

The Film Multiple:
Technologies, Sites, Practices

Stefania Charitou

Goldsmiths, University of London

PhD Media and Communications, 2013

I hereby declare that all the work presented in this thesis is my own.

.....

Abstract

This thesis examines the shifting conditions of the material and technological properties of the object of film and subsequently of the idea of cinema, in the light of the transition from analogue to digital technologies. I suggest that this technological transition has ontological dimensions, which I examine by looking at spaces and places that encompass this transition, materially and conceptually. The study argues that the nature of film and cinema is multiple, in continuous states of ‘becoming’. The anchor of this study is post-Actor Network theorist Annemarie Mol’s philosophical argument that objects ‘come into being’ according to the practices and sites in which they are placed. The thesis examines situated practice-based interactions between the two technologies, which shape relationships of power, replacement, exchange and collaboration. I explore those issues at four specific institutional sites: the gallery, focusing on three moving image exhibitions in London, the British Film Institute’s Archive in Berkhamsted, LUX, the UK agency of artists’ moving image distribution and collection, and the movie theatre’s projection room that gradually displays only digital films.

This survey examines the situated practices of presentation, exhibition, print checking, archiving, restoration and theatrical projection of film. The aim of this study is to present a multiple object and a multiple idea that is defined not merely by technology, but rather by sites and in particular their operational practices, objectives and organization. By evaluating how analogue and digital technologies interplay in these sites, the study aims to highlight issues of film’s and cinema’s multiplicity that unfolds and shifts both in space and time. The investigated practices evolve in electronic spaces, physical sites and particular locations. Furthermore, they expose different temporalities for analogue and digital film and indicate cinema’s virtual nature to be transcending in time. The situated practices unite and divide the analogue and digital technologies, exposing a manipulative relationship between tangible space, formed by the mechanical apparatus of projection and network space, marked by the digital’s temporal and spatial ubiquity. At the same time, cinema is actualized in measurable time, while its phenomenon is formulated in the continuous movement and differentiation of duration.

Contents

Abstract.....	2
Acknowledgements.....	6
Chapter 1. Introduction.....	7
1.1 Focusing on Materiality.....	7
1.2 Heterogeneity of Theoretical Practices.....	13
1.3 Enacting Film and Challenging Cinema.....	17
1.4 The Case Studies.....	21
Chapter 2. Film in Theory and Location.....	25
2.1 Introduction: Processes of Transition.....	25
2.2 Theoretical Enactments.....	28
2.2.1 On Photographic/Cinematographic Processes: Temporality, Reality, Subjectivity....	29
2.2.2 Movement and Relationality.....	36
2.2.3 Simultaneity and Effects of Relocation.....	43
2.3 Temporalities of Film and Cinema.....	50
2.4 The Object is Multiple.....	53
2.5 The Film Multiple.....	57
Chapter 3. Methodological Accounts on Actor-Network Theory.....	60
3.1 Introduction: From Representation to Practice.....	60
3.2 Subject and Object Relationships: The Formation of Realities.....	61
3.3 A Material Semiotic Approach.....	64
3.4 ANT in Media Studies.....	67
3.5 Praxiography as Philosophical Practice.....	70
3.6 Site Specificity: Situated Practices.....	76
3.7 The Role of the Ethnographer.....	77
Chapter 4. Cinema as Multimodal Practices of Installation.....	81
4.1 Introduction.....	81
4.2 Film Practices Between Cinema and Art.....	83
4.3 “Line Describing a Cone”: Real Time, Real Space.....	88
4.4 “My Westphalia Days”: The Mechanics of the Apparatus.....	94
4.5 “Living London”: Attraction in Multiple Screens.....	98

4.6 Ephemerality of Practices.....	101
4.7 Conclusion.....	104
Chapter 5. Fluid and Decomposing Material: Film Checking Practice	106
5.1 Introduction	106
5.2 The Site: LUX’s Art Heritage	108
5.3 LUX’s Heterotopic Corner: Between “Normal” and “Pathological” Condition.....	111
5.4 The Film Checking Practice	118
5.5 The Projected Film	121
5.6 Film Checking Sheet	122
5.7 A Fluid Object: Film’s Nature and Performance	125
5.8 Archival Film	128
5.9 Conclusion.....	131
Chapter 6.....	133
Restoration Practices: Analogue and Digital Co-ordination.....	133
6.1 Introduction	133
6.2 The Concept of the Archive – The BFI Archive	136
6.3 Underground (1928-2009).....	140
6.4 Irreversibility and Reversibility	144
6.5 Originality	149
6.6 Conclusion.....	153
Chapter Seven	155
Projection: Materiality, (Dis)-location and Network.....	155
7.1 Introduction	155
7.2 Curzon Cinemas	157
7.3 Analogue and Digital Theatrical Projection.....	160
7.4 Curzon on Demand.....	166
7.6 The Concept and the Metaphor of the Network.....	168
7.5 The Enactment of Film in Screen Practices	174
7.7 Conclusion.....	180
Chapter 8: Conclusions	182
BIBLIOGRAPHY	189
List of abbreviations	202
Appendices.....	203

APPENDIX A: Films	203
APPENDIX B: Websites.....	204
APPENDIX C: Press Releases and Inscription Device	205

Acknowledgements

My main debt of acknowledgement and gratitude is owed to Dr Pasi Väliäho. This project would not have got completed, if it can ever be completed, without his generosity and help.

The research for this project has been made possible by the financial support of the Greek State Scholarship Foundation (Idryma Kratikwn Ypotrofiwn).

Many people have contributed directly and indirectly to the development of ideas, arguments and questions regarding this thesis. I am grateful to: Jordan Bedding, Lisa Blackman, Vana Goblot, Janet Harbord, Xaroula Kerasidou, Gabriela Kite, Onur Suzan Kömürcü Nobrega Eleftheria Lekakis, Patricia Matos, Gabriel Menotti Gonring, Benjamin Morgan, Elena Prousalidou, Su-Anne Yeo, Mick and Victor, the artists' moving images at LUX, the Renoir movie theatre and the BFI Archive's staff members. Special thanks to Tadgh O'Sullivan for helping me at the final stages of this project.

I would not have managed to do anything without the support of Korina, Maria and Yiannis Haritou.

Chapter 1. Introduction

1.1 Focusing on Materiality

As a result of new media – which broadly understood includes the Internet, digital screens, interactive multimedia and video games – ordinary, everyday experience has become infused by different modes of transmission, exhibition and reception of filmic images, all occurring in different spatial situations. Simultaneously, during the last three decades film has dispersed into diverse technological artefacts, which have eroded distinctions between media such as the theatrical, television or computer screen. Metaphors of mobility (Hjorth et al, 2012; Oswald and Packer, 2012; Jensen, 2010; Acland, 2003) and network (Castells, 1996; Terranova, 2004; Wasson, 2007) are currently being adapted in order to conceptualize and theorize the changing nature of media practice, consumer culture and (networked) communication in the twenty-first century. In particular, the digitization of film appears to alter the professional, material and technological processes of the production, transmission, distribution, archiving and presentation/projection of audiovisual content. The current blurring of clear and distinctive boundaries between contexts and film's presence and location is evident in the changes and differences that the digital technological developments bring to existing film practices and workflows. The technological transition from analogue to digital media exemplifies a time of exceptional change and transformation for the core practices around the object of film that raises questions about its nature and reality. What is film within the material conditions of transition from analogue to digital technologies? In addition we may ask, “when is film?” and “where is film?”

This is a significant moment given the impact of new technologies on film practices and concepts around film theorization, but also of changing practices in the professional contexts and situations in which film appears. From an audiovisual perspective, material practices are more complex than before and this thesis argues that film as an artefact becomes multiple. Located in different situated practices and in heterogeneous material relationships – which are articulated by both analogue and digital media – the object of film, in transition, is signified by diverse operational practices, which are focused on varying, multiple versions of film, from different components and properties of its materiality to different effects, usages and practices. The acknowledgement of the material, technological and contextual

relationships, where film is located, suggests a creative agency to film, whose specificity is not a given but is related to the machines, the materials and the sites, in which it is operated. This thesis is about the multiple, complex processes of relationality, of the changes and active practices of film's situated materializations and actualizations. Arguing that film is not a solid, coherent and bounded object, this thesis focuses on film's multiple nature and asks "when and where is film multiple?", as a means of recognizing it as a material and technological agent. It emphasises the actual work practices and operations around film, instead of giving priority to theoretical conceptions.

For instance, film is part of contemporary art exhibitions in the site of the gallery and is distributed as code of information in the new communication systems of distribution and projection. Film can be analogue and digital or, in its contemporary technologically mutational period, a hybrid of two materialities. For example, analogue films are enhanced with digital technologies in film production but also in film archiving practices, such as film restoration. The digitization of processes around film have unquestionably brought important changes in its theorization and in the discursive relationships which have recently foregrounded in a more direct manner the complex patterns of continuities and discontinuities, between analogue and digital technologies. Moreover, the developments in digital technologies affect the extent to which theoretical configurations of film are treated within the field of film studies, but also beyond film studies, in new media studies and studies on art. While film theory as an enduring epistemological tool to theorize the nature of film has for a long time been oriented toward the relationship between reality and meaning, language and representation, the advent of the digital in film production and content has come to problematize the conceptual processes around nature and identity, and the ontology of film.

This thesis argues that a new focus on materiality needs to be undertaken, now that not only the material object of film is changing, but also because the practices that relationally constitute, manipulate and execute its materiality are under transformation. By using the term *practice* I am referring to professional, empirical practices, including socio-material, common, day-to-day practices, which are primarily local. The transition to digitization in the core practices of film production, distribution and exhibition, but also conservation and archiving, creates and develops an intricate nexus of relationships that bring to light an object, which although it may be rendered more stabilized and lucid for the purposes of institutionalization, appears to be malleable, short-lived, altered, remade and recreated, as the

materials, devices and tools of analogue and digital film appear to be continuously subject to re-conception and renewed uses. For instance, on one hand, the digital does not form a technology that can be transferred from one context to another, without changing. As Adrian Mackenzie points out, ‘code itself inevitably slips into tangles of competing idioms, practices, techniques, and patterns of circulation.’ (2006: 5) The digital does not work in isolation, but is related to different objects and systems. On the other hand, the analogue film has a complex nature: its photochemical, optical and mechanical components and operations need to be enacted. For instance, according to Alexander Horwath (2008) the analogue film comes about through a “working system” as it works together with the projection machine, the light and the spatial setting to be performed. At the same time, it bears a materiality, which although it has been identified as the most durable for preservation purposes (Fossati, 2009; Usai, 2008 and Crofts, 2011), is also subject to material alternation due to its mechanical operation and usage. Drawing on the above, it appears that the specificity of either analogue or digital film is not given, but their nature is rather complex and multifarious, a fact that affects levels and aspects of industries, institutions and human and material actors that are practicing film.

As stated above, analogue and/or digital film stands as a complex technological artefact that in effect challenges the theoretical interpretations and perspectives around film, not only amongst theorists but also among professional groups and institutional practices. For example, film is a commercial product for distribution and exhibition, while it is also an artistic material to be explored and invented for artists-filmmakers, a historical artefact for archivists, a conceptual, material and cultural object for museums, galleries and film collections. The meaning that different professional groups give to the object of film is related to the context in which they situate it, which is translated to the material relationships that inspire and enliven its multiple phenomena and events. Film is not present within a single, undifferentiated space, but in particular sites, in local enactments of passage and spatial alignments. In the over-mediated environments in which film can currently be present can obscure, as Haidee Wasson (2007) argues, new formations of material and contextual specificity. As she notes, ‘Alongside the “everywhere and everywhen” of current cinema, moving images also touch down at identifiable moments and in particular places.’ (2007: 76) My study intends to identify and map some of these places but also focuses on the moments in which film can be examined not in a homogeneous, general context, but in local, particular sites and certain instances. A close look at sites as formative to the object of film can

effectively show their contexts as objects, which are formed by the professional groups and technologies, practices, aims and relationships with other contexts, namely theoretical assumptions and ideas. In contexts that are largely invisible and inaccessible for the public, film appears flexible and fluid as a material and technology to be handled and manipulated in relation to different professional working systems.

According to the Social Construction of Technology Studies (SCOT), different ‘social groups’ see different aspects of an artefact, even to the point that, as Wiebe Bijker (1995) states, ‘(t)he meanings given by a relevant social group actually constitute the artefact. There are as many artefacts as there are social groups; there is no artefact not constituted by a relevant social group.’ (1995: 77) This project suggests that in the case of film, these ‘social groups’ can be specified as the groups or scholars working with film but also more particularly as the relevant professional groups that do not solely examine but moreover constitute the object. Yet, what this study would like to stress is the fact that next to the relevant professional groups, that is to say the practitioners, there are the machines, technologies and devices that constitute the object. Engaging with the field of Science and Technology Studies (STS) and in particular with Actor-Network Theory (ANT), which developed within and beyond the field of STS, this study assumes a theoretical and methodological stance of a material-semiotic approach that emphasises a performative understanding of practices, which can supply a foundation for this thesis’ research on film. Here, I am shifting the focus from technologies, not as socially constructed entities, but as artefacts with their own agency. Nevertheless this agency does not act autonomously but it is mutually constitutive with, and relational to, the social-professional contexts in which it is situated, as well as to a multiplicity of other agents, such as theoretical texts, policies, artistic aims and professional objectives. This approach articulates the dynamic relationships and interactions between the materials and technologies of film and their institutional organization that act in ongoing configurations.

By analysing differences and multiplicities in the theorization of film, this thesis adopts ANT’s focus on the particular, the detailed attention to the relationships, traces and links that film practices are coming across in their actualizations. The thesis argues that we need detailed studies of specific materials, activities and practices, in order to approach film in the contemporary emergence of new paradigms and contexts of presence and actualizations. The contextualization and detailed analysis of practices can convey the knowledge around film embedded in these practices and in everyone and everything that is active within these

practices. Together these heterogeneous materials can allow us to know and understand not the aesthetics or content of film, not audiences and spectatorship, but film as a physical object and its reality itself. This study's framework does not offer universal truths about film, but local realities. It requires a spatial specification, where film is situated each time and examines the ways in which it is practiced.

For instance, in order to restore (as we will see in Chapter Six of this thesis) a deteriorated or aged film artefact in the context of a film archive, the film strip is an essential part of the restoration process, but it is not the only one. The film needs a projection apparatus in order to be projected, so that the material condition of the strip can be examined. If the strip is too fragile to be projected, the film needs to be copied in a projection format. Following on from this, archivists will select the appropriate photochemical or digital processes to be used for the particular restoration. For the project to be completed and be shown to an audience, the restoration's aim is to bring the film back to a form as close as possible to the "original".

The above forms an example of this project's aim to enter into the practical world of film "production", which refers to film's performance and enactment as it is acquainted with daily routines, projects, practices and technologies. This thesis is based on, and is enacted by, the description and analysis of four different British "film" professional institutions: the site of the art gallery, the arts' agency LUX, the British Film Institute (BFI) National Archive, and Curzon Cinemas (in particular the Curzon Video on Demand service, Curzon on Demand) and the Curzon Renoir movie theatre's projection room. This research of film in four institutional sites begs the question as to how they are related. There is a common thread that holds these site-based stories together and this is the multifaceted processes of digitization. In my own research this entailed renewed interest in analogue's materiality, as we will see in Chapter Four, and the site of the art gallery, an enduring focus on analogue film, will be discussed in Chapter Five, in the site of LUX. Meanwhile, the hybridization and coordination of the two technologies is dealt with in Chapter Six, and the site of the BFI Archive. A slower pace transition to film distribution and digital projection is discussed in Chapter 7, in the site of the Renoir's projection room. The object of film appears to vary from one context to another and is different from one practice to another. This does not mean that the object of film is fragmented, or that it is plural. In contrast it suggests that the object of film is more than one and less than many, it is multiple, when the practices of institutions but also of theory in which it is located are not bracketed but foregrounded. When the practicalities, materialities and events are foregrounded, film becomes a part of what is done in practices.

This thesis' argument for film's multiple nature could create new strands in its understanding and theorizing.

Therefore, in order to engage with film's multiplicity this study employs the theoretical and methodological tools of the material semiotics of ANT, in which material, technologies and also concepts and their theoretical references are enacted together. Through the engagement with ANT, this thesis identifies, explores and understands film technologies, sites and practices, as they happen, by several actions, different professionals and a nexus of material interactions. Specifically, it explores three main materials and agents: film technologies (analogue and digital), film practices (gallery exhibition and installation, film checking, archiving, distribution and projection) and the aforementioned four institutional sites, namely their organizational frameworks, daily routines and ordering processes. By paying close attention to the routine-based but also changeable situated technological and material practices, the focus does not lie only on the individual film technologies that the sites' operations and practice, but also on the relationality between these three objects of study.

This project is focused on investigating the relational and multiple nature of film, its ontology, as a topical matter, which informs and is informed by, the shape of the technologies and material elements of film, for instance film strips, projection machines, screens, technological networks and film as coded information. This involves asking further questions around the impact of digitization on film's enactment, the analysis of technologies that tie together or drive apart traditional and new practices, the new possibilities of methods and concepts around and about film, as it is currently situated in technological transition. The focus on the contexts, in which the materialities and technologies are situated can create new lines of enquiry to examine and question film theory's assumptions about the nature of film, as analogue and as digital.

1.2 Heterogeneity of Theoretical Practices

Since the emergence of digital technologies, a new series of theoretical arguments has emerged in the field of film studies stressing the fragmented and fluid state of film. In the contemporary discourse on film and cinema, theorists (Burgin, 2004; Harbord, 2007; Rodowick, 2007; Manovich, 2001) have addressed complexities in the definition and conceptualization of film's nature. In a time when digital technologies have infiltrated the systems of film content, production, circulation, distribution and delivery, contemporary theorists situate the moving image in a broader context of media and new media studies (Manovich, 2001 and Friedberg, 2000). Alternatively, they address the necessity for the field to expand research beyond the context of film studies and into an interdisciplinary framework, as Harbord (2007) has argued, and which has already been adopted in film's historiography. Film's technological shift has affected the epistemology of the object, the theorists' statements, references and meaning around film.

Victor Burgin argues for the 'heterogeneous' (1996 and 2004) nature of film, a condition that highlights the epistemological perplexity that comes to bear in the examination of film and cinema. In an account of film under processes of evolution Harbord (2007: 2), suggests that the transformation in the technologies and spatial performances of film brings about multiple, proliferated objects, which 'produce a disorientation, perhaps a momentary vertigo, for film studies.' In the same theoretical problematization, Anne Friedberg (2000) notes the electronic and spatial proliferation of film platforms (screens) and underlines the effects it has generated in the discipline of film studies. She argues that the field

...finds itself at a transitional moment. We must add computer screens (and digital technologies), television screens (and interactive video formats) to our conceptualization (both historical and theoretical) of the cinema and its screens. Screens are now 'display and delivery' formats – variable in versions of projection screen, television screen, computer screen, or headset device. (2000: 440)

There is a waning historical moment for the traditional epistemological tools of film studies, in which the examination of the film has to be re-contextualized in the light of new relationships, practices and concepts of mediation, those rising from the emergence of "new" media technologies.

In this theoretically contested and epistemologically transitory moment, contemporary film theorists return and investigate the emergence of film and film history, mapping historical accounts of the medium (Gunning, 1990; Elsaesser, 1990 and 2008; Casetti, 1999; Mannoni, 2000; Usai, 2001). These accounts emerge from the challenge that new media poses to our ideas of cinema both theoretically and historically and aim for a restored understanding of the changes in audiovisual media. In a general sense, the focus on film history is based on two sets of questions: does the digital signify a historical break in the history of audiovisual media, or is it a part of a continuous transformation of a long and complex history of screen practices, imaging and audiovisual presentation? From a chronological and ordered examination of film and film history, writers such as Siegfried Zielinski (1999), Erkki Huhtamo (2011) and Jussi Parikka (2011 and 2012) have shifted the emphasis toward approaching media history from an archaeological perspective, and as a multi-layered and dynamic system of relationships. These writings focus on occurrence of events instead of technological development and on cyclical recurrence rather than unique and singular innovation. Zielinski claims that it is since the 1970s that ‘production, distribution, and utilization of technically mediated worlds of sound/images have all been caught up in a fundamental process of transformation.’ (1999: 12)

Therefore, nowadays he argues that ‘the filmic has arrived at the age of its unlimited electronic reproduction and thus its unlimited exploitation as well’ (ibid). Zielinski defines ‘audiovision’ as the amalgam of different communication forms of production and distribution (via satellite, copper or optical cable) of images within the industrial culture, which began in the 19th century. In his thesis, audiovision is a process, a discourse and a project that defines the historically mutable phenomena and institutions of television and cinema, as ‘it encompasses the entire range of praxes in which, with the aid of technical systems and artefacts, the illusion of the perception of movements – as a rule, accompanied by sound – is planned, produced, commented on, and appreciated.’ (1999: 18) Moreover, Carolyn Marvin (1988) has stated that the ‘history of media is never more or less than the history of their uses, which always lead us away from them to the social practices and conflicts they illuminate.’ (1988: 8) From her viewpoint, communication is translated to interactions that actively seek variety. In this way, a focus on the exchanges between old and new technologies formulate a much more fertile ground of examination than an emphasis on a single medium, which accentuates theoretical interest because it is novel. Furthermore, citing the importance of relationality and interaction, but from a perspective that accentuates

the agency of culture and society, Huhtamo points out that the ‘aim of the media archaeological approach is not to negate the “reality” of technological development, but rather to balance it by placing it within a wider and more multifaceted social and cultural frame of reference.’ (1997: 223)

Media have always been attached to their carriers, modes and networks of transmission, distribution and exhibition. Furthermore, they have been and continue to be structured in their use, performance and enactment in relation to their material and technological properties. Authors such as Barbara Klinger (2001) and Lisa Parks (2005) have accentuated the role of materiality in the examination of contemporary media changes and the transformations of practices of exhibition and distribution that accompany them, as well as the mutability and activity of materiality and material practices. In addition, a particular emphasis on site, technology and material specific studies exemplifies the volumes *Fluid Screens, Expanded Cinema* (2007) and *Cinema and Technology: Cultures, Theories, Practices* (2008) that appear to be part of a broader shift toward a new materialism that spans the humanities, digital humanities, social sciences, media studies and studies on space. In these books, the re-articulation of materiality hints at a materialist approach in understanding the relationship between film practices and film phenomena. Following a long period of focus upon theories of representation, meaning and textual analysis, these texts present a renewed interest in local, situated studies and bring about distinct attempts to compose new ontologies around film that enable theoretical inter-disciplinarity and innovation. This thesis considers itself as part of that process and intends to strengthen it.

At the same time, within the extended field of new media studies theoretical accounts of “new” media have presented different conceptual tools to question the distinctions between the “old” and the “new” media by examining the co-existences and convergences between them. Lev Manovich (2001) noted the need to see cinema’s history as a succession of different but equally expressive languages (pre-cinematic and post-cinematic) that, although they carry their own aesthetic variables, complement each other. In shifting media environments, the “new” theories have aimed to outline the changes that the analyses of media undergo. In his book *Technologies of Freedom* (1983), Ithiel de Sola Pool introduced the concept of media convergence, referring to a process or a force of change within media industries. De Sola Pool (1983: 53) explains that ‘convergence does not mean ultimate stability, or unity. It operates as a constant force for unification but always in dynamic tension with change’. By eradicating the distinctive functions and markets between media,

“new” media technologies enable the same content to flow in different forms and within different channels. More recently Henry Jenkins re-appropriated the term and situated media convergence within a framework of cultural, industrial and social changes that is linked more with political and power relationships. Jenkins (2006: 2) described convergence as ‘the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences.’ Moreover, Bolter and Grusin’s concept of remediation and its double logic of immediacy and hypermediacy bring a new dimension in the relationship between “old” and “new” media, which can be analysed and applied in the way that “old” and “new” technologies co-ordinate in practices. In *Remediation: Understanding New Media*, the authors do not confine the notion of remediation only to digital media. They write:

We offer this simple definition: a medium is that which remediates. It is that which appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real. A medium in our culture can never operate in isolation, because it must enter into relationships of respect and rivalry with other media. (1999: 65)

In the context of remediation, “old” and “new” media interact by influencing each other, while this interaction is empowered by cultural, technological and economic forces.

Based on the argument outlined above, conceptual and theoretical schemes are embedded in techniques and technologies (as the next chapter will present more analytically). For instance, qualities that have been ascribed to the analogue are revisited and questioned in the theoretical engagement with digital technologies. Film studies’ engagement with the object in question can be analysed as the juxtaposition of different processes: methods, concepts, relations. While it has been considered here as a single object, in opposition or in relation to other media, such as photography, fine art and television, it is being gradually infiltrated into a collection of highly divergent practices that incorporate different media, theories and spaces.

In particular, in the case studies of this thesis, theoretical knowledge, ideas and themes around film are shaped, re-appropriated, challenged and extended within the orderings, modes of practices and the cultural and historical contextualization of various sites. For instance, the exhibited film in the gallery site merges with a theoretical stance that accentuates the relationship between cinema and art. This is articulated in a specific operation and ordering of practices, which pay specific attention to the artistic engagements with the

materials and technologies of film that expand the phenomena of cinema. The presence of film in LUX is related to the cultural and historical framework of artists' moving image work. In the site's distinctive practice of film checking, Michel Foucault's concept of 'heterotopia' is employed to articulate the distinction between the performative, public projection of film, which is translated to the "normal" condition of film to be publicly projected and the "abnormal", "pathological" condition of film as it is privately checked for deterioration or damage, in a corner of LUX's office. In the restoration project at the BFI National Archive the notion of originality as theorized by Walter Benjamin is reshaped by the contextual practices and technologies, as constituted within the archive, while the concept of the archive bears Jacques Derrida's (1996) principles of commencement and commandment is formative and transformative for the enactment of film. In the last of the case studies, the position of film within the digitized distribution networks of Curzon Cinemas demonstrates the notion of the screen moving from a representational medium (Stanley Cavell, 1971) to a spatial presence, a networked element, part of the "space of flows" (Manuel Castells, 1991 and 1996), which reflects the practices of globalization and late capitalism.

The case studies' focus on local practices argues that site-specific based research can inform and also be informed by theoretical references and enactments. It ascribes agency to sites, technologies and practices which do not form static arrangements but rather demonstrate dynamic (re)-configurations of film realities. These realities are enacted through particular practices that open up arrangements, re-articulations, and parallel to them through knowledge practices that are also open to re-workings and re-interpretations.

1.3 Enacting Film and Challenging Cinema

Therefore the current debates in the field of film and media studies articulate changes, new relationships and different modes of knowledge practices that invite the incorporation of new methodologies to the approach of medium (non)-specificity. Within a moment of expansion in research and disciplinary areas, this study has found productive engagement with the field of STS and ANT, particularly with their attention to practice-based research on objects and sites that through the theories' prism are seen as relational entities. In ANT's framework objects and space are not fixed but they are "done", that is to say they are enacted as part of the relationships in which they are situated. They do not form fixed or stable variables, but

they attain the capacity to transform the relationships within which they act and to be transformed by them.

Within the field of STS, Annemarie Mol's ethnographic work on the medical object of the disease of atherosclerosis articulates the shift from an epistemological to a 'praxiographic' inquiry into reality. In Mol's account the ontology of a thing is not pre-given, fixed and stabilized, but is located and gets shaped and constantly reshaped in local, socio-material practices. Mol's approach has assisted this study greatly in its attempt to explore the intricate paths of film practices. From a praxiographic point of view, the knowledge produced in practices is not only located in the subject that is to say, Mol does not only interview or ask what patients and doctors think about the disease, but it is also located in the material events through which atherosclerosis comes into being, for instance in the examination of the disease through the microscope or on the surgery table. Mol's praxiography that engages with socio-material practices as constitutive of an object makes possible the study of the object of film as it is enacted in socio-material and technological practices, in physical settings and through encounters with professionals and practitioners, that is to say, as it achieves reality through different working systems. By describing practices that are doing film, this thesis seeks to ask what film is.

The aim of this project is to focus on the actual, work practices of film, which paradoxically are what usually stays invisible and unknown to the theory or even the viewers of film. As Katja Schönian states 'the praxiographic research perspective does not assume an "untouchable", hidden meaning or understanding behind people's activities. What is apparent on the surface is in fact reality, configured through practices.' (2011: 151-152) Schönian, deploying Mol's praxiography to examine computer software, explains that practices are not isolated activities, but need to be seen as connected with each other, as one practice can form the resource for another practice, and moreover as practices can potentially affect, change and co-ordinate each other. The questions that the praxiographic approach poses are: how different situated practices and arrangements of film exhibition, archiving, distribution and projection are co-ordinated? What kind of materialities are coming into being in these different settings? What are the professional, contextual conditions under which the practices are operating and how stable are they? What do these practices bring about in film and how can they perform or challenge the ideas and phenomena of cinema?

This thesis is primarily interested in the sites, technologies and practices of professional groups that are “doing” film. That is to say, my study is interested in film not as an object endowed with fixed and stable characteristics and essences, but in the ways that it comes into existence, as it happens. Thus, this is a question not of being but of becoming. By undertaking Mol’s understanding of the multiple as an ontological parameter we can examine the object of film as interacting with, attuned to and shaped by socio-material practices. The different contexts of socio-material practices enact different versions of film. This is the basis, according to Mol, for ontological claims, the ontology of the disease of atherosclerosis and in effect the ontology of an object lies on the practices that enact it. By restoring ontology to the centre of knowledge and socio-material practices, it is conceptualized not as something fixed and static, giving essences of things, but as something that is based on ideas of particularity, transformation and change.

Undertaking Mol’s praxiographic approach to examining the object of the disease of atherosclerosis and translating it to the object of film, this thesis investigates film’s altered nature in relation to different settings and asks how these settings (institutions, technologies, practitioners) shape and configure film. In this thesis’ case studies, neither analogue nor digital film seem to be finished products, but rather they appear to be part of different and multiple processes. Rather than permanence and durability, and it is the ephemeral and fluid nature of processes through which film comes about, is shaped and performed that this thesis describes and examines. The purpose of this project is to narrate practices, to present a composite picture of the transitory stage of materialities and technologies of film, those derived from, and immanent to, the modes and methods practiced in the four different contextual sites. Through institutionalized specific practices, the technologies and the ways in which they are operated are foregrounded, while a comparison of the technologies in practice, the attributes, correlations, circulations and operations of each technological configuration are unfolded, within site- and case-specific contexts.

Practices present the material, i.e. the technological film, even if this presence lasts only for a few moments (when the analogue print is checked in LUX’s projection machine, for instance). The event of film has a short life span, and the practices examined are, for the most part, based on ephemeral moments. In sites, we see the actual operation of both materially visible analogue and electronically confined digital. As in the case studies this thesis offers, film is seen as an exhibit in a gallery: restored, examined and checked with regard to its material condition, and then theatrically exhibited. Here, scenes from the life of film

(snapshots, transient moments) are presented as highlighting the ephemerality and the contingency of the film object. Film exists in practices, and in these practices unanticipated events may occur, and the practices and conditions need to be redefined and the object of film needs to be handled differently.

Accordingly, this thesis is interested in examining these sets of questions: How is film enacted in the condition of technological transfer and of new possibilities of viewing, experiencing and practicing it, in the beginning of the twenty first century? What kind of effects and relations are formulated by its new technological arrangements? In addition, how does film embody time as an unstable and moving technology, which can exist simultaneously in different sites, in different moments? How do we account for the processual nature of technologies and materials themselves, that is to say their transformations and becomings in different contexts and the temporalities that they produce? This also introduces the question of the duration in materials and technologies and its effects on the multiple, simultaneous trajectories that film can take? How can we know film as an object that constitutes its ontology in practice?

In particular, my study draws on the way the technologies and materials of film attain multiple forms and acquire multiple traits in practices, namely the way in which analogue and/or digital film is operated, handled, executed, projected and exhibited constitutes the sphere in which film's multiplicity is enacted. My thesis intends to demonstrate that all these practices, instances and situations can work as an exemplar of processes that are constantly changeable and can underline and indicate the relationship between film and cinema in continuous transformations. In order to develop this, this project draws on Henri Bergson's concept of intuition to talk about the temporality of film as a matter that has agency. That is, that it can be considered as a material object which can be perceived attaining its objecthood, its ontology through socio-material practices, that is to say through professional, technological, and contextual practices. These are practices that acquire action rather than representations and symbols, and that through the temporalities and durations of film through which we can discuss cinema, help to investigate the challenges that actual, working practices bring to different phenomena and ideas of cinema.

