hacking and offers a subtler approach to the portrayal of Salander's hacking activities.

Feature 12 – The hacker genre film lacks a clear sense of definitive resolution

This sense of an unclear and vague resolution is a common feature across time in the hacker genre film. From Caul's emotional breakdown and inability to find the bugs in his apartment in *The Conversation* (Coppola, 1974), to the ongoing conflict between Smiley and Karla, to the ominous satellites in orbit in *Enemy of the State* (Scott, 1998), the victory of the hacker figure is only temporary and never a clear-cut triumph. Cyberspace remains a contested space. This reflects how crime in general is not resolved by a detective story, merely restoring order related to a particular crime.

Feature 13 – Female characters evolve from victims and unwitting allies to rivals and eventually hacker protagonists

The initial presentation of female characters is in the role of victims of hacking and surveillance, but this role evolves significantly over time as female characters become rival figures and eventually hacker protagonists, as I consider more in relation to *The Net* (Winkler, 1995) later in this Conclusion.

7.3 Considering Other Examples of Hacker Genre Films

As indicated by my list of hacker genre films in Appendix A, there are a significant number of other films that demonstrate the generic traits that I have outlined throughout this thesis. Those films produced in the 1990s are particularly key examples in the formation and development of these shared features, and, therefore, I will briefly consider some of the other key examples of the hacker genre, before moving on to examine *The Net* (Winkler, 1995) in greater detail.

7.3a) *Sneakers* **(Robinson, 1992)**

Produced and released in the early 1990s, *Sneakers* exemplifies a number of hacker genre film characteristics. In a 1992 article, Sarah Weidman highlights how plans for this film began during the production of the screenplay for *WarGames* in the 1980s, which then developed for over a decade:

> The idea for *Sneakers*, about a team of computer hackers hired by companies to break in to test their security, arose in 1981 when [Lawrence] Lasker and co-writer/ producer Walter Parkes were researching for their Academy Award nominated

screenplay, *WarGames*. They inadvertently found about these teams the government puts together, and thought there was potential for a movie (Weidman, 1992, p.8).

This sense of connection between the writing and production of *WarGames* and *Sneakers* continues the notion of generic development, with the production of one hacker film unearthing another element of technological infiltration for a future production. At the same time, as Vincent Canby underlines in a review of the film, '*Sneakers* looks like a film that resurfaced after being buried alive for 20 years. It's an atrophied version of a kind of caper movie that was so beloved in the early 1970's' (Canby, 1992). Consequently, the film combines the ambience and feel of 1970s thrillers with the developing features of the hacker genre.

The film is particularly noteworthy due to its depiction of a group of hacker figures working cooperatively towards a common goal. Each member of the team offers a different set of skills to complement those of their teammates, providing a sense of camaraderie, shared experience and collaboration, as opposed to isolation. Nevertheless, the film represents a personal journey for Martin Bishop to reintegrate into society with his true identity.

In a similar fashion to other 1990s hacker genre films, *Sneakers* also focuses on the potential misuse of hacking technology to penetrate any computer system by using the black box device. Thus, the film engages with the conflict for control of the 'electronic frontier' (Sterling, 1992, p.xi). However, rather than presenting a negative depiction of the hacker figure team surrendering this technology to NSA agent Abbot at the end of the film, *Sneakers* instead presents Martin Bishop to have removed the main processor from the box to render it useless before he handed it over. As a result, the film presents the continuing struggle for

control over this space of information itself to be a positive step, allowing people to interact feely within the electronic frontier and ensuring that no single agency achieves dominance. Paralleling both *The Net* and *Enemy of the State*, the threat at the heart of this film is potentially global, as the black box technology allows the user to instantly infiltrate any computer system for their own purposes.

Sneakers also exemplifies a fetishisation of technology throughout the film. The film opens with a scene set in 1969 depicting a young Cosmo and Martin conducting a hacking operation. The camera focuses on shots of their technology before panning out to show their faces. This continues throughout the film as technology is continually brought to the fore, with shots focusing on the intricate details of how technology is used. One striking example of this is the hacker team's efforts to construct a copy of Werner Brandes' vocal recognition code to gain access to his office, which involves capturing recordings of his voice, splicing them together and then physically utilising this recording in the field. Similarly, the extradiegetic camera assumes the viewpoint of the group's technology being used to conduct surveillance of their targets.

7.3b) *The Matrix* (The Wachowski Brothers, 1999)

In many respect *The Matrix* is the culmination of 1980s and 1990s hacker films striving to immerse the viewer into the technological world, in that the film presents a dystopian future in which the human consciousness is quite literally incorporated into the 'electronic frontier' (Sterling, 1992, p.xi). Although the film begins as a more typical hacker film, in which hacker Thomas Anderson is investigating the mystery of the Matrix, the main portion of the

film looks at the immersive form of hacking presented in *Tron*. As Damian Gordon highlights '*The Matrix* (1999) which accurately features a 25–50-year-old hacker working in the computer industry is less memorable for its correct profile of a hacker than it is for people in black coats dodging bullets in slow motion' (Gordon, 2008, p.25); the truth is that the virtual environment of the titular Matrix offers greater opportunities for action and audience engagement than watching someone simply typing at a computer screen could ever provide. Although computer hardware forms a significant part of the narrative, it becomes clear that the virtual reality, and the character's manipulation of this world, assumes a more critical role to this narrative. As in the 1980s film *Tron* (Lisberger, 1982), the hacker characters become integrated into a virtual environment, embodying avatars that assume their appearance, but with one critical twist for Thomas Anderson (or Neo as he becomes). His existence truly begins in the virtual environment of the titular Matrix, before he is eventually released into the real world. The real hacker figures in this case are the free humans who hack into the Matrix and can manipulate the environment around them because they are aware of its artificial nature and thus able to surpass the limits imposed by the system. Neo's journey to becoming 'the one' requires that he embark on an epic journey of self-discovery before he can determine how to manipulate this virtual environment.

In a similar fashion to *Tron* (Lisberger, 1982), the futuristic science fiction setting of the film allows the visual spectacle to be more readily accepted by the audience. In making the characters effectively cybernetic, with technology incorporated into their bodies to facilitate a connection to access the Matrix environment, the film offers a plausible explanation for some of their amazing feats; information can literally be transferred into their brains to imbue them with new knowledge and skills. Thus, given the rules laid out for this futuristic setting, the viewer can accept that Trinity can suddenly become a helicopter pilot when the need arises,

as the film explains the premise that allows her to download this information directly into her brain. The same is true for Neo's fighting skills, information that has been relayed directly into his brain through the cables connected to his cybernetic implant; however, the film also makes it clear that each hacker needs to learn to effectively utilise these downloaded skills to effectively manipulate the Matrix for their own ends. Far from a simple flick of a switch, the skills implanted in the human brain need to be developed and honed before the Matrix hackers can successfully infiltrate the virtual environment.

Nevertheless, like *The Net*, which I will discuss later in this Conclusion, the beginning of the film bears closer resemblance to a more traditional hacker film. The character of Thomas Anderson is presented as existing in the contemporary reality of 1999, secretly having a hacker alias of Neo to cover his hacking activities. In this initial context Neo, as a hacker, appears to live a solitary existence, demonstrating similar traits of paranoia and sociophobia presented in the characters of Harry Caul and George Smiley. Moreover, one of the opening shots of Neo at his computer visually resembles shots of more traditional hacker characters in other films. The sense of mystery drives the early part of the film as Neo investigates to uncover the truth behind the Matrix, yet rather than acting alone Neo is instead led down the right track by Trinity and Morpheus. Unlike some of the other hacker figures I have looked at, Neo is quite literally a prisoner within the virtual reality and only truly becomes a hacker when he is freed from the Matrix and begins hacking back in with Morpheus and his crew. Ironically, whilst most hacker characters are presented as choosing to isolate themselves in a world of hacking and technology, Neo begins his life submerged in the virtual reality of the Matrix but over the course of the film is liberated from this existence and begins to make human connections with Trinity and the rest of Morpheus' crew in the real world.

As with other hacker figures in other films, the viewer 'hacks' into Neo's life through the extra diegetic camera at the same time he is the object of surveillance by Trinity within the narrative. However, the irony of the surveillance becomes most apparent when it is revealed that Morpheus and Trinity have been hacking into the virtual reality of the Matrix to monitor Neo's activities.

7.3c) *Swordfish* **(Sena, 2001)**

Equally, the 2001 film *Swordfish* demonstrates several of the core hacker genre film traits, depicting an unwilling hacker figure drawn into the criminal world in his attempts to reunite with his daughter; the character of Jobson is also shown to be socially isolated, existing on the periphery of society and disconnected from his family, but is forced to leave his seclusion behind to enter into larger spaces and engage with the rest of the world. In this way, the film conforms to Thomas Schatz's genre of integration, in that Stanley Jobson achieves social integration by reconnecting with his estranged daughter. The film also achieves a degree of restoring social order in that Jobson is able to thwart the immediate criminal threat posed by Gabriel Shear, but ultimately the threat continues to exist when it revealed that he faked his death through misdirection.