Whereas the multiplicity of cinema resides in an array of phenomena, that is to say the temporalities and spatialities that they create, film materialities and technologies tend to appear in the practicalities and method descriptions of institutionalised situations. Focusing

and emphasising the multiple nature of film's materiality enables this thesis to discursively examine the changing and transformative world of cinema. As we will see in the next chapter, the advances in digital technologies have influenced and affected our understanding, appreciation and conception of, not only film, but also cinema. In addressing the material and physicalities and practices of film we can think in new ways about the nature of cinema, about its elements, expressions or modalities. Thinking about film as an active material agent, we can underline instances of cinema in these materializations, as an open process, in film materiality's productive, enacted contingencies. By enforcing the film's materiality, not as a solid and bounded object whose transition is predictable, notions of change, agency, time and space for cinema require rethinking, as materiality is not only about matter but also about difference, relationality, change, transformation and multiplicity. These could be seen as elements and attributes that render cinema as an active, productive and changeable set of phenomena and events. Therefore, engaging with a methodology that follows the object of interest, by describing the practices of its actualization and enactment, this study intends to map the presence and 'objecthood' of film as a material agent and aims to connect these with cinema, as phenomena that are processual and continuously changeable.

1.4 The Case Studies

This thesis continues with a Literature Review (Chapter Two), which frames the project's field of investigation: the movement of film in two different areas of action, in theory and location. To ground this argument, this chapter uses Mol's notion of enactment as a staging and performative action to appropriate theoretical accounts and stances around film as knowledge practices and argues that as such they do not designate a pluralism of perspectives around film but that they shape and enact multiple realities of the object of film. Drawing on "classic" film theories on indexicality (Andre Bazin, Stanley Cavell and David N. Rodowick) this study underlines that although indexicality is perceived as an inherent and essential quality of the analogue film, it is shaped and performed differently in these theorists' accounts and produces different versions of film. Making a move to the advent of digital technologies based on the writings of Lev Manovich and Sean Cubitt, where a constitutive dialogue between analogue and digital technologies is enacted, this chapter assumes that under the same name, i.e. "film", different relational entities come into being, which are not singular but multiple. The chapter also engages with the recent turn in film studies relating to

space. The work of Janet Harbord, Francesco Casetti and Victor Burgin allow us to trace the multiplicity of film in location. In general terms, in their theories film appears dislocated from its traditional site, the movie theatre, and dispersed among a variety of locations and material substrates. By stressing the significance of location as a constitutive element in the enactment of film, the study unfolds and describes the philosophical and methodological stance that it uses to examine, not only the theoretical enactments of film, but also the actual activities and operations through which film's identity and objecthood is enacted in situated institutional contexts and practices. The focus on Mol's work suggests the foregrounding of practices, theoretical and situated, as an ontological parameter to discuss film, as an object that is inherently multiple. In parallel, the chapter utilises Henri Bergson's philosophy on matter and duration to ascribe intuition as a way of knowing film and it examines these in the case studies that demonstrate enactments of film as events that disclose states of the duration of cinema and as an intuitive experience.

The third chapter of this thesis turns the focus on to the theoretical and methodological accounts of ANT, post-ANT and more specifically on Mol's work in *The Body Multiple: Ontology in Medical Practice* (2002). My study operates both as a detailed analysis of the epistemological and methodological field to which Mol contributes, and it also reflects on the themes, objects and issues that this study develops. It delves into the field of STS and ANT and presents an account of the theoretical concepts and ethnographic practices through which this project enacts its methodology, that is to say, the theoretical background that formulates the shape that this thesis uses to enact the object of film in this particular way, and searches for an ontology, as an ethnographic and philosophical practice. The study is informed by the application of ANT in the field of media studies and accentuates the spatial turn and the praxiographic shift as constituting elements of the present project.

The first chapter of the case studies (Chapter Four) finds film in the site of the art gallery, and argues that the theorization and conceptualization of film within this site encounters a multi-faceted account of practices, which are both institutional and artistic. In this site, the study claims that the artistic practices of film enactments are in principle not bracketed but foregrounded. Drawing on three gallery installations, Anthony McCall's *Line Describing a Cone*, Mario Garcia Torres' *My Westphalia Days* and Gerry Fox's *Living London*, the chapter seeks to examine the variables of technologies and actors, such as the screen, the projection machine and the disposition of the human subject and the installations' visitor in relation to the enactment of space, arguing that the film object in the site of the art gallery is an

ephemeral object, situated in ephemeral practices. This case study presents the multiplicity of film as it is created, shaped and performed differently in different exhibitions and moreover as it creates new experiential possibilities for the visitor.

Chapter Five encounters film in the site of LUX, London's arts' agency of artists' moving image work. In the specificity of the agency a number of activities and ordering processes are included, namely around the promotion, distribution and exhibition of film. My research was conducted in the course of my internship in this site and it is based on the practice of analogue film's checking. After its distribution in external sites, film returns to LUX in order to be distributed again. The film checking is enacted in a private moment between film's public screenings, in the agency's 'heterotopic' corner, in which the projection machine is situated. Foucault's concept of heterotopia acquires significance in the examination of the diversity of situated practices as ordering processes. In this study, film is seen as an afflicted object, susceptible to its mechanical operations and physical decay and ageing. Particularly, film is examined as an object projected, spatialized in a film checking sheet, fluid and archival. The presence of film in LUX accentuates the movement of the object between private and public settings, and its effects on an assumed "normal" and "pathological" material condition.

Chapter Six describes the restoration of the British director Anthony Asquith's film *Underground* as actualised at the British Film Institute's National Archive. The film was originally produced in analogue nitrate film format in 1928 and was restored by the combination of three different prints, with the assistance of digital tools in the post-production processes taking place at the Archive's laboratories in 2008-2009. This chapter examines the processes, practices and operations involved in the restoration project, by utilising scholar and archivist Giovanna Fossati's (2009) proposed distinction between the conceptual and material archival artefact. Fossati takes a stance on archival film as a 'historized' object, both in a material sense, due to its mechanically enacted damage or ageing, and in a conceptual level that views film as a product of its own time and also of the time of its restoration. The "new" film, this chapter argues, is a hybrid object, both materially and conceptually. Moreover, by employing Derrida's conceptualization of the archive that bears the power of commencement and commandment this chapter argues that the archiving of film and the theoretical (as well technologically related) references to concepts of authenticity, multiplicity and originality are constituted and enacted in the discourse of archival practices.

The last chapter of the case studies, Chapter Seven, encounters film within the practices of projection and distribution of Curzon Cinemas' company in London. The transition to digital projection and the operations and proliferation of digitized alternative systems of circulating and exhibiting film has affected theatrical release practices. This chapter focuses on two activities that operate within the company, the theatrical projection of film and the material and technological transitions occurring in the Renoir movie theatre's projection room, and the new Video on Demand service, 'Curzon on Demand,' that distributes film at the same time as its theatrical release via the digital screens of television, computer and mobile phone. The chapter employs the metaphor of the network and the 'networked screen' (Wasson, 2007) as spatial configurations in order to describe new experiences of cinema, both in time and space. By mapping the transition of film from the locality of the movie theatre to networked screens, this study argues for a dislocation and relocation of film and in effect for new states in which cinema can be experienced.

The last chapter concludes this thesis by returning back to the main argument on the multiple nature of theoretical and technological/material practices. It attempts to explain the coordination, and also the differences, between the different site specific practices described in the previous chapters. At the same time it accounts the methodological challenges that the praxiography of film has encountered and reflects on its viability for further research. Last, it expands the field of research to an assumed appropriation of cinema as a phenomenon to be experienced, and less as a theoretical enactment.

Chapter 2. Film in Theory and Location

2.1 Introduction: Processes of Transition

The advent of digital technologies since the 1980s has changed the way we conceive film in theory and diversified the spaces we encounter it outside the traditional space of its exhibition, the movie theatre. It is more than one hundred years since the cinématographe presented actuality and trick films in fairgrounds and vaudeville theatres and it is almost 60 years since television brought film into private domestic settings. Nowadays, the replacement of analogue photochemical prints with digitally coded images and sounds in the processes of production, distribution and exhibition of film situates its conceptualization, contextualization and definition in a period of transition and rapid change. The history of the amorphous institution' (Wasson, 2007; 2008) of cinema has been marked by transitions in its technological materializations, including from pre-cinematic devices to television, video and nowadays the digital. However today film is disseminated in unexpected locations, such as on portable media devices, public screens, personal computer technologies and simultaneously in an expanded field of theoretical locations, such as internet studies, game studies, new media studies and art. The technological transition has problematized the conception of what film is and what cinema is, while claims on the specificity and ontology of film are attached to the possibilities of both analogue and digital film.

In their study of cinema and technology, Bruce Bennett, Marc Furstenuau and Adrian Mackenzie (2008: 2) claim that cinema becomes visible as a technology in moments of crisis and contestation. In this period of material negotiation between analogue and digital technologies, the relationships between cinema and the broader domain of moving image materials and technologies emerges as a significant field of inquiry. Cinema could be seen as a platform to talk about technological transition while at the same time thinking about it as a migratory array of effects and events which adopts "new" technologies, or "old" technologies enacted in new ways, and becomes adapted to new sites and situations. In daily life, and in multiple locations, film is something that may be "done", occurring in unexpected places, for instance it might be downloaded, collected on DVD, seen in an art gallery, found on the Internet, in sites such as YouTube or Video on Demand. But film is not done just anywhere.

Film and its practical enactments may appear in the materials, technologies and methods used in specific processes and practices which operate in certain institutional frameworks.

In effect, the dispersion of film, through broadcasting, computer networks and digital fiber-optics in various locations has disrupted the encounter with film in specific times and spaces. Attached to different physical bases and channels of transmission, the unity of the theatrical release of film, in a singular space and time that is equated with cinema's identity in classic film theory, has become dissipated. Film is mobilized in various spaces and it is simultaneously dislocated or relocated in multiple sites. Through digital delivery systems film is moving unexpected distances and finds itself in various viewing situations. In a potentially infinite number of locations and situations film does not necessarily stand as a settled object to be observed and watched, inviolable within the spatial and technological site in which it is situated and by its uses, it rather becomes a flexible participant in various environments and settings. For instance, the rise of the Internet and – since early 2000 – of Web 2.0 bridged the gap between the traditional roles of consumers and producers, thus creating, according to Henri Jenkins, a new kind of subjectivity, the 'prosumer', which refers to people that not only consume media texts but also produce them (2006). Given the immersion of film in our daily lives, people become potential producers and users of film, they can actively act upon film, thereby creating new settings to be experienced and practiced.

It is possible to find evidence of the contemporary technological transition on two main domains: in theory and the location(s) in which film is situated and, as this thesis argues, *enacted*. Drawing on the field of STS studies and particularly on Mol (2002), the notion of 'enactment' suggests the act of staging and performance of objects and realities through practices. Enactment can be seen and employed as a praxiographic method. In her study of the disease of atherosclerosis in the different departments of a single hospital in The Netherlands, Mol claims that the object of the disease is multiply enacted within the practices, which operate in the particular setting. When she describes the different versions of atherosclerosis, Mol states:

It is possible to say that in practice objects are enacted. This suggests that activities take place – but leave the actors vague. It also suggests that in the act, and only then and there something is – being enacted. [...] Thus, an ethnographer/praxiographer out to investigate diseases never isolates them from the practices in which they are, what one may call, enacted. (2002: 32-33)

Citing this point, we can argue that film figures as an entity staged and performed, which takes on a variety of shapes in different sets of contextual material practices combined with theoretical contexts that form knowledge practices. As film tends to appear in theoretical practices, it also appears in spaces, which form the ground – that can be developed further – for the examination and the theoretical implementation of studies around film.

Since the advent of digital technologies that have primarily affected the practices of ‘doing’ film: producing, exhibiting, viewing and preserving it, an emphasis on the actual, material practices could form a suitable area to examine when fashioning descriptions of the changing nature of film. As argued in the introductory chapter of this thesis, the present study proposes a different way of knowing film, which foregrounds the practicalities in which it is enacted and through which the agency of the technologies of film is unraveled. In particular, this thesis narrates four stories about the practice-based enactments of film, in screens, projection machines, light, film strips, digital tools and material networks. This is accomplished by shedding light on the four sites and the situated practices in which film is enacted: namely, the gallery, the arts’ agency, the archive and the projection room. These locations are institutional; they are formulated around a set of activities that are simultaneously professional, cultural and material. These are locations in which the film object and reality are transformed and in which new ways of doing film are crafted. From here film is exported in the shape of an exhibitionary object, a projected material, restoration production or as a component of a distribution network of small and large screens. At the same time, the field of theory becomes a relational area of inquiry and knowledge and is attached to the practices that are examined here. The domain of theory informs and becomes informed by the objectives, orderings and operations that these “film institutions” enact.

First, this chapter presents the object of film as enacted by the knowledge practices of film theory, that is the way that the epistemology of film studies has known and knows the object of its examination. This includes the conditions, qualities and relationships that film theory has addressed in the ontological search of its object. According to John Law and Annemarie Mol (2004), knowing an object is a practice. Thus, a mode in which an object is enacted is facilitated by employing theoretical knowledge practices to “do” film. Citing this stance, I will now examine the theoretical enactments of film, which relationally preserve and disclose a transformative idea about cinema, in order to inquire into the modes of knowing film as presented in film studies and to argue for the multiple nature of knowledge practices about

and around film. If we take into consideration Donna Haraway's (1991) argument that the production of knowledge is always partial and an effect of situated practices, this chapter begins by drawing attention to the theoretically situated stances that specific theorists have undertaken in their search for the object of film and its qualities. By following the theorists' positions on film, from classic film theory (André Bazin and Stanley Cavell) to contemporary film studies (David Rodowick, Lev Manovich, Sean Cubitt, Francesco Casetti, Janet Harbord and Victor Burgin), an itinerary of multiple enactments is unveiled. This includes: film's technologically produced indexicality and its origins in the photographic image, the constitutive agency of film on human subjectivity, the performative nature of film to create movement and produce effects and lastly, the significance of space – material and immaterial – in the new trajectories that the digital has presented for film to be situated in. These elements acquire agency in the theorists' assessments. Relationally they enact particular realities of film. Thus, the theories described show an object which appears to be multiple in the theoretical locations that the theorists situate it in.

2.2 *Theoretical Enactments*

According to David Rodowick (2007) film theory is the most productive field to look at when we are examining the changing nature of film. In particular, he concludes his book on *The Virtual Life of Film*, by stating that

Film theory, then, is our best hope for understanding critically how digital technologies are serving, like television and video before them, to perpetuate the cinematic as the mature audiovisual culture of the twentieth century, and, at the same time, how they are preparing the emergence of a new audiovisual culture whose broad and indiscernible outlines we are only just beginning to distinguish. (2007: 189)

In addition, Francesco Casetti (1999) sees theory as a tool by means of which one can define, analyze and reconsider cinema as 'a device used to acquire knowledge.' (1999: 314) He sees the formulation of theory as an institutionalized, social and historical knowledge. In this context, 'theory is knowledge that circulates among those working in a given field and through them reaches broader audiences, producing discussion, loyalties, and dissent. In this respect it is a social device, something that is diffused and shared within a community.'

(1999: 315) Crucially for Casetti, theories stand always as fragmented and dispersed since cinema itself extends and is dispersed in a variety of practical and material spheres, for example from television and video to a practice of documentation and a material of study. For him, the questions that film theories ask often go beyond the phenomenon they want to discuss, ‘They come from “out there” and head toward “the beyond”’. It is cinema itself that invites this practice – from the moment at which it denies its separate identity and defines itself as a crossroads of diverse experience.’ (1999: 315-316) In agreement with Rodowick’s argument, film theory can indeed creatively present ways of assessing what is new and at the same time “old” in “new” media, but, considering Casetti’s point on the diversity of experiences of cinema, there is something relational and at the same time elusive in theory’s account of cinema. The next section of this chapter will show that the theoretical stances, which aim to inscribe an objective, epistemological manner of knowing film and cinema, are activated by diverse and not discrete relationships between technologies, environments, histories and possibilities of the medium, which in the argument of this thesis will be translated as multiple, ideas, experiences and enactments of film and cinema.

2.2.1 On Photographic/Cinematographic Processes: Temporality, Reality, Subjectivity

Classical film theory examines the indexicality of the photographic image as an essential property in the examination of film and cinema’s ontology. This section draws on the theories of André Bazin and Stanley Cavell and the possibility of the photographic film to create representations (Bazin) and views (Cavell) of the world. Continuing on from this and drawing on Bazin and Cavell amongst other theorists, Rodowick examines the ‘virtual life of film’. He starts with the indexical nature of film in order to search for cinema’s relationship with reality and duration in the age of the digital.

André Bazin, in his search for the ontology of cinema, *What is Cinema?* (2005 [1967]), views cinema as a primarily representational medium. He asserts that the representation of reality and time, through cinematographic images, as for the first moment the image of things is the same with the image of their duration, becomes an aesthetic direction of the medium and also its ontological parameter, which is exemplified in the myth of total cinema. In ‘The Myth of Total Cinema’ (2005 [1967]) Bazin conceives the emergence of cinema as a historical coincidence, a contingency, which is based on the idea of a total representation of reality, in which the precursors of cinema, such as Niepce, Muybridge, Leroy, Joly and Demeny, more

as prophets, saw in their imaginations ‘cinema [w]as a total and complete representation of reality; they saw in a trice the reconstruction of a perfect illusion of the outside world in sound, color, and relief.’ (2005 [1967]: 20) Thus, the technological history of cinema’s invention is situated in an endeavour to actualise the myth of a total illusion of reality. This is a cinema that intertwines realism and illusionism, as it presents ‘an integral realism, a recreation of the world in its own image, an image unburdened by the freedom of interpretation of the artist or the irreversibility of time.’ (2005 [1967: 21]) Considering cinema through stages of technical development, the accomplishment of cinema would occur as technologies would, little by little, get closer to the reality of the total myth, ‘a complete imitation of nature’. For Bazin, film became a temporary and thus ephemeral actualization of this myth, as it had not yet acquired the technical means for the creation of this integral reality. In Bazin’s thinking, cinema is not only a photographic, physical medium, but it is also a conceptual phenomenon, a myth, a fantasy, which takes, at the time of his writing, the form of the photographic film. Therefore, the photographic film might actualise a stage in an elusive, virtual idea of cinema, as a total illusion of reality.

Within the debate that governed the plastic arts for centuries between illusionism and realism, between the aesthetic expression of spiritual reality and the psychological desire to duplicate the world outside, Bazin asserts that mechanical systems of reproduction, that is photography and cinema, ‘satisfy, once and for all and in its very essence, our obsession with realism.’ (1960: 12) specifically, in his essay on *The Ontology of the Photographic Image* (2005 [1967]) Bazin develops a direct claim on the photographic and, in extension, the cinematographic image’s root in reality. Photography becomes part of the genetic code of cinema, which is based on the automatic and thus mechanical nature of recording images. For the theorist, the advent of photography in the 19th century was the most important event in the history of the image, lying in the psychological fact of illusion of reality, the complete duplication of the world outside, which this time is produced mechanically, without human intervention. He argues that: ‘(f)or the first time between the originating object and its reproduction there intervenes only the instrumentality of a nonliving agent. For the first time an image of the world is formed automatically, without the creative intervention of man.’ (2005 [1967]: 13) In this case, the representation of the world excludes the intentionality and motivations of the artist, while the mechanically reproduced reality becomes a frame that differentiates the subject from the work of art and objectivity is ascribed to it. If the photographic image accounts for embalming time from corruption, through capturing real

objects at a set moment of their duration, then cinema is for Bazin objectivity in time. This is cinema's distinctive difference from photography, its ability to inscribe duration.

The film is no longer content to preserve the object, enshrouded as it were in an instant, as the bodies of insects are preserved intact, out of the distant past, in amber. The film delivers baroque art from its convulsive catalepsy. Now, for the first time, the image of things is likewise the image of their duration, change mummified as it were. (2005 [1967]: 14-15)

The indexicality that Bazin proposes as the first principle of the medium of cinema, focuses on the conceptualization not only of reality but also of time. The indexicality of the photographic frame is related to the capturing of a moment in duration, in real time. For Bazin film carries the unique ability to represent time, as it produces movement through time of photographic images. In this argument cinema becomes a mummified/resembling image, a record of duration. As baroque art made representation a matter of resemblance and likeness, the mechanically produced film brings a temporal record in the field of representation and reproduction. For Bazin, duration is seen as a state of life, which cinema encounters and interacts with, based on the instrumentality of a non-living agent, the camera. The apparatus embodies the passage of time, in its technical function and also manifests the passage of time in the film's context, its narrative. From the perspective of the mechanical reproduction of reality, movement becomes a component of a real and truthful picture of life, copy of nature. In Bazin's argument lies a pre-existing, out-there reality to be mechanically recorded and thus presented independent of human's artistic expressions and a medium which can be referenced objective, as it mechanically records time and reality. Thus, the ontological identity of the cinematographic image is constructed upon the possibilities that its mechanical aspect offers and the ones it fails to accomplish, the myth of total cinema. The indexical relationship between film and the external world is the constitutive element of film's identity, which is depended on and acted upon the human perception and experience of the reality of the external world.

Philosopher and film theorist Stanley Cavell in *The World Viewed: Reflections on the Ontology of Film* (1971) reasserts Bazin's claim that the basis of the medium of film is photographic, in order to argue for a different kind of relationship between film and reality, one that lies on the creation of the human subject's reality. Referring to photography, the philosopher stresses that reality is absent when we see it in a photograph, while the photograph as an object is present. Between the photograph and the reality does not lay a

form of mediation, since photography maintains a connection with a pre-existing reality. Hence,

Photography maintains the presentness of the world by accepting our absence from it. The reality in a photograph is present to me while I am not present to it; and a world I know, and see, but to which I am nevertheless not present (through no fault of my subjectivity), is a world past. (1971: 23)

In Cavell's words, photography replaces the subjective certainty of the presence of the world by providing the assertion that the world is present, even if I am absent. Based on the automatic projections of the world I am acknowledging my distance from the world and I am accepting it as my natural condition within the world. As Mullarkey (2010) points out, for Cavell 'What is real is not one, simple reality, nor one world, but the presence of a world, the being of a world.' (2010: 115) Importantly Cavell stresses that film is a technology "of" a world. It is part and of the same matter of the world. As Mullarkey continues, 'Movies are not "recordings" (or "reproductions"), but, nonetheless, reality has a role to play. This reality is not separable event recorded on film, however, but whatever it is that is "photographed, projected, screened, exhibited, and viewed" in film technology.' (2010: 115)

The photographic image presents a reality, a world that is absent from the human subject. This is a world past, a central point in order for Cavell to develop his thesis on the existence of the world in movies and the creation of contemporary human subjectivity. Movies screen the world, that is they take their material form from the world, and by screening the world, images of the world are made available to us. Yet, by screening the world, a moving picture 'screens me from the world it holds – that is, makes me invisible. And it screens that world from me.' (1971: 24) Cavell argues that the subject is not present in the reality that is happening but, on the contrary in a reality that has happened. Therefore, the subject cannot affect that reality, since it is absent from it. Richard Rushton explains that Cavell's claim 'has nothing to do with the way that films reproduce or represent the world, while it has much more to do with the way in which the world produces itself on film.' (2011: 114) Movies permit us to view the world unseen, as we are outside of them.

Cavell argues convincingly that on the screened film 'we do not so much look at the world as look *out at* it, from behind the self.' (1971: 102) This is a key theme in Cavell's philosophy and which exemplifies his scepticism over the ways that it is possible to know ourselves and the world. For Cavell the world exists as it is screened for us and from us. The reality that

movies project underlines the contemporary reality of the human subject to the world, one in which we view the world from behind the self, unseen: 'In viewing film, the sense of invisibility is an expression of modern privacy or anonymity.' (1971: 40) In other words, as movies present the state of modern subjectivity by making us invisible from the world, we establish our relationship with the world as invisible and anonymous human subjects. The ontology of film that Cavell suggests is an ontology linked with the concept of screen and human subjectivity. The screening of the world becomes the question of existence of the world beyond human subjectivity.

Beyond film's screening of the world from us, Cavell attributes to film the automatism of photography. Automatism is defined by Cavell as 'the broad genres or forms in which an art organizes itself (e.g., the fugue, the dance forms, blues) and those local events or *topoi* around which a genre precipitates itself (e.g., modulations, inversions, cadences).' (1971: 104) An automatism is organised according to film's physical base, including the *topoi* around which film organises an event and also the productions of film, that is to say the artistic expressions of film, its genres or forms. For him, the tradition of automatism underlines all arts and could be considered as the power of every instance of every art to produce its medium. Thus, to 'discover ways of making sense is always a matter of the relation of an artist to his art, each discovering the other.' (1971: 32) The creation of a new medium relies both on the artist but at the same time on the art itself, and the range of automatisms that maintain this tradition. Thus Cavell claims that:

Only the art itself can discover its possibilities, and the discovery of a new possibility is the discovery of a new medium. A medium is something through which or by means of which something specific is done or said in particular ways. (1971: 32)

Automatisms cannot be confused with essential traits of a medium, since they are not confined to unchangeable and timeless entities. The part of film that is based on the photographic camera is automatic, yet the medium of film cannot be reduced to its physical support. Within the field of the art, the artists create a new medium within the medium, i.e. a new automatism, a new set of practices. Although the automatism of film is photography, this does not exclude the re-invention and creation of new media within the automatism of photography. In this sense, the media coincide and recreate each other. No art's existence is physically assured; instead art explores and creates new forms and conditions of expressions, that is to say, new automatisms. Automatism is a new medium that art is creating and it gives to the medium an autonomy, not in terms of a purity or essence, but in terms of freeing the

object from the subject. As Cavell explains to speak of an artistic medium as an automatism is

due first to the sense that when such a medium is discovered, it generates new instances: not merely makes them possible, but calls for them, as if to attest that what has been discovered is indeed something more than a single work could convey. Second, the notion of automatism codes the experience of the work of art as “happening of itself”. (1971: 107)

Drawing on Cavell, but also on Bazin’s focus on the indexicality of photography, Rodowick discusses the new automatisms that the digital is able to create. The theorist identifies cinema with a distinct material basis and a particular phenomenology of viewing experience, that is the projection of a photographically recorded film strip in a theatrical setting. He argues that with the advent of digital technologies a qualitative change is taking place in our definition of cinema. As photographic images are transformed into numerical signs, Rodowick asserts that a shift in materiality is taking place. Whereas analogue media record spatial and temporal traces of events, a fact that empowers photography’s principals of indexicality and analogy, digital images are simulations, wholly created from algorithmic functions that can be rendered identical as they are attached to the same computational notations.

Rodowick believes that the element that nowadays fades in cinema is the photographic causality and the assertion of time that passed. The creative powers of the digital can be found in the infinite possibilities of its images to be reworked, re-contextualised, re-appropriated and manipulated. Interestingly, in contrast to the photographic image that preserves the image from the flow of time, the digital as information provokes and facilitates the need to control and manipulate time. This contrasts with analogue film’s automatism, which is the expression of temporality and more specifically of ‘our confrontations with time and time’s passing.’ (2007: 73) A photographic/cinematographic image is a movement disjoined from space, which on one hand presents a moment of a time in past, and on the other passes in front of the viewer in the present moment. Rodowick writes that

In both photography and film, the virtual is always overrunning the actual: on one hand, there is the hallucinatory projection of events lost to the (virtual) past in the present perceptual image; on the other, the irreversible succession of passing presents where space in movement appears and disappears into the virtual time of memory. (2007: 78-79)

The very act of projection at a uniform rate of speed produces movement and duration and this is the condition lost with the digital projection. Inspired by Babette Mangolte’s (2004)

argument about digital's inability to communicate duration – that is the passing of time – Rodowick argues for a sense of time lost. Thus, the fact that the digital event, as he names it, is composed of discrete elements and which are read as distinct mathematical values, differentiates from the spatiotemporal unity of the pro-filmic event. The digital indicates a different ontological relationship between the image and space and time, which are driven by control of the mathematical pixels,

Because the spatial unity of the image in time can no longer be assured or attested to by the digital image, and because the powers of indexicality are weakened and decentred by the process of digital conversion, the expression of duration is transformed – it becomes other to the powers of film and calls for a new medium. (2007: 166)

Based on the mathematics of information processing, the digital event internalizes the discrete codes into the computer's memory and the numerical processes, while it does not correspond analogically with the duration and the movements of the world. The notion of materiality and medium-specificity attains a central role when Rodowick discusses the transfer to digital technologies. He positions the replacement of the analogue world by digital simulations of symbolic manipulation and transmission within a context of aesthetics of expression in which 'cinema struggles to reassert or redefine its identity in the face of a new representational technology that threatens to overwhelm it.' (2007: 4) For Rodowick, the powers of analogy and indexicality of the analogue are re-affirmed and replaced by the manipulative qualities of computer generated images. The condition that all digital media are reducible to codes renders them without substance, and furthermore, 'no medium-specific ontology can fix them in place.' (2007: 10) While the photographic image's power of analogy in terms of duration has been transformed into discrete units that can be recombined and change, the digital image signifies another ontology, which Rodowick characterises 'as an increased attention to the present and to the control of information.' (2007: 166) For the theorist, the element of compositing, and also interactivity, control, modularity and programmability, creates a new medium, thereby forming an automatism for the digital. Based on Cavell's notion of automatism, Rodowick claims that film cannot be defined simply in technological or material terms, but can be seen as a concept, form or idea, as in effect it 'is fundamentally through a practice or actual artistic acts that media are recognised and assume an identity, no matter how variable.' (2007: 43)

Therefore, and in relation to Cavell's construction of subjectivity, with digital cinema we do not need to overcome our temporal alienation from the time past, as in Rodowick's words,

‘the causal chain of analogy is broken, and second because the electronic screen expresses another ontology, which I have characterized as an increased attention to the present and to the control of information.’ (2007: 166) In this sense, the digital image does not preserve an image of time against time that is passing, but instead it dominates and manages time, as the image is transferred in information and, more crucially, it is controlled as information. Rodowick’s definition of film is centered on a time-based ontology of the medium that the digital disrupts. For instance, in the realm of the digitally created worlds, space is not defined any more by duration, but by the ‘real time’ of a continuous present, which is composed by the synthesis and transformation of numerical elements. The example of composition makes apparent for Rodowick two effects of the digital: first that the shot, the primary element of film expression, and fundamental to the appropriation of the essence of cinema, has been challenged and replaced by the digital code, which is a combination of discrete elements, open to manipulation and changeable. Second, that with digital cinema ‘there is no longer continuity in space and movement, but only montage or combination.’ (2007: 172-173)

Bazin, Cavell and Rodowick have argued for analogue film as a representational medium of an external reality, and thus the primary relationship that these theorists enact on their account of film is that between the photographic image and reality. Through the photographic image, cinema can depict the world, manifest time and produce a singular duration. In particular, Bazin sought to present the photographic representation of an integral realism of the world itself, as articulated in the myth of total cinema. Cavell ascribed agency to the screen, as it is possible through projection to see the construction of our own subjectivity. Moreover, his notion of automatism attributes action to both film and the tradition of art in which it resides to create new instances and means of art. Rodowick has underlined the disruptions that digital has brought on our ontological understanding of film through indexicality and duration, by stressing new film enactments based on management, control and manipulation of information.

2.2.2 Movement and Relationality

Lev Manovich and Sean Cubitt do not search for an ontological cut between analogue and digital technologies but rather assert a dynamic relationship of historical and technical associations between analogue and digital aesthetics and expression by focusing on cinema as

a phenomenon and an object that causes effects. In their investigation of film and cinema, the theoretical enactments assess the effect of digital technologies on our understanding of the history of cinema. For both Manovich and Cubitt, the primary effect of cinema is movement. From the photographic shot/frame, cinema gets actualized as an illusion of natural movement, 24 frames a second. The previous theorists' starting point for the examination of the essence and the quality of film and cinema was the photographic image. The theorists examined in this section focus on movement, which lies at the heart of many debates on cinema's ontology, most distinctively in the philosophy of Gilles Deleuze. Examining the work of Manovich and Cubitt, an important shift can be underlined: the analogue film's indexical account of the real is reassessed through the "new" material agency of the digital. Digital technologies do not present an objective reality, an 'object world', as Cubitt argues, 'to a subject supposed to have a monopoly of consciousness.' (2007: 306) In Manovich's writings, the human intentionality reappears from the manual construction of images in a pre-cinematic field of animation to the digital manipulation of images, in 3D digital animation or digital paint programmes, whereas for Cubitt, the object of film is ascribed with specific temporalities constitutive for both the human subject and the object of film as a commodity. Setting aside the understanding of time and temporalities within the sphere of human consciousness and experience, Cubitt focuses on the complex temporalities, created between human subject and film technologies.

As Rodowick re-poses and repeats the question of "what is cinema?" as an effect of the challenges that the digital simulations have brought to the photographic, analogical processes of cinematic representation, Lev Manovich, in the *Language of New Media* (2000), takes a different turn, arguing that cinema has always tended to efface the construction of its images, even the photographic ones. As digital processes come to replace the analogical ones, Manovich takes up a genealogical search of digital imaging, which situates the technological change not in the realm of the new and indiscernible from earlier modes of image production, but in the continuation of pre-cinematic practices of image making and in particular of animation. He examines cinema in relation to new media as a technical practice, based on the filmmaking and stylistic developments undertaken for the production of images. In his discussion of cinema, the analogue photographic film, 'the art of the index', is an instance in a proposed genealogy of images, which include painting and digital, numerical media, extended in new directions. In his re-visit of cinema history from a digital perspective, he underlines a cross reference of media: painting, photographic indexicality and animation. The

photographic cinema foregrounded its indexicality, its lens-based recording of reality, while it bracketed the signs of the production processes, only, as the author stresses, to pretend that the images were recorded. On the contrary, animation both in pre-cinema and in digital cinema underlines the artificial character of its images, declaring that they are just representations. In this sense, the ‘opposition between the styles of animation and cinema defined the culture of the moving image in the twentieth century. Animation foregrounds its artificial character, openly admitting that its images are mere representations.’ (2000: 298)

Manovich accepts that computer media redefine the identity of cinema, as they offer an amount of possibilities that exceeds the filmic/photographic recording of physical reality. The theorist argues that cinema’s indexicality is not the only way that images are created, since the digital ‘while retaining the visual realism unique to the photographic process, film obtains a plasticity that was previously only possible in painting or animation.’ (2000: 301) With this argument, he re-asserts the illusionism of cinema and the pictorial arts in the long debate between realism and illusionism, the initial point in Bazin’s argument on the index. Thus digital cinema is ‘a particular case of animation that uses live action footage as one of its many elements.’ (2000: 302)

For Manovich, the manual construction of images in computer media and their appropriation as simulations redefine the cinematic, as they represent a return to the manual – hand-painted and hand-animated – pre-cinematic practices of the nineteenth century. In particular, he explains that:

At the turn of the twentieth century, cinema was to delegate these manual techniques to animation and define itself as a recording medium. As cinema enters the digital age, these techniques are again becoming commonplace in the filmmaking process. Consequently, cinema can no longer be clearly distinguished from animation. It is no longer an indexical media technology, but, rather, a subgenre of painting. (2000: 295)

Distinctively, Manovich disrupts the essentialism attached to indexicality present in Bazin, Cavell and Rodowick, by examining it as a technique of image production to be transferred from one medium to another. Nowadays, with the possibilities that digital technologies offer, the raw material of film, while retaining the visual realism identified with the photographic process, attains elasticity and plasticity, as it can be composited, animated and morphed. The automatic nature of film, as described by Cavell, gets a reverse route in Manovich’s writings, as what has been recorded automatically by the camera can now be hand painted and manipulated, techniques that were previously only possible in painting or animation.

Moreover, next to the pre-cinematic techniques of animation, Manovich, mentions the modernist avant-garde movement to underline that the contemporary possibilities explored by new media have already been employed by the techniques and practices of avant-garde filmmaking. As with animation, the filmmaking of the avant-garde operated in the periphery of commercial cinema not only in terms of aesthetics but also crucially in techniques of image manipulation. For instance, nowadays the techniques of collaged multiple images come to be embedded in the interface and the command metaphors of computer software. Thus, the ‘avant-garde move to combine animation, printed texts, and live action footage is repeated in the convergence of animation, title generation, paint, compositing, and editing systems into all-in-one packages.’ (2000: 307) Manovich contributes to the emerging annals of new media studies and maps a complex relationship that can lead to the potentials that the field can take: between digital media and the techniques of animation and the avant-garde. In Manovich’s revision of the history of cinema, the digital finds parallels and continuities with the practices of pre-cinematic image making, namely the stylistic specificities and in effect the aesthetics that produce them. As such, cinema supersedes the techniques for the creation and display of moving images found in painting and animation. Distinctively, for Manovich the examination of new media is affected by the influence of cinema as a visual and aesthetic culture of image production, which transcends its definition as a recording media technology. The techniques that the digital offers in filmmaking production bring to light older techniques which were situated in the periphery of cinematic practices.

Sean Cubitt in *The Cinema Effect* (2005) focuses on cinema’s various historical epochs, which he addresses under the principal categories of pioneer, normative, and post-cinema, and primarily examines cinema as an object that produces effects. Importantly, the distinction between analogue and digital is effaced by accepting that the history of cinema is a history dominated by the theme of special effects, such as images and sounds, dimensions, durations, sensations, all of which ‘share a quizzical and oblique relation to reality.’ (2004: 1)

Primarily, Cubitt explores the relationship between the human subject and the object of film as a commodity form through the materiality of mediation, the making and exchanging of media, such as commodities, labour and cinema, in the historical processes of communication. The materiality of mediation is studied through the prism of the historically changing nature of the object of mediation that came into being with capitalism. Thus, ‘to investigate a medium is to analyse and synthesize the historical nature of material mediations

that characterise a period in time.’ (2005: 2) If the (static) image is accepted as a discrete, whole entity, a case of integrity and wholeness, then when the image moves from one to another Cubitt asks: where does the movement come from and when is the moving image? To answer this question, he employs Pierce’s ‘firstness’, ‘secondness’ and ‘thirdness’, an endlessly evolving triad, which in his argument is translated in the interconnections between sensation, cognition and comprehension. Cubitt employs the vocabulary of the digital, the terms pixel, cut and vector to constitute the shot-frame, editing-montage and communication in a triangular relationship that, in his theoretical case, shapes the cinematic object. Yet, what is shaped in Cubitt’s writings is an idea of the transformability and manipulability of cinema, in which different temporalities produced by visual images, social and political contexts, material crafts and technologies, subjectivity, movement and content, all of which take part in the “enactment” of the cinematic object.

In particular, in Cubitt’s thesis, movement is the first special effect of cinema: a temporal event, the emergence of the cinematic time. It is both an experience of the moment – as passing in the present – and an ordering action. The pixel, with a position of precedence over the cut and the vector, is the smallest sample of movement, the frame-line, which separates and differentiates frame from frame and distinguishes the past from the present and the future, what has passed and what will pass, ‘as that the frame itself, the present, appears as their pure difference, the moment of cinematic motion.’ (2005: 32) Accordingly, cinema documents not life (*la vie*) but movement, *le vif*. Cubitt states that ‘Deleting still photography’s claim to truthful knowledge of an external world in favor of a metaphotographic technology of movement, the cinematic event emphasizes that the world is not the object of a cinematic subject, but that both are part of the same process: *le vif*.’ (2005: 19)

In this way, if cinema and the world belong to the processes of movement then cinema does not represent time but originates it. Contrary to the depiction of movement as an effect of realism and an essential model of cinematic duration, his argument abolishes narrative as an essential quality of film. As he argues, narrative arises as a secondary quality ‘from the production of time in the differentiation within and between frames.’ (2005: 38) The frame-line becomes the source of motion, the dark, invisible line that creates motion between the

previous, to the present and the future frame.¹ The reproduction of a reality, a transcendent referent that already exists in the world is – as argued by Bazin, Cavell and Rodowick, who claimed that the automation of movement and duration is dependent on a profilmic event – a record of a specific space and duration. Meanwhile in Cubitt's thesis it is reversed into an argument that situates the external world as an integral element of the cinematic event. Cubitt states that 'I want to prioritize the material of film, the reality of film itself. The filmstrip neither has nor lacks a transcendent origin, whether external or narration, that lies anterior to it. Film and world are of the same matter.' (2005: 39) The dark frame-line situates cinema in a constant process of coming into being as the frames that we see on the screen, instead of the dark frame lines, can be considered as pixels, with the difference that these are not spatial, as in the digital computer, but temporal.

If the pixel is the origin of the cinematic movement and time, the cut recognises objects and their movement in space. The formless instant of the pixel becomes an object 'as we recognise it, shaping the flux of sensations, not yet even identifiably internal or external, into a specific object for the contemplating subject.' (2005: 49) The cut converts the pixel 'into places and objects, organising the on and off screen, the behind and before into coherent worlds.' (2005: 43) For Cubitt the cut in film signifies the power to distinguish what is visible within the frame and what is not. It transfers the focus on the thing that moves within the frame, into identified objects and spatializes the pixel, as the origin of time in cinema, by setting boundaries within and around movement and constructing new temporalities, by the organization of the pixels. The cut constructs objects by defining their spatial and temporal limits. The cut is seen as the organization of elements in the frame.

From the sensation of the event that the pixel signified, to the identification and representation of the object and the subject in organization of space and time that the cut reassembled, the vector signifies the mobile relations and communication between subject, object and the world, and it transfers the cinematic object from being to becoming. Cubitt defines the vector as nuance, 'any quantity that has magnitude and direction.' And continues by explaining that 'Computer imaging uses vectors to define shapes by describing their

¹ Drawing on Brian Rotman and his argument that numbers are elements of a system created by zero (1987), Cubitt claims that the numbers do not depend on the existence of an external world to which they refer to, but, on the contrary, they are rather constructed by zero, the cinematic event does not have a *dependency* on an external world, but a different relationship is constituted between the world and the object of cinema.

geometry rather than allocating an address and colour value to every pixel.’ (2005: 70) Drawing on Emile Cohl’s early animations, Cubitt claims that the vector becomes the transformation, the change that the viewer awaits in a film from moment to moment. The vector produces movement based on relations; it ‘temporalizes space.’ (2005: 72) In this case, it is the activity of the line that matters, anything that can be depicted as line permits the transformation of the image. Thus the screen image carries the double logic of being both an image and an object. The vector identifies the image as a cinematic sign and ‘becomes’, in relation to the viewer’s temporality and also the temporality of the apparatus. Therefore, the unities produced by the pixel and the cut make cinema visible, while the ‘vector takes us one step further: from being to becoming, from the inertial divisions of subject, object, and world to the mobile relationship between them.’ (2005: 71) Cohl’s animated line acquires an autonomy, as it does not have any resemblance with the external world. Untouched by the representation of a world that is familiar, Cohl’s animation creates concepts and divides the viewer from the viewed object, ‘Cohl’s film activates a constant engagement of the viewer in guessing not only “what happens next” but “what is doing now,” inferring the agency of the film itself.’ (2005: 90)

For Cubitt, the relations between the pixel, the cut and the vector are relations of mediation, signification and communication, from the cinematic event that is to say from movement to the cinematic object. Cinema represents, reproduces and generates, in new mutations and in processual becomings. In digital ‘firstness’ is the infinity of possible permutations. If the promise of the pioneer cinema was to create a dynamic relationship between the human and the machine for the creation of a new art, the special, artificial effects in digital cinema evoke ‘the subordination to the machine as consciousness.’ (2005: 256) With the digital, for instance, in the Hollywood cinema of special effects both films themselves and the spectators are addressed as holistic monads and the socialization of the experience is rendered to an individualised experience of the here and now of the film. Digital technologies can offer the possibility ‘to elevate fantasy worlds above the troublesome everyday world.’ (2005: 247) They do not pretend to represent the world, and accordingly they are related ‘to the emergent loss of an ideological structure to social meaning.’ (2005: 250) In this way, the world, according to Cubitt, does not become simulation but the cinema events become a spectacle in which the subject is offered a way of being that is created upon consumerism and virtual needs. According to Cubitt ‘What digital media seem to do – which is not necessarily what they do – is sever the link between meaning and truth, meaning and reference, meaning and

observation. Digital media do not refer. They communicate.’ (2005: 250) Thus, in this argument, digital media create connections and relationships, and it is the materiality of communication that interests Cubitt, in which the construction of subjectivity is created through a ‘subject – object nexus of the commodity, so that we stand in awe of the object nature of the object and surrender to that.’ (2005: 269) But it also includes the materiality of communication as manifested in the external systems of communication, the shift from the multiplex, to video and DVD and viewings in the domestic space of home video. In reverse, through these channels, ‘Digital film proposes a mode of communication in which the central purpose is to create subjects for the object of communication, subjects that exist only to be subsumed into the object, and thus to achieve a plenitude in which no further communication is desired or necessary.’ (2005: 270) In this case, the subject is intertwined with the object, and thus communication does not form a required condition. In Cubitt’s argument, the “new” mode of communication does not annihilate the distinction between subject and object, but the subject is being incorporated as the principle, the purpose of the digital’s agency.

Cubitt and Manovich describe an “internal” evolution of film, as every state of film and cinema appears to encompass the past, the present and the future. From the periphery to normalization, the implication of digital coding in the area of filmmaking becomes a way for Manovich to underline the connections between pre-cinematic techniques and the contemporary composition of images as manually created. Cubitt refutes an object or subject centered analysis of film, in favour of an approach that regards the world, and its political, social and cultural formations, as constitutive of processes and temporalities enacted around film, as film always appears in a process of becoming, which is enhanced by communication.

2.2.3 Simultaneity and Effects of Relocation

The moment of transition from analogue to digital underpins the work of Francesco Casetti, Janet Harbord and Victor Burgin, which emerges from a rethinking of film and cinema not only within the aesthetics of the film text but also in relation to space. In their writings, film is relocated in specific sites that create certain effects on its performance and conceptualization. A common thread between these ideas, film and space are interconnected in a relationship of cause and effect, in which, in a general framework, the focus is on the physical materiality of film.

To start with Francesco Casetti, his extensive work *On Theories of Cinema, 1945-1995* (1999) raises questions about the singularity of the object of film. Films are dispersed in unexpected locations, in a ubiquitous field of aesthetics and communication spread over many aspects of contemporary life. Casetti argues that the instances, experiences and paradigms of cinema change locations and channels of materialization in an extended network of communication, art, nature and culture. The demarcated places, in which film used to belong, co-exist with new platforms of delivery and consumption in a ubiquitous realm of images that move. In his argument, film has always been multiple, as it was placed in heterogeneous locations, material supports and settings. He explains that myriad objects appear and circulate under the single name of film, all identifications of cinema:

For a long time cinema has not been identified with one kind of film: it is the fictional full-length movie, but also an experimental work, an amateur's 8-millimeter production, an ethnographic documentary, a teaching tool, an author's test run. (1999: 316)

Casetti approaches the relationship between subject and object created by the digital in terms of physical settings, which, as we will see, connects with a virtuality of cinema. In his 2011 article 'Cinema Lost and Found: Trajectories of Relocation', Casetti situates the contemporary relocation of cinema in two main areas: that of delivery and that of setting. In the first case, the focus is based on the object itself: the film and *what* we see. Outside the auditorium, 'the film being screened exists, but the environment connected to the screening does not.' (2011: 2) The spectator needs to modify the environment, in order to be able to watch the film. In this way, there is no specific physical space in which a film is watched but rather, as Casetti phrases it, 'an imaginary space' and 'an existential bubble' constructed by the spectator. Yet this experience is fragile and temporary; it can be disconnected by external factors penetrating the imaginary, possibly public and non-domestic, environment. On the other hand, the relocation of cinema takes place under the conditions of the environment and *how* a film is watched. Thus, the 'cinema experience is reactivated far from its canonical locations, not as much because of the availability of an object as because an environment suited to it exists.' (2011: 3) In the case of the setting, cinema is identified with an experience rather than an object. For instance, the screening of various visual contents in a home theatre modifies cinema into a quality attributed to the specific setting and the way we watch a film, a TV series, or a football match. Here, we re-modulate and adapt the object to the situation and the environment, and 'The cinema experience is reactivated far from its canonical locations, not so much because of the availability of an object as because an environment

suitable to it exists.’ (2011: 3) For Casetti, these two paths bridge two questions of *what* we see and *how* we see it and in this way, ‘cinema becomes either the film object, or a way of watching films.’ (2011: 4) Relocation shakes the unity of the identification of cinema as an object and as an experience, as ‘It will be a *filmic experience*, if it leads to the *what*, or a *cinematic experience* if it leads to the *how*.’ (2011: 6) This is, for Casetti, a divided territory: our experience is either filmic or cinematic. Thus, according to his argument, we are dealing with an extended object, unified in perception, but multiple in its enactments in space. In both cases of relocation, Casetti accepts the reincarnation and representation of some kind of essential traits of cinema: an experience in a movie theatre, which he considers as complete or authentic. Hence, the cinematic situation becomes the basic parameter to produce the delivery and the setting of film. In this case cinema becomes a self-evident condition, inhabited and physical, which although extended in situations of setting and delivery needs to be recreated under a particular configuration of experience. Casetti connects the spatial dislocation of film with a canonical and “normalised” idea of cinema, the technology of film and the environment with qualities that have been accounted as cinematic.

On the other hand, Janet Harbord draws on Casetti’s *Theories of Cinema* (1999) in an account of film under processes of evolution and claims that ‘film isn’t what it used to be’. (2007: 2) Nowadays, the material properties of film do not form the categories of what we used to be classified as film since ‘The property of celluloid is now combined or existing in tandem with the properties of the digital in the production of what we recognize as film.’ (2007: 2) Her argument is based on an expanded idea of what film is, since it has escaped the movie theatre. In particular she claims that transformation in the technologies and spatial performances of film produces multiple objects, which are topologically scattered.

Central to Harbord’s project is a reconceptualization of the model of thinking and analysis about ‘what film is’ founded on, deriving from a Deleuzian tradition, ‘what we (film studies, in particular) do with film’. Nowadays that analogue film is transformed and transferred into a digitized flow, the conceptual systems of film theory are subject to change. She argues that film has always been, in a sense, a hybrid, as its transformations have been imagined through ‘a kaleidoscope of disciplinary influence.’ For Harbord the digital seems to be an a-priori multiple, ‘once an object, an affectual experience, and idea/memory, a system of code, and transferable data.’ (2007: 7)

Crucially, Harbord emphasizes the fact that one of the transformations that film undergoes nowadays is, besides the technological, its dispersal across various spaces. She identifies three aspects through which film produces a sense of space. First, film transforms the space that it occupies, since film is considered in her argument as affecting other spaces by providing ‘a portal into another space and time.’ (2007: 36) With film relocated outside the movie theatre, space becomes ‘a curious archive of other place and times.’ (2007: 37) In this argument, film transforms space as depth, by opening it to other spaces and times. Film becomes a window into other worlds that carry their own, different temporalities and spatialities. Second, it is film’s circulation in space that has changed. Historically, the release of film was within a temporal order in which the film was first theatrically released and gradually entered into new windows where it could pass: i.e. the television premiere, satellite broadcast, video and DVD release. This temporal framework has gradually eroded, mainly, as Harbord argues, because of ‘the failure of cinema to perform the role of a critical event.’ (2007: 37). Nowadays, the film release has become a matter of choice between different types of viewing, within different ‘technological interfaces and spatial locations creating the possibilities.’ (ibid) In this way the presence of film in various sites shifts not only our conception of film’s appeal, but significantly our experience of these spaces where film is released. Harbord’s final point stresses the production of space within the film itself which, while an intriguing point, it will not be further examined in this thesis, as it relies on the aesthetics of film’s content.

The transformations that Harbord identifies are examples in which film and space can be considered in a relation to each other and underline the question of film’s emergence as a matter which is changing in every new encounter and experience we have with it. Harbord poses the questions: ‘what if we attribute the filmic past with a life-span, a materiality that undergoes its own transformative duration, without us?’ (2007: 119) and how do we conceive of film in our absence? What happens to film, when no one is there? Harbord investigates the way that we co-exist with the film object. Films, in this perspective, are not only texts to be decoded but they are material objects, in which their dispersion in various sites ascribes different relationships between us and them. She examines these relationships from the perspective of the affectual relationship between the human and the nonhuman, in which the emotional reaction to the stimuli of film occurred before the processes of consciousness, and moreover, from the point of film’s relationship with contingency. Cinema and modernity are characterized by both control and appraisal of the contingent, the chance, the ephemeral.

(Doane, 2002) Approaching Doane and her study of contingency in early cinema and the era of modernity, Harbord traces the contingent as a defining attribute of cinema, which re-emerges in the present across different the media forms in which film is situated. Thus

...the fundamental attribute of cinema is the processing and production of time within this paradigm: time becomes, in the cinematic form, both fluid and without meaning, and crafted into a unit meaningfully designated as leisure. Cinema works through a paradox, that it recognizes the contingent as a disruptive and affectual force, whilst simultaneously harnessing contingency to a cathartic end'. (2007: 124)

In the digital era, Harbord reinserts the contingent in the dispersion of film in multiple spaces, as it is relocated in various technologies and contextualized in spaces outside the movie theatre, in which, as Harbord argues 'our encounters with film may reside in indeterminate contexts.' (2007: 126)

By employing the concept of affect, film is not only a text or representation to be decoded, but a technology, matter and medium that produces affects. With film, as she states, we are undergoing an exploration of ourselves as it is changing its form. Harbord explains the paradigmatic shift from effect to affect, as effect is derived from the model of social constructivism, according to which the non-human world is a construction, relying on the experience of the world through the language. The effects that film has are socially constructed. But for Harbord the problem with the model of effect rests on the fact that it does not give to the non-human world any dynamism or alterity. In opposition affect 'works from a different foundation, where the alterity of the non-human (including film), is irreducible to human experience.' (2007: 120) Importantly, for this thesis argument, Harbord draws on the agency of the technology of film in relation to the production of space. Yet for her this is based on the contingency involved in our unexpected encounters with film. The case studies of this thesis will show that the situated practices operating film – although they can be subject to contingency and change in relation to technological and material shifts of the versions of film they are enacting – make film visible and empirically knowable.

Victor Burgin also underlines the spatial relocation of film, although in relation to an appropriation of temporality. For Burgin our everyday encounter with the environment of media is characterized by 'random juxtapositions of diverse elements across unrelated spatial and temporal locations.' (2004: 14) Burgin's search for film exceeds the grasp of theory. He refers to the voluntary and involuntary practices in which a film can be broken down. Instead

of moving around the object of film, Burgin draws on the way that moving images fragmented and dispersed are specific to the location and practices of the human memory.

The inviolable object of film, which in the past few people had the possibility to countermand its order, has become possible to be altered and fixated by the viewer, subject to the new possibilities that the digital technologies and their practices offer. For Burgin, the arrival of the domestic video cassette recorder – and now digital video editing – has created a range of possibilities for dismantling and reconfiguring the inviolable object of film, which was once able to be manipulated only in the setting of the movie theatre or the editing machine of a film production. According to him, nowadays different kind of dislocation and reconfiguration from the decomposition of the narrative film's order is also taking place, one that is not related to the intervention of the spectator, but is to be found in the scattering of the multiple objects that we name as film, across time and space.

Referring back to his book *In/Different Spaces: Place and Memory in Visual Culture* (1996) Burgin notes the spatial extensities of the object of film, and at the same time its fragmentation. A film is fragmented as it is re-located in different materials and places, and thus it does not perform as a concrete object to be viewed in a specific setting at a specific time. He argues for the dispersion of film in everyday life in various forms and means of communication. Hence,

A film may be encountered through posters, “blurbs”, and other advertisements, such as trailers and television clips; it may be encountered through newspaper reviews, reference work synopses and theoretical articles (with their “film-strip” assemblages of still images); through production photographs, frame enlargements, memorabilia and so on. Collecting such metonymic fragments in memory, we may come to feel familiar with a film we have not actually seen. Clearly this “film” – a heterogeneous physical object, constructed from image scraps scattered in space and time – is a very different object from that encountered in the context of “film studies.” (1996: 22)

Critically, for Burgin these spaces compose a ‘cinematic heterotopia’: ‘the variously virtual spaces in which we encounter displaced pieces of films: the Internet, the media, and so on, but also the psychological space of a spectating subject that Baudelaire first identified as ‘a *kaleidoscope* equipped with consciousness.’ (2004: 10) And he continues, explaining that ‘although set apart from the habitual habitat, heterotopias nevertheless have multiple relations with other sites.’ (2004: 10) The theorist points out that the examination of film by film theory excluded the ‘space formed from all the many places of transition between cinema and other images in and of everyday life.’ (2004: 10) But the fragmented object that Burgin refers

to is located within a cinematic heterotopia. Drawing on Foucault's concept of heterotopias, Burgin argues for an understanding of a fragmented object located in relational sites: both external and material, and internal, namely within the realm of fantasy, dream, imagination and memory. Drawing on Barthes, Freud and Vygotsky, Burgin argues that the 'oneiric aspect of cinematic heterotopia is a matter not only of forms but of contents.' (2004: 15) The inner world and its external surroundings are constitutive of each other within a temporality independent of linear time. Recollection of a film, or sequences and fragments of a film could be done both voluntarily and involuntary, as provoked by external events.

Thus he presents ways in which a film can be broken down, while it is dispersed in different media and delivery systems in our everyday environments. The disjointedness, dislocation and dismantling of the film object is related both to the way that films are unfolded in different contexts and media: trailers, posters, theatrical releases, but also to the way that narrative forms, disjointed mutations, sequences and the arrangement of sequences of a film become representations of film in publicity systems, such as reviews, trailers, or QuickTime.

Burgin explains that in the contemporary environment which is saturated by media, the juxtaposition of diverse filmic elements in different spaces and in different locations can be compared with processes such as Freud's "day's residues", phenomena from everyday life that enter into the subject's dream, mainly as mental or visual images and unconscious fantasies, composed by minimal sequences, typical of the reiterative fractional chains. Drawing on this point, he sought to explain how 'personal memories and fantasies will provide the narrative kernels and principles of organization of any more or less coherent structures that emerge within this field.' (2004: 15) Thus, Burgin focuses on the cinematic heterotopia through the remembered film, a process of disjointness which is reflected in the object of film in dispersed platforms of circulation and environments of production. However, recalling films that he has watched in his childhood or "creating" films just from the images, the posters and the trailers that he has seen, memory becomes an environment of production, of both the collection of images and recollection. Accordingly, the associations of elements, of images that appear in our lives and in our daily activities, are in our memories processes that happen voluntary or involuntary. Mental images derived and recollected from films can be provoked by external events occurring in the form of, as he emphasizes, voluntary or involuntary associations. Thus Burgin contradicts the processes of memory with the contemporary saturation of media representations which seem to exist only in the present:

In the storm of representations that rages in contemporary life, the forms of continuity that were once inhabited from the inside (lived as “traditions”, or other practices of everyday life – whether to be conserved, modified or rejected) are dissolved in a mediatic solution of perpetual contemporaneity, as if the only modes of inhabiting the worlds were live transmission and instant replay. (2004: 21)

For Burgin, although films are physically removed and relocated in digital platforms, there is the place of memory in which they continue to live on in a new form of associations and thus maintain a certain kind of presence. From the moment of human agency, described at the beginning of his argument, Burgin moves into the relationships between technologies and physical things, such as physical movement or location and the mechanisms of human perception. Burgin names his earliest memory of a film a *sequence image*, ‘a transitory state of percepts of a “present moment” seized in their association with past affects and meanings.’ (2004: 21) In the current mediated environment of contemporaneity, human memory stands as a site in which places, images and film extracts can be woven together and joined from the past to the present through processes of involuntary recollection.

2.3 Temporalities of Film and Cinema

The theoretical enactments of film described previously contain and articulate certain kinds of associations and motions between film and cinema. In the search of methodologies, ontologies and epistemologies of apprehending and talking about film, these theories recognize and connect with multiple manifestations of cinema. For instance, in a brief summary, Bazin theorized cinema as a conceptual phenomenon, an imagination, a myth to be actualized by a ‘total’ representation of reality. In Rodowick’s theory, if film moves from a photochemical to a mathematical process, the digital is questioned in its ability to capture cinematic duration. In Manovich’s writings, cinema is encountered in the techniques and styles of image, by which making digital cinema does not form an indexical media technology, but a sub-genre of animation. Whereas Casetti discusses cinema as a relocated entity, which in its various localized new environments is related to, and compared with, an “original” experience of viewing film to that within the movie theatre, Burgin introduces the term of the cinematic heterotopia, which refers to the virtual and actual spaces in which we encounter disjointed pieces of film and focuses on the remembered film through memory’s processes of collecting and recollecting film images. In these accounts, cinema resides in

human minds, but also in different contexts and situations where it intermingles with intentions and memories. The theorists describe different presentations of cinema attached to past experiences, actions of recollection, material mediations and emphasise each time a change or transformation of what cinema is or could be can occur. To consider the theoretical but also the practical enactments of film in relation to cinema, this thesis draws on the work of Henri Bergson. In particular my project draws on the philosopher's concept of intuition that he proposes as a method of knowing an object.

In Bergson's (1999 [1912]) philosophy of metaphysics, there are two ways of knowing an object. The first is the relative way, which depends on the point of view in which I am placed and the symbols and signs I use to express this object. This is an external approach to the object, which is based on representations of the object. The second is the absolute, the metaphysical way – in the case that it is possible – when I enter into an object, when I am experiencing an object from the inside. This is the process of intuition, which is a direct act or a set of acts, of the cognition of an object's reality. Intuition is a different way of apprehending a thing, which moves from external symbols and analysis to the internal, an act that makes it possible to think about objects in terms of duration. With intuition, we do not know a static object, stable and schematized by symbolic representations, but an object in its duration, in Bergson's words 'a becoming which is not the becoming of any particular thing, and this is what I have called the time the state occupies.'(1999 [1912]: 23) Duration, in Bergson's philosophy, is equaled to different entities such as memory, movement, artistic and biological creation, and in the context of this thesis duration will inspire us to think about film and cinema in terms of transformation, change, movement and becoming and intuited acts.

Engaging with Bergson's philosophical thesis makes possible a way of knowing something else about film, or a new way to know film not through representations, that is to say objective images and symbols, but through the private and subjective way of knowing an object from the inside, within the forces of its own agency and temporality. If we undertake film as a durational entity, in the way that Gilles Deleuze in *Bergsonism* explains intuition not as duration itself but 'rather the movement by which we emerge from our own duration, by which we make use of our own duration to affirm and immediately recognize the existence of other durations' (1991:33), then it is positioned into dynamic movement, action and change. The actual practices as described in the following chapters which enact film can present

different, multiple traces, instances and presences of film as an actualized becoming. These do not enact essences of film, static representations, but multiple states, moments and processes of film.

With the advent of digital technologies, but also with the internal life cycles of analogue media, it becomes apparent that matter itself carries complex temporalities. Both analogue and digital technologies exist as processes rather than products. Temporalities are woven into different levels of their materialities, from the ageing and dissipation of the photochemical film strip to the digital networks of film distribution and the screen image produced by the moving electron beam. This thesis suggests that the technological and material enactments of film carry their own time, which is manifested in locations and it is retained not in human consciousness, as Bergson (2001 [1913]) makes the distinction between the human consciousness' capacity to grasp duration and the relation of objects to it, but in the dynamic relationships of the environment, context and agency of materials, including the human subject.

Bergson (1988 [1912]) claims that matter resolves itself in numberless vibrations and sensations that are related to each other in an uninterrupted continuity. In particular in *Time and Free Will*, he describes the conception of matter in these words:

When we speak of material objects, we refer to the possibility of seeing and touching them; we localize them in space. In that case, no effort of the inventive faculty or of symbolical representation is necessary in order to count them; we have only to think them, at first separately, and then simultaneously, within the very medium in which they come under our observation. (2001 [1913]: 85)

In these terms, it is intuition, rather than symbolical representation, that becomes a way to deal with matter. In this thesis, the materiality of film is to be known through the hands of the practitioners and through the sensations of sight and touch. Through the praxiographies of knowing film, materiality, which is associated with unchangeable, fixed qualities is opened up to the often temporal forces of transformation and change.

In particular, in this praxiography – where the attention lies on actual, workflows of practices, analogue and digital projection, film distribution by physical means, material restoration and installation – there is something broader and inclusive disclosed, recognized and attached to them, which is related to cinema. This thesis employs Bergson's concepts of movement, continuity and change to theorize the relationship between film's material enactments and the

cinematic, as something lived, experienced, remembered or intuited. Cinema appears to continuously move as an idea, a memory or an experience that in the case studies of this thesis is already past, it is redirected in the present or it creates new lines towards the future. Simultaneous to the actualizations, the materializations of film, the temporal instances (momentary or long lasting) in which film comes into being and then disappears, bring into existence the becomings of cinema, which are based in time. The idea of cinema as duration, as change that encompasses the past and moves towards the future makes the material enactments of film in processes of transformation provisional instances.

The case studies capture and foreground qualities and tendencies rather than specific and singular objects and technologies of cinema, associative with pre-existing conceptualizations and informative of new possibilities of cinema. The practices become ways, methods of apprehending cinema. These are not based on cinema through theoretical observations, but as acts of intuition. As we will see in the descriptions that follow, the enactments of film are related with different, multiple ideas of cinema viewing environments and experiences in mind. The actualizations of the cinematic in the material enactments of film involve temporal creations of ideas of cinema, as differentiation and heterogeneity. Duration is employed as a concept, an idea that can contribute to the examination of the nature of time and evolution/continuity of cinema, in which the object of film creates different instances of the cinematic, which do not translate to image aesthetics or film narrative, but to viewing experiences, or audiovisual conditions, temporalities of analogue materials and instances of images' transmission, or the origination of new durations.

2.4 The Object is Multiple

So far this chapter has presented the entity of film in theories as complex and multiple, displacing and replacing qualities and elements of film differently, from one theoretical practice to another. Mol states that the problem of 'what an object is' is not a matter of perspective, instead objects are "done", enacted rather than observed. She shifts the focus from epistemology to ontology and claims that multiplicity is a property of things, as it

... is possible to refrain from understanding objects as the central points of focus of different people's perspectives. It is possible to understand them instead as things manipulated in practices. If we do this – if instead of bracketing the practices in which

objects are handled we foreground them – this has far reaching effects. Reality multiplies. (2002: 4-5)

In the field of STS and ANT, multiple entities can be placed under the category of the object: a disease, a water push pump, methods of agriculture, a mixture of natural, human, technical, social objects. Mol examines an organic entity, the disease atherosclerosis as an object which acquires identity, shape and ontology in technological, material, actual practices.