Swordfish also exemplifies the foregrounding and fetishisation of technology common to hacker genre films. The film's visuals blend reality with virtual reality, which serves to simulate the experience of infiltration for the viewer. In addition, Jobson's hacker workspace creates a feeling of extensive power, with multiple screens and visually impressive

technology at his disposal to create a feeling on Jobson being 'slick' hacker figure. Like other hacker figures, Jobson is depicted with exceptional hacking skills, able to penetrate the US Department of Defense[14] mainframe when tested under extreme circumstances, supposedly able to gain access to the system within moments. Equally, the striking visuals presented on the computer screens continue the trend depicted in 1980s and 1990s films to attempt to elicit a sense of awe and wonder in the viewer as Jobson creates the worm software. In a similar vein to *Hackers* (Softley, 1995), the world inhabited by Gabriel is essentially a subculture hidden outside the realms of everyday reality, which allows him to operate in the shadows and to build up a vast powerbase.

There is also a sense of hacker competition in the parallel depictions of the endeavours of Gabriel and Jobson, compared to those of J.T Roberts' team of FBI agents pursuing them. As in *Enemy of the State*, the film's focus continually jumps between the two narrative perspectives to create a sense of competition and pursuit between hacker figures. This is paralleled by the involvement of a US senator in Gabriel's criminal undertakings, highlighting political corruption and misuse of technology.

7.4 *The Net* (Winkler, 1995)

Produced and released in 1995, *The Net* stands as an example of the hacker genre film during the peak hacker period of the 1990s, a time in which computer technology was becoming a key feature in the general public's work and home environments. *The Net* particularly parallels both *The Conversation* and *Enemy of the State*, in that the hacker protagonist, Angela Bennett, is also the subject of surveillance and hacking by a covert group. At the

same time the film demonstrates a number of generic developments from the 1970s and begins to speculate on technological and social developments yet to come. In his review of *The Net*, Jeffrey M. Anderson draws comparisons with other similar films from the 1990s and observes 'What's more, *The Net*'s computer-paranoia crime theme may become a mini-genre in itself, along with *Johnny Mnemonic* and the upcoming *Virtuosity*.' (Anderson, 1995). Thus, even in 1995 there was a recognition of an emerging mini-genre around computers. Throughout my research, it has seemed clear that there is some degree of recognition of the potential to group at least some of these films together and this only fuels the argument for further study into these films. This also raises the question as to whether the 1990s hacker genre films constitute a hacker sub-genre in their own right.

The links to the thriller genre are also made explicit by one of the scriptwriters, Michael Ferris, in the DVD extra, 'The Net: From Script to Screen' who comments on the fact that the director, Irvin Winkler, wanted the film to have a 1970s thriller tone (*The Net* DVD extra, 2006). Hence the intertextual references to earlier films like *The Parallax View* and *The Conversation* are intentionally included to recreate that sense of tension. These allusions tie into the sense of uncertainty and distrust in the political system in the 1970s that merges following the Watergate Scandal. Likewise, Mick LaSalle describes *The Net* as 'a high-tech version of one of those spiralling nightmares in which an innocent person is chased by assassins and wanted by the police' (LaSalle, 1995). He goes on to highlight that this is a familiar theme in thriller genre films, but that the 'gimmick' in this film is the Internet. This trend continues with hacking and surveillance in *Enemy of the State* (Scott, 1998), in which Robert Dean is ultimately framed for murder and pursued by NSA agents. The emergence of the Internet particularly presents new avenues of excitement and anxiety; whilst this realm of cyberspace offers access to a wealth of information and connectivity to the whole world, it

also presents us with the threat of our personal information being stolen, increased surveillance of our activities, identity theft and the potential to tamper with and rewrite our records. All of these fears are realised in both *The Net* and *Enemy of the State*.

As I have explored throughout this study, the paratextual materials surrounding the production of each genre film are critical components in framing each film's generic identity. The promotional poster for *The Net* effectively demonstrates this, emphasising Bennett's on-going isolation and the fact that she is under threat throughout the film, surrounded by darkness. This particularly elicits expectations of the thriller genre, demonstrating Martin Rubin's notion that 'the thriller stresses sensations more than sensitivity. It is a sensational form' (Rubin, 1999, p.6). Like the image of Lisbeth Salander on *The Girl with the Dragon Tattoo* posters*,* some computer text is shown flashing across, and around, her image, indicating the way the technology is used to rewrite her identity in the film and how it has evolved from a medium of recording and capturing information to proactively altering the real world. The taglines on the poster underscore the threat posed by technology and the power the antagonists wield against Bennett. The mysterious silhouette in the background also presents a threat to Bennett, which is both unclear and unknown. Moreover, this figure appears to be a male threat to the female character of Bennett, heightening the sense of her physical vulnerability; whilst this conflict begins in cyberspace, the poster emphasises its manifestation into the real world, and the threat to Bennett is personified by the character of Devlin. Thus, the poster introduces the issue of gender to the hacker film and Bennett's disempowerment thorough the computer system also signifies a subjugation of her as a woman. The trailer for *The Net* plays up the notion that 'we all live in the age of information', building on the idea that all of our personal information is contained in cyberspace. From this

point, it launches into the fear of how this technology could be manipulated by forces with sinister purposes, using technology to infiltrate, disrupt and threaten Bennett's life.
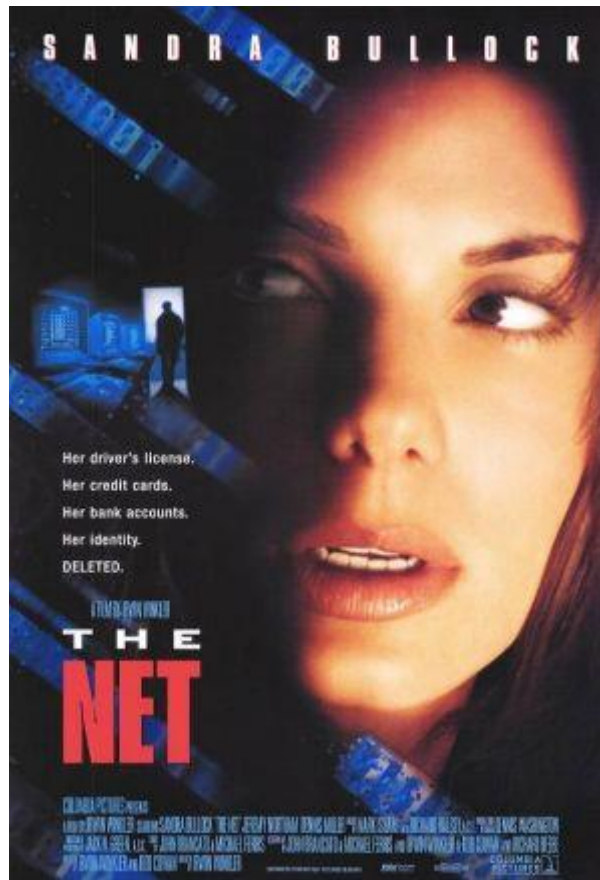
Figure 62 – promotional poster for *The Net* (Winkler, 1995)

One common feature throughout all the hacker genre films and television series I have analysed is the foregrounding and fetishisation of the technology used in hacking and surveillance. Like other hacker genre films, *The Net* demonstrates this foregrounding and fetishisation of technology throughout the film. This feature continues to come to the fore in hacker and surveillance films, ranging from the promotional and sales angle of *The Conversation*, through to the increasingly hyperbolised depiction of technology in *WarGames* and particularly *Hackers*, with a return to a more grounded, yet nonetheless still fetishised,

depiction in later films such as *The Girl with the Dragon Tattoo*. In the accompanying documentary on the making of *The Net* included in the 2006 DVD release, Computer Supervisor Todd Marks comments on how the production team sought to make computers and technology 'one of the characters in the film'. As a result, technology becomes more than merely part of the mise-en-scène in hacker genre films, as the producers strive to build up the presence of the hacking and surveillance equipment. This correlates with the notion of hacker genre films striving to elicit thrills and fear from the viewer; in creating this sense of the technology almost taking on a 'life of its own', it becomes a greater subject of excitement and fear for the viewer. As the Praetorian threat remains mysterious, it only serves to reinforce the notion of technology becoming a character and posing a direct threat to the hacker protagonist.

The Net exemplifies how 1990s films particularly create, and develop, a verisimilitude of hacking and computer technology for these films. Steve Neale highlights how this phenomenon of film genres creating their own verisimilitude can be observed:

> It is arguably the case that most Hollywood genres, as traditionally defined, involve transgressions of socio-cultural verisimilitude – for the sake of particular kinds of aesthetic pleasure (as derived, for instance from the song or the gag), and in the name not of 'art', but entertainment (Neale, 2000, p.34).

This is not just true of *The Net*, but is also demonstrated by other hacker genre films such as *Johnny Mnemonic* (Longo, 1995), *Disclosure* (Levinson, 1994) and *Hackers* (Softley, 1995). The mundane reality of the technology is rejected in favour of spectacle and the camera endeavours to emphasise the speed and sleekness of the technology to simultaneously entice and drive fear into the viewer. Therefore, the film strives to elicit a sense of awe from the viewer through the portrayal of the capabilities of surveillance and computing technology and the skills of the people using this equipment.

As Chris Sims highlights in a retrospective article on *The Net*, the film predominantly focuses on the dangers of computer technology and society's fears as to how it could be misused.

> Really, though, the movie is more about how the rise of technology impacts our lives, and our changing ideas and concerns about privacy. Bennett was easily seduced by Devlin because he spied on her describing her ideal man in a chat room, and filled in the details by going through her records. As she says, our entire lives are recorded on computers, from our work to our taste in movies. In 1995, this was a shocking problem that people had to learn to deal with. In 2013, it's basically how Facebook works (Sims, 2013).

The film's relevance becomes even more apparent years after its release. Social concerns change over time as society learns to adapt to the changes in this technology. The issues that were a cause for concern in the 1990s are now accepted as simple facts of everyday life. This does raise the question as to whether part of the extradiegetic function of these films is to raise and confront social issues around technology in order to overcome society's concerns. At the same time, the ethical debates and social fears concerning hacking and surveillance elicit commercial interest in these films – whether due to thrill, horror, or simple curiosity of how this technology could be used, these films generate attention from audiences. Yet, this sense of thrill seeking is unsurprising in the wider cultural context; of course, audiences will continually seek excitement from the entertainment industries, and it is in the film industry's interests to produce films that play on these social anxieties around hacking and surveillance technology. Ultimately, each hacker genre film will endeavour to maintain a certain level of unresolved tension around the lingering threat of this technology, particularly as this technology continues to develop as an alarming rate; whilst society continues to adapt to this technology, the fact that the technology is always advancing means that it remains one step ahead of us.

This foregrounding of this technology is also speculative and somewhat prophetic, striving to predict the rise and predominance of technology in our everyday lives. Although Bennett is shown to be a computer expert, the film ventures into the unknown of how everyone could adopt the use of this computer technology over time. However, in foregrounding this technology and how it is used in our everyday lives, the film also highlights the manner in which this technology is simultaneously beneficial and restrictive to the user, which is an issue that continues to be faced by society. In his review of the film, James Beradinelli argues that *The Net* underlines the dangers of overreliance on technology:

> *The Net* can be seen as a cautionary tale to those who believe that complete reliance upon computers is a good thing. Twenty years ago, this script would have been science fiction; today, significant portions are grounded in reality. No computer security system is foolproof, and there is great power available to those who know how to tamper. In *The Net*, Big Brother isn't only watching; he's taking action as well. It's too bad the movie gradually loses its awareness of this ominous danger. I guess car chases are easier to film. (Beradinelli, 1995)

This idea of a 'cautionary tale' indicates the film's attempts to predict the potential impact of computer technology, imagining how the rise of technology threatens humanity's way of life, but also the threat it poses to our personal security. Berardinelli's underscoring of the proactive nature of computers hackers emphasises the how this technology develops from passive observation to proactive intervention. As its capabilities progress, the technology can be used to commit identity theft, create false records and implicate people in violent crimes, whilst at the same time affording increasing anonymity to the malevolent hacker figure, which only serves to further develop the idea of the technology being viewed as both a character and a direct threat to human targets with the hacker genre film.

What does become clear for any film depicting technology is that it inevitably has an inbuilt expiry date, and *The Net* is no exception to this. Although hacker genre films depict

technology as sleek and sexy to present the equipment and hacker figures and 'cool' and appealing to the viewer, the fact that the development of new technology progresses so quickly means that this technology inevitably appears dated rather quickly. Looking back at this film from a 2016 perspective highlights the dated nature of the technology it depicts. Whilst floppy disks were key resources in the 1990s, in the present day we have moved on to using memory sticks and storing information in 'the cloud' and these methods of remote storage will only continue to change and evolve. As David Nusair highlights 'Eleven years after its theatrical release, *The Net* has aged just as poorly as one might've expected; a surplus of dated references to floppy discs and dial-up modems cements the film's status as a mid-90's relic' (Nusair, 2006). Thus, these hacker films are noted to quickly become dated due to their fetishisation of contemporary technology from the period of production. However, this also presents an opportunity to continually produce new hacker genre films to exhibit new technology and new concerns as to how this technology could impact our lives.

As I consider throughout this thesis, the major link to crime and detective genre films lies in the investigative process undertaken by the hacker figure. One of the central questions I have been posing through the chronological examination of the development of hacking and surveillance generic features has considered whether the drive towards hacker genre films emphasising the sleekness and stylishness of hacking has been at the expense of the sense of methodical process depicted in earlier films and television series. There is a clear sense of progression throughout the films I have examined, particularly in the 1990s when several films demonstrate the move towards hyperbole and extreme representations of technology and its capabilities. However, given the difficulties of generating tension and excitement though computer hacking, it is unsurprising that hacker genre films hyperbolise the capabilities of the technology to create drama and a visceral connection with the viewer. The

producers consider this issue in the accompanying DVD documentary and audio commentary as they discuss the need to introduce greater excitement and speed to engage an audience, *The Net* demonstrates a certain duality in which there is a sense of this sleekness alongside a degree of investigative process. The very premise of the Gatekeeper software is that it enables the user to utilise a backdoor to gain access to all computer systems that are using it, but this software nevertheless needs to be installed on an organisation's computer system to facilitate this access.

Whilst Bennett's investigative process resembles the systematic approach of the earlier hacker figures I have looked at, the technical side of the hacker and the computer technology in *The Net* nevertheless tends to focus on spectacle. Although Bennett's physical investigation feels like a step-by-step process, her use of computer technology veers towards hyperbolised spectacle. As opposed to an intricate, detailed technological process, Bennett traces people with immense speed using only a few lines of code; this is shown in the manner she identifies and locates the members of her online chatroom with great ease, as well as the way she identifies the Praetorian username as belonging to Jeff Gregg. Although, within the narrative, the ease of her hacking process could be attributed to her use of the Gatekeeper software's backdoor into computer systems, it nonetheless feels convenient and lacks the intricate and methodical process associated with the more 'realistic' depiction of hacking. At the same time, the purpose of this heightened sense of technology's capabilities in undoubtedly used to generate a greater sense of excitement and make the experience less boring for the viewer. This marks a venture into science-fiction territory, broadening the reach and connections of the hacker film genre.

As I have traced, there is a discernible increase in the scale and reach of hacking and surveillance technology in hacker genre films over time, but this also leads to an increased threat from the technology and a larger scale conflict over the contested space of technology. *The Net* also demonstrates an escalation in scale of hacking from personal to global invasion as Bennett delves deeper into the Praetorian's plot. However, the film maintains a personal focus on Bennett striving to reclaim her identity and uses the personal danger to Bennett to highlight the wider threat to society. Whilst the film conveys the wider threat posed by this computer system through television news segments, the narrative focuses on the personal threat posed to Bennett to create a sense of tension and connection between Bennett and the viewer. In effect, she is the 'everywoman' who could be the target of cyber-crimes and the film plays on this social concern of personal data being vulnerable in the virtual realm of the internet. Part of the reason the hacker film begins to increase the scale of hacking and surveillance's impact is due to the fact that the technology becomes more advanced and gains the ability to have a larger scale impact and increased speed. Whilst I have traced an increase in scale from the 1970s through to the 1990s, there is increasingly a sense of later films and television series returning to smaller scale hacking and addressing more personal threats. Earlier films like *The Conversation* (Coppola, 1974) from the 1970s focus on a single conversation being monitored and recorded by a small team, but by the 1990s the potential impact becomes worldwide, due to greater connectivity and the increased speed of the technology. Ironically, the technology of communication and connection poses a greater threat as it becomes more powerful; as individuals and institutions become reliant on technology, more of their information is accessible online to the hacker figure to steal secrets, manipulate records and even hold information to ransom. However, *The Girl with the Dragon Tattoo* adaptations mark a return to small scale hacking, investigating the individual and

penetrating their personal space, in this case Salander investigating Blomkvist, Bjurman and the Vanger family members.

Whilst other hacker films produced in the 1990s begin to build up a sense of an emerging hacker community or subculture in which the hacker figure becomes immersed, Bennett is clearly depicted as sharing the social isolation and alienation of the likes of Harry Caul, Brill, George Smiley and Lisbeth Salander. In a similar fashion to *The Conversation*, and *Tinker Tailor Soldier Spy* and later films like *Enemy of the State* and *The Girl with the Dragon Tattoo*, the protagonist of *The Net* is shown to live an isolated and solitary existence that disconnects her from the rest of humanity. In many ways, this film serves as a warning for the potential isolating effects of overuse and overreliance on technology. In fact, the main reason that the Praetorians are able to steal her identity and replace it with that of Ruth Marx is that her isolated life makes it virtually impossible for her to find someone who can verify her identity.

Like other hacker genre films, *The Net* demonstrates a fascination with the hacker figure's personal interactions with other people and the dual sense of a desire to protect oneself from others, opposed by a yearning to make connections and build trust. The film's opening shots convey Bennett's solitary existence in which she avoids social contact, instead using telephones, emails and chatrooms to facilitate her interactions with colleagues, clients and peers. Although the film ultimately presents her isolation to extreme levels to facilitate the premise of the technological theft of her identity, the feeling of isolation in the character aligns her with other hacker genre film figures. The overhead shot replicates the sense of intrusion into the hacker's personal space and emphasises the fact that she exists in small,