In Mol's account the body is where the disease of atherosclerosis is located, but the disease is also located in the materials, practitioners and devices of different medical sections, such as the clinic or the pathology department. In these sites, atherosclerosis could be claudication, the medical term for the pain in the legs that patients report to the physician. It could also be the thickening of the intima of the vessel wall, a diseased artery that can become visible under the microscope. These are only two of many more versions of atherosclerosis. According to Mol, the human body and disease is materially and socially connected with the surroundings of the sites where it is examined, including the technicians, doctors and technologies operating in the departments where the disease is diagnosed and treated. She explains:

... atherosclerosis is an encroachment of the vessel lumen and a thickening of the vessel wall – in the department of pathology, under the microscope, one a bit of artery has been cut out of the body, sliced, stained, and fixed on a glass slide in order to judge an intervention. But in the outpatient clinic, when surgeons face the question of 'what to do?' atherosclerosis is something else. It is pain that occurs after a certain amount of exercise, pain when walking. It is a poorly nourished skin of one or even two legs, and it is bad pulsations in the dorsal foot artery. The praxiographic is not universal, it is local. It requires a spatial specification. In this ontological genre, a genre that tells what atherosclerosis is, is to be supplemented with another one that reveals where this is the case. (2002: 54)

For the philosopher, the question of ontology is not one of finding truth but of how objects are handled in practices. And it is within this shift that the philosophy of knowledge acquires an ethnographic interest in knowledge practices. She accentuates that:

If practices are foregrounded there is no longer a single passive object in the middle, waiting to be seen from the point of view of seemingly endless series of perspectives. Instead, objects come into being – and disappear – with the practices in which they are manipulated. And since the object of manipulation tends to differ from one practice to another, reality multiplies. The body, the patient, the disease, the doctor, the technician, the technology: all of these are more than one. More than singular. This begs the questions of how they are related. For even if objects differ from one practice to another, there are relations between these practices. Thus, far from necessarily falling

into fragments, multiple objects tend to hang together somehow. Attending to the multiplicity of reality opens up the possibility of studying this remarkable achievement. (2002: 5)

In her research the object is being enacted, performed, 'done' and this process has far reaching effects: reality is performed too, and thus it is multiple. Radically enough, Mol argues that not only are objects multiple but so are realities, 'like human subjects, natural objects are framed as parts of events that occur and plays that are staged. If an object is real this is because it is part of a practice. It is a reality enacted.' (2002: 44)

Mol's work derives from the socio-material field of Actor-Network Theory (ANT). Developed by Michel Callon, Bruno Latour and John Law, the theory emerged as a critique to traditional sociology that overlooked the role of the material in the construction of the social. John Law characterises ANT as:

a semiotic machine for waging war on essential differences. It has insisted on the performative character of relations and the objects constituted on those relations. It has insisted on the possibility, at least in principle, that they might be otherwise. Some, perhaps many of the essentialisms that it has sought to erode are strongly linked to topology, to a logic of space, to spatiality. (1999: 7)

Topology concerns itself with spatiality, in particular with the qualities of the spatial that secure continuity for objects that are moving through space. In the framework of topology, spatiality is not fixed, it rather comes in various forms. ANT is interested in the practices of materiality and relationality that exist in the world. Objects do not naturally exist anywhere in particular; they can be here and there, in many realities and locations at the same time. Thus, relations and realities are not real until they come into being, as realities have status and standing through temporal – momentary or lasting – processes of production and reproduction. Law argues that the field of ANT conceptualizes materiality as 'a thoroughgoing relational materiality. Materials – and so realities – are treated as relational products.' (2004: 83) The heterogeneous and intermediate relations of production and reproduction of object and realities are constantly and precariously formed and reformed. For ANT, even ideas are set parts in this form of relationality that produces objects, sites and realities. It is through processes, in which every piece of the relationality needs to play its part, and this constitutes these processes precarious. Instead of things or substances, relations are the fundamental elements of reality.

Mol approaches the object of her study through a praxiography, a method based on practices. Since practices are heterogeneous and precarious the disease is enacted every time differently, as ‘no object, no body, no disease is singular. If it is not removed from the practices that sustain it, reality is multiple.’ (2002: 6) According to Mol’s praxiography, the cases made about an object are situated in specific sites. And within different sites, practices need to be *foregrounded* rather than *bracketed*. Objects, sites and realities step aside from inherent, essentialist qualities. Thus, according to Mol:

ontology is not given in the order of things, but that, instead, ontologies are brought into being, sustained, or allowed to wither away in common, day-to-day, sociomaterial practices... Investigating and questioning ontologies are therefore not old-fashioned philosophical pastimes, to be relegated to those who write nineteenth century history. Ontologies are, instead, highly topical matters. (2002: 7)

Mol’s ontology in practice moves from a singularity as the enactment of a singular object to multiplicity and difference. Objects are not unified entities, existing in and of themselves; they exist in multiple situated practices; the practices in which an object is enacted manifest the primacy of an object’s and a reality’s multiplicity.

Examining and understanding the material, technological but also institutional, industrial and artistic objecthood of film materials through the application of Mol’s theory, this thesis understands film as an entity with a practice-based nature. Attending to the specificities of film, the objecthood of film is revealed: a technological, material object with a life of its own, which, as we will see in the case studies, ages, ceases to exist, dies and it is restored, acquiring new birth through digital materials. The object of film, examined through the application of Mol’s theory, is not passive, it is not only mechanical in operation, and calculable, it also carries an active materiality, it is an animated matter, able to change, in movement and transition, in different shapes and different treatments, manipulations and enactments. Film is not seen as a mechanistic or deterministic material, instead as an object that carries instances of life within the mechanical and technological world. Film does not exist outside of its practices.

2.5 The Film Multiple

This thesis argues that there is not only an objective, public and scientific way of knowing film from the “outside”. There is also a way of knowing the object of film from the “inside”, in private settings, personal encounters and discourses attached to specific institutions. Therefore, instead of being perceived, this thesis proposes an object that it is enacted. That is to say, instead of investigating solely knowledge practices, articulated in words, books and images, this project privileges the praxiographic study of film. The method of praxiography does not singularly locate knowledge on theorists’ minds and the way that they write about film and its technological transition. Instead it focuses mainly on knowledge produced in activities, events, procedures, operational shifts, material and physical exchanges between analogue and digital technologies.

In this study of film through its spatial mediations, based on circulations involving the movement between screens and distribution modes, which are points of action and location for film, the idea of connections and relations becomes pervasive. The enactment of materially heterogeneous relations produce and reshuffle all kinds of actors including machines, organizations, geographical arrangements (circulation and distribution of films), ideas and theories about film and practitioners. Therefore, this thesis seeks to enact particular versions of film, not different perspectives on the same object, something that Mol is rejecting, but particular objects and realities of film, which could be relational and/or differential with each other, thus multiple. Through this method, time, sites and objects are considered as having their own agency and a multiplicity which ascribes change, newness and novelty, for instance new automatisms, transformative materialities and practices.

Thus, this thesis examines film not as an object that carries essences, specific, single and stable identit(ies). It does not examine film as an artistic or aesthetic object within the context of content and representation, and which is challenged or changed by the incorporation of new media. The ontology of film as multiple within different sites and different practices is the hypothesis that this thesis undertakes and argues that the enactment of film’s reality in practice makes possible to examine and theorize film in different forms in different places, as its practices generate their own material realities of film.

The research conducted in the specific institutional sites narrates stories about how film is worked, manipulated, invented, collected and archived, and multiplied in various

technological materials and temporalities. The focus shifts from a search for film's pure and stable qualities to relations, partial connections, enactments and co-existences. As we will see, the technologies do not follow a teleological path, or distinctive roles: they have the capacity to be constantly transformed in their shape and action and simultaneously to transform each other. Thus this study describes the ongoing enactments of film, suggesting that if there is no enactment, if there are no local practices, there is no effect, film does not act and it ceases to exist.

Therefore, the question of the location of film, "where is film?" takes on another dimension, which puts forward location not as a fixed co-ordinator, an explanatory variable but within ontological terms, as a multiple and changeable variable. In a moment where film continuously changes positions, moves and occupies new spaces, new practices for itself, the positions and locations need to be reconsidered and explored. In the case of film, screens, inscription devices, digital tools and analogue materials impose their own form of spatiality in the sites in which film exists. These forms of spatiality enact particular logics of position, relationships and enactment. Position and location are seen as effects, rather than as causes in the enactments of technologies.

Cinema and film in transition entail change and continuity simultaneously. In the duration of cinema multiple events are taking place in different locations in space. The transition from analogue to digital signifies an important movement, within the context of technological advancements. The Bergsonian concept of duration connects with the emergence of something new. Duration equals with the heterogeneous flux and becoming. Duration is always irreversible and continuously creates newness and novelties. The becoming can be apprehended by true empiricism, that is to say by the action of intuition as a continuous, changing process. From the flux of cinema as experience, film's theoretical enactments take only instances of it, individual, discrete images and happenings, located in specific regions of theoretical areas and fields. Bergson directs us to the temporal dimension of existence, in which each new moment is the emergence of something creative and new. By employing this kind of approach to my project, my research reflects on the duration of the experience of cinema. Therefore, it credits film with simultaneity and cinema with a time that endures. In particular, the local enactments of film present a temporal moment, where the transforming nature of cinema is revealed in different spatial contexts, which also indicate different temporal rhythms. That is, the spatial fragmentation and proliferation of film suggests the

manifestation of a variety of duration(s). The spatially fragmented multi-mediated film calls for a re-conceptualization of cinema, which goes beyond analogue film in an expanded network of systems, relational technologies and overlapping spatial manifestations. If cinema is becoming then film as an object that moves and changes from its position in analogue and digital materials, from one location to the other, from one projection to another, causes change to the duration of cinema.

This project argues that we cannot take anything as given, we cannot trace the essence or the defining properties of analogue or digital technologies but rather we must accept that everything is an effect of relationships and relational practices. Through the filter of ANT, this project abandons the purified –pure identity – and essentialist categories, the demarcated contours of episteme for an understanding and acceptance of realities and objects as multiple, through interrelated forms. Thinking film as a multiple object, dissipates the appropriation of film as singular, as something self-evident or isolated, to be simply watched or theorized. Film studies could recognize that what it has to offer is not a knowledge of a singular entity, but a range of relational interventions into systems that include technologies, contexts and concepts, ideas. Even the gaze and perspective of the theorist involves some kind of manipulation of the object of study. By arguing that the object is made and remade continuously in the set of relationships that it finds itself within, we are not dealing with absolute truths, we are not dealing with realities and representations of realities as facts that exist and get enacted separately. However, the *film multiple* does not only situate concerns about the theory's epistemological tools. Film is not only epistemologically complex it is also ontologically multiple. Dealing with the materialities of specific practices, you discover difference. The emerging question to be asked is how this difference is done. Thus, it is pertinent to explore how practices enact ontologies, even if these are ephemeral and changeable from time to time, from moment to moment. The emphasis on micro studies is based on relational effects, while at the same time the focus on the macro of cinema is also part of precarious effects that alter with changing technological and material relationships.

Chapter 3. Methodological Accounts on Actor-Network Theory

3.1 Introduction: From Representation to Practice

When the discipline of film studies contemplates film, it does not refer to one but to many films which, although they are differently enacted from each other, their discussion implies a unity that can be named “film”. John Mullarkey describes a relationship between film and theory by stating that ‘each of our theories is part of film, immanent to it rather than representative of it – a part that is trying to think the whole of film, to tell us what really is.’ (2010: 192) In the previous chapter, under the name “film,” different, heterogeneous qualities and entities are ‘coming into being’. These include the analogue film and its indexical connection to reality (Bazin, 2005 [1967]; Cavell, 1971), and the way that this figuration is challenged by the advent of the digital (Rodowick, 2007). Neither the archaeological connection of digital image making with pre-cinematic analogue techniques of animation (Manovich, 2000), or the dialogue and similarities between analogue and digital through the triad of the pixel, cut and vector (Cubitt, 2004), suggest essence or purity for analogue and digital media. Lastly, the digital film acts as a relocated and fragmented entity in different, actual (Harbord, 2007 and Casetti, 2011) and virtual (Burgin, 2004), spaces. If the world and its materials are relational, as ANT claims, then the theoretical texts are also relational, as ‘they come from somewhere and tell particular stories about particular relations.’ (Law, 2009: 142) The theorists addressed do not give an account of the same, singular and immutable object. Instead, the object of their studies is enacted differently based on the relationships that they decide to make present. The previous chapter articulated the conceptual practices of each investigation of film as theoretical enactments of specific realities.

In the theoretical claims about film and cinema examined in the Literature Review chapter, writing becomes constitutive of meaning and of knowledge in the enactment of film. Undertaking a materialist-semiotic approach, language, theoretical knowledge, practices and materiality are mutually constitutive. By shifting the concept of “representing” realities to “doing” realities, we are not only dealing with epistemology, but with ontology, we are in the realm of the real. Asking the question “what is film?” in the midst of the technological transition from analogue to digital technology is a way of shifting the ground on which questions about the reality of film might be posed. Persistently foregrounding practices

changes the appropriation and appreciation of film as an acting agent. Observing and watching eyes are still important, as Chapter Five of this thesis will discuss, but they are joined by manipulating hands, machines and technologies.

Crucial for this thesis, Annemarie Mol's (2002) examination of the disease atherosclerosis in different departments of a single hospital suggested a different way of knowing an object. Instead of focusing on an objective, scientific way of knowing the disease from the outside, emphasis could be put on the inside, on the way that the object of the disease is practiced: sliced, cut, talked about, measured. Here, the term practice denotes the actions of enactment, the making and the unmaking of objects, as they are done, both theoretically enacted and practically acting. The term has a temporal, ephemeral aspect and refers to the specific moments and locations, in which enactments are taking place and in which objects are coming into being and then disappear. Accordingly, it is possible to understand film from the inside of particular locations, projects, practical enactments, as it is manipulated by artists and exhibited in the site of the gallery. As it is checked and archived in LUX, restored at the BFI Archive, projected in the gallery and the Renoir's projection room and disseminated as information in multiple locations, through Curzon Cinemas' 'On Demand' video service.

3.2 Subject and Object Relationships: The Formation of Realities

This study engages with Mol's praxiographic approach to defend a practice based understanding of film material and technology in transition. Film is available to be analysed as an ongoing process, which transpires through situated, local activities. Film can be conceptualized as part and bearer of these activities and can refer to the socio-material dimension of its practices. As film emerges everywhere, in day-to-day activities, spaces and devices, the material and the spatial dimension of film becomes an important element to be examined and theorized. In practices film as a material and technological artefact is emphasized. This dimension could be fruitfully researched in the presence of film materials and technologies in specific institutionalized practices. As a large amount of theoretical work has been focused on practices of film production and perception, the intermediate stages of film distribution, projection and archiving have enjoyed less attention. The sites under examination in this thesis can become paradigms of the chance and probability of intervention and performance that constitute the conditions of possibility for the object of film to be understood as multiple. That is to say the diversity of practices that exemplify the

examined sites, present multiple versions of reality that different tools, professionals and contexts help to enact.

Practices bring about film as a specific and simultaneously multiple artefact. The praxiographic approach that Mol proposes identifies the multiple nature of objects with the multiple nature of practices, according to which they are handled. In the non-humanist, post-structuralist field of ANT studies the examination of heterogeneous relationships between society, organizations, agents and machines has been aligned with the production of socio-material networks linking diverse human and non-human actors that compose an array of effects in the performance of objects. ANT is interested in the ways that elements of a “network” take their shape in more or less precarious relationships with one another. These elements could be: people, technologies, documents, knowledge, phenomena, all of which are effects of their relational interactions. Crucially, instead of asking “why things are happening”, ANT asks “how they are happening”. Specifically the theory asks how relations between actors are coming together – even for an instant – in particular locations. John Law gives an explanation and definition of the origins and framework of ANT with the following:

Actor-network theory is what resulted when a non-humanist and post-structuralist sensibility to relationality, materiality, process, enactment and the possibility of alternative epistemic framings bumped into the theoretically informed, materially-grounded, practice-oriented empirical case-study tradition of English language STS. (2008: 632)

Within the context of STS Bruno Latour (1993) has claimed that modernity has been established upon official classifications articulated in separate guarantees between the non-human – nature and technology and the human – society. According to Latour, these distinctions retain un-presentable and unthinkable and that the construction of systems is not based on processes of purification, on the distinction between nature and society, human and thing, but instead is based on processes of mediation that mix a range of actors, politics, technology, society and nature. These systems are “hybrids”, networks that combine the human and cultural with the natural world, the subject with the object, the macro with the micro in a continuous web, which is a priori not stable and permanent. Within this approach, society cannot be defined only by the social, but in the interrelations of multiple actors which can be human and non-human, social and technological/material.

In ANT’s terrain, both humans and nonhumans are treated symmetrically. They can be actors and attain symmetrical agency within a network, in which they assume identities according to

the strategies of their relations and interactions formulated in specific settings. Similarly, for Annemarie Mol the distinction between subject and object is reformulated in the field of practices which involve both actors and enact objects that are ontologically multiple, continuously performed, manipulated and changing, and often occupying different simultaneous realities. These practices can include a wide range of actors, ‘molecules and money, cells and worries, bodies, knives and smiles, and talks about all of these in a single breath.’ (2002: 157) In particular, Mol addresses the distinction between subject and object, based on two realms: the distinction between the human subject and the natural or technological object and the distinction between the knowing subject and the object that is known. The first relationship is based on the performance of identity for both subjects and objects. Mol draws among others on Judith Butler’s (1990) performance of gender identities and on Charis Cussins’ (1996) ‘ontological choreography’, to build the argument that ‘like (human) subjects, (natural) objects are framed as parts of events that occur and plays that are staged. If an object is real this is because it is part of a practice. It is reality enacted.’ (2002: 44) The second relationship is articulated through a separation established by the modern episteme of medicine, between the position of the physician as a knower and of the silenced patient/corpse as the known object. Mol argues that this epistemological distinction is resolved when attending practices, in which knowledge ‘does not reside in subjects alone, but also in buildings, knives, dyes, desks [and] in technologies like patient records.’ (2002: 48) Crucially, Mol makes the suggestion that instead of focusing on knowing subjects, we may talk about realities, enacted in practices.

In film theory, the object has presented itself as it is performed and as part of film experience. It has been enacted primarily by placing the film on a projection device and fulfilled with the presence of a viewer that experienced an aesthetic and durational phenomenon. Technologies do participate in the way that theorists stage the artistic, phenomenological or historical qualities of film. Through the technological performance of film, theorists express ideas about its identity as a phenomenon that causes effects: for instance (and drawing on the literature review chapter), the reproduction of reality, the construction of subjectivity, the production of special effects. By following Mol’s practical enactment of objects, and by placing technologies on stage, as the primary stand of examination, the performance of the film object’s identity is constituted in and through these materials, not as something given, but as something practiced, which is enacted depending on what is happening in localized practices. The film strip, the projection machine and the screen do seem technologically,

fundamental elements of the film object, yet when we are focusing on the local enactments of film, we see that they are not enough, or they are not the only isolated elements to mark the reality of film. The materials of film need to be practiced by human subjects in relation to institutional structures, orderings and objectives that define and constitute them. The focus on the heterogeneous relationship between the film object and institutionalized practices brings about new knowledge practices around film, while it re-articulates and re-constitutes traditional theoretical ideas and standpoints around film.

This project aims to talk about film and the relationships between the subject and the object, between film theory and film technology, about the world of ideas and the world of matter not as distinct but as allied, co-existing and constituted together in action. In the case studies of this thesis, this is shown and done by the analysis and empirical observation of both human and nonhuman actors in the series of relational sites and institutionalised enactments. This project de-contextualizes the object of film from our everyday life and our multiple encounters with it through diverse delivery platforms and screens and re-contextualizes it in institutional and standardised practices, in which the technological merges with the cultural, institutional and historical aspects of the locations and their appropriation by theory, and posits the human, the technology and the site as actors within local enactments. Undertaking this kind of relational approach between object and subject, this study examines film as a hybrid object, performed by the human subject, the practitioners (the hands of the practitioners) and also the viewers, and the technological arrangement of the object.

3.3 A Material Semiotic Approach

ANT's theoretical and methodological framework is inspired by a post-structuralist version of semiotics. As structuralists claim that there is something universal in the relations of difference within the arbitrary nature of language, post-structuralists claim that there are different structures enacted in different social locations. These social locations create different kinds of objects and moreover, different forms of knowledge about those objects. John Law suggests Foucault's account of the body as the obvious example of this transition in semiotics. In Law's analysis of *Discipline and Punish* (1979) he explains that 'in the classical episteme the body is a site for the enactment of symbolic power relations (for instance in the form of torture), while in the modern episteme it is turned into a functional and (self) disciplined machine, a structured set of ordered and productive relations.' (2002:

91) The notion of semiotics, in the material semiotic approach of ANT, explains the power of representation to create objectified images of processes and scientific facts. In ‘A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies’ (1992), Bruno Latour and Madeleine Akrich define semiotics as:

The study of how meaning is built, but the word “meaning” is taken in its original nontextual and non-linguistic interpretations; how one privileged trajectory is built; out of an indefinite number of possibilities; in that sense, semiotics is the study of order building or path building and may be applied to settings, machines, bodies, and programming languages, as well as texts; the word socio-semiotics is a pleonasm, once it is clear that semiotics is not limited to signs; the key aspect of the semiotics of machines is its ability to move from signs to things and back. (1992: 259)

The semiotic turn in science studies addresses a movement away from knowledge dominated by theory to a production of knowledge in day-to-day scientific activity to which theory only becomes one aspect. As Timothy Lenoir states, the material semiotic approach calls attention ‘to both the materiality of the text and a materiality beyond it.’ (1994: 2) The materiality beyond the text invites us to put emphasis on skill, craft and tacit knowledge, in an account of science ‘as a disunified, heterogeneous congeries of activities.’ (1994: 2)

For instance, Latour and Woolgar’s *Laboratory Life: the Construction of Scientific Facts* (1986 [1979]) a key research for the formulation and development of ANT, established a new field, that of the ethnography of science, which focuses on the materiality of the laboratory, its physical and architectural organization, its practices and its apparatuses. Through ethnographic research, Latour and Woolgar investigated the official accounts of scientific methods by following day to day practices, tasks and activities in the Salk Institute for Biological Studies in San Diego, California, where they sought to understand the world of the scientific laboratory as presented to an outsider: not a scientist but a sociologist. *Laboratory Life* takes a similar approach to the Sociology of Scientific Knowledge (SSK), a field of study that emerged in the early 1970s and focusing on science as a social process. SSK set aside the reductive reasoning of normative philosophical standards and suggested that scientific knowledge should be perceived as primarily a social product and in addition should be examined based on empirical studies of any given particular practice of science, past and present. (Pickering: 1992) But whereas SSK’s approach is human centred, meaning that the agency of the natural world and things is attributed by humans in social negotiations, Latour and Woolgar’s approach place emphasis on things: primarily, the inscription device, which defines ‘any item of apparatus or particular configuration of such items which can transform

a material substance into a figure or a diagram which is directly usable by one of the members of the office space.’ (1986: 51) The inscription device is an instrument of representation and also visualization of the scientific activity taking place in the laboratory which has autonomous power and agency. The inscription device, a construction, a material representation of action turns practices and objects into a reality. The laboratory translates the physical to the symbolic through the inscription device that becomes a mediator, an active participant between the social and the technological.

If the task of ethnography is cultural description by which human behaviour is examined in context, in natural settings rather than artificial experiments (Hammersley and Atkinson: 1983), then, the crucial point and difference in *Laboratory Life* is the recognition of the role of both human and non-human agents in the construction of scientific knowledge. In this case, subject and object are not strictly defined and separate, but in mutual interaction. By using ethnography’s method Latour and Woolgar encountered practices that include a whole range of participants – besides people – such as instruments, the architecture of location, texts and inscription devices that act or relationally perform activities. While traditionally the laboratory constitutes a space, where reality is set to have objective, stable traits, Latour and Woolgar’s examination tells us that

... scientific activity is not “about nature,” it is a fierce fight to construct nature. The laboratory is the workplace and the set of productive forces, which makes construction possible. Every time a statement stabilizes, it is reintroduced into the laboratory (in the guise of a machine, inscription device, skill, routine, prejudice, deduction, program, and so on), and it is used to increase the difference between statements. (1979: 243)

In relation to the laboratory, and drawing on the ethnographic practice of ‘following the object’ on location, Mol suggests a strategy which calls for attention to localized practices and bears ontological status, as in her arguments ontologies are topical matters. Moving away the examination of the disease from the viewpoint of the patients and the perspective of the doctors and localising it practices undertaken in different departments, Mol suggests that the enactments, and not the construction, of the disease are processes between patients, a set of questions, devices and fields of examination. According to Mol instead of examining the signs of the disease that is to say its symptoms and representation – as their validity can be altered in different realities/versions of the disease that each department enacts, we should place emphasis on the physicality of the object.

3.4 ANT in Media Studies

In the broader field of media studies, there are few cases that deploy and critically contemplate the application of ANT in the context of media production and media research. Nick Couldry in his text ‘Actor Network Theory and Media: Do they Connect and in What Terms’ (2004) explores the reasons for the lack of links between media theory – especially concerning the roles of media and communication technologies in contemporary societies – and ANT in its classical definition, as a theory of the socio-material. The media scholar Couldry highlights that in the late 1980s associations were made between the domestic and social role of technologies, such as television and the sociology of science, namely in the work of Roger Silverstone, who has been influenced by ANT. According to Couldry, there has never been a wide development of the theory in the analysis of media. He ascribes the lack of application of ANT within media studies to two reasons: ‘first that ANT itself is not a substantial or coherent theory and, second, that media pose problems, or set limits, to the applicability of ANT, in spite of its general value as a theory.’ (2004: 2) Couldry argues that the sociology of Latour, which fundamentally criticizes the separation between ideas and matters i can become an important argument for the avoidance of the functionalism, which, as Couldry argues, characterizes much of the media theory.

For Couldry ANT can provide the most precise language to highlight the power of media institutions in the circuits of communication. It is ANT’s emphasis on the spatial dimension of power – in its double connection to space and Foucault – and on the practices of ‘stretched-out networks’ that has been neglected by media theory. The power of the material organization of space, that is to say the understanding of media institutions and systems as social processes extended in space present media ‘as one of the most important of all displacements at work in the relatively centralized order of contemporary societies’. (Couldry and McCarthy, 2004: 2-4) However, Couldry charges the theory with political conservatism, which is linked with its indifference to human agency. For Couldry, the theory discredits the difference between the power of humans and the power of nonhumans in terms of social consequences, ‘which are linked to how these differences are interpreted and how they affect the various agents’ ability to have their interpretations of the world stick.’ (2004: 7) Simultaneously, Couldry claims that the emphasis on the spatial organization of media systems is connected with a neglect of time as a dynamic element – in the same way that space is – which continues to transform the networks after their establishment. This limitation is related to ANT’s relative lack of interest in the “long term” power consequences of

networks. Couldry claims that ANT can provide an understanding of how the networks are performed but ‘tells us little about the life of objects, such as texts, which are produced to be interpreted, nor about how other objects, as they circulate beyond their original context, remain to various degree open to reinterpretation by users, consumers and audience.’ (2004: 8) Thus, Couldry’s critique of ANT is placed within an appreciation of the theory as an interpretive account of media systems. However, he is not concerned with the agency of media, and therefore he does not establish any particular emphasis on the theory’s focus on what things (media) do or how they produce different realities.

In the field of media production, Emma Hemmingway, in her book *Into the Newsroom: Exploring the Digital Production of Regional Television News* (2008) employs ANT primarily as a method to examine the television news production processes in the digital age. Her research describes the ordinary, the mundane, everyday routines, undertaken in one specific site, the BBC television newsroom in Nottingham. Here, Hemmingway examines the ‘internal news episteme’ (41) by focusing on the role of production sites, such as the media hub and technologies, such as the satellite, in news production practices, which include video journalism and live reporting. She describes in detail the environment of the newsroom, the position of the actors and the technological arrangements of the media hub. Her project is a study on the micro, hybrid and contingent processes of news production and demonstrates how technologies attain particular agency, which is not isolated but stands in a continuous multiplicity of flows. For Hemmingway, ‘the purpose of using ANT is to examine the detailed construction of news facts as they happen.’ (2008: 9). Attending the events of news production reveals that the daily routines performed within technological arrangements are the factors that govern the production of news rather than the global and all-encompassing theories on news production.

The emphasis on practices themselves entails the understanding of the routines of news production as they are, and Hemmingway (2007) emphasises this by quoting Van Loon’s statement that these are ‘technologically embedded, but not indifferent to meaning.’ (2008: 15) However, the main weakness that the author ascribes to ANT’s methodology is its ‘insistence to define actors only by their ability to withstand trials of forces.’ (2007: 22) For Hemmingway, by eliminating any difference between human and non-human actors, ANT fails to express and examine wider issues that have to do with issues of human intentionality, strategy and power. Thus, in an ANT approach, the social meanings underlining the production of news as attitudes, beliefs and motives of human actions are being discarded.

In my thesis, Hemmingway's application of ANT in the localized practices of specific site, the newsroom has been undertaken as an opportunity to examine the institutional framework of the sites in which the present praxiographic study has taken place. While Hemmingway's focus lies on a single institution, and examines the various departments in which news is produced, my project draws on four different institutions in order to examine the differences, but also the situated interrelations of film's enactment. In particular, it aims to describe the different combinations of analogue and digital technologies manifested in these sites and the conditions under which film materials are performed. The four site studies present different appropriations of co-ordinations between analogue and digital technologies, within different conditions, frameworks and boundaries that each institution brings forward in the performance of different materials.

In the field of film production practices, Oli Mould's (2009) study is the only case, to the best of my knowledge, in which ANT is employed as a methodology to examine film, in terms of a commercial production. Mould presents an analysis of the Australian film *Three Dollars* (2005) production project, by employing the 'research language' of ANT. Mould's case study focuses on a mode of film production, which is centred on the employment of freelance, contract-based workers. By undertaking an ANT approach, Mould sought to research the "assemblage" of disparate independent actors in the production of the film's network. According to Mould, for projects with a short life span, and for networks whose life span extends to the duration of the project, ANT provides a methodology that draws on the gathering of various materials: techniques, budget diaries, photographic and filmic ethnographies. Mould argues that ANT becomes a tool to examine the 'more intricate, project-based and temporary aspects of film industry.' (2009: 211)

The author favours the impact of the Actor-Network for the examination of the 'action of production work activities and relationships over structure of the industry's institutions and economies.' (2009: 203) Mould's study, instead of undertaking approaches that highlight the meta-narratives of capitalism, economy, or culture in the study of media industries, employs the Actor-Network approach in order to focus and analyze the micro-level processes that produce and maintain the temporally short production networks under investigation. In accordance with this, emphasis is laid on the dynamic behaviour and the agency of the actors that is 'the collective term for either a human or nonhuman entity that can be involved in the network.' (204) By using Latour's concept of "black-box" the author re-opens the self-contained and ineffectual part of film production to investigate the new sets of relationships

between the actors of the film's production. Mould's study presents an alternative case of an independent film production which steps aside from the production paradigms of the Hollywood industry and major studios. Mould remarks that 'ANT ties together and considers the differing moments, times, and spaces of a specific production in a single study, as a networked whole.' (211) The research concludes by emphasizing the role of the actors that perform the time and space of the *Three Dollars* distribution and exhibition practices. For Mould the engagement with the method of ANT is grounded on the heterogeneous and networked nature of film production. His study emphasizes the networks formed around the freelance workers, the mode of production and also the new networks in which the film is situated after the completion of its making. However it does not emphasize the location and does not focus on a detailed description of the practices of the production.

In relation to the above, my study emphasizes the role of the sites, that is to say the institutional cultures and practices that the gallery installations, LUX, the BFI Archive and Curzon Cinemas present. Yet, in contrast to Hemmingway and Mould's approaches, it is not interested in the industrial modes of film "production" that is to say performance and enactment. In contrast it is interested in investigating the "becoming" of film, the actualizations of film within and in relation to ideas of cinema. Based on the praxiographic research that Mol proposes, this project addresses film enactment's through practices. The praxiographic method that she suggests is a philosophical practice that can make claims about the objecthood(s) and realit(ies) of film. Thus, it undertakes Mol's ontology in practice to make ontological claims about film, which present a multiple nature, bringing about and disclosing the elusiveness of cinema, as an experience, a phenomenon to be lived rather than theorized.

3.5 Praxiography as Philosophical Practice

In practice objects are enacted. (Mol, 2002: 41)

In the late 1990s the dispersion of ANT in a number of research disciplines and theoretical fields received criticism among its own theorists. In particular, in 1999 John Hassard and John Law published *Actor Network Theory and After*, a volume of essays examining the possibilities of going beyond 'traditional ANT', without leaving it behind. The essays draw on the meanings, influences and limits of ANT within a self-critical character. Law (2007)

divides 'Actor Network Theory' into two major phases 'ANT 1990' and 'ANT and After'. He explains that in the 1990s the approach found a momentary stability only to become dispersed into a variety of approaches in the early 2000s. Since then, the theory attained diasporic nature since 'it has converted itself into a range of different practices which ... have also absorbed and reflected other points of origin: from cultural studies; social geography; organizational analysis; feminist STS.' (1999: 10) Gad and Jensen (2009) discussing the themes of 'ANT and After' have used the term 'post-ANT' for 'reflexive' ANT texts.