enclosed spaces, isolating herself from the rest of the world and creating a private refuge for herself. Although various reviewers comment on the implausibility of Bennett's extreme isolation depicted in the film, *The Net* nevertheless offers a 'cautionary tale' of the potential impact of this technology. For example, Michael Wilmington comments 'Irwin Winkler's "The Net," which should have worked a lot better than it does, is a glossy, intricately plotted, mostly implausible suspense movie about a woman on the run' (Wilmington, 1995), which essentially summarises a number of reviews of the film; criticism of the film stems from the fact that the film's premise depends on this notion of Bennett being such an extremely reclusive figure. Thus, *The Net* introduces another concern emerging with the rise of the home computer and the widespread use of the internet – the fear that people will be able to, and could choose to, socially withdraw from the community to spend their lives in a virtual bubble. One of the key points arising in films produced during the 1990s period is the fact that the hacker is becoming increasingly traceable and therefore is forced out of small, enclosed environments rather than choosing to emerge from this space. In many respects, this ties into social fears of the implications of the technology causing people to disconnect from society and encouraging people to maintain interpersonal connections.
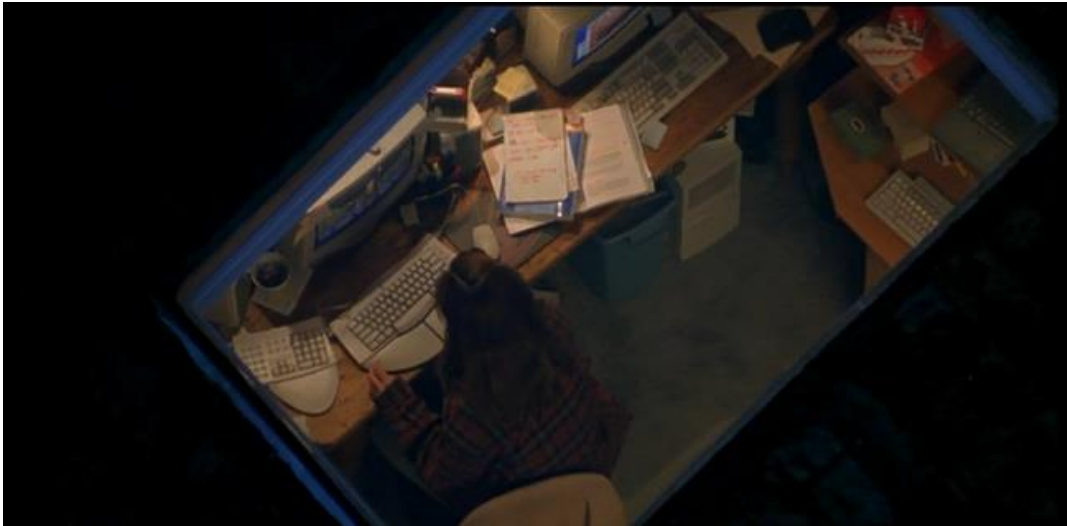
Figure 63 – Bennett's solitary hacker lifestyle viewed through a ceiling window. *The Net*, (Winkler, 1995), film grab.

Like other hacker genre films, *The Net* visually conveys Bennett's attempts to isolate herself as a means of protection by creating physical barriers between herself and the outside world. In a similar depiction to other hacker figures, the film initially emphasises Bennett's isolation by positioning her in the small, enclosed space of her home. Likewise, her early interactions with other characters are largely experienced through the medium of technology; she is shown talking to an ethereal male voice at the start of the film, offering advice on how to counteract a computer virus, then later virtually interacts with other hacker figures through an online chat room. In this way, technology simultaneously connects her to, and protects her from, the rest of the world. The film directly tackles the general concern of the disconnected anonymity afforded by technology – in being able to carry out different transactions online, we do not need to physically interact with people, but rather we can use machines to facilitate our needs. However, this anonymity is presented as a double-edge sword. In a similar fashion to Harry Caul in *The Conversation*, the film also emphasises the fact that Bennett chooses to isolate herself from the rest of the world through Sandra Bullock's performance of her visible

discomfort in the crowded airport. Bennett also highlights to Devlin her view that computers are 'the perfect hiding place', expressing that her self-imposed isolation in a virtual existence allows her to avoid interacting with the real world; the environment she creates for herself is one she can control, essentially her own determinate space. However, the events of the film force Bennett out on to a larger stage by expelling her from the small, enclosed spaces of her home. In being stripped of her identity, Bennett is forced to exist in the wider world and the film emphasises this, positioning her in unfamiliar settings and public places. Similarly, during the course of the film, these barriers are transmuted from images of protection to images of confinement. This becomes clear as the small enclosed spaces change from Bennett's home environment to prison cells and motel rooms she is forced to hide in.

Figure 64 – Bennett's barriers to keep the world out of her personal space. *The Net*, (Winkler, 1995), film grab.

Like Harry Caul in *The Conversation*, Bennett's desire to make a connection with another person becomes clear in her eagerness to become involved with Devlin. Once again, like

Caul, Bennett is emotionally manipulated as Devlin plays on this vulnerability to get close to her and to gain access to the incriminating disk she possesses. The backstory of her relationship with her psychiatrist also demonstrates this loneliness and desire to make a connection with someone else; despite her reluctance to connect with other people, she simultaneously seeks companionship. Nonetheless, this exploitation of her human vulnerability becomes somewhat darker with the gender roles reversed; as this hacker character is a woman who is being manipulated by a man, the film strives to highlight Bennett's physical vulnerability to Devlin and the seriousness of the threat he poses to her. The film continually reiterates the notion that this identity theft is a violation, which does have gender implications when the victim is female and the perpetrator is male. This sense of Devlin being a voyeuristic male hacker figure pursuing a female target harks back to Laura Mulvey's notion of the 'male gaze' (Mulvey, 1999, p.810). The camera's association with Devlin's male gaze becomes particularly clear in the scene in the airport when he is shown to be watching her and the camera adopts his perspective. In many respects hacking is the penetration of personal space, and this violation feels more profound and resonates more with the viewer when a woman is the victim; although the cyber-threat poses an equal threat to men as well as women, this film demonstrates the cyber-threat emerging into the physical world and deploying agents to target Bennett. However, *The Net* presents a positive depiction of a female character (re)claiming power and challenging her male perpetrator; the film allows Bennett to invert her own role as female victim as she becomes a more proactive hacker over the course of the film. Thus, the development of the hacker film genre includes the development of female characters from victims of surveillance and hacking, through to accomplices of male hacker figures, culminating in female hacker figures emerging in their own right. Considering the reason for this, the hacker figure is really an unlikely protagonist, a potential antagonist and anti-hero figure. Moreover, the generic precursors of thriller, horror

and crime tend to portray female figures as victims and targets, rather than protagonists. It is only as these genres begin to embrace female protagonists that the female hacker figure is able to rise.

The 1990s specifically charts the rise of independent female hacker figures, such as Lex Murphy in *Jurassic Park*, Kate Libby in *Hackers*, and Trinity in *The Matrix*. If anything, the female hacker continues to rise in film and television, with Lisbeth Salander a prominent example I have looked at in detail, alongside Chloe Sullivan in *Smallville*, Willow Rosenberg in *Buffy the Vampire Slayer*, and more recently Root in *Person of Interest*, Felicity Smoak in *Arrow*. Women on screen have more than just engaged with hacking, they have actually begun to take over this space. This is very much an inversion of the male dominance of the technological space in 1970s films such as *The Conversation*.

Furthermore, there is a shift from the safety and reassurance of Bennett's own small, enclosed space to the danger and uncertainty when she inhabits such space controlled by other people. The film undermines the initial sense of comfort established in Bennett's home environment and later juxtaposes this with a feeling of confinement and threat; an early example is the scene on Devlin's boat in which the intimate, romantic setting quickly shifts to a dangerous encounter when Bennett uncovers his gun. This is far from a new phenomenon however, as Harry Caul's personal space is invaded during *The Conversation*. Once again, the film generates increased tension by presenting a female protagonist who is subjected to this violation of personal space by a male antagonist. Thus, in addition to fighting for the virtual contested space of cyberspace, there is also a conflict over the physical space of Bennett's home. The film strives to emphasise the sense of invasion and the penetration of interior

space, indicating that no space is safe or impenetrable. Throughout the film the futility of barriers is emphasised. Whilst Bennett has attempted to protect herself with a safety net, using technology as a defensive barrier, technology turns against her. Whilst Bennett has taken several measures to protect her privacy and her personal space, the film depicts hackers using computer technology to infiltrate and alter her records, stealing her identity. In showing Bennett's personal space from above, the camera is used to create a sense of the viewer adopting a hacker perspective to remotely view Bennett and allows the extradiegetic camera to penetrate the barriers to infiltrate this space.

The film also plays on the fear of people losing their physical presence in favour of a virtual existence through cyberspace. In this way, Bennett is essentially 'lost' in cyberspace, effectively becoming a 'ghost' in the real world because she been rewritten through the technology. In being forced out of her small, enclosed spaces into open, public spaces, Bennett is forced to physically (re)connect with other people. The character's personal journey of becoming more integrated into society and moving beyond the small, enclosed spaces is highlighted in the closing shots of her reclaimed home with an open door and her enclosed workspace having a large window space that literally opens it up; rather than facing a wall, Bennett is shown to be sitting facing the door. This is further reinforced in the manner that Bennett is shown becoming a more mobile figure, proactively taking action to reclaim her life.

Figure 65 - A closing shot shows Bennett's hacker workspace to have become more open.

The Net, (Winkler, 1995), film grab.

The ways in which hacking and the hacker figure have been represented in film indicate a shift towards increased mobilisation of hacking and surveillance over time. Bennett's personal journey during the course of *The Net* exemplifies this shift from a static and passive hacker figure to the more mobile and dynamic character. Initially Bennett is presented as a reclusive figure, using barriers to protect herself and using the technology as a means of controlling her connections and interactions with the rest of the world. However, the character empowers herself to take action and retaliate against this identity theft to reclaim her identity. The DVD audio commentaries from both the scriptwriters and the director underline the fact that Bennett as a female character is presented as having to 'rescue' herself rather than relying on a male hero to swoop in to save the day.