In the establishment of post-ANT and the 'new' material semiotics, the notion of performativity gains vital significance. With performance, as Law argues, a metaphorical shift took place. The notion of performance suggests actors that are playing their part relationally, enacting together a set of practices which produce a reality which is more or less precarious. The production of multiple realities is based on performance and intervention. Performance is different, as Mol states, from perspectivalism, in which different theories do not multiply reality, but only in the eyes of theorists. It is also different from constructivism, in which facts do not reside in the laws of nature but in the intricacies of history. Constructivism suggests that a different kind of reality construction could be possible, yet for the theory these possibilities are in the past, they are gone, as a matter of contingency. Constructivism undertakes the role of history and contingency to show how a specific version of truth or reality was crafted, how it was argued, but also how – for instance – material supports were foregrounded. In contrast, with the performance and multiplicity of reality, we fail to deal with the different attributes or qualities of an object, but different versions of an object and which materials tools help us to enact. Multiplicity suggests realities that are done and enacted, rather than observed, in a diversity of practices. In theory, these performances have been untouched.

Mol's reflections mobilise the shift from epistemology to ontology. Instead of the creation of different and multiple 'world views', Mol's ontology creates different and multiple worlds and realities. In *The Body Multiple: Ontology in Medical Practice*, Mol uses the term 'enactment' as an antidote to the agenda attached to the term 'construction'. The term shifts away from Latour's notion of construction in the way that we talk about objects. Mol explains that:

The term construction was used to get across the view that objects have no fixed and given identities, but gradually come into being. During their unstable childhoods their

identities tend to be highly contested, volatile, open to transformation. But once they have grown up objects are taken to be stabilized. (2002: 42)

Latour's construction of facts in the laboratory accepts and is based on the stabilization of the identity of objects after their making. But if the focus is raised on processes and the continuing of processes, the term is inadequate. Mol raises the idea of time in the enactment of objects and argues that 'maintaining the identity of objects requires a continuing effort.' (43)

By including the practicalities – technologies such as the microscope in sites, for instance, the clinic – as part of the story of the disease, Mol's ethnography becomes a praxiography: a story about practices. Mol undertakes Latour's and STS methodological tool of following the object of study in localized practices and proposes that the question of "what is an object" needs to be reposed, as "where is the object", in which location attains ontological claims. She makes the shift from an epistemological to a praxiographic appreciation of reality, in which the new, praxiographic "is" is one that is situated. Attending to the way that objects are enacted in practices is different from the epistemological concern with reference that asks whether the representations of reality are accurate. For the philosopher, 'if reality doesn't precede practices but is part of them, it cannot itself be the standard by which practices are assessed.' (2002: 6) The praxiographic turn demands spatial specifications. According to Mol 'to be is not only to be represented, to be known, but also to be enacted in whichever imaginable other way.' (2002: 55) By focusing on enactment, we need to ask:

"how are objects handled in practice?" With this shift, the philosophy of knowledge acquires an ethnographic interest in knowledge practices. A new series of questions emerges. The objects handled in practice are not the same from one site to another. (2002: 5)

The Body Multiple is an ontological claim about the disease of atherosclerosis, which does not stand as a singular disease, an object to be seen by various perspectives. Perspectives have been replaced by skills, technologies and situated knowledge. Objects do not necessarily stand as passive recipients of points of views, observations and representations. They can be instead active agents within the locations in which they are placed. Criticizing pluralism and perspectivism, Mol states that by following the practice around objects 'instead of attributes or aspects, they are different versions of the object, different versions that the tools help to enact. They are different and yet related objects. They are multiple forms of reality.' (1999:

80) For instance, atherosclerosis is given different diagnosis and different treatments depending on the different departments where the patient is examined. Different specialists ask different questions and use different medical equipment to track down and treat the disease. From a material semiotic stance, for Mol realities are always constructed in their relations and these relations can only be fixed for a time. Namely, the atherosclerosis examined in the pathology department and the atherosclerosis examined in the clinic cannot be aspects of the same entity. A patient that is examined in the pathology department does not complain about chest pain or claudication, both signs of atherosclerosis' poor vessel walls, and the disease goes undetected. In contrast, this symptom can be diagnosed and detected in the clinic. As Mol writes, 'one atherosclerosis might be a reason for treatment while nobody ever worried about the other. In such instances the objects of pathology and clinic cannot be aspects of the same entity: their natures are simply not the same. They are different objects.' (2002: 46) What is practiced and what is detected in the different departments is what counts as a reality, and therefore different versions of reality exist in the particular sites.

Mol argues that her praxiographic approach 'does not simply grant objects a contested and accidental history ... but gives them a complex present, too, a present in which their identities are fragile and may differ between sites.' (43) Translated into the topic of this thesis, when the practicalities of enacting the object of film are foregrounded, it becomes clear that film is not singular but multiple. The object of film has a contested and accidental history of technologies and materialities. For instance, celluloid was a material first manufactured in 1868 as a replacement for ivory in the production of billiard balls (Sargent, 1974). A few decades later, it became the dominant and most lasting material in the production of moving images. Shifts, replacements in materials and technologies, have always been inscribed in the history of cinema. The advent of digital technologies follows a process of technological and material change, which gives to the object of film a complex present, in which its traditional operations of archiving, projection and distribution are contested. The digital restoration tools, digitization (scanning), streaming and fibre-optic cables, for instance, are replacing, adjusting, informing and resolving the relationships that have been established in the workflow of analogue film-based practices. In the present moment, the digital transforms traditional practices and revolutionizes the way that the material of film can be exhibited, saved, projected, and restored.

Mol's praxiography gives us the opportunity to conceptualize the object of film and build connections between theory, objects, spaces, time and practices differently. Stressing the role

of practice – that is to say the situated practices in the production of relational objects and the appropriation of their multiplicity – Mol states that:

If practice becomes our entrance into the world, ontology is no longer a monist whole. Ontology-in-practice is multiple. Objects that are enacted cannot be aligned from small to big, from simple to complex. The relations are the intricate ones that we find between practices. (2002: 157)

Each case study and each new paradigm of research may present a different version of film, made with different set of relations or different assemblage of the same relations. The enactment of different relations between materials, technologies, professionals, sites and practices does associate film with an unchanging single nature, but with a multiple nature that is constituted differently each time in the way that the institutional sites and socio-material relations are formed and performed.

In my research, and in contrast to Mol and also to Hemmingway's studies, the observations have been conducted not in one film site, but in four different sites, and within the context of a specific place, London. Film of course is enacted in other sites and different places as well. In other locations the object of film can be done differently. That is to say, it can be practiced differently by another intern in LUX, it can be archived differently, following different priorities and conditions in a different archive and in a different restoration project, it can create a different production of space in the gallery. Thus, I could have chosen different practices or different institutions and thus different choices would perform different stories about film. However, this study took a particular shape based on a network of materials: the regional space of London, my professional practices, as well as my theoretical disposition on artists' films and the accessibility to particular sites. As this thesis came to a conclusion, an invisible thread of connections became visible. As film is disseminated in different sites of professional engagements and activities, namely the art gallery, LUX, the BFI Archive and Curzon Cinemas, these sites produce the main cycles in film's practice: production, exhibition, distribution.

In the shifting nature of practices within the co-existences between analogue and digital technologies, the practices are contingent, and most of the time precarious, carried out in action in a field in which the introduction of new tools complements, adapts or diminishes the operational framework of the four examined sites. As Law explains, 'if you want to understand mattering of the material, you need to go back and look at practices, and to see how they do reals that those practices are doing, relationally. And, a vitally important coda:

you don't take anything for granted.' (2008: 1) There is a nexus of forces that shapes the examined practices, not only the technologies in transition but also the organizational profiles and differing cultural parameters of each institution. In this context, knowledge about the object of film, and also about the phenomenon of cinema, is acquired through theoretical lines of film present in the particular situated fields, but also in embodied skills, in the hands of the practitioners. The enactment of objects and realities cannot give fixed, definitive answers to the notion of multiplicity: the object of film will get actualized as cinema in the moment of its practices.

Drawing on the theoretical investigation of STS's and ANT's ethnography and Mol's praxiography, this thesis presents an ethnography of film related sites, concentrating in particular on film distribution, restoration and exhibition processes. From this starting methodological claim how the practices operated in four different film institutions are followed and examined, and the thesis identifies the enacted, multiple object of film within the different localized realities. In the sites examined new facts are constructed around the usage and manipulation of digital technologies. These become visible and apparent in daily practices and project-based works, in the study of film in action. The case studies bring together technologies and practitioners that are continuously evolving and changing. The manipulation of the object of film in action shows the capacity and ability of the object to adapt and become reshaped and enacted anew in new conditions and situations. This kind of approach provides an alternative reading on the object of film that goes beyond a priori assumptions and attempted generalizations or concrete attributions concerning the contemporary technological transition. On the contrary, the ethnographic approach gives rise to the short lived and short circuited networks that are operating in spatial encounters with films – between the viewer (in the site of the gallery), the practitioner (the archivist, the projectionist and the film-checking intern) and the technological materializations of film, which are rather complex and multi-dimensional and therefore outside of theoretical commitments or rigid theoretical views. The site specific and heterogeneous networks seek to replace the traditional boundaries between subject and object in a series of relations that are not defined just by notions of transition or replacement, but by orderings, organizations, objectives and materialities.

3.6 Site Specificity: Situated Practices

Michel Foucault's (1967) study of heterotopias describes the present era as "the epoch of space" that follows the nineteenth century's conceptualization of time governed by the second law of thermodynamics, that is the irreversibility of time. For Foucault the current era is an epoch of juxtaposition and dispersal, 'when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein.' (1967:1) Heterotopias are spaces that take various forms, and not an absolutely universal form. They are linked with slices of time, 'which is to say that they open onto what might be termed, for the sake of symmetry, heterochronies. The heterotopia begins to function at full capacity when men arrive at a sort of absolute break with their traditional time.' (1967: 6) In the field of ANT, by focusing on small scale cases, namely on instances rather than foundational categories or qualities, and on the ephemerality of things that "come into being and then disappear", the heterotopic and the heterochronic can be found in specificity: it comes in the form of heterogeneity, performance and situated practices.

Locating and re-locating film in its movement outside of the movie theatre, a site specific approach examines not the ubiquity and simultaneity of film's presence, but film's interaction with specific localities, their organizational frameworks and systems of workflow. The sites are actual, physical locations, tangible realities, whose institutional identities are examined based on specific technological arrangements, operations and projects. These sites function under the purpose of "doing" film, distinctively distributing, restoring, exhibiting and archiving. The specificity of the practices that are going to be described offer an insight into the differences and the similarities of manipulating, using and working with analogue and digital technologies within these different situated contexts. As we will see in the following chapters, there is no standardization or simultaneity in the enactment of both analogue and digital technologies.

The conceptualization of space as an ontological parameter and as a condition for the enactment of objects needs a theoretical ground to be addressed in. Like objects and realities, space is also enacted. For ANT 'spatiality is not given. It is not fixed, a part of the order of things. Instead it comes in various forms.' (Law, 1999: 6) John Law and Kevin Hetherington underline that 'space is made. It is a creation. It is a material outcome. Like objects, places, or obligatory points of passage it is an effect. It does not exist outside its performance'. (1999: 9) The emphasis on site shifts the practice of analyzing film from an isolated and distant

theoretical field to physical and spatial encounters with the object of film and the actual work done around it. In this thesis the sites become synonymous with the practices, and the practices analogous to the sites.

Site specificity gains fundamental importance in this study's methodological structure and mapping of materials and practices. The film checking practice in LUX, for instance, reveals that the distribution/circulation of film in different locations and projected by different practitioners can affect, namely deteriorate, the material condition of the film strip and thus determine the visual condition of the projected images. In particular the editing Steenbeck machine at LUX measures the splices and the rate of the frame while the film is projected for a film checking practice. This kind of projection examines the scratches and the tramlines and evaluates the image condition of the analogue films that will regulate its future distributions. At the same time, in the context of the Renoir cinema the digital console situated in the theatre's projection room projects films that are distributed in a data-packet, all within the time span of an encryption key. In the sites of the art gallery, films are exhibited, but screens, projection apparatuses and projection light also become active participants in the creation of audiovisual environments. At the BFI's restoration of Anthony Asquith's film *Underground*, the surviving prints after being photo-chemically cleaned are digitally scanned for the restoration process to begin. The examined sites call for different technological and human actors to collaborate and co-ordinate practices. Each location uses different apparatuses and tools to enact the film object. The sites involve complex technological associations between analogue materials and digital tools, storage rooms, analogue and digital projection, and so on, which, as tailored in the sites, carry out specific tasks, activities and projects.

3.7 The Role of the Ethnographer

In this thesis, the method of praxiography becomes a performative element in the production of the realities of film presented. On method, Law highlights that 'the argument is no longer that methods discover and depict realities. Instead it is that they participate in the enactment of those realities.' (2004: 45) The praxiographic method re-crafts and creates new understandings of the object in question as the knowledge derived by it is embedded in practitioners' skills, sites and institutional frameworks. The shift to the question as to how knowledge is derived turns the interest from an analysis of ideas and signs to the treatment of knowledge as a physical, circulating process. This thesis carries out praxiographic research

on the object and institutional enactments of film from an “insider’s” point of view. The ethnographer participates reflexively in the networks formed in the different sites and needs to recognise the precarious and ever-changing characteristics of the networks themselves. My key method includes participant observation in which the ethnographer acquires the dual role of participating in the life of the setting and at the same time being an observer, an insider and outsider who can describe the practices undertaken in the sites. In this study, the emphasis relocates from a final product to production itself: film’s different enactments. However, these productions are situated, and the choice of the sites presupposes an ethnographer, myself, an actor who actively chooses.

By exploring the particular, this thesis aims to become a reference for other cases that examine the inside of institutions, modes and practice-based plans, from the perspective of the temporal and spatial relationships performed within specific sites. The case studies are considered as instances of phenomena, events of cinema, including different organizational and institutional projects and various technologies, objectives and operations. ANT and Mol’s praxiography will help us to describe film’s processes in everyday practices, in project oriented enactments, in which the observer is engaged with what is invisible from the public eye, or the eye of a traditional theorist.

An ANT-oriented examination of localized practices demands detailed description of practices, which are composed of texts, words, inscription devices, hands and eyes, observations and practitioner’s involvements, technologies as well as organizational and institutional objectives and traditions. As the author of these descriptions, my position as the ethnographer is just as unstable and precarious as the other actors within the sites examined. My practice, as an ethnographer, intends to narrate stories, rather than presenting solidified truths about film or cinema. The stories told are accounts of what I have seen, heard and experienced in the sites that I have visited, worked in and experienced. Through a wider network of research, professional interest and personal fascination, the sites presented in this thesis have been linked together based on ephemeral – shorter or longer – events in my life in London. In the way that objects are circulating, in my role as a researcher I have also been circulating and participating within different settings related to the production of the film multiple. My part in these networks is not consistent; in relation to the plethora of actors in the sites under examination and description it is mutable, contingent and performative. As an actor in film’s enactment, I intend to present these case studies as exemplars of the “how”

and “why” that localized networks around film are enacted and what kind of relational realities they perform.

Therefore, this is a study where film is examined in the way that it is staged, the way that it is handled, treated, touched and checked. In this thesis, I searched for film, I went to galleries, and I observed it being exhibited, projected in screen assemblages, creating kinaesthetic environments and light sculptures. In the case of film exhibition, I observe activities that come together for the projection of film in a particular time and space. I am interested in the localized environment, the screens and technologies employed and the way that the exhibition is organized, the kind of liberty it gives to the audience to walk around or sit down. In the gallery space, the ethnographer encounters both a screen space and an audience space, creating a need to negotiate a physical relationship between the two. In this case, instead of creating a space in which the viewer is, a space is created in which the viewer participates. Thus, the understanding and engagement with the film exhibition can be accomplished by interrogating the active experience of the event of the film performance. I have been fortunate in having access to the sites of LUX and the Renoir, via a working relationship. In these cases, I have had the significant advantage to be an initiating actor in the sites. As an intern for nine months at LUX, an insider in the processes of film checking that facilitates the distribution of analogue films, I observed film in its condition of degrading, after its physical transportations and spatial re-displacements. I checked the print, I operated the editing machine and I transferred it into a checking sheet, an inscription device, thus performing my evaluation of the print. My access to LUX is based on an established duty, the checking of the film print. Simultaneously, I was a part time member of staff at the Renoir cinema. Within a span of two years, from 2008-2010, I was regularly in and out of the projection room, observing the practices of projection and experiencing the transformation of materials. I saw analogue and digital films in a transitory moment, where the analogue projection became gradually replaced by digital projection. The entry into the projection room was possible mainly because of the relationships established with the projectionists, yet my negotiation for a further stay in the room needs to be addressed as part of my research. My understanding of shifting practices was achieved through informal talks with the projectionists. The site of the BFI Archive became accessible through a specific “sponsorship”, the title of a PhD researcher. Although the tours to the Archive are only facilitated for members, my archival research case study gave me the possibility to visit the archive and see the completion stage of *Underground*'s film restoration. After witnessing the

processes and becoming informed about the work of the Archive and the spaces, procedures, vaults and temperatures that they undertake, I saw the film in its restored version in the Archive Gala of the BFI Film Festival.

What follows is a praxiography of film's enactment in these sites, engaged with an account of film theories that relate to specific activities examined in each chapter.

Chapter 4. Cinema as Multimodal Practices of Installation

4.1 Introduction

The first one of my case studies describes film in the institutional specificity of the art gallery and in relation to the examination of three film installations, and examines the variables of film technologies and materialities as exposed and executed in and at the same time as they respond to this space. This chapter discusses the objecthood of film as it is performed in the material and installation practices that the site of the gallery invites, which step aside from a version of the commodifiable practices of film production, exhibition and projection. It makes the assumption that the artists-filmmakers'² engagement with the materials of film to be exhibited in this site as installation reconceptualises and reworks possibilities for the production of new automatisms (Cavell 1971) that do not formulate film as a solid entity with a pre-given identity,³ but with a practice-based nature. These re-conceptualizations and re-workings are not framed as a consequence of digital technologies but as an effect of gallery situated film practices on the materials and technologies of film to be challenged, experimented with and reflect on their limits, possibilities or obsolescence. This chapter pays little attention to the content and form of the films examined. Instead it emphasises the context of the installations: the space for exhibition, the location and the number of screens, the position of the projection machine but also the position of the exhibitions' visitor and discusses the effects that all these actors create. Specifically, this chapter asks, in what ways does the practice of film projection create a passage for human bodies and film materials in space and time? In relation to this, how does the installation of film materials, such as the screen(s) and the projection machine change the space that it occupies? Moreover, what is the nature of the practices operating within this site?

In this site, film is enacted as an installation that creates events and phenomena as they happen, all in ephemeral temporal and spatial formations. According to Erika Suderburg in installations the object installed has been 'rearranged or gathered, synthesized, expanded, and

² In this chapter I am using the term artists-filmmakers drawing on the specific examples of art work that I am using made by artists trained both on fine art and filmmaking.

³ Cavell states that 'only an art can define its media' (1971: 107) that is to say, only an art can examine and shape the conditions of its existence. In relation to the arts' work examined in this chapter, the practice described could be seen as automatisms of the conditions of film to be practiced, viewed or experienced.

dematerialized.’ (2000: 2) The process of installing suggests a temporary occupation of a provisional space. That is the installation forms an ephemeral presence of film in the gallery space, in which after a certain period the parts of its material and technological composition need to be broken down, and the gallery space to be vacated. In this way, as Margaret Morse (1998) explains, ‘The frame of an installation is then only apparently the actual room in which it is placed. This room is rather the *ground* over which a conceptual, figural, embodied, and temporalized space that is the installation breaks.’ (1998: 157) In these ways the examination of film as installed presents the material mechanisms and properties of film and the surrounding space of its screening as active material/physical agents, and in an effective relation to the momentary and conditional space they occupy.

Consequently, this chapter situates the installation of film in the site of the gallery and puts emphasis on its relationship to different ideas of cinema, such as the cinematic conventions of film spectatorship, cinematic codes such as narrative and the particular situation for film materials and technologies in space. This chapter’s praxiographic study is based on the description of three concrete examples of film installations viewed in London in 2005 and 2008, Anthony McCall’s *Line Describing a Cone*, Mario Garcia Torres’ *My Westphalia Days* and Gerry Fox’s *Living London*. In these exhibitions the materials and technologies of film are mutated from one installation to another, thus enacting different realities for the object of film and, as I will attempt to demonstrate, they create different instances of cinema’s becoming.

As described in the previous chapters, Mol claims that the multiple object of the disease of atherosclerosis has local identities as it is enacted differently in distinctive departments of a single hospital. In the enactment of the disease various actors are being involved: knives, forms, files, pictures, technicians. But, according to Mol

... none of these are solid characters: after a little more investigation, all of them like the surgeon appear to be multiple. The surgeon enacting atherosclerosis as “pain on walking” may have the same face, voice and name tag as the surgeon who “scrapes a thick intima out of an artery.” But they differ. While the first is a talker, the second is a cutter. A single person may be capable of shifting from one repertoire (talking) to the other (cutting). The repertoires, in their turn, with all the materialities they involve, are capable of shifting the locally enacted identity of the surgeon. (2002: 143)

In the unravelling of ontology-in-practice, it appears that the actors enacting an object are variables that may vary from one site to another. The passage from Mol indicates that the same disease, but also the same technology, the same material, or the same person that relates to its enactment differ as they move from one site to another, from one practice to another. Based on this argument, this chapter presents the variables of film materials as reiterated and reworked in order to be projected and exhibited in the site of the gallery. It suggests that in the site of the gallery, as an institutional space that encompasses film technologies in artistic work, the exhibited object of film, as an installation, is placed within different associations and ruptures between practices characterised as cinematic and practices characterised as artistic. In this chapter, and based on the particular examples cited, by using the term ‘practices’ I am referring to the practices of film projection and presentation and screen practices. In the site of the gallery these sets of practices are foregrounded rather than bracketed, as it is these activities that the artists-filmmakers intend to investigate, extend or reconfigure.

In addition, based on the examination of film materials and technologies as variables between different installations and practices that perform them, this chapter will discuss them as material instances of cinema’s duration that is to say as instances through which cinema in one or another form is apprehended or intuited. To support this argument, this chapter will first draw on a theoretical articulation of the relationships between cinema and art and will claim that the cinematic is less to be found in institutional practices or historical phases and more as something to be experienced or reflected upon in relation to the space of installation.

4.2 Film Practices Between Cinema and Art

It is largely in the last two decades that art institutions, such as the art gallery and the museum, have shown increased interest in displaying moving image works among their exhibits. The technologies used and performed in this site are diverse, varying from 16mm film projectors, to slide shows, multiple-screen projections, and work shot originally on analogue film that has been transferred to HD video. However, starting from the early 1960s artists began to examine the social, aesthetic and technical ideas around art and cinema in order to explore the eradication of medium boundaries when incorporating film technologies in their work. But when film is attached to the practices of artists-filmmakers, who engage

with its materials and technologies in order to reflect upon and for cinema within the sites and contexts of art, a spatial shift is signified which, as this chapter will argue, accentuates ontological claims about film. In this site the object of film comes into being in the practice of installation and then disappears, leaving no traces of its presence.⁴ In this site, besides the understanding and exhibition of film as an object of content, narrative or the product of certain styles and techniques of image making, within this context it is its exhibition/installation that challenges, discloses and creates its material and spatial reality.

Drawing on these three exhibitions, it can be said that the art gallery is a site for the passage of film in different 'film practices'. Bordwell, Staiger, and Thompson give a definition of the term 'film practice' as:

The concept of a mode of film practice situates textual processes in their most pertinent and proximate collective context. This context includes both a historically defined group of films and the material practices that create and sustain that group...A mode of film practice, then, consists of a set of widely held stylistic norms sustained by and sustaining an integral mode of film production...These formal and stylistic norms will be created, shaped, and supported within a mode of film production – a characteristic ensemble of economic aims, a specific division of labor, and particular ways of conceiving and executing the work of filmmaking. (1985: xiv)

A film practice is something constituted within a historical, institutional and production context. As Walley (2008) notes, Bordwell, Staiger and Thompson's definition 'enables us to see beyond aesthetics, subsuming aesthetics under its broader heading; the contexts of production, distribution, exhibition and reception are the material conditions under which aesthetic goals are formed by artists and recognised by spectators.' (2008: 185) This chapter speculates that beyond the conceptual element of the film work, each installation is a design and execution of physical, material and spatial practices that shift the attention to different elements of film that is seen more as a working system (Howarth: 2007), rather than as an autonomous object.

An understanding of the distinctive, although diverse, film practices taking place in the site of the art gallery could be traced in an account of the historical context of artists-filmmakers

⁴. Morse argues that 'While an installation can be diagrammed, photographed, videotaped, or described in language, its crucial element is ultimately missing from any such two-dimensional construction, that is, the "space-in-between," or the actual construction of a passage for bodies or figures in space and time. Indeed, I would argue, the art is the part that collapses whenever the installation isn't installed.' (1998: 157)

work in relation to this site. Specifically, from an institutional perspective, within the emergence of film in the site of the art gallery, the artists-filmmakers working with moving images encountered and became involved with a pre-established industrial practice of commercial cinema with its own processes of production, exhibition and distribution of film. As such, in the site of the gallery and the cultural and artistic context to which it is often related, the fixed understanding of films as movies reproduced and disseminated through industrial practices of mass production and consumption is a domain that artists-filmmakers' work deliberately exits from. Stepping aside from the frames and domains of cinema's industrial and commercial logic, these works engage with a different scope, and organization of practices. Andrew Uroskie remarks that

... the artists who began to incorporate moving-image technologies into their practice in the 1960s were engaged primarily in the act of aesthetic and conceptual refusal. Refusing both the commercial cinema as well as its expressive, 'visionary' counterpart, they sought to reconsider both the institutional site and the affective economy of moving-image spectatorship as a novel and important domain of inquiry. (2008: 397)

Within the same period, Catherine Elwes explains (2005) that artists started to enquire into the social and political institutions of exhibition and also the traditions of fine art practices, namely painting and sculpture. In her argument, the examples of performance, experimental film and video 'offered a way out of the conceptual impasse of high art practices.' (2005: 14) Moreover, in his detailed work on the history of artists' moving images – the term that David Curtis uses⁵ – in Britain, he identifies the artists' moving images as the work that has been conveyed 'with a particular freedom and intensity, often in defiance of commercial logic, and knowingly risking the incomprehension of their public.' (2007: 1) In his account, this different logic is also expressed in the artists' treatment of the exhibition space. He notes in particular that artists' work is not defined within a certain form of exhibition space, but on the contrary the space itself becomes an element for the artists to respond to.

In the same period and in relation to the space of the gallery, curator Chrissie Iles (2001) describes that in the 1960s, the 'projected image', as she terms it, attained a critical role in the creation of a new language of representation 'as artists used film, slides, video, and

⁵ This chapter notes that the research encountered a nexus of different terms and definitions of the actors involved in producing work for this site. In the British context, the terms 'artists' film and video', 'artists' moving image', 'artists' cinema' (Maevé Connolly: 2009) 'cinema of exhibition', (A.L. Rees *et al*: 2011) or 'projected-image art' (Tamara Trodd: 2011) suggest that the definition of artists working with image making technologies or filmmakers producing installation work (Bruno: 2007) has not been settled.

holographic and photographic projection to measure, document, abstract, reflect and transform the parameters of physical space.’ (2001: 33) As she continues, minimalist artists in particular transformed the actual space of the gallery into a perceptual field, by engaging the spectator in a phenomenological experience of the object as related to the architectural dimensions of the gallery. Iles (2001) explains that in the work of minimalist artists the previously unmoving position of the viewer changed as the artists’ dismantled physically the viability of a fixed setting.

In her essay ‘Film and Video Space’ (2000), Iles describes and classifies historically the interchanges between film and video installations and the avant-garde practice, to which she claims to belong. She focuses on the quality of the moving image to transform the space it occupies by marking out three phases in the history of film and video that communicate issues of spatial presentation and phenomenological experience: ‘the first phase can broadly be termed the phenomenological, performative phase; the second, the sculptural phase; and third, current phase the cinematic.’ (2000: 252)⁶ Iles’s remarks are focused on the first and the third phase – in this chapter the description of McCall’s *Line Describing a Cone* forms an example of the second phase to which Iles does not give a direct account – in order to claim that the issues of space investigated in these phases are remarkably similar.

In particular, Iles describes the contemporary cinematic phase as an evolution on the themes and practices discussed in the previous phases and remarks that the questions of the 1960s and 1970s ‘continue to exert a strong influence on a new generation of artists showing a rigorous concern with conceptual and spatial issues.’ (2000: 262) As she argues, there is a historical legacy left over from the previous phases that is discernible in the contemporary phase. What Iles foregrounds is the changes of film practices within the gallery space, and in particular the changes and transformations that it brings to the experience of space that it creates. To demonstrate this, Iles draws attention to the ‘phenomenological’ phase that emerged in the mid-late sixties and which is positioned in the overlap between practices of expanded cinema and the intermedia environments of ‘video work with a rigorously conceptual approach to viewer participation and social space.’ (2000: 252) Iles identifies this phase with works that include large scale film projections, which transformed the gallery site

⁶ Baker (2008) and McDonough (2009) have noted that the last two decades of artists’ films within the gallery has been defined by a cinematic turn, which is expressed by a new generation of artists-filmmakers that exhibit their work only in the gallery. (Fowler and Voci, 2011)

into a three-dimensional space as a way of spectacularizing the cinema viewing experience, but also smaller scale performative video installations comprising of live feedback recordings of the actions of the viewer or the artist. For Iles these ‘marked a new, antispectacular, analytical experience of space.’ (2000: 254) These installations become the site for an analytical and phenomenological experience of space and for an introspective relationship between the viewer and the space. Focusing on contemporary exhibitions, Maeve Connolly explains the exchanges between cinema and ‘artists’ cinema’, the term that she uses to define the ‘claims made for and by artists and art practice in relation to cinema and the wider context of moving image culture’ (2009: 19). This can be seen in the ways that contemporary art practitioners ‘have claimed the narrative techniques and modes of production associated with cinema, as well as the history, memory and experience of cinema as a cultural form.’ (2009: 9) For instance, the exhibition ‘Cinema, Cinema, Contemporary Art and the Cinematic Experience’, which took place in 1999 at the Stedelijk Museum in Eindhoven, The Netherlands, explored the connections between cinema and the film and video art according to two points of departure. In particular, in the exhibition’s programme Marente Bloemheuvel and Jeap Culdmond (1999: 5) introduce the two methods: on one hand there are the cinematographic techniques, such as camera use, lighting and narrative, incorporated not only in the production of films but also in media-esque photography and installation. On the other hand, it is the work of artists that make use of well-known cinematic material such as B-movies, Hollywood films, and auteur cinema, which they analyse, manipulate or restructure. From a different perspective, Catherine Fowler (2008: 254) examines the cinematic in relation to the flat screen. She states that in the last decade the artists’ moving image ‘has largely returned to the security of the frontal flat image’ and stresses the need for revisiting the practices of cinematic conditions. Fowler (2008) concentrates her argument on the return to the flat screen, which constitutes a repetition with a difference, i.e. that gallery films either continue to criticize – thereby embodying practices and histories of the phenomenological and sculptural phase – or they use codes, practices and conventions that bring back the gaze to the centre of the frame.

Within the site of the gallery, a dynamic interaction, connection and a pervasive convergence is forged between art and cinema, in relation to a double challenge and re-contextualization of issues of space in relation to installation, including exhibition practices and viewing experience. Iles (2001) defines this model of setting as a ‘hybrid’ in which the white cube and the black box inform and modify the elements and characteristics of one another, while artists

re-evaluate and crucially reconfigure the specificities of film and cinema as practice and artistic expression. The pictorial space is shaped by the linear perspective, and adapted by cinema and the setting of the darkened auditorium. The traditional cinematic theatrical experience dictates the fixed position of the viewer who, looking at a singular frame/screen, is replaced by a gallery viewer, who can not only move within the site of exhibition, but also actively enact the exhibition. Morse (1998), referring to video installation, describes a ‘space-in-between’ in which material objects and the images on the video monitors become meaningful with the passage of the visitors within the patterns of orientations or restraints that the installation creates. In her argument the action of the subject in the here and now of the installation is the crucial element of the ephemeral nature of the installation. But at the same time, as we will see in our examples, it is the object of film, tied to its specific spatial enactment and practices, that affects the creation of a ‘space-in-between’. The film exhibitions described in this chapter, suggest that the cinematic is to be found in the transformations and negotiations of materials that the installations produce to the exhibitions’ space, which are related to the position and manipulation of specific materials of film. To start with McCall’s film, space is demonstrated not as a direction of sight but rather as movement in a durational space.

4.3 “*Line Describing a Cone*”: Real Time, Real Space

In the era of post-minimalism, artist Anthony McCall produced the series of ‘Ambient Light’ films (1973-1975), the most widely exhibited of which is his *Line Describing a Cone*. Although exhibited in art galleries, the film was originally made for theatrical screening. It was first projected in small, alternative spaces in New York where smoking was allowed, thus the smoke produced from cigarettes and also from dust particles in the air made the light beam visible. By entering the site of the gallery and its’ cleaned up space, the work was made invisible. Employing haze or mist made the work in the gallery site visible again. This installation, which I viewed in the Hayward Gallery in London as part of the exhibition ‘Eyes, Lies and Illusion’ in 2005, problematizes the relationship between art and cinema by eliminating the boundaries between sculpture and film. *Line Describing a Cone* has been described by Walley (2003) as a paracinematic work. Walley identifies the works of

‘paracinema’⁷ that took place in the 1960s and 1970s and describes them as ‘an array of phenomena that are considered ‘cinematic’ but that are not embodied in the materials of film as traditionally defined.’ He continues that the kind of works he is addressing

recognize cinematic properties outside the standard film apparatus, and therefore reject the medium specific premise of most essentialist theory and practice that the art form of cinema is defined by the specific medium of film. Instead, paracinema is based on a different version of essentialism, which locates cinema’s essence elsewhere. (2003: 18)

Walley suggests that works that belong to paracinema include Anthony McCall’s series of solid light films and Paul Sharits’ monochromatic films of the mid-late 1970s.⁸ Beyond an essentialist legacy of medium specificity,⁹ Walley refers to an essence discovered in more ephemeral events, in which the cinematic is sought outside the materials of film. Drawing on Bazin’s idea of the *Myth of Total Cinema* (1967), in which film had not yet acquired the technical means for a perfect illusion of the outside world, and Sergei Eisenstein’s (1988) theories of montage, in which he argues that although montage has been elaborated as a defining element of the essence of cinema, it cannot be limited to the medium of film, Walley concludes that ‘the idea of cinema, then, is not a function of the materials of film, but the other way around – the materials of film are a function of the idea of cinema.’ (2003: 23)

It is interesting to note in passing that almost thirty years after the production of the original 16mm print, in 2010 the artist remade *Line Describing a Cone* named *Line Describing a Cone 2.0* in a digital format (DV). In a moment when 16mm film and 16mm projectors are fast becoming obsolete, and as such a considerable part of contemporary art work recovers the use of devices such as the slide projector and 16mm loopers (Walley; 2012) McCall remade his film in case of the obsolescence of 16mm film projectors. In an interview at Tate Modern in 2007, McCall explained that in this case there would be two options of recreating the film, to make a digital copy of the work, or to remake it as a new version of the film using

⁷ Walley states in his paper ‘The Material of Film and the Idea of Cinema: Contrasting Practices in the Sixties and Seventies Avant-garde Film’ (2003) that the term was coined by the filmmaker Ken Jacobs.

⁸ As Walley explains, in these films Paul Sharits removed the shutter-blade and the registration pin from the projector so that while the films projected they were experienced as a blur of colours and shapes.

⁹ The idea of medium specificity is based on the argument that for a medium to be regarded as art it must have a range of autonomous effects. See Noël Carroll’s ‘Theorizing the Moving Image’ (1996) for a further discussion on the relationship between medium specificity and film, video and photography. Also, the issue of medium specificity will be addressed with a different take in the following chapter in relation to the materiality of film under the checking practices at LUX.

digital scripting. The 2010 digital remake could be described in terms of McCall's remarks in 2007 which envisioned that

It would be a new version entirely, completely true to the original conception (a white circular line gradually forming a circle), but with none of the irregularities of the film that was actually made (after all, from the start I acknowledged the irregularities as such – as departures from the purity of the idea – but I accepted them). So the re-make might be justified as a distortion but one that was true to the original conception, and the experience of watching it could be compared to the footage that existed of the film being projected with its audience. And this digital version might be justified on the grounds that the artist himself had already gone this route – for instance, his off-reproduced stills from the film were not stills at all, but new circular line-drawings (and later on, digitally manufactured line drawings) which were done that way because it was a lot easier than isolating a part of the film and making a copy of it. (2007: 5)

As the artist argues in the same interview, a remake would give up some of the basic characteristics of the analogue material in the process, such as the evidences of its ageing materiality, a part of the material character of the medium, as McCall explains. The new work is not a reproduction, a practice that would fulfil the inherently reproductive nature of the medium of film, but a transfer of the conceptual work from one medium to another. In order to avoid the disappearance of his work due to material obsolescence, McCall, in a way, documents and archives – in digital format – the essential and original idea of the analogue *Line Describing a Cone*. For the artist enacting the film installation the distinctiveness in materiality does not become a pre-existent condition. I would claim that regardless of the film's information – either manually animated or coded – it is the projector's beam of light that makes the film visible and actualises the installation.

The film is the artist's first animated film. McCall explains the process of making the film with the following words:

[the film] was made on an animation stand by rotating a line drawing a line of a white semi-circle from under a mask. Very basic and hit-and-miss enough that at one point in the finished work, there is a noticeable split between the semicircular lines. The semi-circle was drawn with a ruling-pen compass and gouache, and the line thickness varies enough that the difference is visible in the film. (2007: 5)

In the analogue version seen in the site of the gallery, the film begins with a piercing dot of light and in the span of thirty minutes the dot opens up into a conical form that is demarcated by light. The solid white light is not projected on a screen but runs the length of the space of the gallery while being obstructed by its walls. The process of the cone's completion discloses a different dimension to, and expectation of, light by not illuminating images on the

screen but instead creating an immaterial ‘sculptural’ line. McCall, by using two of the basic tools of cinema, the projector and the beam light, creates an immaterial sculpture, which penetrates the space like a laser’s ray, which can be, consequently, penetrated by the visitor. McCall stresses that

... no longer is one viewing position as good as any other. For this film, every viewing position presents a different aspect. The viewer therefore has a participatory role in apprehending the event: he or she can, indeed needs to, move around, relative to the emerging light form. This is radically different from the traditional film situation... (1978: 250)

While different from the spectatorial practice of facing the screen when watching a film, McCall breaks the frame of the screen, denounces a linear perspective and brings viewers face to face with the source of light – the projection apparatus. In this case, to face the projection is to face the medium as technological system and understand the practice of projection. The physical presence of the projector, which in the movie theatre is canonically hidden, reveals film’s vital practice of performance and the source of enunciation.

This work underlines a form of cinema in which illuminated by the film projector the line becomes a three-dimensional sculpture. *Line Describing a Cone* does not give essence to cinema on traditional terms. George Baker writes on Anthony McCall’s series of light film installations in the 1970s that:

... if cinema could be said to be a medium to which the experience of ‘becoming’ always in fact adheres, cinema could never be reduced to a stable and fixed essence. It could never be produced as modernist and abstract (in itself), but only as a form that would be analogical and relational (quite literally for another). Like the transitivity isolated in Serra’s process-based sculpture, McCall’s light films proclaimed that it was the essence of cinema not to have an essence. Cinema could only be particularized as the movement of form into becoming, multiplicity and difference. (2004: 22)

Primarily it does not create a cinematic milieu based on a two dimensional framed screen. By reworking and using alternative forms from the projection of film onto a screen, McCall’s work could be seen as an exploration of cinema’s processual becoming, an idea, as Walley has argued, to be found outside the standard film apparatus and an enactment of film’s apparatus (i.e. the screen, hidden projection machine and static viewing position).

The visitor does not intuitively watch the screen but instead the beam light, which describes a line which is gradually converted into a cone. The installation forms a physical event, which

invites the visitor's participation and movement. It precisely unfolds its three-dimensional quality by means of the presence and movement of spectators in the thickened air, which become materials for the work of art itself. By walking through the luminous line, breaking the light's completion of the cone, the projection elucidates the viewer-film interaction and the intersection where both actors (projection and visitor) participate in the presentation and the actualization of the light performance. As the artist himself declared (2003: 44), 'the more people who are present, the more solid the form becomes.' Baker (2004: 8) stresses the fact that the solid light film suggested art not as 'artificially constrained into a self-enclosed object form' but within a relational interdependence between the object and the viewer in a phenomenological appreciation of the object in and through space and time. McCall's film underlines a relational existence between the viewer and the object. The film forms a primary experience; the time and the space are real and not referential.

Zoller (2008: 35) describes the film as a 'temporal sculpture' and a 'spatial film', in which time and space are held in perfect balance. The duration of the completion of the cone sculpture is a medium that the spectators are invited to engage with, as the completion of the light cone is a condition that is set between the past and the future, while the present moment of inhabiting the space becomes an enactment that invites the visitor's participation. The measured time of the film's projection dissolves into an experience, in which duration is inhabited by the visitor. The visitor to the film could literally "enter into" the film, as they could walk through or "touch" the cone, thus becoming part of the film. To refer to Bergson, this forms an intuitive experience (1992 [1911]), one that occurs when the subject is placed within and not outside the object and constitutes, as a real part of it, a physical and conceptual relationship with it.

In the exhibition of the film we see a transformation of a line into a cone that does not imply cutting in cinematographic terms. The film could be seen as an example of Cubitt's (2004) explanation of the line as vector, a line moving through time and space. The animated line on the film strip is based on the principle of transformation, a quality of changing from moment to moment in the creation of something not yet seen or experienced. From recognising the line to experiencing the creation of a sculpture, *Line Describing a Cone* temporalizes space. Yet, in contrast to Cubitt's examination of the vector through Cohl's animation as the element that differentiates the viewing subject from the viewed object, McCall's animated line invites the viewer to actively and bodily participate in the production of the installation.

Through participation, the human subject experiences the duration of the film as it unfolds in three dimensions within the gallery space, and enacts the installation. The double presence of the object and the subject as media in the production of the effect of sculpture, ascribe to the installation a synthetic relationship based on both the visitor's and the projection technology's temporalities. Although McCall has stated that this film contains no element of cinematic illusion, by arguing that 'It is a primary experience, not secondary: i.e., the space is real, not referential; the time is real, not referential,' (2003: 43) it is its situation and projection in the gallery that lends the film its immaterial and thus illusionistic form as a sculpture. *Line Describing a Cone* is a film that refers to actual space and not the representational space within the frame, and at the same time is a film that is unfolded in temporal, real time, in which the three dimensional sculpture is being created.

The successive completion of the cone stresses a temporal effect which unfolds in duration from the first white point to the completion of the cone. And when the cone is completed the film achieves or enacts a difference in kind, thereby becoming another medium. By crossing mediums, cinema becomes sculpture, and as such always enacted in the present moment of the film's projection and experiential enactment in the gallery space. McCall's film manipulates the properties of projection and light to create an immaterial, solid-light sculpture. If the beam of light is the chief material condition for film's performance, in the completion of the circle the film becomes a sculptural cone, as each photogram of the strip adds a minuscule piece of line to the existing one, which by the projector's movement illuminates the design of the cone.

In the space created in McCall's film installation, the presence of the projection machine, freed from the screen and the movement of the visitors' bodies creates a temporal and spatial rather than visual continuity. The visitors' movement within the space is linked to a negotiation of the three dimensional space of the immaterial sculpture. The film is enacted as installation only in relation to the materials of the thickened air, and the film projection's light beam, the absence of the screen, and the presence and movement of the viewers, which exemplify no position and no medium specificity within the site of the installation.

In this thesis, *Line Describing a Cone* is encountered twice, once in the gallery space and once at LUX (Chapter Five),¹⁰ in the practice of film checking. The film is not the same in

¹⁰ Chapter Five will describe a different enactment of the film, in which the projection of film in LUX's editing machine annihilates the sculptural dimension and presents the film's technical production.

the two spaces; the print might be the same but the practices, the enactment of the film, are different. In the public display of *Line Describing a Cone*, the analogue technology gave form to a light, three-dimensional cone in which it was obscure at the beginning of the projection, to recognize its filmic origins. As I will discuss in the next chapter, at LUX's editing table-projection machine, the duration of the film is remote from the dark and smoky environment of theatrical exhibition and from the tension created from the presence and movement of the visitors. Instead, it is unfolded within the flatness of the small screen, in a short distance from the intern's eyes, and who is checking the print where what is visible is the dot growing into a line and forming the circle. In the manner in which it is checked in LUX, *Line Describing a Cone* reveals its filmic medium and demystifies the process of the film's enactment.

4.4 “*My Westphalia Days*”: *The Mechanics of the Apparatus*

McCall's film exhibition provides an example of Hollis Frampton's (1971) argument that film could not be considered independent of the 'event' of projection, that is, the possibilities that film projection offers for the creation of environments that move between forms or communicate with other media and forms. In a contemporary account of film exhibitions, Walley (2012) argues that alongside the current return to aesthetics of materiality and medium specificity – that is the properties and elements that are unique and specific to a medium – related to issues of obsolescence of the traditional medium of artists' work, the 16mm analogue film strip and projector, there is a renewed interest in film based projection performances. He explains that the use of film projectors in live performances can be traced back to European modernism. The contemporary varied forms of projection performance are emphasised by a common stress on the physical, mechanical, and perceptual qualities of film. Walley states that in most of these performances, 'the work does not take place entirely on the screen but incorporates the exhibition space and the material "work" done by both filmmaker and projector.' (2012: 19) The appropriation of the projector as a physical, technical but also conceptual component in the performance of film is the central focus of Mario Garcia Torres' installation *My Westphalia Days*. In this exhibition, the standard film apparatus stands in front of us, the visitors, as an exhibited object, an alternative mechanical, sculptural object.

Torres's 2008 exhibition in the White Cube gallery, in Hoxton Square, London, features the film *My Westphalia Days*, a 15-minute-long 16mm film made in 2008, and projected in a constant loop, and the slide installation *What Doesn't Kill You Makes You Stronger*. Torres' film installation is composed of the narrative film projected on a medium sized screen and the presence of the projection machine in close distance from the screen, in the middle of the gallery space. In this form, the installation presents an engagement with both gallery and cinema as interconnected contexts of exhibition. In contrast to Catherine Fowler's (2008) argument that the gallery films either focus on the inside of the frame that is the film or the outside of the frame that is the space of the gallery, or the space around the screen, Torres' installation negotiates this distinction by creating a continuum between the off screen and on screen space associated with the theme of technological obsolescence and disappearance of the art object.

In terms of narrative, the film tells the journey of a caravan being towed by a Mercedes car, on the streets and highways of a German city in the region of Westphalia and its outskirts. It opens with the caravan placed behind a Mercedes, while the camera follows it from dawn, the beginning of its journey in the street, until dusk and its ultimate abandonment in a forest. Yet, reading the press release we are informed that the caravan shown is not a simple vehicle but an artistic icon; an art object which the conceptual artist, Michael Asher, has presented for the inspection of the Sculpture Project Munster (Skulptur Projekte Münster), an exhibition of location-specific sculptures in the German town of Münster in 1977. This exhibition takes place every ten years. At each exhibition, Asher has represented the same work, the *Installation Münster (Caravan)*, in which the caravan is parked in different spots around the city of Münster on each day of the exhibition. During its exhibition in 2007, the caravan was temporarily purloined. The press release (Appendix C) states that 'Garcia Torres work is known for the playful – and sometimes nostalgic – take on the history of Conceptual art, unlocking many of its forgotten narratives to bring forth new ideas and meaning'.

Torres's film was produced one year after the art work's disappearance in 2008 and the running time of the film is repeated in the projection's constant loop. Although the film was made in 2008 it appears to have tramlines, scratches and flecks in its print, signs of damage from hand processing by the artist. In this way the fragility and bulk of the analogue medium is revealed. This fact, in combination with the 16mm EIKI projector, gives the impression that the film was made in the seventies, when the caravan was first exhibited and has

accumulated the signs of deterioration and degradation of a worn-out print. The image quality of the work is related to the noticeable tremor produced by the 16mm projector, presenting time inscribed in the emulsion grain, as the constant shifting of the grain, of the tramlines and scratches, is a reminder of the constant change of frames, and also an expression of the material of film, in which time leaves its traces by degrading the strip. Using the 16mm film format, Torres speculatively marks one more disappearance: that of the traditional, working tool of filmmakers-artists. Traditionally, the 35mm format has been a standard for theatres, whereas the 16mm format offered, because of its size, more flexibility and accessibility in less conventional arenas, such as those of the exhibition. Nowadays, the use of the 16mm format has gained renewed interest for the artist working with the moving image (Walley, 2012). Laura Marks points out that it was at exactly the moment that the photochemical era of film was pronounced obsolete when artists returned to the material body of film. She argues specifically that ‘the idea of obsolescence is meaningless to non-industrial filmmakers: when a medium has been superseded by the industry, that’s when artists can finally afford it.’ (2000: 31)

The artist, by using a screen to project his film, directs the viewer back to the frontal image, the on screen space. Fowler (2008) has argued that contemporary artists have showed a renewed interest in the ‘frontal flat image’, moving the emphasis away from the ‘off-frame’, that is the actual space of the gallery to the ‘off-screen’ space, the fictional, virtual space, implied by the film’s narrative. Torres’ film directs the viewer’s attention to the off-screen space, the actual caravan and the possible fictional journeys that it could have taken, but at the same time, it uses the off-frame space by placing the projector within the gallery’s exhibition space. By placing the projector as an exhibited sculpture in the gallery space, Torres questions the illusionism created by cinema, thus underlining the constraints of representability within the frame, and sets the primacy of the story into question.

The presence of the projection machine within the space makes apparent the projection processes that give movement and life to the film frames and indicate the passage of time within the film, from one frame to another, while the mechanical performance of the projector defines the real-time, the duration of the screening. The film apparatus visible and present within the exhibition’s space is not a usual aesthetic choice. Traditionally, untouchable and unseen from the sight of the audience, the projector stands as a new appropriation of the viewing position of the subject in relation to the object, as the audience’s

position is not caught between the source of light behind it and the moving images projected in front of it. But at the same time, the presence of the projector raises references to video monitors and the appreciation of them as sculptures within the site of the gallery. However, for video projection new devices such as smaller, portable data-projectors enable the projected image to be freed from the box (the monitors) that has contained them. In Torres's exhibition, the projector presents film as essentially attached to its machine. In this way, the film installation is composed of the film, the screen and the projection machine; the access between these components immaterially confined. The position of the projector within the gallery's physical space becomes significant, revealing the conditions by which the moving images are presented and closing, as Mulvey (2006: 67) has pointed out, 'the gap between the film strip and the screen'. Torres' installation limits the physical space that is required to project an image, which creates the space for the visitor.

By seeing the projector, the performance and technological execution of projection is revealed as an open system: the sound that the loop of the projection is making is audible, the circular movement of the strip, the physical shape of the machine, is visible. In this case, what is hidden and private within a movie theatre's projection room and visible and accessible only by the projectionist is publicly on display. The exhibition suggests a way of knowing and encountering film, which is based on the actual practicalities and materiality of projection. The portable EIKI projector reshapes spatially the screening of film, its mechanism, exemplifying what Jenkins (2000: 265) underlines as 'a film [which] is not detachable from its machine source. Rather it can be seen only if it remains tethered to a version of the apparatus that originally produced the work. Unhooked from its machine, a film is lifeless and empty.' The relationality of the object of film is revealed as attributing the agency that the projector machine acquires through the processes of performance. The machine is accredited with the power to project the film, while the projector re-asserts the specificity of analogue film and its mechanical status. In this installation the looped film, inside the frame, is surrounded by the spatial here-and-now mechanism of the projection machine, which is enclosed in the creation and the enactment of an actual space allowing the visitor to position and move her/himself.

Torres' installation might be seen as an elegy for a dead or a dying medium, the 16mm film and the 16 mm film projection apparatus. The installation emphasises the mechanical version and the technological specifications of analogue image making and image projection: the

celluloid and the mechanics of the projector. In this installation, the analogue film is restored by Torres' cinematic-artistic practice.

4.5 “*Living London*”: *Attraction in Multiple Screens*

Gerry Fox's exhibition *Living London*, produced by multiple digital video screens is the outcome of the artist's residency, working with the collection's curator, local young people, as well as the construction of the gallery, a restored Methodist chapel. The exhibition is not based on a fixed pre-existing conceptual framework or plan. As a residency, the art work created is based on collaboration between the institution, the artists and the local residents, at a specific time and a specific place. In the gallery's main room, the installation of six white canvases – which is to say screens – four in the four walls of the room, one on the ground and one on the ceiling, allow the projection of the films *Night in London* and *Nunhead Cemetery*. Each screen shows a different image of the location shoots, which roughly correspond with the images shown on the other screens; north, west, south, east, the sky and the ground. These are night time sequences in Central London's Soho and Leicester Square and daytime sequences in Nunhead's old cemetery in South London. The installation gives the sense that it operates somewhere between the gallery space and the street or the cemetery.

In the image of London generated by multiple sites and sound aesthetics, the installation acquires active participation and interplay between the viewer, the audio and film recording. Such an installation and setting replaces the classical position of the viewer sitting in an exhibition in the auditorium. The all-embracing environment produced suggests that the viewer walk through the space of the gallery. The practice of projection joins the space, the images and the subject in a technologically created London environment, combining sound and moving images. *Living London* is a recreation of the world of London in its own image, in a way that Cubitt (2004) described as the film and world being derived from the same matter. These virtual images of London, do not only aim to be as close as possible to a faithful imitation of the natural and urban environment of London, but rather they intend to be closer to an experience that activates the visitor's vision, hearing and movement. Hence *Living London* offers an immersive experience: the sounds and images are diffused in the gallery's environment, while the viewer kinetically engages with the milieu. Appropriating the means of multi screen projection, the environment produced in this installation creates a kinaesthetic experience and transcends the boundaries of the screen by displaying multiple screens where focused attention could be replaced by distraction.

Stepping away from the single screen as a focal point of attention, the viewer's attention disperses. Peter Osborne (2004: 69) writes on the presence of film in the gallery space, remarking that: 'attention is distraction (from distraction); distraction is attention (to other objects). Their dialectic generates an embodied non-perspectival, baroque space of distraction.' He continues by arguing that 'the question of what modes of attention and experience are specific to art, at any particular historical moment, finds itself enlivened once again by technology' (2004: 67). For Osborne it is the installation itself and the technologies that enact it, which stage 'the *constructed* – rather than received – character of temporal continuity.' (2004: 67) In *Living London* the effects that the installation creates are revealed in relation to the architecture of space and the enactment of film in six screens that frame the environment. Yet the distraction in the visual space, whereby Leicester Square is re-enacted, offers the visitor a feeling of "thereness" within this environment: the noise makes you turn and see what is behind you; the lights prompt you to look at the other screens; the ground moves in front of your feet as the camera moves, urging you to follow the steps of the people walking on the streets. The installation creates a temporal space, which is animated by the synchronization of sounds and images and suggests the visitor's reflective engagement with the enclosed surrounding space and all the perceptions deriving from the material world presented on the film. At the same time, the temporal interrelation between the recorded visual and acoustic stimuli instantiates an experience that is kinaesthetic, i.e. it can be experienced and perceived kinetically and sensory. The body and senses of the visitor are animated inside this moving and visual context, through a visual (re)construction of existing environments, offering an imaginative and illusory itinerary inside these urban and natural environments.

The images are not constrained by the screens as they fill the space of the installation, along with the sounds of night and day life. Fox's installation challenges the position and the situation of a point of view or perspective, but rather invites an engagement with the act of walking and changing viewpoints. The materiality of the screen becomes invisible, as it does not frame and direct the visitor's point of view and position within the gallery installation, and instead the installation directs the visitor's attention elsewhere, to the virtual image of London, as walked, heard and seen. The assemblage of the screens aims to break the 'ontological cut' between the material surface of the wall and the view contained within the screen, a virtual window into the life in London, as Friedberg would argue (2006). Through the multiple screens, the projected images become effectively the same materiality of

London, transferred from one context to another in order to be experienced, as being inside of them, by walking on them, listening and seeing them.

The exhibition suggests a sensory heterogeneity, in contrast to the coalescing of all the sensory streams into one system of viewing. Fox's installation is neither object-centred nor body-centred, instead it invites mobility, distraction as a state of scattered moments of attention and communication between the images projected and the viewers' own position within them. The mediated images of London enunciated from different viewpoints intend to complete a representation of London, which stands incomplete without the presence of the visitor who will hear, watch and distract her/himself. The physical position of the screens within the space of the gallery shapes the immediate space of the exhibition and also the position, which is moving, of the visitor. Through the position of screens and the structure of projection the installation renegotiates cinema's materiality, as found on those images and sounds that create spatial environments.

It is remarkable to note that in 2009, Ian Christie wrote about a lost film named *Living London*, dating from 1904. Christie noted that research conducted as part of a project entitled 'The London project' and which intended to study the growth of the London-based film industry at the British Film Institute, suggested that this footage belonged to Charles Urban's film *Streets of London*, released in 1906. The film was publicly screened in Trafalgar Square in London, as part of the 2008 BFI Film Festival. As Christie notes, the remaining 12 minutes of the actual film footage render images of London at the beginning of the previous century, while simultaneously regaining time and knowledge about the 'vibrant and bustling' visual portrait of London¹¹. Simultaneous to the public screening of the actuality film, artist Gerry Fox was exhibiting the installation *Living London*, in the gallery 176 in Chalk Farm, London. Although it is unknown whether Fox was aware of the existence of the 1906 film, his film installation, made and projected in digital video displays fragmented and dispersed images of contemporary London. Fox's installation bears the signs of a form of attraction similar to early cinema, that the actuality films of early cinema presented, in which the mode of display on a screen was an attraction in itself. Gunning (1990: 58) explains that in its early years 'the cinema itself was an attraction. Early audiences went to exhibitions to see machines demonstrated ... rather than to view films.' Gunning also notes that early cinema was not a

¹¹ Christie notes that London has long been a popular 'site of representation', with its population and topography in many early films, and continues to be a source of continuous fascination.

narrative medium, but instead exemplified the quality of visibility¹² of the medium to show the movement of the frame and the movement of objects within this frame. Whether drawn to the attraction of the projection, the speed of the images projected on the screen and the shock of the representation or the creation of an immersive environment by the form of multiple projection, the two films in their speculative contexts could be related in terms of the spatial basis of their screen performance.

4.6 *Ephemerality of Practices*

As argued in Chapter Two of this thesis, Stanley Cavell's (1971) notion of automatism can be appropriated as an important standpoint with which to engage with the production of the new phenomena of moving image work in which the forms scrutinize but also challenge the material and properties of its medium. For Cavell we should not ascribe a pre-given essence to film, as the aesthetic possibilities of a medium are not given, but they are subject to the intentions of the artist to discover and create a new medium within it. Thus, the possibilities of a medium can be revealed when someone actualizes them. He refers specifically to automatisms and the aim of modernist artists 'to explore the fact of automatism itself, as if investigating what it is at any time that has provided a given work of art with the power of its art as such.' (1971: 107) The exhibitions described in this chapter cannot give us an objective or unified sense of the elements of automatism. Each artist and his treatment of film materials in the enactment of film as an installed object create new automatisms for film. As such the materialities of film are transformed from one exhibition to another, as they are manipulated and presented differently. In *Line Describing a Cone*, the installation by exposing the projection's beam of light creates a three dimensional space, in which the durational completion of the cone can be 'touched', penetrated and passed through. The animated line becomes a light sculpture, an experiential space. In the case of Torres' installation, the obsolescence of 16mm film projectors is reiterated in a conceptual piece of work which conceives of the machine as a museum exhibit. By changing the location of the machine to the centre of the exhibition space, the installation adds a new level of significance to the loss of a basic tool of artists' work. In Fox's installation, the projections on the six large screens

¹² Gunning quoting Fernand Léger's essay 'A Critical Essay on the Plastic Qualities of Able Gance's Film *The Wheel*', writes that 'the potential of the new art did not lay in 'imitating the movements of nature' or in 'the mistaken path' of its resemblance to theatre. Its unique power was a 'matter of making things seen.' (1973: 229)

create an immersive environment of London which can be viewed, listened and walked through, albeit in a distracted manner. In the site of the gallery it seems that the notion of automatism becomes pertinent not only to describe new discoveries within an art form's tradition, that is to say artists' film practices, but by using the medium it also refers to the creation of new environments and sensory and reflective possibilities whereby visitors can engage with film technologies.

An understanding of film as a component of an installation translates its "fixity" for the creation of unfixed spaces, whose dimensions are foregrounded and shaped by the combination of different material actors at a certain moment. Thus, the examination of film in the site of the gallery is embedded in a search of variable practices that articulate many positions, relationships and artistic expressions. Within this form of examination, there are two points that need to be stressed: that the ephemeral nature of the film installation in the gallery reduces any form of singularity or stability and also that the aesthetic and spatial possibilities that the works convey are temporal. In addition, the description of Fox's installation and its focus on the obsolescence of the 16mm mechanical apparatus, and also of McCall's digital remake of the analogue *Line Describing a Cone*, both bring other dimensions to any assumption of the ephemeral experience of films within the site of the gallery. It can be argued that these dimensions suggest the ephemeral, in terms of the technologically transitory nature of visual media.

Paul Grainge (2011) suggests that the study of media as ephemeral 'provides a starting point for thinking about the presence of transitory screen forms within audiovisual culture.' (2011: 1) In his research the concept of ephemeral media coincides with the evanescent, transient and brief. The installations described in this chapter attain and present a sense of materiality in relation to screens and projection machines, as it is performed in the given place and position of the installations. Yet, the nature of the installations operates within ephemeral cycles of times, visited and viewed at a specific place and for a limited, short lived, period of time. Furthermore, the installations draw on material and spatial phenomena that are fleeting given the specificity of their installation in the site of the gallery.

The film in the art gallery is not a singular work, but it is an object, a material and technological artefact which is conceptualised artistically, as an installation. Thus, contrary to an idea of film as repeatable and standard, its exhibition in the art gallery entails elements of performance, with the implication that the installation, on every separate occasion of

exhibition, needs to be reworked, reconceived or changed according to the space of the exhibition. In this site film does not acquire an identity that holds together or is identical in different installations, but it is instead an executed, manipulated, fragile entity that shifts the focus to different material components of the installation, such as the screen or the projection machine and different spatial and temporal settings for the reception of the film.

The film exhibitions demonstrate a conceptual, unstable, processual and variable nature while at the same time they are using ephemeral settings and also materials. The film exhibitions underline that the work does not stand as an autonomous product, but instead it is enacted as part of relational practices that involve the visitor in relation to the positions of the screen(s) or the projection machine, all within the space of the gallery. Morse (1998) explains that

...the process of installing suggests a temporary occupation of space, a bracketed existence enclosed by a matching process of breaking down the composition into its elements again and vacating the site. Thus, installation implies a kind of art that is ephemeral and never to be utterly severed from the subject, time, and place of its enunciation. (1998: 157)

The movement of a film in different galleries assumes that we do not only refer to a movement of an object that already exists, but instead suggests the movement of an object that will be created, take shape and form, in relation to, as Morse argues, the subject, time and place of its enactment. Therefore, film as situated in the gallery does not have an a priori identity, but its identity is conditioned, shaped and searched out in the possibilities of the spaces that it can create.

The exhibition of film in the site of the gallery is animated in the time when the visitor enters the space, as in the experience of film there is a coincidence between the film object, its properties and the presence of the visitor. Film installations do not require an external point of view but one that gets inside the space of the exhibition created by the object of the projection machine, the screen or the beam of light. The exhibitions presented in this chapter offer a way of knowing the variables of film through their duration or through an enactment that directs the movement and the actions of the visitors, and which furthermore cannot be identical to the previous or next enactment. It is in the here and now of the visitor's reception, movement and experience of the installation, beyond the frame but in the space-in-between.

In the site of the gallery, it is the future that is at issue, the transformation, which will be accomplished for the artistic object of film for its next exhibitions. The concept of change,

potentiality and probability, conceptualises and enacts the object of film as an ephemeral object, subject to variables of use and modes of exhibitional enactment. Therefore the installation of film in the site of the gallery presents material processes that formulate relationships between certain art practices, different technological formats and certain film materials that are put in the front light. More as ephemeral processes rather than as fixed objects, the installed film inhabits the present of the film installation as a moment of becoming.

4.7 Conclusion

The exhibition of film in the art gallery signifies a site specific enactment of film. The location, the institution of the gallery comprises a site within which distinctive material executions are presented. Stepping aside from the examination of film as text and representation, this chapter focused on the ways that the variables of film technologies transform the space that they occupy.

More specifically, the exhibitions presented in this chapter show a series of complex performances that recombine and position audiovisual materials, such as the screen and the projection machine, into new enactments. The material properties, elements of analogue and digital film are dismantled, reshaped, reconfigured, thus presenting multiple levels of engagement with film materials, synthesizing and generating new automatisms within the heart of the work practices themselves. This chapter did not focus on a distinct set of practices, as either exemplary or definitive, within the site of the gallery. It assumed that the diverse nature of practices, based on given traditions and movements could be examined under the wider prism of a set of relationships and exchanges between art and cinema. That is to say, the artists, whose work is engaged with gallery installations or films that are installed in the exhibition space of the gallery work within the institutional, spatial and conceptual contexts of art and cinema.