As I have traced with the younger hacker figures, there is an increased sense of hacking and surveillance becoming associated with games and competition over time. The notion of hacking being associated with competition and games also becomes clear throughout the film. However, whilst Bennett is shown working on removing a virus from a video game's code earl in the film, the film mainly focuses on the 'game' Bennett engages in against Devlin and the Praetorians. Like other hacker films of the time, there is an increasing sense of hacker conflict, as the film presents scenes from bother Bennett's and Devlin's perspective, showing the conflict between them. The mobility of both Bennett and Devlin as characters creates an escalation of this conflict and presents both figures in a dynamic light.

In the same vein as all the hacker genre films and television series, the hacker genre blurs the line between Thomas Schatz's genres of social order and social integration with a dual focus on a technological threat alongside a personal narrative involving the hacker figure's relationships with other people. In many respects the film strives to indicate that the resolution of the film brings about both social order and integration. Bennett is able to reclaim her identity and win the battle for the contested space of cyberspace by using a virus to destroy the Gatekeeper software, whilst she also achieves a degree of social integration by opening herself up more to the rest of the world by the end of the film, bringing her mother into her personal space and the film closing with the camera emphasising how she has opened up her personal space. However, like all hacker genre films, the implication is that this resolution is only temporary. The technology continues to develop, with new threats continually emerging. Moreover, the true villains remain mysterious and unknown, concealed from both Bennett and the viewer. Whilst the character of Devlin presents a clear antagonist for Bennett's narrative, Jeff Gregg and the Praetorians remain an uncertain and unclear threat. Again, Michael Ferris discusses how the original antagonist was scripted to remain

mysterious and unknown but that the introduction of the Devlin character created a more 'human' conflict for Bennett (*The Net*, DVD extra, 2006). Nevertheless, the film makes it clear that both Devlin and the real Ruth Marx are instruments of a larger scale operation, but this threat of the 'Praetorians' remains largely anonymous and unknown, which is a common thread in films like *The Conversation* (Coppola, 1974), *Tinker Tailor Soldier Spy* (Alfredson, 2011) and continues in the post-9/11 television series of *24*, *Spooks* and *Person of Interest*. This technology allows people to furtively monitor and target people remotely, a capability that only increases as the technology progresses, and has potential to increasingly pose a threat. Ultimately, the real threat remains anonymous, unknown and a looming danger to the rest of the world. Cyberspace as the technological frontier allows a degree of anonymity and thus we can never be one hundred percent certain who we are interacting with in this space, and that is why this threat remains at large. Technology is simultaneously the 'monster' and the 'monster-maker', the creature stalking humanity and the corrupting influence that can transform people into cybernetic monsters to stalk others.

As I have considered, *The Net* exemplifies a number of hacker film genre traits and characteristics, and how these 'memes' have progressed and transmuted from the 1970s through to the 1990s in light of social concerns over technology and how it impacts our everyday lives. Unsurprisingly, the foregrounding and fetishisation of technology remains a constant focus for the hacker genre film, with new technology, and the isolation of the hacker figure is continually brought to the fore.

What is more, the hacker genre film offers no clear or definitive resolutions, but rather continually raises questions and indicates that the threat posed by hacking and surveillance

technology continues to loom in the background. Any attempt to restore social order and achieve dominance over the contested space of cyberspace remains problematic due to the fact that the antagonists retain a degree of anonymity. Similarly, the hacker genre film offers no clear social integrations for the hacker figure. Whilst films like *The Net* strive to emphasise how the hacker figure has undergone a personal journey and learned to open him or herself up to the wider community, this picture is simply not clear or fully developed to indicate a true sense of such social integration.

7.5 Conclusion

Looking ahead, how the hacker genre progresses from here is open to possibilities arising from new technological developments and new socio-cultural and socio-political concerns. Hacking and surveillance continue to come to the fore in both film and television, and considering the implications of WikiLeaks and on-going terror threats, it is likely to continue to be a key area of both excitement and fear for audiences for years to come. What does seem clear is that technology will always be viewed on the dual basis of having positive and negative implications for the user. The technology simultaneously creates barriers at the same time as it connects people and it can encourage people to become reliant on its use and to withdraw from the wider world into small, enclosed spaces. Nevertheless, over time this technology, and its users have become increasingly mobile and increasingly proactive, evolving from passive observation to dynamic intervention; this shift towards proactive hacking poses as much a threat to humanity as it does offer empowerment and opportunity, but the struggle between these tensions offers a degree of hope. There will always be some kind of contested space, always new frontiers to be tamed, and technology is merely one of

many such frontiers to explore; the journey of the conflict allows us to learn more about ourselves and the world which we inhabit.

Appendix A: Potential Hacker Genre Film List

This Appendix offers a list of potential hacker genre films I have identified during the course of my research. Box Office Figures have been taken from *The Numbers* website and the Box Office Mojo website, where available. In some case, data is either limited or not available. As my focus has been on a detailed analysis of a small group of these films, I have focussed my efforts on acquiring information on those films.

Title	Year of Release	Box Office Figures (Where Available)	How does it fit into the hacker genre?
World Without a Mask (Die Welt ohne Maske)	1934	N/A	The television that can see through walls is a form of surveillance and hacking technology that pre-empts modern technology.
Modern Times	1936	$163,577	Early precursor to ideas such as the 'Big Brother' surveillance of *1984*.
Rear Window	1954	$36,764,313	The protagonist effectively 'hacks' into the private lives of his neighbours by using his telescope to spy on them.
The Thousand Eyes of Dr. Mabuse	1960	N/A	Surveillance equipment is positioned in all the rooms of a hotel to monitor the occupants.
Cape Fear	1962	N/A	Presents the notion of stalking as a form of surveillance.
Blowup	1966	N/A	The film introduces the notion of photography as capturing a series of events in images. However, the plot considers how these images are interpreted or misinterpreted.
The President's Analyst	1967	N/A	The protagonist becomes paranoid and convinced that his every move is under surveillance, which is revealed to be true.
The Secret Cinema	1968	N/A	The protagonist is the subject of surveillance, and her activities are screened in a cinema.
Colossus: The Forbin Project	1970	N/A	The rival supercomputers, Colossus and Guardian each assume control of the USA and USSR's missiles respectively, taking control of the world by taking over military technology.

The Anderson Tapes	1971	N/A	The apartment building has extensive surveillance equipment monitoring people's every move.
THX 1138	1971	$5,000	In the dystopian future society depicted in the film, citizens are controlled by the government and subject to surveillance to curb their emotions.
Klute	1971	$12,512,637	The film follows an investigative process. This sense of paranoia permeates throughout the film.
The Conversation	1974	$4,420,000	Harry Caul's surveillance of the titular conversation demonstrates the way wiretapping technology allows him to 'hack' into the young couple's secrets.
The Parallax View	1974	N/A	Joe Frady, the journalist character, investigates the assassination of a US Senator, assuming a false identity to infiltrate the Parallax Corporation of assassins to uncover the truth. He is ultimately set up as a scapegoat to take the blame for the assassination.
All The President's Men	1976	$51,048,435	The two journalist characters investigate the Watergate scandal, using sources and methods of infiltration to gain access to information.
Demon Seed	1977	N/A	Particularly plays up the horror potential of technology becoming a character and being able to watch humanity's every move through surveillance equipment.
Death Watch	1980	N/A	Roddy, the protagonist, has been implanted with cameras and transmitters behind his eyes so that he can record the dying woman's experience – he literally becomes a cybernetic figure.
Blow Out	1981	$13,747,234	The sound technician records a murder and plays it back to try to piece together what happened. He later gathers further evidence that he uses to construct a fuller picture of these events.
Tron	1982	$26,918,576	The central character literally becomes part of the artificial world of virtual characters, interacting with the constructed space.
Blue Thunder	1983	$42,313,354	The film depicts the use of the helicopter to prevent large scale civil disobedience. It is later part of a conspiracy to use its surveillance technology to eliminate the political opponents of subversive government group.

The Osterman Weekend	1983	$6,500,000	This film involves suspected espionage and surveillance.
WarGames	1983	$74,433,837	Lightman is a teenage hacker who gains access to the NORAD supercomputer system, amongst other computer systems. He is later accused of espionage and pursued by the Government.
Hide and Seek	1984	N/A	The P-1 system hacks into other systems.
Nineteen Eighty-Four	1984	$8,368,371	The Orwellian surveillance society depicted in the film positions Big Brother to monitor the activity of all citizens. In this narrative, the attempts to break free of this control offer a depiction of 'hacking' out of an oppressive society.
Electric Dreams	1984	$1,932,663	Edgar, the acritical intelligence, hacks into systems to cancel his creators' credit cards, and registering him as a criminal in Police records.
Body Double	1984	$8,801,940	Jake Scully uses a telescope to voyeuristically watch Gloria Revelle each night, ultimately witnessing her murder. He later discovers that another woman, Holly Body, was hired to impersonate Gloria each night so that Scully would be watching when the real Gloria was murdered.
Cape Fear	1991	$182,291,969	Remake of the 1962 film, which also presents stalking and the pursuit of characters as a form of surveillance and penetration into personal space.
The Lawnmower Man	1992	$32,100,816	Jobe becomes part of a virtual reality, achieving enhanced intelligence and abilities through becoming a cybernetic figure. He also attempts to spread hi influence through network connections
Fortress	1992	$46,730,578	The prison setting offers an extreme depiction of surveillance, as prisoners are monitored and controlled using the surveillance technology.
Sneakers	1992	$51,433,000	The protagonists plan to steal a black box from a mathematician for the Government, only to learn that they have been working for rogue agents and then need to recover the equipment. The black box is capable of breaking any computer encryption system, so offers unlimited hacking potential in its own right.

Demolition Man	1993	$159,055,768	In the film's futuristic setting human behaviour is monitored and regulated through implanted transceivers.
Jurassic Park	1993	$1,038,812,584	A computer hacker (Dennis Nedry) hacks into the Jurassic Park computer system and locks out the other staff from primary systems. He also undertakes corporate espionage in trying to steal dinosaur embryos to sell them on to a rival company.
Sliver	1993	$116,280,867	Zeke Hawkins, the owner of the building Carly lives in, has a series of surveillance cameras placed in all area of the building to spy on his tenants, hacking into their personal space and monitoring every aspect of their lives.
Ghost in the Machine	1993	$4,731,273	Karl Hochman becomes a network based entity, able to access computer systems at will.
Disclosure	1994	$212,200,000	Tom Sanders is forced to undertake espionage and hacking against his company in order to protect his career.
Goldeneye	1995	$356,429,941	Computer hackers and the act of hacking assume a central presence parallel to the action of Bond versus the Bond villain.
Hackers	1995	$7,487,370	The film introduces the idea of a hacker subculture, alongside the notions of hackers making alliances with one another and hackers undertaking virtual warfare.
The Net	1995	$110,521,733	Angela Bennett's identity is stolen by the Praetorians group and replaced with another – she has to become a more dynamic hacker figure in order to evade her pursuers and reclaim her life.
Johnny Mnemonic	1995	$19,006,201	The human mind becomes the vessel for data transmission in a dystopian future.
Independence Day	1996	$817,400,878	David Levinson hacks into satellite transmissions to uncover the planned alien attacks and later uses their own technology to hack into their systems and implant a virus.
Lawnmower Man 2: Beyond Cyberspace	1996	$2,396,302	Like *The Lawnmower Man*, this film presents an ethereal presence from within cyberspace that poses a threat to humanity.
Mission Impossible	1996	$457,697,994	The film depicts a mole hunt in the team's initial mission, whilst Ethan Hunt's dealing with Max demonstrates a hacker investigation and infiltration of both the CIA and Max's network.

Enemy of the State	1998	$250,649,836	The film depicts surveillance and active manipulation in Dean's life to frame him for murder. He subsequently draws on the experience of the Brill hacker figure and takes steps to become a hacker himself to resist the Government's attempts to frame him.
Mercury Rising	1998	$32,983,332	The narrative involves a young boy cracking a top-secret government code, giving him access to their sec rets and posing a threat to national security.
The Truman Show	1998	$264,118,201	The Truman character is the subject of constant surveillance in which his life is a constructed existence that is constantly shown on television.
EDtv	1999	$35,319,689	The character of Ed is the subject of surveillance for a reality television programme, being followed by cameras to capture his life.
The Matrix	1999	$463,517,383	Initially the film appears to be a contemporary hacker film, depicting a hacker trying to gain access to secrets. It is later revealed that this is a virtual reality that most of humanity has been trapped in by machines; the group of human rebels hack into the Matrix.
eXistenZ	1999	$2,840,417	The human mind is able to be connected to game systems to immerse the user in a virtual environment.
Mission Impossible II	2000	$549,588,516	The sequel to Mission Impossible continues to develop the idea of Luther Stickell, as a computer and technical expert, as a secondary protagonist at the centre of the narrative.
Antitrust	2001	$17,865,209	The NURV company uses an extensive surveillance system to identify and steal computer code, has infiltrated government departments and strives to control the protagonist's life.
Enigma	2001	$14,832,284	The film follows Jericho and Wallace's attempt to crack the Enigma ciphers to decrypt Nazi communications.
Swordfish	2001	$147,080,413	The film shows impressive Jobson's hacking skills and how he becomes embroiled in cybercrime.
Infernal Affairs	2002	$89,594	Explores the idea of two moles working in rival organisations - one being placed in the triad organisation and the other placed in the police department. This film was remade as *The Departed* in the USA.

Minority Report	2002	$358,824,714	The film depicts a future in which future crimes are predicted and prevented before they can take plan – this ties into David Lyon's argument of surveillance technology being able to predict actions.
Panic Room	2002	$196,308,367	The film depicts surveillance of the protagonist's house as she and her daughter take refuge in the titular panic room and observe the activities of the intruders.
The Bourne Identity	2002	$214,357,371	The film depicts the world of the spy, alongside tracking Jason Bourne's attempt to uncover the secrets of his own past.
Phone Booth	2002	$97,837,138	THz mysterious Caller has been watching Stuart's movements and has previously 'tested' other people he felt has committed wrong deeds. The film portrays Stuart as the target of surveillance and does not focus on the hacker figure himself.
Terminator 3: Rise of the Machines	2003	$433,058,296	John Connor is hiding 'off the grid' following his experiences in the previous film, and is therefore untraceable by terminators from the future.
The Matrix Reloaded	2003	$738,576,929	The sequels continue the depiction of the futuristic war of the remnants of humanity against machines. As with the first film, the sequels continue to depict humans hacking into the virtual reality of the Matrix, but also depict the Smith program taking over the virtual reality and even hacking into a human being's mind.
The Matrix Revolutions	2003	$427,300,260	The sequels continue the depiction of the futuristic war of the remnants of humanity against machines. As with the first film, the sequels continue to depict human beings hacking into the virtual reality of the Matrix, but also depict the Smith program taking over the virtual reality and even hacking into a human being's mind.
The Recruit	2003	$101,174,440	Like other spy films, this focuses on a mole hunt within an espionage agency. The film also depicts the training of CIA agents at the Farm training facility. Computer hacking software also assumes a central role in the narrative.
Freeze Frame	2004	$105,377	Sean Veil, the protagonist, effectively hacks into his own life, recording his every move to ensure he cannot be accused of further crimes.

I Robot	2004	$348,629,585	The VIKI supercomputer processes vast surveillance of the human population and strives to control them through the latest model of robots.
The Bourne Supremacy	2004	$288,587,450	The narrative follows the dual perspective of Bourne, and his CIA pursuers, so provides the audience with a surveillance viewpoint.
Final Cut	2004	$3,618,825	The film's premise of recording and going through people's memories allows the 'cutters' in the film to 'hack' into someone's memories.
Serenity	2005	$40,319,440	Mr Universe stands as the principle hacker figure in the narrative. The core narrative focuses on the Serenity crew trying to reveal hidden government secrets.
The Sentinel	2006	$78,080,697	The film involves a mole hunt, similar to that depicted in *Tinker Tailor Solider Spy*.
Firewall	2006	$82,751,189	Jack Stanfield is forced to rob the bank he is providing security for because his family has been kidnapped, but later hacks into the kidnapper's bank accounts.
Red Road	2006	$754,892	Jackie Morrison stalks the man who killed her husband and daughter in a drug-driving incident and manipulates the situation to frame him for rape.
The Lives of Others	2006	$81,197,047	Espionage forms a major part of this film, depicting the tools and techniques of the spy figure.
The Net 2.0	2006	Direct to DVD Release	Like the original film, *The Net*, this film also focuses on electronic identity theft and the conflict between the target of identity theft and mysterious forces working against her.
The Departed	2006	$289,660,619	Follows the narrative of two 'mole' characters, one tasked with infiltrating the Police, the other tasked with infiltrating a criminal organisation.
Disturbia	2007	$118,537,627	Kale Brecht spies on his neighbours through a telescope, monitoring their activities.

Look	2007	$16,136	The film follows interconnected storylines viewed entirely from the perspective of security camera footage.
The Bourne Ultimatum	2007	$442,161,562	Like the other Bourne films, this film follows Jason Bourne's journey to investigate his past and to discover what happened to him before he suffered amnesia.
Die Hard 4.0	2007	$382,288,147	Hacking is central to the terrorist plot and a hacker character supports John McClaine in working against their actions.
Burn After Reading	2008	$168,167,798	Follows unlikely characters entering into the world of espionage and secrets.
Eagle Eye	2008	$178,066,569	The mysterious woman is actually the voice of the ARIIA computer system that hacks into different computer systems to monitor Jerry and Rachel and to control traffic lights, mobile phones, and other forms of technology. The system is also able to manipulate people by falsifying orders to meet its own agenda.
Vantage Point	2008	$150,886,329	The extradiegetic camera reveals different sequence from different character perspectives
The Dark Knight	2008	$1,002,891,358	A major plot point involves Batman using technology to connect cell phones across Gotham, empowering him with an extensive surveillance network.
WarGames: The Dead Code	2008	Direct to DVD release	Sequel to *WarGames* (1983) and follows a young computer expert who is believed to a terrorist threat. This is caused by a supercomputer, RIPLEY, misinterpreting data and reaching the wrong conclusion.
Echelon Conspiracy	2009	$796,716	Another film presenting a powerful supercomputer with access to a wealth of surveillance data.
State of Play	2009	$88,832,210	Follows a journalistic investigation into the death of a US congressman's mistress, drawing on the influence of 1970s political thrillers.
Terminator Salvation	2009	$365,491,792	The film involves the physical infiltration of Skynet, as well as Marcus Wright utilising his cybernetic components to hack into Skynet's systems.
GI Joe: The Rise of Cobra	2009	$302,469,017	Hacker figure part of the protagonist team.