The description of the three installations presented the staging of the film object as manipulated in practices. This began with an examination of McCall's exhibition, *Line Describing a Cone*, which creates a three dimensional, immaterial sculpture by extending the beam of light to the whole space of the installation. The film eliminates the physical properties of film, the screen and the light and the projector are dimensioned with the natural

and material phenomenon of sculpture. The space that the installation creates presents the sculptural and phenomenological stages of the immersion of film in the art gallery, as identified by Iles. *Line Describing a Cone* creates a primary experience of the duration and transformation of the animated line, and thus invites the visitor to directly experience the film and participate in its enactment. McCall's comes into being in real time and in real space. The passage of the viewer within the space of the gallery makes the film both appear and disappear, as the viewer unveils the three dimensionality of the sculptural line and simultaneously interrupts the description of the cone. *Line Describing a Cone* enacts the cinematic beyond the mechanical apparatus of projection, in the space shaped by the infusion of light and the movements of the gallery's visitors.

Continuing with Torres' installation, his factual film stresses the obsolescence or disappearance of materials, while the presence of the 16mm projector emphasises the obsolescence of the artists' work tool and physical support. Close to becoming obsolete, the machine underlines the ephemerality of film technologies. Torres' installation brings about the 16mm projector, as exhibited and exposed in contrast to its hidden identity in the context of the movie theatre. Torres' exhibition invests the 16mm film with a sense of significance and heterogeneity, and the machine is in a central position within the space of the gallery, as the experience and phenomenon of cinema is spatialized and interrelated within a performance that includes the projection machine.

Finally, Fox's installation presents affiliations with expanded cinema practices. The environment that this exhibition creates, invites the participation of viewers in the enactment of a durational, kinaesthetic experience through images, sounds and screens. The installation stresses the capacities of film to produce space and spatialize time, enacting an environment that can be experienced in bodily and sensory ways. The installation merges the technology of digital video with the physicality of participation that the multiple screen projections create. Fox's installation is ascribed site specificity as it is the production of the artist's residency in the gallery 176. The installation creates an environment actualised and enclosed in the form of multiple projections.

The next chapter re-visits one of these works, McCall's *Line Describing a Cone* within the site of LUX, the London based arts agency that collects artists moving image works. Deprived from their performative enactments in the art gallery, artists' film returns to LUX, in order to be distributed and exhibited anew.

Chapter 5. Fluid and Decomposing Material: Film Checking Practice

5.1 Introduction

This chapter focuses on the physical and material object of the analogue film strip, in the *film checking* practice as it is enacted in the site of LUX, the UK's leading arts agency of artists' moving image work. LUX's internship scheme of archiving, which entails the practice of film-checking, is one of the 'ordering processes' (Hetherington, 1997) undertaken by the agency to maintain and secure the viability, availability and accessibility of its analogue film print collection. This process is specific to the site of LUX and it is performed only by the agency's interns and the people who work within this site. In concrete terms, the survey of this chapter derives from my nine-month internship in LUX. Every Tuesday from 10.00 until 18.00 I was working as an intern at Shacklewell Lane, East London, where the offices of LUX are situated. In this case study, I, the researcher, am the practitioner, who operates the film checking. In this chapter, drawing on this role and the particular film practice, I am primarily interested in asking: Which versions of the analogue film's materiality are enacted through this practice? Relationally, this is concerned with how film is enacted outside its public display, in the private projection of the checking of its material condition and in effect how does film exist besides its moment of projection? To examine these questions, this chapter – by placing emphasis on the general framework of practices undertaken in LUX, from collection and distribution, to projection and maintenance – considers the place in which the checking practice is situated (a corner in LUX's office space) as heterotopia (Foucault, 1967). In addition, the concept of heterotopia will be employed in order to claim that the practice in focus is situated and constituted between film's 'normal' (public) and 'pathological' (private) condition. That is, deviant from its public, canonical performance and also "other" from the various set of practices that are operated around it in LUX's offices, will define the place in which the checking is taking place as heterotopia. Furthermore, in LUX, the passive (as distinct from an archive's active) strategies of film preservation, as will be described in the following chapter, give grounds to discuss the relationship between film's physically and conditionally transformative nature and "death". Within the acts of distribution and archiving in LUX, film oscillates and moves between life, that is to say

public performance, and death which in this site is equal to its status as archival object, as defined by its inability to be distributed and projected again.

In the previous chapter, discussing the practice of projection in the art gallery, film is enacted in order to create spaces and temporalities to be intuited. In the gallery, projection is related to film's installation within the space, the situation of the projection machine, the position of the screen or the limits of the screen. In case, for example, of the film *Line Describing a Cone* it is the presence and movement of the gallery's visitors in the gallery space that performs the installation. In contrast, the checking projection in LUX achieves the role of diagnosis of film's material condition. In the site of LUX, I, as the intern, operate the projection in order to observe and classify the materiality of film as potentially damaged or disintegrated.

Following the exhibition of artists' moving images in the gallery site, this chapter interrogates the enactment of film after (and before) its "normal" condition, that is to say of public display, in the moment of its "pathological" condition during the film checking. Within LUX's field of activities and orderings, the checking procedure is situated at the meeting point between the distribution and exhibition of film, as films to be distributed first need to be checked. This practice provides a moment at which this thesis assesses the fragile material properties of the medium of analogue film, that is to say, the film's emulsion and base, the two components of the film stock, the positive analogue strip. Namely, this is the material which carries the moving image, the information that is the gelatin, and the base, which holds the gelatin's thin emulsion. The light-sensitive emulsion, a solution of silver halide crystals, is applied to a transparent base. In the process of film checking these two elements are under examination. The condition of the emulsion affects the quality of the images; grain or dust impinges on the images without penetrating the base. Nevertheless, scratches can penetrate the emulsion down to the plastic base of the image carrier. At the same time, ageing, the passage of time, irregular storage conditions, or lack of projection could initiate autocatalytic mechanisms that is to say chemical reactions that affect the level of degradation in the material condition, the shape and the durability of the base.

The film projection enacted in this site intends to examine the grain, splices, dyes and colour of the film stock. As such, the materiality of the analogue film is seen to be malleable and fluid as it is shrunk, broken apart and deteriorated in its circulation across a vast range of institutional sites and mechanical operations. Therefore, within LUX's distribution and

exhibition practices, in the circulation and display by various projection machines under different conditions and different projectionists, and also storage, film emerges within a realm and agency of time and chance.

5.2 The Site: LUX's Art Heritage

LUX collects and also makes available through its distribution activities, much of the work that we encounter in art galleries' exhibitions discussed in the previous chapter, but also in universities, special screenings in movie theatres. The site is constituted by a practice-based approach to artists' moving image work, which is articulated by the nexus of its aims and activities. On its website the agency describes itself as:

... an international arts agency for the support and promotion of artists' moving image practice and the ideas that surround it. LUX exists to provide access to, and develop audiences for, artists' moving image work; to provide professional development support for artists working with the moving image; and to contribute to and develop discourse around practice. (www.lux.org.uk)

As an institution, LUX is a non-profit, non-commercial, organization that receives financial support from the Arts Council of England. It encompasses the present form of the Lux Centre, which, founded in 1997, emerged from the amalgamation of the London Filmmakers Co-operative (LFMC), a radical co-operative initiated in 1966, and which aimed for the promotion, production and distribution of experimental films, and the London Video Arts (LVA) – later London Electronic Arts – established in 1976, and which worked for the promotion, distribution and exhibition of video work, focusing, in particular, on individual artists. The historical and institutional tradition from which LUX emerges is of significant value in the UK and is engaged with practices that go beyond filmmaking and cover the activities of distribution and exhibition of artistic work. The agency facilitates the programming of screenings and events, online exhibitions, public workshops, seminars, talks and curatorial work based on its collection, the compilation and release of DVDs, and the more mundane practices of packaging, sending and receiving film prints for and from public projections and also the film checking practice.

In the agency's constitutional framework, the term 'artists' moving image' covers a wide spectrum of work comprised of moving images: avant-garde and experimental films, video

art, television projects, national and international works from the early years of the previous century, right through to today. Julia Knight (2007) informs us that the agency hosts the largest collection of experimental film and video work in the UK. It retains the work of more than five thousand artists, which are collected, distributed and archived in the form of beta tapes, DVDs and analogue films. Its main section is composed of films in 16mm format, a small amount in 35mm format and fewer in 8mm and Super 8 format (these are the formats under the checking practice), and videotapes and digital discs. The analogue prints residing in LUX are in triacetate celluloid or polyester format, and the agency does not deal with any nitrate celluloid film prints.

As a distributor of artists' moving image works, LUX holds a collection that rents its acquisitions for non-commercial exhibition, both nationally and internationally, facilitating access to films, some of which are rare and unique to them. The status of film in LUX does not appear as a commodity, its field of operations is cultural rather than economic. The agency acts as an intermediate point between the production of artists' films and their distribution. Geoffrey Nowell-Smith (2011) acknowledges a lack of theoretical consideration on the intermediate stage of alternative systems of distribution outside of commercial circuits of circulation. As he writes:

... unlike the mainstream film industry, in the world of artists' film and video it was distribution where cultural interchanges were at their most intense. The artist might perform a solitary labor (in extreme cases, just him/herself, a camera and a landscape), reception might be no less solitary (particularly with the advent of video), but the intermediate world where films were assessed and were devised to bring them to prospective audiences was one throbbing with collective life and political-cultural debate. (2011: 12)

Nowell-Smith reasserts a divide between the commercial industry and the *artists' film and video*. The artists' work is marked in scope by an array of autonomous practices that step outside institutions such as movie theatres, theatrical chains and mainstream distribution companies. As an art agency, LUX focuses on the marketing of materials, concentrating on film's circulation and exhibition among organisations, such as museums, galleries, festivals and educational establishments. In contrast to the large scale commercial reproduction and distribution of films, which will be underlined in Chapter Seven of this thesis, the artists' film prints are scarce. Jonathan Walley (2008) explains that they are purposefully scarce, since scarcity is the element that makes them valuable in the art market. In his words 'artists' film regards the film print as an art object.' (2008: 187) In the film checking practice at LUX, the

object of film, as a material print, relates to the significance and value of film as a mode of artistic expression and as a distinctive property given its limited number of copies. Within this context, the film checking practice operates in order to secure the condition of the scarce number of a given film's copies.

Furthermore, as an agent located between film's distribution and exhibition and the artists, when it is feasible LUX has, in many cases, given custody from the artists over the contexts, practices and the material specificities of their work. For instance, if an artist has decided that she wants her work to be exhibited in a 16mm film shape, then it is this 16mm print that LUX needs to preserve for the film's distributions. In such a way the issue of medium specificity takes on another dimension in LUX, as it is addressed based on the rarity and scarcity of the analogue films that the agency holds. The concept of medium specificity has long been an object of examination in art and film studies. The history of the concept can be traced back to the eighteenth century and Gotthold Ephraim Lessing, who claimed that 'each art, in virtue of its medium, has a uniquely appropriate range of effects such that only that medium can discharge' (quoted in Carroll, 1996: 7) In the age of the post-medium condition, Rosalind Krauss (2000) discarded the idea of the purity of the medium in works of art. Her thesis is based on reference to artists such as Richard Serra and Carl Andre who rejected Clement Greenberg's (1940)¹³ idea that an aesthetic medium was defined inherently by its own specific material properties. In Krauss's argument, the medium could be understood as a set of differential relations, which are not bound to its pure materiality. Criticizing the medium-specific approach, Krauss (2000: 44) underlines 'that the filmic apparatus presents us with a medium whose specificity is to be found in its condition of self-differing.' What interests me in this chapter is not the idea of film as an art or aesthetic object which self-differs, in interdependent physical supports or aesthetic conventions but the idea of material specificity and condition that lies at the heart of the role of LUX to collect and promote artists' films. As a collector and a distributor that needs to maintain its collection for purposes of circulation and exhibition, LUX needs to secure the artists' work in their original formats and in which the artists have decided to exhibit them. While film's material and technological components in their performance in the site of gallery exhibition are manipulated in order to be installed,

¹³ Clement Greenberg believed that the uniqueness of a work of art relied on the ability of the artist to manipulate the elements of an art form that are unique to the nature of the particular medium.

LUX has introduced the site specific practice of film checking in order to regulate film's specific materiality.

The distribution of films for theatrical screenings requires a rental fee that has been mutually agreed upon with the artists. In case an artist has not stipulated a price, the rental cost depends on the film's individual length.¹⁴ It is the duration of the film, dependant on the material length of frames, that becomes the distinct criterion for pricing, not the frequency of rental requests, the rarity of the copy, or the value of the film, or the artist's acclaim. If the hired work is not screened on 16mm format, there will be costs involved for the reproduction of an exhibition print. On the other hand, damage to hired works must be reported to the agency by the hosting sites. The main reasons reported for damage on the rented prints are the projection of the films using poorly maintained projectors and/or mistakes made by projectionists. The rental terms and conditions, which include the checking process, the reference list of host venues and any the problems that might have occurred during them, are all features intended to standardize LUX's collection of sustainable analogue film resources and the accessibility to, and visibility of, the prints. Durability and material maintenance is a key quality in the presence of film in LUX, in order to maintain the practices of film distribution and exhibition, and thus access to its acquisitions. LUX ensures that the copies of artists' work that it acquires are going to be maintained in their original material format and the best possible viewing conditions.

5.3 LUX's Heterotopic Corner: Between "Normal" and "Pathological" Condition

Mol stresses that 'to enact a disease is also to enact norms and standards. This is because the entity afflicted by the disease deviates – from some normality.' (2002: 121) Situating the object of the disease in the practices undertaken in the pathology department, she states that

Enacting atherosclerosis in the department of pathology is not only a matter of directing the medical gaze at bodily issues. It is also a matter of touch. The pathologist takes an

¹⁴ LUX, as an institution, promotes, creates and exhibits artists' moving image works and primarily negotiates with artists about the duplication of formats, their disposal, and/or their digitization, as the replacement of analogue film technologies with digital has a significant impact on costs, operations and long term access.

amputated leg out of a plastic bag. He searches for the appropriate knife and cuts out pieces of vessel. If it weren't for the gloves he wears, his hands would get dirty. And he's not the only one interacting with physical matter. A technician stains the specimen with fluids. Light passes through lenses and slides before reaching his eyes. Enacting reality involves manipulations. And yet in the department of pathology enacting atherosclerosis reaches its apogee when the doctor's eyes see an enlarged vessel wall. When the disease is unveiled and knowledge is established. (Mol, 2002: 88-89)

In the above quote, Mol focuses on the examination of an amputated leg afflicted from the disease of atherosclerosis and describes the way that doctors, technicians and materials enact it. She simultaneously describes the actors and operations enacted within this site, in order to acquire knowledge about the disease. In accordance with the technologies operating in this site, the doctor engages using a 'medical gaze' to detect the manifestation of the disease: an enlarged vessel wall. In the pathology department, the human organ is examined in terms of the ways that the disease has afflicted it, thus deviating from a normal condition.

The difference between a "normal" and a "pathological" condition, is one of the main differences that Mol articulates in her project. The model of conceptualising difference that Mol engages with does not refer necessarily to opposition. Drawing on the existing literature¹⁵ (*The Normal and the Pathological*, Canguilhem: [1943] 1966), Mol argues that difference could be said to be quantitative, and in this way:

Pathological conditions could then be studied with the aim of learning about those that were normal because they were an exaggerated or diminished form of normal. Elsewhere, the arrow pointed in the other direction. From studying the normal function of an organ one could learn what it failed to do when it came to be pathological. (2002: 121)

But, at the same time, Mol explains that it could be regarded as a qualitative difference, as it does not only involve changes along a continuum and it is not a matter of degradation, rather it forms a jump, a gap, a break, 'when one goes from one side of the boundary to the other.' (2002: 122) In the first case, the conditions' study can recognise and show us what is deviant but not a disease itself. In the second case the study makes apparent the disease itself. As Mol stresses, in Canguilhem's work the significance of stressing the difference in qualitative and

¹⁵ Mol also refers to the work of Michel Foucault (1973), who showed that the distinction between the normal and pathological is articulated first in the nineteenth century. Mol draws on Foucault's writings to explain that before the nineteenth century 'disease was not taken to be a *condition of* the body, contrasting with that other condition, health. There were *diseases* and they could come to *inhabit* the body.' (2002: 125)

quantitative terms, 'is to defend the clinic against the lab. Laboratory measurements, imaging technologies, and all the rest of it allow only the recognition of what is uncommon deviant.' (2002: 123) That is to say, the laboratory can establish facts, but cannot define and establish norms. These are the work and subject of clinical diagnosis. In the empirical study of the film checking practice at LUX, the condition of film is examined within a range of practices, which should not be caught up in the tension between the clinic and the lab. The materials that are enacted in the film checking practice, from the projection machine to my visual examination of the film checking sheet both detect the symptoms of deviance on the film's print and mark norms, that is to say raise classifications and take actions, such as defining a film's condition as archival, and in this way positioning the afflicted film within the site of LUX's archive. The film checking practice recognises the symptoms and diagnoses, measures and defines the film's condition. In the film checking practice in LUX, facts and knowledge about film are constructed through the activity of film checking.

Through LUX's distribution practices, film is transferred from one site to another, and in its travelling through "unpredictable" places, the technology seems to be flexible and responsive. But it is also multiple, non-identical to itself, as it attains a certain mutable materiality, which attaches decay to its nature if not preserved under appropriate storage conditions. Also involved in this is its mechanical nature as a component of a tactile operation of a projection system and the technical condition of the projection machine. By mobilizing Mol's differentiation between the "normal" and "pathological" condition of the human body, we can see an object that is bounded both in terms of its mechanical performance/projection and its material/physical nature in LUX's distribution of film in different sites to be exhibited and returned to the agency in order to be checked.

The main difference between film's normal and pathological condition can be seen through the practice of film checking in terms of viewing context and form, which can be related to film's public and private practice of projection. That is to say, the difference between its "normal" performance in the site of the art gallery, where film is aesthetically or kinaesthetically experienced by the visitor, and its "pathological" enactment in the practice of "film checking", where it is examined as a potentially afflicted object, damaged by its mechanical performances and/or the deterioration and ageing of its materiality.

Traditional film studies draw on institutional models of film spectatorship, in which the consumption of film forms a symbolic activity and composes a culturally significant event.

As Chapter Two of this thesis discussed, Stanley Cavell (1971) has suggested film spectatorship as a cognitive activity, in which making sense of a film is equivalent to making sense of the world and human subjectivity. On the other hand, the apparatus theory of the 1970s refers to the relationship between the viewer and the screen, but not in technical terms. This involves film spectatorship as a primarily aesthetic activity, which can produce psychological responses.¹⁶ In the manually operated practice of film projection there is a physical relationship between me, the screen and the projection machine, but it is restricted from any imaginary or mental connection with the space within the screen, the content or the aesthetics of the image. In film checking practice the film strip, the projection machine and the screen become practical devices and are deprived of any symbolic or performative function. The specificity of the screen in the practice of film checking, in terms of its small size and its attachment to the projection machine, indicates the context and situation of the film viewing: close proximity to the screen and a sited position. In the viewing situation in which I am positioned I look at the screen not as a window onto a different representational space, but as a lens through which I am checking for signs of dirt, glitches and scratches on the strip's surface. As such I could examine the visual condition of the images, and the material integrity of the strip. My viewing of the film is observatory, focused on the details, just as a practitioner would examine an afflicted tissue in the laboratory.

For instance, as an intern in LUX I am projecting, with a Steenbeck machine, the 16mm copy of Anthony McCall's film *Line Describing a Cone* (1973) in order to check the condition and quality of the image frames. My intention is to inspect and evaluate the material condition of the photosensitive emulsion on the base of the analogue film print and its impact on the visual quality of the projected images. The film has been rented by the agency for an exhibition and has been returned to it after its screening and sealed in a film canister. On the inner part of the canister a label is placed that provides information about the format, the length of the film,

¹⁶ Jean-Louis Baudry ([1985]1974), the exemplar theorist of apparatus theory, claimed that the mechanical apparatus negates the differences between the static images in order to create movement and to constitute meaning. He argues that in this way 'the "subject", is put forth, liberated (in the sense that a chemical reaction liberates a substance) by the operation which transforms successive, discrete images (as isolated images they have, strictly speaking, no meaning, or at least no unity of meaning) into continuity, movement, meaning.' (1985: 536) In this account, the spectator postulated is passive and homogeneous. In this chapter's argument, the normative elements ascribed metaphorically to film refer to the "standard" institutional model of cinema experience, underscored by an engagement with meaning, messages, aesthetics and content. The pathological elements ascribed to the afflicted materiality of film acquire a different kind of spectatorship, which is diagnostic.

the number of times it has been recently checked – which translates into the number of times it has been rented – and the level, a number indicative of its material condition during prior checks. The sculptural phenomenon that the film produces when displayed in the gallery space has been described previously in Chapter Four. In the site of LUX I am encountering a different enactment of McCall’s film, remote from the spatial environment of its public installation, exhibition and performance, and the bodily and visual engagement of the visitor with it. The film I am watching and checking is projected on the small screen of the Steenbeck flatbed film editing suite, at a very close distance to my eyes, and it shows a one-dimensional luminous line describing a cone. As the film begins with a white dot on a black background, the dot grows into a line, which in a circular process of thirty minutes expands into a cone. In its projection in a corner of LUX’s office, the thickened air and the visitors’ participation, through which the cone becomes visible and gains corporality, is missing and the film, deprived of its three dimensional volume enacted in the gallery space, recoups its graphic and painterly geometric qualities. The construction of the film reveals its animated qualities but, more importantly, while projecting the film print in LUX, the green tramlines and dirt on the strip’s emulsion disrupt the clear, black background, which is disrupted only by the formulation of the circle, thus inviting questions about the way these particular signs of damage might affect the public projection of the film. In the practice of film checking, I had the opportunity to see *Line Describing a Cone* in a mode of projection that few have experienced.

In McCall’s film projection at LUX I did not watch the analogue film as an aesthetic or conceptual object and I did not experience the thin projection beam that creates a convincingly solid light cone, inhabiting duration, but instead I focused on the film’s emulsion and base condition, observing the faults created on the image. In LUX, it is not only the fact that the point of view of analysis and the gaze are different, but that the situation and location of projection changes and alters completely the sculptural enactment of the film. But it is also the object of film that is different; it is an entity possibly deteriorated and afflicted by dirt and tramlines. Away from a “normal” site of exhibition, such as the gallery, the checking of film’s pathological condition in LUX actualizes a different reality of film. This is the reality of the film checking practice, which I am going to address next. Such a reality “silences” the alternative or multiple ones enacted in film’s public projections, for instance in the art gallery. However, the previous projection of film does not vanish, instead it leaves its

signs on the condition of the film stock. The materials of the editing table, the film records, are actively engaged in the enactment of this reality.

The checking of *Line Describing a Cone* exemplifies the way that the practice is operated and gives an indication of the way that the corner in which the film is checked could be seen as constituting heterotopia. In terms of medical vocabulary, the term heterotopia comes from the study of anatomy, and originally refers to parts of the body that are in an abnormal anatomic location, out of place or missing. In Foucault's (1967) study heterotopia is a space of otherness in relation to (and in) difference with other spaces. He explains that heterotopias can be found everywhere in varied forms; for instance heterotopias of crisis and heterotopias of deviation, the heterotopias of the garden, the museum and the cemetery. Spaces such as the psychiatric hospital, rest homes or prisons are what Foucault designates the 'heterotopias of deviation' bound to deal with individuals whose behaviour was considered to deviate from society's required norms.

By taking Foucault's description of heterotopia as a space of deviation, another way to look at the film checking practice arises. Through the checking of film's material condition in LUX's corner space makes it a heterotopic location in which film's pathological condition is examined and disclosed. This is a private space, in which the checking practice can be accessed only by the people who work within this site. It is also a space, as I will describe in the next section, in which the film checking activities, through the way that they are defined and activated, are particular to the site of LUX. The film checking corner is an obligatory point of passage in LUX's distribution processes. This site and this practice can be seen as "other" within the other everyday practices and activities operating in LUX. In these activities, film is marketed, distributed, published in books, DVDs and websites, and it is also researched and watched by curators. In the office, the employees answer phone calls, have meetings, prepare films for packaging, negotiate about films with artists, and organise the curatorship of film events. The technical staff also checks the digital film copies that arrive in the office, compile collections for DVD releases, and update the agency's website. All the activities undertaken in the LUX office are peripheral to the actual film projection and film viewing by the intern. However, the checking site is related to all these activities and – as I argue – orderings by LUX, as they describe and exemplify the distinctive practices that LUX encompasses around the promotion of artists' moving images. Drawing on Foucault, Kevin

Hetherington analyses and defines heterotopias as spaces of alternate ordering¹⁷ within the historical specificity of the eighteenth century and the spatial dynamics of modernity. Hetherington looks at the notion of heterotopias in terms of the organization of space, arguing that they form ‘modes of social ordering, found in modernity’s Other spaces...’ (1997: viii). As he explains, heterotopia organizes parts of the social world in a different way to that which surrounds them. ‘That alternate ordering marks them out as Other¹⁸ and allows them to be seen as an example of an alternative way of doing things.’ (1997: viii) In this study, sites such as the Palais Royal, Masonic lodges and early eighteenth century factories in Britain all become examples of the processes of the alternate ordering – namely an alternate way of doing things – undertaken within these sites. In Hetherington’s argument, order is not seen as something that is already fixed and stable, fully formed. Rather it is something always intentionally created, ‘a contingency effect that arises from ongoing social, and some would say technical, processes.’ (1997: 10)

I will employ Hetherington’s use of the concept of heterotopia, as a process of spatial orderings. Mobilizing Hetherington’s focus on social processes to the artistic processes and tradition from which LUX emerges, I will argue for LUX’s alternative enactment and manipulation of film within its site and its film checking practice. Since the heterotopic corner of LUX and the practice that I am operating do not exist in themselves but they are aligned with materialities, practices and events that are located and enacted within LUX. It has already been shown that LUX represents a space with distinctive systems of distributing, promoting and exhibiting films. The spatial orderings that the film checking practice enacts in the heterotopic corner becomes an interesting field of inquiry. Through these orderings, materials, such as checking sheets, film cans and film strips and the archival condition of film, can shape multiple realities of film. That is to say, film is projected here in order to be checked, it is situated in LUX’s archive and also in the film checking sheet, which is a record of the film’s past history and performances. These processes, these orderings that I will

¹⁷ In ANT studies, a field in which Hetherington is involved, the sociological term “social order”, suggesting organization and structure, is replaced with “orderings” so to underline that there is no such thing as social order with a single centre and a stable set of relations. In contrast, there are orderings, plural and processual. Central to ANT is the examination of local processes of patterning and orchestration. Film’s enactments that are taking place outside of LUX transgress its practices and also the shape of the analogue films, introducing new ordering processes and operations.

¹⁸ Hetherington states that there different ways of examining Otherness: as something without, something excessive or something incongruous. In his study he considers Otherness in terms of the incongruous.

describe next, are situated between LUX and the external spaces in which film is distributed and exhibited.

5.4 The Film Checking Practice

The moment and practice of film checking takes place in a corner in LUX's space where the table projection machine is located and the film to be checked is manually operated by the intern. As an intern, I take one film at a time from the storage room, which hosts the agency's film collection. The films that have recently distributed and exhibited are placed on a set of shelves next to the entrance. I take a film in "my corner", which is isolated from the rest of the open space by a black curtain that I pull circularly around me and the projection machine. This corner is a place set off from the rest of the "normalized" and expected activities undertaken in the office of LUX, as described previously.

The site of film checking is defined by its relationships with the stages of film's distribution and exhibition. These relationships are formulated between public and private projection, theatrical and non-theatrical screening, illusionistic spectatorship, or diagnostic observation, and involve examining and scrutinizing the material condition of film. They designate the checking practice in a site, in which the cinematic norm and the theatrical projection of film is transformed into a diagnostic process. In the mobility of film between sites to be projected for exhibition, the film checking practice is a precarious enactment that rests on associations and orderings between LUX, the institutions in which it is rented, and the technologies and practitioners that operate each time during projection.

The checking occurs within this transitional space, between the host venues and the agency, between the theatrical performance and the state of inoperability or latency (often for months, even years) in the collection, between mobility and stasis, action and inaction. Films that have not been distributed for some time, if they are demanded for hiring need to be checked. For some films this moment of transition and subsequent checking occurred often, for others rarely. For me, the encounter with this film practice was part of the internships' routine. While checked, film became an "afflicted", "conditioned" object, in which the previous theatrical projection was absent, whereas the past projection's material traces were present on the Steenbeck's screen.

The checking requires observation in order to diagnose the film's condition. Substantively speaking, what I was searching for was the measurement and evaluation of the damage and the decay to the film print. The measurement of decay became a quantitative dynamic only in regard to the completion of the checking sheet's criteria, which are an indicator for its distribution and exhibition. In contrast it qualitatively altered the visual look of the film through its physical agency. The records of a film become the reference point of every check. The regulation of film's condition through check ups resembles the check up of a patient's condition, in which the observational part of the process resembles the medical gaze. Foucault proposes in *The Birth of the Clinic* (1989 [1963]) that observation requires a 'pure' gaze. As the philosopher explains, at the end of the eighteenth century and with the establishment of modern medicine, the eye and the gaze become a source of clarity that brought the disease into being. Before this paradigmatic shift, the detection of a disease was defined by listening to the patients' words and descriptions. Patients seeking relief would describe the conditions they were suffering from, in order for the doctor to infer the disease that inhabited their body. After the eighteenth century, the detection of the disease required a well-trained examining gaze of the bodily tissues. Foucault describes this gaze:

The observing gaze refrains from intervening: it is silent and gestureless. Observation leaves things as they are; there is nothing hidden to it in what is given. The correlative of observation is never the invisible, but always the immediately visible, once one has removed the obstacles erected to reason by theories and to the senses by the imagination. (1989: 107)

Employing the metaphor of the medical gaze in the film checking practice, we restrain what is visibly given in terms of the material's condition. Observation leaves things as they are and is concentrated only toward the visible damage and deterioration of the film strip; it does not intervene and it does not make assumptions about the wholeness of the film by means of aesthetics or techniques and styles of image making. Requiring the employment of a medical gaze, the intern aims to find the signs, the representations of damage on the visual condition of the film.

This is how I checked the film: I checked if the film has an academy leader (the reverse concession of numbers that define the beginning of the film), I cut and I taped – adding yellow strip for the film's head if its missing and green strip for its tail; these being the leader marks which indicated the beginning and the end of the film – I touched the film prints, and I felt whether they are deteriorated or not. I placed it in the projection machine and I press the

starting button. The celluloid passes through bandages to be cleaned and I wore gloves to touch it. I watched, and I employed my gaze to detect the tramlines, the dirt, the scratches, etc. I smelled, to witness the films' state of deterioration, if it is heavy, it releases a certain smell, like rust. I focused on the sound that the loop is making, listening for sprocket damage or film warpage. If it bears these symptoms, you could listen, for instance, for the difficulty the machine undergoes in projecting film smoothly. The process of checking, described above, is filed in reports, the film checking sheets, which then get archived. The visual gaze is multiply focused: on the way that the reels unfold the frames, the audio sound, the tramlines on the frames, the counter of splices, and so on. But the interaction with the machine is not disembodied, but rather embodied; it involves and requires the participation of my hands and eyes, the latter focused not only on the screen but also on the way that the strip passes from the reels of the editing machine, thus detecting if there is any sprocket damage or if the emulsion is destroyed.

This practice forms a parallel, private maintenance procedure for the collection's prints. Through the use of check ups as the agency's only mode of regulating film's condition, this site and practice becomes a kind of laboratory practice, where film is being monitored. Here, several processes take place simultaneously: damage to the film strip is measured, splices are counted, information is transferred onto a piece of paper, photographs of the print in projection are taken in order to document its condition, and all these will be transferred onto the computer for archival reference. However, LUX's checking practices are not unalterable. After a new film print was returned to the collection terminally damaged, LUX introduced a new visual and archival instrument for film checking: the recording and documentation of film's condition in photographs. In the process of simply watching the film in order to trace and record its damages I had to take photographs – like x-rays – of the film in its projection, one at the beginning of its screening and one at the end. These digital photographs were transferred into a separate electronic file, where each film would have a virtual record of the trajectory of its condition after every theatrical exhibition and every screening check. The photographs, a material that could be seen in this context as an inscription device, produce static and fixed representations of the fleeting moment in which the film is projected.

Since its invention photography has stood as an archival formation, a documentation of an event, a statement and an inscription. The photograph is directly related to the aspiration to produce and archive. The snapshot, a close-up of the movement of the analogue film in the

projection machine, clarifies this process. The photograph documents material and visual conditions from the projected film's lifespan. It constitutes a knowledge and form of reference about the condition of the film. By deploying photography, LUX employs a regulative ordering to the practices of the documentation and archiving of the processual nature of film's materiality when it is projected. In documenting film's condition, photographs outline the relationship between temporality and the image, the film object as a material that delivers the content of the art and its past, as a singular and unique record of a condition that will be irreversible for the specific material. With photography, the material condition of the afflicted film survives only in a single snapshot. The animated film becomes captured within a photographic frame that expands its content in another technological format and in a new location, the digital archive files for every film.