The Informant	2009	$41,771,168	Protagonist is a whistle-blower who covertly records activity within his company
Gamer	2009	$42,002,029	The film depicts Simon Silverton, a 17-year-old gamer, playing an online computer games in which the participant controls human beings as players.
The Girl Who Kicked the Hornet's Nest	2009	$41,179,660	Like *The Girl with the Dragon Tattoo* and *The Girl Who Played with Fire*, this film also focuses on Lisbeth Salander as a computer hacker, as well as Blomkvist's investigative journalism.
The Girl Who Played with Fire	2009	$70,697,112	Like *The Girl with the Dragon Tattoo*, this film also focuses on Lisbeth Salander as a computer hacker, as well as Blomkvist's investigative journalism.
The Girl with the Dragon Tattoo	2009	$109,421,911	This film also focuses on Lisbeth Salander as a computer hacker, as well as Blomkvist's investigative journalism.
Tron Legacy	2010	$400,062,763	Like the original Tron, this film depicts players being transmitted into a virtual reality and trying to gain control of the system by playing virtual games.
Johnny English Reborn	2011	$164,539,660	Comedy version of the spy film, following a mole hunt to find a traitor in English's organisation
Source Code	2011	$140,428,499	Follows a solider entering into a computer reality to find a bomber terrorist threat.
Mission Impossible 4: Ghost Protocol	2011	$694,713,230	Like previous *Mission Impossible* films, the physical infiltration of an enemy's facility forms a key part of the plot.
The Girl with the Dragon Tattoo	2011	$239,373,970	Lisbeth Salander offers a key example of the hacker figure. The film, like its Swedish counterpart, offers some striking visual representations of hacking.
Tinker Tailor Soldier Spy	2011	$81,452,811	The film presents espionage and the hunt for a mole as a spiritual precursor and contemporary parallel to wiretapping surveillance and computer hacking methodology.
Skyfall	2012	$1,110,526,981	In addition to depicting espionage, cyberterrorism forms a key part of the narrative, as does the act of infiltration.
The Hunger Games	2012	$677,923,379	The film takes advantage of the film medium to offer the viewer a dual experience of the narrative, both from Katniss' perspective and

			through the diegetic cameras as The Hunger Games are presented to citizens within the narrative.
Total Recall	2012	$211,856,088	Doug Quaid is the subject of surveillance by his wife.
Disconnect	2012	$1,507,310	Each of the three storylines involves one character 'hacking' into the life of another. In the first storyline the journalist hacks into the life of a young man who is involved in to the underage video-chat website, in the second the two boys present a false identity to the third boy to gain his trust, and in the third storyline Stephen Schumacher steals the couple's identities to commit fraud.
The Bourne Legacy	2012	$280,355,920	Like the other Bourne films, this film follows a character who has been the subject of government experiments. Also follows the fallout of Jason Bourne's uncovering of secrets in previous films.
Paranoia	2013	$16,173,593	Wyatt acts as a corporate spy, seeking to infiltrate a rival company and to steal technical secrets. AT the same time, he is the target of surveillance himself, by the companies and by the FBI.
Identity Thief	2013	$175,361,578	Diana is revealed to be a serial con artist who has committed identity theft on multiple occasions.
Elysium	2013	$286,192,091	In a dystopian future, the film follows the physical infiltration of the Elysium space habitat.
The Call	2013	$69,821,476	Technology is at the centre of the narrative.
Closed Circuit	2013	$6,547,526	The film's premise follows the idea of surveillance equipment monitoring our every move. It also features computer hacking to access secret files for evidence.
The Fifth Estate	2013	$6,154,172	Follows the story of WikiLeaks, and how information is uncovered and shared with the vast audience through electronic technology.
The Hunger Games: Catching Fire	2013	$864,868,047	Hacking and surveillance in the background of the narrative
Jack Ryan: Shadow Recruit	2014	$131,377,412	Hacking, computer files and surveillance form central parts of the narrative
A Most Wanted Man	2014	$36,068,890	Follows a government team that works to recruit local informants with ties and connections to Islamic terrorist groups.

Captain America: The Winter Soldier	2014	$714,401,889	The central characters need to investigate the infiltration of one secret organisation by a rival organisation, employing infiltration and investigative tactics. Surveillance to predict and prevent threats also forms a central plot point.
Veronica Mars	2014	$3,485,383	Journalism is presented as form of hacking and surveillance, following on from the Veronica Mars television series.
Transcendence	2014	$103,039,258	One of the central characters becomes a virtual avatar in the world of cyberspace, uploaded to the technological frontier.
The Imitation Game	2014	$227,773,686	The film follows the characters trying to crack German transmissions during World War II.
The Hunger Games: Mockingjay Part 1	2014	$766,652,288	The character of Beetee is presented as a hacker figure, but District 13 is fully introduced as an institution hacking into the Capitol to challenge their authority
Kingsman: The Secret Service	2015	$404,561,724	Again, this film immerses the viewer in the world of espionage and the processes involved in being a spy.
Avengers: Age of Ultron	2015	$1,404,705,868	The Ultron AI is able to hack into different computer systems across the world.
Spooks: The Greater Good	2015	$5,328,721	Continues to follow the Spooks television series' approach to the art of espionage. Also features hacking as a central plot point as Harry Pearce convinces Will Holloway to help him hack into MI5's computer systems.
Spy	2015	$233,125,712	Susan Copper begins as technical support but if forced to assume a field agent role as the narrative progresses.
Terminator Genisys	2015	$440,160,956	The Genisys system is revealed to be Skynet, the antagonistic artificial intelligence system
Mission Impossible: Rogue Nation	2015	$700,868,363	Hacking and surveillance continues to assume a central role in the narrative. Alongside Tom Cruise's Ethan Hunt, Simon Pegg's technical field agent character assumes a central role in the film.
Eye in the Sky	2015	$34,916,128	The central characters debate the ethics of taking military action against a group of terrorists as they remotely monitor them through surveillance technology

The Hunger Games: Mockingjay Part 2	2015	$650,523,427	The hacking into the Capitol is taken a step further from Part 1 as District 13 unites the other districts to invade the Capitol.
Blackhat	2015	$19,548,419	Hacking is central to the narrative, used to cause an explosion through coolant pumps at a nuclear plant, and to manipulate the trade exchange. The hacker protagonist is brought to work with FBI to counter the cyberterrorist attacks.

Appendix B – A Selection of Hacker Figures in Television Series

This appendix provides details on a selection of hacker figures I have identified in television series. As my primary focus has been on hacker figures in film, this selection of hacker characters is intended to provide some further context on Chapter Four: Hacking on Television in Post-9/11 Television Series – *24*, *Spooks* and *Person of Interest*.

Title	Year of Release	Hacker Figure Character	How does it fit into the hacker genre?
Doctor Who	1963-1989 2005-	The Doctor Mickey Smith	The character of the Doctor is himself a hacker figure, able to 'hack' into different computer systems. Particularly in the 2005 series, the Doctor is assisted by Mickey Smith, who is a hacker figure.
Tinker Tailor Soldier Spy	1979	George Smiley Peter Guillam	The series follows George Smiley's investigative process to uncover a mole within the Circus.
Smiley's People	1982	George Smiley	This sequel series follows George Smiley's investigative process and ongoing espionage campaign against Karla.
The X Files	1993-2002	The Lone Gunmen Fox Mulder Dana Scully	The Lone Gunmen are Mulder and Scully's technical allies who epitomise 'typical' hacker figure qualities of paranoia and sociophobia, whilst hacking into government files.
Team Knight Rider	1997-1998	Kevin 'Trek' Sanders	A technical genius who supports the work of Team Knight Rider in the series
Buffy the Vampire Slayer	1997-2003	Willow Rosenberg	Willow is continually shown to have extensive computer and hacking skills that aid in the group's investigations
Level 9	2000-2001	Roland Travis Various others	The series follows a government agency set up to tackle cyber-crimes and hacking. Roland is a former criminal hacker who is

			given the opportunity to join Level 9 and support their work with his skills, rather than go to prison.
Dark Angel	2000-2002	Logan Cale ('Eyes Only')	Logan Cale is a cyber-journalist who investigates corrupt power-brokers in the series' dystopian future. He hacks into television networks to broadcast his findings to the public.
Alias	2001-2006	Sydney Bristow Various others	Sydney herself acts as a double agent for most of the series, trying to gain intelligence and playing the 'game' of espionage.
24	2001-2010	Chloe O'Brian Jack Bauer Tony Almeida Nina Myers Michelle Dessler Various others	This series follows the investigations of Jack Bauer and CTU into various terrorist threats against the USA.
Smallville	2001-2011	Chloe Sullivan	Chloe is initially presented as a journalist characters who investigates mysteries in the Smallville setting, using her computer skills to access different pieces of information. Particularly in Season 9, she becomes a reclusive hacker figure, retreating to her 'Watchtower' space to covertly monitor Metropolis with extensive computer equipment.
The Wire	2002-2008	Various	Surveillance is at the heart of the series, depicting the struggle between law enforcement and criminal elements.
Spooks	2002-2011	Tom Quinn Zoe Reynolds Danny Hunter Harry Pearce Malcolm Wynn-Jones Ruth Evershed Colin Wells	Each of the 'spooks' is a hacker figure, akin to George Smiley, but as the series progresses, Malcom Wynn-Jones emerges as a specific computer hacker, who comes out of retirement in *Spooks: The Greater Good*. The character of Ruth is also a former GCHQ officer.

Veronica Mars	2004-2007	Cindy 'Mac' Mackenzie	A supporting character who assist Veronica Mars in her journalistic investigations.
Bones	2005-2017	Christopher Pelant	Christopher serves as a recurring antagonist and hacktivist, who uses his computer and hacking skills to commit crimes.
Torchwood	2006-2011	Toshiko Sato Ianto Jones	Both characters are presented as skilled computer experts who use their skills to monitor alien threats through surveillance, develop an understanding of new technology and to access files.
Leverage	2008-2012	Alec Hardison 'The Hacker'	Alec serves as the team's computer specialist and hacker figure.
Warehouse 13	2009-2014	Claudia Donovan	Claudia is presented as a computer hacker, who stumbles into the world of the artefacts by gaining access to top secret information.
Person of Interest	2011-	Harold Finch John Reese Root	Surveillance is key to this series, but as time goes on, the character of Root, a computer hacker, is introduced and develops a connection to 'the Machine' artificial intelligence.
Revenge	2011-2015	Emily Thorne Nolan Ross	Nolan serves as Emily's hacker figure/ technical support, helping her to conduct surveillance, gain access to her enemies' computer files and to help her achieve her revenge schemes against different targets.
Arrow	2012-	Felicity Smoak	Felicity serves as technical support to the team, accessing computer systems, providing intelligence and following surveillance feeds.
Agents of Shield	2013-	Skye/ Daisy Johnson	Skye is initially presented as a hacktivist character, working against Shield and its agents. She later joins them and uses her technical skills to support the team's investigations.
24: Live Another Day	2014	Jack Bauer Chloe O'Brian	Jack and Chloe both operate outside the system in this series, working against government agents. Once again, they are involved in tracking terrorist plots.
Scorpion	2014-	Walter O'Brien Happy Quinn Sylvester Dodd	Follows a team of geniuses who work for the government. Hacking, surveillance and infiltration allow them to utilise their computer skills.

Mr Robot	2015-	Elliot Alderson Darlene Alderson	The whole premise follows the idea of computer hackers planning a cyber-attack. The central character conducts covert hacking of people and actually confronts some people with his knowledge.
CSI Cyber	2015-2016	Marshall Flinkman Rachel Gibson	The whole team investigate cyber-crimes, involving hacking, surveillance and technology

Appendix C – Interview with Jonathan Powell

Below is a transcript of email correspondence (13 March - 22 April 2013) between *Tinker Tailor Soldier Spy* (1979) producer Jonathan Powell and myself. Due to formatting issues involved in copying the text from my email account, some stylistic alterations have been made for clarity: I have labelled my original questions 'DC' to indicate the points Jonathan Powell 'JP' is responding to. In addition, corrections have been in terms of spelling, spacing errors and missing italics. Otherwise, the words have been printed verbatim

DC: What was the appeal of adapting *Tinker Tailor Soldier Spy* for the BBC?

JP: There were several differing contexts playing into the decision. At the time, Granada TV had decided to make Brideshead Revisited and the BBC needed something equally impressive. As the Producer in charge of the BBC 2 Classic serial, it seemed to me that TTSS was a literary work which transcended its genre, being much more than a spy novel, and one which lent itself to the kind of treatment we would have accorded novels generally seen to occupy the canon of classics. It also had the advantage of being a highly recognisable title. Lastly, as a producer I loved the book, not only finding the story engrossing but also thinking that it was linguistically and thematically very rich.

DC: What were the main challenges in adapting *Tinker Tailor Soldier Spy* to television? Were there any advantages in adapting the novel to television?

JP: One of the main challenges was persuading John le Carré to let us do it – London Weekend TV had tried and failed to achieve a satisfactory set of scripts. Once that was accomplished the primary challenge was the nature of its very complex narrative with its journey of Smiley – as Lacon says to him 'Go backwards. Go forwards, George. Do whatever is necessary' (that's not the exact quote: it comes near to the beginning of the novel and at the end of Ep 2 of the series but it is the key to the structure – how to reflect this structure in a medium which tends to be more at ease with linear narrative.

DC: The various flashback scenes bring the past (and past characters like Control) to life as an integral part of the narrative, rather than alluding to them in dialogue. What prompted the BBC to invest so heavily in these flashback scenes?

JP: It's not a question of 'investment' as you put it: it's a question of how to best realise the novel on the screen. There are several 'journeys' – Smiley's interrogations of the main suspects – the events leading up to Control's death – Brno and Jim Prideaux, Ricki Tarr: Karla- the circus on the night that the news of Brno broke and the ongoing question – who is

the Mole. The adaptation (by Arthur Hopcraft) had to make this structure clear, express it dramatically on the screen, hold to the backwards/forwards key structure of the novel and follow Smiley's investigation as well as dealing with other narratives – Ann Smiley for instance. It was always going to be a careful juggling act balancing what to show in flashback and what to reveal through dialogue. The series was notable for the length of its interrogation/dialogue scenes but these needed to be counterbalanced. This, I think is one of the most notable achievements of the screenplay.

DC: There is a strong sense of the series following a process as Smiley investigates the mole theory. How important was this sense of process from a production point of view?

JP: Extremely important. It is, after all the main narrative. We needed to believe that we were seeing it through Smiley's eyes as he put together the clues and drew nearer to his arch enemy, the man who had cuckolded him – Bill Haydn. We also adhered to the 'weather' of the novel which, as with other le Carré books begins in Autumn and is a journey into night: Smiley's Heart of Darkness.

DC: Have you seen the 2011 film adaptation of Tinker Tailor Soldier Spy? What were your thoughts on how the film adapted the novel?

JP: I don't have any. In the end I felt that the TV series investigated the characters in more depth and was truer to the nature and themes of the novel.

DC: In what way(s) do you think the 2011 film drew inspiration form the BBC television series?

JP: I didn't see any real evidence that the film derived any of its approach from the TV series.

DC: A review of the 2011 film in The Guardian made reference to the 'documentary realness' of the television series in comparison to the recreation of the 1970s in the film. How important was this sense of reality from a production point of view?

JP: Very important. The book is about betrayal – personal betrayal, and betrayal of class, of country and of Empire. We felt that it was vital to express Smiley's (or le Carré's) England because it is a story about loyalty to country. Thus, the locations in the TV series are almost all those of the book, (with some exceptions – Ricki Tarr is in Hong Kong in the novel: Portugal in the TV series for budgetary reasons), but many of the locations are the same. The exterior of the circus is Cambridge Circus: Smiley's home was filmed in the same street in the TV series as is mentioned in the book: the hotel where they base themselves is filmed in Paddington: Connie Sachs house is in Oxford and was filmed in Oxford and the countryside – Thursgood's are all designed to reflect the qualities of the novel. We went to great trouble to capture the atmosphere and the landscape of the novel in order to reflect Smiley's world – even to the extent of filming in Piccadilly Arcade.

The film seemed largely to have dispensed with this concern.

DC: How do you think the series could or would be produced differently if it was remade today?

JP: Yes. It would be impossible to do it as we did it. The demands of today's appetite to narrative would have supposed a completely different approach.

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Tinker Tailor Soldier Spy (1979) TV. Directed by JOHN IRVIN. UK: BBC Worldwide.

Tinker Tailor Soldier Spy (2011) Film. Directed by TOMAS ALFREDSON. UK: Studio Canal.

Total Recall (2012) Film. Directed by: LEN WISEMAN. USA: Columbia Pictures.

Transcendence (2014) Film. Directed by WILLY PFISTER. USA: Warner Bros. Pictures.

TRON (1982) Film. Directed by STEVEN LISBERGER. USA: Walt Disney Productions.

TRON: Legacy (2010) Film. Directed by JOSEPH KOSINSKI. USA: Walt Disney Pictures.

The Truman Show (1998) Film. Directed by PETER WEIR. USA: Paramount Pictures.

Vantage Point (2008) Film. Directed by PETE TRAVIS. USA: Columbia Pictures.

WarGames (1983) Film. Directed by JOHN BADHAM. USA: United Artists.

WarGames: The Dead Code (2008). Film. Directed by STUART GILLARD. USA: Metro-Goldwyn-Mayer.

'Writer's Commentary' (2002) *The Net* [DVD] Columbia TriStar Home Entertainment.

Notes

1 This term is coined by Bruce Sterling in his 1992 book *The Hacker Crackdown: Law and Disorder on the Electronic Frontier*.

2 William Gibson coined the term 'cyberspace' in 1982.

3 This is the reason I have grouped together *The Conversation* and *Enemy of the State* in Chapter One, that I consider the two screen adaptations of *Tinker Tailor Solider Spy* and *The Girl with the Dragon Tattoo* in Chapters Two and Five respectively, and compare three televisions series in Chapter Four. Each of these comparisons demonstrate generic 'repetition' and 'variation' – some over decades, others over s couple of years and some as contemporaries.

4 The emphasis is from Thomas Schatz's source text.

5 The emphasis comes from Thomas Schatz's original text.

6 As I have noted throughout this thesis, the true emergence of the hacker film genre can be charted through the 1980s and 1990s, whilst films produced in the 1970s serve as precursors that influence the development of generic features. However, this study does use *The Conversation* from 1974 as a starting point to map out the beginnings of the new genre.

7 The American English spelling is used here, per Martin Rubin's original text.

8 Americanised spelling per original text.

9 The full transcript of this email interview/ conversation is included as Appendix C.

10 American spelling used here per the spelling used in *WarGames* (Badham, 1983).

11 The emphasis in the text here is taken from Schulte's original text.

12 Americanised spelling per Dixon's original text.

13 In *Hackers* (Softley, 1995), 'Hack the Planet' is a fictional broadcast series for hackers. As the hacker figures come together to work collaboratively with hackers from around the world, and the 'electronic frontier' continues to absorb more of our data, this technology does seem to be 'hacking' the planet.

14 I have used the American spelling of 'defence' when referring to the US Department of Defense.