5.5 The Projected Film

The properties and conditions of the analogue strip do not tend to attract much theoretical attention, principally only interested archivists or the manufacturers of analogue film strips. Traditionally, in the processes of making and producing films the print of a film is checked, after the production has finished and before the reproduction of release prints, mainly in order to evaluate the colour and the light exposure. In the course of my internship I was using an RTI previewer model to check the prints for the first six months. This is a table projector for 16mm film prints only, with an additional facility of cleaning the film while projected through the double system of reel bandages attached to it. The screen is attached to the machine, just next to the film reels. The use of headphones facilitates concentration on the film. The machine has operational buttons that adjust and manipulate the quality of viewing: for example, a button for keeping focus and a button for framing. This projector model also has a metre counter and a splice counter. The film strip follows the same process every time: the film's sprockets have to encounter the projector reel's teeth just so. The photographic frames pass in front of the light at a uniform rate of speed, twenty-four frames per second, which reproduces accurately the movement and performance of the film. With the RTI model, the film is projected on a very small screen, in close proximity to my eyes. I forwarded the film, I watched it, then I filled in the film checking sheet, I rewound it and then I put it into its case and back into the film storage room.

Due to a shortage of the specific bandage used for cleaning the celluloid, for two months the RTI machine was not operated. In LUX's editing room, another machine – an editing-projection Steenbeck, with no headphones or a minute, second and frame counter – replaced the table projector for the film checking. The Steenbeck is a four-plate table machine, not as rarely encountered as the RTI model. It demands and offers greater manual control, something that justifies its usage as an editing machine. Here, the film strip, in order to be projected, has to pass through more reels and gates than with the RTI model. A single-level speed selector enables control of speed; it permits the projection of film at two speeds and the same for rewinding. In contrast with digital and video technologies which can be easily rewound, analogue technologies cannot be. However, the freedom of the speed selector in contrast to the single rate of speed of the RTI model can cause greater wear to the celluloid. By manipulating the speed of the editing projector I could have caused scratches or sprocket damage to the film's strip.

As in an editing room, where cuts, stops, changes of frame rate are executed, the film projection for the checking process is a technical procedure, showing the division of frames, the potential splices, the black frame lines, the length of the strip, and everything that needs to be checked relies on observable materialities and the physical properties of the strip. Here the frame division facilitates the practice of checking. The condition of every frame counts. If one frame is scratched, this must be logged on the film checking sheet. Thus a minute in the duration of the film, in which the frame is afflicted, is written on the film checking sheet. The engagement with film as a material and the processual nature of projection and its effect in transforming film's material condition, provides us with an understanding of the technological and mechanical relationships through which the materiality of film is shaped.

5.6 Film Checking Sheet

The film checking sheet identifies and materializes the outcomes of film's trajectories in various sites and display enactments (Appendix C). It provides a representation of the film's visual condition in figures. I observe the present state of the film in its various manifestations and these are categorised, based on the questionnaire of the checking sheet. It composes a "picture" that comprises categories based on formal similarities of manifestations and effects created on the film's emulsion and/or base. Foucault (1989) names the *picture* as a spatially

legible and conceptually coherent representation that can integrate what is perceived by the clinician's gaze and what is heard in the essential language of the disease. The film checking sheet requires the observation and documentation of specific information: the film's LUX code, the title of the film, the artist's name, if the film has a head and a tail, if it has an academy leader, the number of slices, the position and extension of tramlines – the presence of green tramlines shows a deteriorated and seriously damaged condition – specifically if they are faint or heavy and whether they are situated in the centre or at the edges of the film. In addition, for the completion of the film checking sheet, the intern inspects if the film has scratches or dirt: in particular, if they are light or heavy, consistent or partial; also if there are signs of sprocket damage and symptoms of fading or of warping, this being relevant to old formats that have already experienced vinegar syndrome¹⁹. Special notes about the film could also be taken. Specifically, I first noted if the print had a head and tail – added strips by LUX – and if it had an academy leader; these elements affirm the order of the film print necessary for every projection. There are five levels of condition in LUX's checking sheet: 1a for brand new reels, 1b for almost brand new prints. The first two levels define a perfect condition, then good, average and poor follow and lastly level 5 designates that the print cannot be distributed and projected and will therefore reside immobile in LUX's archive.

In the checking sheet, the film becomes scratches, tramlines, dirt. It may be missing an academy leader, there is shrinkage in the 11.45 minutes of the film, a fault in the optical sound. Finally the film checking sheet requires the evaluation of the print in a scale from 1 (best condition) to 4. Number 5 indicates archival condition. There is a direct relation between the checking and the figures and the notes on the sheet. Yet there cannot be a perfect translation between the condition of the film and the evaluation sheet, as it unifies conditions that are distinctive each time. The translation of film's condition on a film checking sheet conceals the actual act and enactment of the film in the film checking procedure. The sheet is a reference, in which the material condition relates to, but it does not refer to the actual experience of checking through projecting and viewing the film. Thus, the classifications on the checking sheet are relative and not absolute. Through the different classifications and symbols that the film checking sheet provides, the adding of these elements does not

¹⁹ Leo Enticknap explains that the formal term for vinegar syndrome is 'deacetylation'. 'Among archivists it is more often referred as "vinegar syndrome", named after the characteristic smell of a deacetylating element. The initial symptom is usually shrinkage, which causes difficulties in running an affected element through any film transport mechanism (such as printer, projector or telecine) because the perforations become smaller and the space between them is reduced.' (2005: 190-191)

reconstitute the actual condition and the experience of the film. What was perceptible and observed in the film checking practice needs to be construed according to the list of symptoms. In this process the observational and perceptual experience becomes the account of the progress of the film's condition. The film checking practice can be considered as an indication of the material, physical and chemical ageing of film, a malleable nature of materiality, which is foregrounded in every projection public or private.

After watching the film, my observation is transferred into figures and notes on the film checking sheet that will be placed on archival records and also on another sheet, attached to each film's can, in which the grade and note of the following film checking will be added. In this way the projectionist in a film's future screening is aware of the film's condition and the agency can check and confirm if there is any damage when the film returns to the agency. The process of the checking will be depicted in reports which finally become the main objective of my work: the condition of film as a reference for future distribution and display.

In the site of LUX, it is the film checking sheet that plays the role of visible, legible and material representation of the examined film's condition. The signs of damage become visible to me as an intern because of the symbols and their signification of the film checking sheet. The film checking sheet is the way through which – in LUX – signs on the shape of the film are spatialised. It becomes a space for the configuration of the film's condition and also a space of definition for its possible practices of distribution. It forms an inscription device, which for Latour (1986 [1979]), is any item of an apparatus that can transform and translate a material substance into a figure, which can be used by other members, in a laboratory, which is the site that he examines. The checking sheet, in LUX's practice, is a diagnostic device that is used to define film's pathological condition and thus asserts an objective image of this condition. The checking sheet is evidence of the evaluation and regulation of the film checking and moreover of the condition of film to be analysed and interpreted. It is a device to establish criteria, a common comprehension of film's condition and ability to be projected. The film checking sheet, intends to represent through symbols the analogue materiality's shifting, malleable and, as I will argue next, fluid nature.

5.7 A Fluid Object: Film's Nature and Performance

This section foregrounds the material condition of film as fluid, that is to say as an object that has no stable or solid identity in relation to the specificities of projection and its degradation in time. Within these processes, film appears to be a symptom of its own vitality, since the performance of projection produces its “death”, including the decomposition of its physical materiality.

Mol argues that ‘no entity can innocently stay the same throughout the story, unaltered between various sites. There are no invariable variables.’ (2002: 121) As we have seen in the previous chapter, the installation of film in the site of the gallery’s distinctive materials, such as the screen and the projection machine, become variables in terms of staging, location and performance. In LUX’s checking practice, and through distribution in different public screens, the materiality of the analogue film print becomes a variable, as its material condition degrades through its projection in various sites. Every site in which LUX’s films are distributed enacts the performance of film but also potentially affects the shape of the object. By shape I mean the material condition of the strip that is translated into the visual condition of the film’s images. Elements, such as human interference, or conditions on the image carrier, such as scratches on the print caused by the projection machine or its operator and including accidental exposure to light, could seriously affect the film print.

Thus, the distribution of film in different sites and its enactment by a variety of actors alters its materiality, which appears to be, as I will argue, fluid. De Laet and Mol (2000) use the term and concept of ‘fluidity’ to examine a technical device, a particular hand water pump, the “Zimbabwe Bush Pump ‘B’ type”, which gets transported travels through the villages of Zimbabwe in order to produce clean water. The pump is a mechanical device, composed of pump head, lever, base and underground parts. In their argument, the Bush Pump is seen and defined as a fluid, changeable object over time and space, as its physical shape changes over time, and also its components parts can be replaced, because in ‘travelling to “unpredictable” places, an object that isn’t too rigorously bounded, that doesn’t impose itself but tries to serve, that is adaptable, flexible and responsive – in short, a fluid object...’ (2000: 226) De Laet and Mol’s argument depends on an object that flows and changes gradually, bit by bit. Namely, an object that is not well-bounded but, as they state, ‘entangled’ both in its performance and nature. These changes are not abrupt, if they were then the object would disappear and become a different object. Law and Singleton (2003) comment that,

oxymoronically, the fluid object that De Laet and Mol describe is something that both changes and stays the same. That is to say, by changing its shape and components the Bush Pump still produces clean water. The pump is not immutable, but it is meant to last. However, they state that if the push pump yields no water, it is not a pump: 'If it has to work it has to be assembled. It needs to be installed, and installed properly.' (2000: 231) As such, the pump does not supply only water but clean, fresh water.

Seen as a fluid object, the distributed film that needs to move in different places is not well-bounded with regard to the nature of its materiality and its images' visual condition, but 'entangled', both in terms of its performance in different projection machines and by different projectionists and, crucially, in its physical and chemical nature. The analogue film print is a part of a mechanical, technological working system that is to say it is enacted within an interdependent practice between the projection machine, a projectionist and the image carrier's photosensitive physical nature. All sorts of things can go wrong within these practices. As mentioned already, the film might be scratched, the operator might mishandle it. The strip might be worn and torn, and ageing might affect the condition of the images to be projected. These are factors and contingent effects that cannot be foreseen or monitored in film's travels outside LUX. The agency's distributed film becomes volatile and variable over time and between spaces.

As an example of film's mechanical and material condition, during my internship, the artist Stephen Dwoskin gave a part of his collection of his own films to LUX. Some of these prints, mainly triacetate celluloid, are 30 years old. These have been in poor storage conditions and have hardly been projected. The state of degradation of the reels depends on their age, but is based primarily on the fact that they were kept under improper storage conditions. In LUX, when the film canisters that carried the films were unsealed, smells of confinement, of mould and rust were released. The prints suffered from colour alternations, caused mainly by environmental variables, such as high temperature and humidity, that had attacked the print from the edges and caused sprocket damage. Enticknap explains that in an enclosed container the increasing accumulation of acidic fumes will cause the chemical reaction to become "autocatalytic," self-sustaining to the point at which the rate of decomposition accelerates.' (2005: 191) Furthermore, some of the prints betrayed shrinkage of their mass. This symptom, referred to as 'channeling', occurs when the free acetic acid breaks the links between the units of the cellulose molecular chain and causes the film base to shrink. The films could not

lie flat due to the fact that some of their parts had shrunk more than others. While the celluloid was congealing into one solid mass, the films had warped or faded, and they displayed severe sprocket damage and the strip had become reddish. In this case, the films were almost impossible to project, while methods of cleaning them needed to be adapted. Although the effect of the storage conditions and age on the emulsion and base of the film were severe, the condition of the shrinkage could be reversed temporally. The films were sent to a film laboratory for ‘deshrinking’, a method of decreasing the shrinkage of the film before it can be copied. Ralph Sargent explains:

Processing, age, cutting or perforating of the raw stock, humidity and temperature all affect the dimensions of motion picture films. Only the first two factors cause what can correctly be called ‘permanent shrinkage’. The remaining factors produce reversible, or temporary, dimensional change. (1973: 21)

In this case, the passage of time and the films’ absence from projection processes had reinforced the physical law of entropy, the law of degradation which expresses that all physical changes have the tendency to be degraded and dissipated (the law of entropy will be thoroughly described in the next chapter in the restoration project of the film *Underground* constituted by deteriorated analogue film prints), which had shifted the shape of the prints. Physical and chemical agents – leaving often irreversible damage on the film strip – can prevent film coming into being. Un-projected, the prints lay breathless in the humid and vacuum space of the sealed can. The practice of projection that deteriorates the film print also gives life to film, as there are two levels of deterioration: film to be projected can potentially become damaged, or it may not be projected but suffer decay and degradation in “pure” storage conditions. Thus, movement, the ontological predicate that gives life to film becomes the cause of its damage. The repetitive projection – Usai’s (2001) ‘art of repetition’ – becomes the death drive behind film’s destruction, as I will explain in this chapter’s next section. In the process of being performed, as soon as film is deposited in the working system actualised by the interaction between the analogue strip and the projection machine, the film enacted and resulting from this activity is subject to physical decay and material damage and eventually disposal and loss.

If photography’s mechanical process, as Bazin has argued, ‘embalms time, rescuing it simply from its proper corruption,’ (1967: 198) the enactment of film through the checking practice discloses an object that decays, if it is not projected and restored properly. In this case the materiality of film appears to be fluid, to be short-lived, even if it is produced to last a long

time. If photography's promise is to save and restore time and film to record and communicate duration and movement, the projection of film and its life in time defines the material fragility of film and its fluid nature.

Usai pointedly argues that the mechanical projection of film makes cinema the 'art of destroying moving images' (2001: 7). For Usai film is equal to cinema as a set of practices that are linked to projection, the vital practice that brings film into being. The projection of film, according to him, initiates its destruction. Naming a number of factors that can enact film's inherent process towards decay and loss, such as malfunction of the apparatus, exposure to light but also humidity and temperature, he claims that 'Once it has been projected, the film resulting from this intention is subject to the physical decay of its images...' (2001: 39) In effect film preservation could be translated as a process according to which 'the science of [the moving image's] gradual loss and the art of copying with the consequences, very much like a physician who has accepted the inevitability of death even while he continues to fight for the patient's life.' (2001: 105) Even in the practice of the checking, every time that I watched, in order to check a film, every time that I followed a routinized system – putting the film reel on the projection machine, pressing the start switch, then rewinding it, placing it back in its case and then on its shelf – I was encountering film's material ephemerality; I was witnessing another exposition of decay and destruction, a private and 'conscious' – as Usai would add – viewing of death. On the other hand, freed from projections and thus violated by the passage of time, the films verify the physical transformation processes to which the material of the film strip is subject.

5.8 Archival Film

If severely afflicted by projections and the signs of the passage of time on its material condition, film is situated in LUX's 'archive'. In the agency's storage room, the 'archival' films are located in a separate set of shelves. Their migration to another format will be done in professional film laboratories. Their disposal will be negotiated with the artist. The signs of damage or deterioration in the celluloid's skin indicate its condition and act as signs for the annulment of further distribution, predicating its determination to stay sealed in a film can and anticipate the specific material film's final disposal. Film's poor projection condition defines its stasis, its demise as a distributed and exhibited object. Although in LUX films are

stored, under the basic conditions of archival conservation, that is the humidity and temperature of LUX's storage room are under regulation, in the agency's institutional orderings and collection management the definition and placement of film as 'archival' designates the end point in a film's life. The enactment of film as archival translates the change, fluidity and physical transformation that it is subject to into an irreversible process that leads to damage and loss, as afflicted, degraded films are kept off the record for exhibition and performance, as well as LUX's institutionally normal processes of distribution and thus movement between different locations. In contrast to a materiality that becomes visible and is treated within the context of a traditional archive, in LUX's conceptualization of the archive, the damaged, deteriorated or aged materiality of film eventually reaches the level of invisibility since a film determined as archival equals its absence from any public performance, the end point of an ordering process that intends sorting, organizing and cataloguing LUX's film collection.

Although LUX exemplifies the main objectives of a film collection, which stand similar to the objectives of a film archive that is the development of its film collection, the promotion of artists' moving image work, the creation of audiences and access to this work, it does not undertake practices and strategies of active film preservation. LUX does not form a traditional film archive in terms of a space that preserves film through conservation practices, such as repair, duplication and restoration, as I will demonstrate in Chapter Six and the analysis of the BFI Archive. The archive of LUX does not form a site of sustaining material condition. Films that are designated as archival cannot get outside of LUX, they are disposable.

In his work on the archive Jacques Derrida (1996) writes that:

In an enigmatic sense, which will clarify itself perhaps (perhaps, because nothing should be sure here, for essential reasons), the question of the archive is not, we repeat, a question of the past. It is not a question of a concept dealing with the past that might already be at our disposal or not at our disposal, and archivable concept of an archive. It is a question of the future itself, the question of a response, of a promise and of a responsibility of tomorrow. (1996: 36)

In these terms, LUX's archive does not form a repository for the future (Harding, 2002); it forms an endpoint rather than a starting point. The associations between the objectives of an archive and the future are being reversed, as in LUX it is the past that is at issue. LUX's concept and function of the archive signifies the associations of the site with dissipation and

loss, based on an ordering which defines materials, unable to be performed, thus having no value and function for future distributions. If the transitory space of film checking in LUX resembles a hospital and a laboratory, LUX's space as an archive becomes film's cemetery, a site, based on Foucault, both of heterotopia and heterochrony (as addressed in the Chapter Three of this thesis). Within LUX's archive, film ceases its duration to be projected and performed. Through its temporal condition of decomposition and deteriorations, the status of film as archival signifies its permanent disappearance.

In this context, Derrida's argument on the archival instinct, the drive of destruction, is relevant for the examination of the enactment of film as archival. In *Archive Fever: A Freudian Impression*, Derrida draws on Sigmund Freud and his work *Beyond the Pleasure Principle* (1920) to assign to the archive the desire and drive for destruction. An archive keeps, puts in reserve and saves, but at the same time it is subject to a 'diabolical death drive, an aggression or a destruction drive: a drive, thus, of loss.' (1996: 9) While the death drive shapes the archival desire to anticipate the finitude to escape loss. Derrida recalls Freud's death drive, existing next to the pleasure drive, which is based on the tendency to return to a prior, inanimate state. For Freud, a drive might be seen as '...a powerful tendency inherent in every living organism to restore a prior state, which prior state the organism was compelled to relinquish due to the disruptive influence of external forces...' (2003: 76) According to him, the prior state could be a primordial state, not one that had previously been attained, but one from which it once departed, which is death. Freud explains:

If we may reasonably suppose, on the basis of all our experience without exception, that every living thing dies – reverts to the inorganic – for intrinsic reasons, then we can only say that the goal of all life is death, or to express it retrospectively, the inanimate existed before the animate. (2003: 78)

Defining films as archival and making them inaccessible for projection instantiates the LUX collection's drive of destruction. The archival film in LUX's storage room is an inanimate object. It is an object that returns to the condition of pre-history, in the way that Usai notes that the projection of film is the beginning of film history. Thus, the notion of the archive in the site of LUX does not refer to a guardian of life, of film's preservation, durability, access and performance, but to a concept guided by the death drive, the Freudian conception of the drive that 'serves to procure death.' (2003: 79). As within a traditional film archive, the objective, the ordering, the drive is to restore a prior condition, which is identified with the

integrity of the film object, the design and the way that the film looked before its damage and deterioration, within the alternative archive of LUX.

The celluloid film encounters and accumulates signs of death from its first projection, the very vitality of film performance, and the practice of projection becomes the defining process of its destruction. An analogy between death and the archive designates two points: first that the archival film surrenders to its corporality's limits and second that these limits are determined by and they determine the film's life through projection. In ending up in the archive, film dissolves the temporal division between the normal and the pathological condition. Situated as archival film, it escapes from either of these conditions, as it reaches permanent damage, deterioration and loss. The performance of film is ceased and the film (re)gains an inanimate stage.

5.9 Conclusion

This chapter has mobilized a set of metaphors between the archive and the cemetery, the film checking practice and a medical diagnosis, the film's nature and performance and fluidity, its public and private projection and the normal and pathological condition to describe and examine the material version of the analogue film strip. The focus on the distinctive site practice of film checking has foregrounded and made visible the fluid, transformable and malleable materiality of the analogue print, which is degraded by the vital performing practice of projection and also by the primarily physical and irreversible nature of its materiality. Based on this version of film, the corner in which the practice is operated was defined as heterotopic and othered from the range of activities and orderings undertaken in LUX for the promotion, exhibition and distribution of artists' moving images.

In this chapter film became a fluid object, as its shape changes in its movement within different sites and different projections, but also as time passes while it is not projected. In the heterotopic corner of LUX, in which film is checked, an afflicted materiality came into being and then disappeared within its position relative to LUX's operation of the archive. In the film checking practice, film appeared to deviate from its normal framework of performance and viewing. Outside of the spatial context of the installed film, the film checking viewing resulted in the detection of signs of damage and deterioration to the films' emulsion and base.

As an object in a pathological condition, film needs to be diagnosed on its condition and, based on this practice, assessed as to its further distribution and projection. The medical gaze of the practitioner, that is I, who in this site combined the role of the researcher and the observer, defines, based on an inscription device, the film checking sheet, the future movement and performance of the object. If a film is rated as archival, it means that the particular object will not be projected ever again. Citing the principle and power of the death drive that Derrida ascribes to the archival desire, LUX's conceptualization and function of the archive forms a site and a position for film that equals its temporal and spatial death.

The next chapter sees film in the laboratories of a traditional film archive, the British Film Institute National Archive. At the BFI, the restoration project of the film *Underground* presupposes the immobility of film from public settings and its residency in the archive. However, mutations of the physical and performative nature of film are the elements that need to be restored in order for the film to be accessed by an audience. In this site, the physical and performance-based nature of the archival film coincides with notions of originality, unity and the irreversibility of time.

Chapter 6

Restoration Practices: Analogue and Digital Co-ordination

6.1 Introduction

The focus of this chapter is on the film archival practices conducted at the British Film Institute National (BFI) Archive. It localizes film as an object in the process of restoration situated in the institutional framework of the BFI Archive, and manifested around specific strategies, responsibilities, principles and laws of film preservation practices framed by British film history and heritage. It specifically examines the restoration of the British film *Underground* made by the director Anthony Asquith in 1928. This restoration, which took place at the Archive's laboratories in Berkhamsted in 2008 and 2009, was composed of three different film prints of the *Underground*, coming from different dates of reproduction and carrying their own 'internal histories' (Usai: 1995) of material deterioration and damages. The project was accomplished by the co-ordination of photochemical and digital techniques employed in restoration.

In general, film preservation practices, to which restoration belongs, are constituted through a series of relations that primarily include film artefacts, objectives and policies of archiving, such as acquisition, conservation, documentation, access, deaccession and disposal. The previous chapter's enactment of film as a malleable and fluid materiality was the result of the active role of LUX as a resource of distribution and exhibition of artists' films. Film in LUX encountered the fragility of its material condition, subject to the vitality of its mechanical projection and its physical tendency towards decay and decomposition. The archival condition of film that, within the context of LUX, equated "death", namely a film impossible and unpermitted to be distributed and projected due to deterioration and damage, and distinctively accessed, constituted LUX's ordering of the archive as passive. This chapter's focus on the BFI's practical context of the archive presents the practices of active preservation, that is to say the strategies, procedures and policies of collecting, documenting, conserving and making the BFI's collection available to an audience. If we think about the archive, in the way that we have conceptualized in LUX, the position of film in a restoration

process can begin with the metaphor of regaining life, origin and duration. At the same time, in this chapter, as in the previous one, the analogue film print under restoration encounters its inherently transformative and irreversible material nature, as it “unmakes” itself and dilutes in time. But, distinctively, the BFI’s restoration and access strategies re-enforce film’s inherently reproductive nature, a serial product in commercial releases.

This chapter intends to describe and make apparent the technological and material practices undertaken by the BFI’s restoration team for the specific restoration project. This discussion will argue that these practices exemplify the co-ordination between analogue and digital materials and techniques, which currently shapes film restoration, and enabled the production of a new film artifact. In relation to this, it associates the material and technological specificities of this project with the conceptualization of the archive as a place of commandment and commencement (Derrida, 1996). Last, it discusses the film’s enactment as a restored object by pointing out how the concept of film as “original”, can be traced and configured in the example of *Underground*, in which the restoration was made possible through the combination of three prints. Given this research framework, this chapter asks: How do the co-ordinations between analogue and digital materials affect the material identity of the new, restored *Underground*? How does the restored film challenge the concept of the original and become meaningful in film collection and preservation policies? What kind of temporalities does the restoration project disclose in relation to analogue film prints and the enhancement of digital materials? To answer the above questions, firstly, it is important to contextualize the theoretical framework that will enable me to investigate this case study.

In a general sense, the technological developments in the practices of film restoration, including the employment of digital technologies in analogue materials as well as the migration of restored films in a digital format, has initiated epistemological shifts, not only in the thinking of and writing about archives, but also concerning the organization and practices of archival work (Fossati, 2009; Usai *et al.*, 2008). While film theory is re-examining the object of its study as film transits from analogue to digital, film archivists are re-thinking the aims and practices of their work. Whereas celluloid is reaching a stage in which it will quite possibly no longer be a viable option of film production and, at the same time, of theatrical presentation, the role of film archives in the twenty first century is under question. The fields of archival preservation and restoration that Fossati (2009) describes are the ones which are changing most radically. These changes, she argues, are attached to ontological questions

around film, most significantly around the discourse on film's relationship with the concept and material status of the original. While film as a technology is inherently and infinitely reproducible, thus, according to Walter Benjamin (1936), it lacks originality and authenticity, Fossati (2009) stresses that a new originality is ascribed to film when it enters the archive, when it becomes archival artifact, given the way in which every copy of a film is in some ways an original, a unique record of its own history. This chapter argues that the restored *Underground* publicly screened at the BFI's Film Festival in 2009 forms a new production, a new negative constructed with the aid of digital technologies, which will be reproduced multiple times. Based on the description of the restored *Underground*, the question of the original is a pertinent topic of examination, particularly in relation to the concept of originality in its literal sense, as origin and beginning, the point at which something comes into existence²⁰, thereby stepping away from the Freudian concept of restoration as a return to a prior stage of origin, as outlined in the previous chapter. That is to say, the restoration under investigation brings film to a new production, a new existence, thus enacting a new duration for the film. While subject to the agency of the irreversibility of time inherent in film's materiality, as well as to the archival storage conditions through which the material condition of film is regulated, the restoration of the film is seen as another state in a succession of states in the life of a film. The materiality of the restored film encompasses different layers of time, i.e. different temporal trajectories of the film prints that they were brought together for the restoration to begin and the enhancement of new contemporary technologies of image restoration. The present restoration is made possible by the use of digital methods, making it possible for a new duration of the film to be watched, reproduced and circulated in theatrical screens and DVDs.

To investigate these issues, this chapter delves into the examination of the archival film as a 'historized' artefact, as theorized by William Uricchio (2003) and Giovanna Fossati (2009). In their thesis, film becomes historized in the site specificity of the archive on two levels: on a material level when the archival film is aged by the passage of time and damaged by projection operations and machines; and on a conceptual level, as it forms a part of and manifests specific aesthetic and technical processes and elements, which are bound to the

²⁰ Rosalind Krauss, in her paper on the 'Originality of the Avant Garde' (1986), discusses the concept of originality as origin within the context of the Futurist avant garde, in which originality refers to it, not so much as formal invention, but as sources of life, as continual acts of regeneration and the perpetuation of self-birth.

time that the film was produced. More completely, Fossati describes this duality of film's historization by stating that:

... restorations of archival films are not original film artifacts shown for the first time to an audience, but, conversely, artifacts that have been historized both on a material level (e.g. the film has been damaged by projection and chemical instability is causing decay), and on a conceptual level (e.g. the film is a product of its own time as the people who restore, study and watch it). (2009: 105)

The historized artefact carries the signs of production practices, technologies and also the symptoms of the passage of time on its materiality. The restoration of archival films needs to negotiate and compromise the historized film artefact on a conceptual level²¹, for instance the film format but also the practices and techniques in cinematography that were used during the period when the film was first produced and thus they are no longer part of contemporary practices of filmmaking and production. On a material level this involves the different levels of deterioration of the print(s) that enact the restored film. This chapter draws on both the material and conceptual approach to film in order to underline the mediations between time, space and materiality manifested in the practices of *Underground*'s archival restoration.

6.2 *The Concept of the Archive – The BFI Archive*

This section employs the principles of commencement and commandment attributed to the archive by Jacques Derrida (1996), in order to investigate the cultural, organizational and practice-based framework of the BFI Archive Derrida ascribes to the archive a 'privileged topology'. For him the archive is an uncommon place, a 'place of election where law and singularity intersect in *privilege*.' (1996: 3) For the philosopher the archive stands at the intersection between the topological and the nomological, the place and the law, the substrate and the authority. In his study Derrida traces the origins of the term archive from the Greek word *arkhē* which translates as commencement, beginning and commandment, law. These form the two principles of institutionalization in the Derridean archive. He explains that the Greek root of the word archive *arkheion* means the house, the residence of the superior magistrates, those who command (archons), hold and signify the political power to make or

²¹ Sue McKennish discusses the archival film as a conceptual artefact in terms of a 'moral defence' of the record, that is to say 'to ensure that records were preserved in the context of their creation and would thereby retain their qualities as evidence of the functions and activities of the organizations or persons that created them.' (1994: 188)

represent the law. In this definition, the archive is a physical site where ‘official documents are filed.’ (1996: 2)²² Therefore, the documents ‘Entrusted to such archons, these documents in effect speak the law: they recall the law and call on or impose the law. To be guarded thus, in the jurisdiction of this *speaking the law*, they need at once a guardian and a localization.’ (1996: 2) Derrida’s conceptualization ascribes to the archive the drive to collect, reserve and save documents as human records.

The philosopher states that the first figure of the archive is the *exergue*. The *exergue* plays with citation, as ‘To cite before beginning is to give the tone through the resonance of a few words, the meaning or form of which ought to set the stage.’ (1996: 7) The archive and its primary element of the *exergue* give order and have an institutive and conservative function. The archive includes, saves, preserves, but it also makes the law and thus decides. It has an institutive and conservative function: it poses and institutionalizes the law and then reserves, saves and conserves it. In this way, every archive ‘is at once *institutive* and *conservative*. Revolutionary and traditional.’ (1996: 7) Derrida describes this as an *eco-nomic* archive that is to say the house (*oikos*) of the law (*nomos*) has a double sense: ‘it keeps, it puts in reserve, it saves, but in an unnatural fashion, that is to say in making the law (*nomos*) or in making people respect the law.’ (1996: 7) The *eco-nomic* archive both safeguards and regulates, it is both a place and a law, a principle.

Derrida moves on to another intriguing point relating to archivization when he examines the archive of the history of psychoanalysis. In his study of the psychoanalytic archive, by relating the issue of archivization with psychoanalysis the philosopher articulates the relationship between the archive and technologies of communication and archivization. He argues that if Freud and his contemporaries had access to technologies such as computers, printers, faxes, televisions and so on, instead of writing letters by hand, this would have had a significant effect on the conservation of the history of psychoanalysis. By using these technologies, the history of psychoanalysis would be transformed ‘from top to bottom and in

²²In the *Archaeology of Knowledge*, Michel Foucault states that ‘the archive is first the law of what can be said, the system that governs the appearance of statements as unique events. But the archive is also that which determines that all these things said do not accumulate endlessly in an amorphous mass, nor are they inscribed in an unbroken linearity, nor do they disappear at the mercy of chance, external accidents.’ (2002: 145) Foucault captures some of the principles upon which institutional archives are founded and organised. According to the philosopher, the archive appears as a system that orders, governs and determines statements, or in our case materials, that are situated within its site, primarily in order to save them from disappearance and loss. In his statement the archive both conserves and organises statements as unique events.

the most initial inside of its production, in its very *event*.' (1996: 16) In this way 'the technical structure of the archive also determines the structure of the archivable content even in its very coming into existence and in its relationship to the future.' (1996: 17) Thus Derrida claims that technologies can formulate the archivable content, in this case the history of psychoanalysis and the knowledge of the practitioners around that content.

If we translate Derrida's conceptualization of the archive to our case study, it appears that the institution of the BFI is a place that safeguards film but also embeds it in its site where the principles of the law and the beginning, of commandment and commencement, occur in a very specific way. On the other hand, the technologies (analogue and digital) which are available and compatible for the complex processes of film restoration shape the context of the Archive but also have a role in the knowledge produced about the content of the archive, one that articulates the art, the history and impact of British film culture.

The case of *Underground's* restoration practices cannot be examined outside the contextualization and localization of the BFI Archive. The Archive is composed of a directing board that includes the head curator, BFI staff, curators and external specialist advisors, who regulate, review and exert command over the main practices of archiving: collection, acquisition, preservation and access. The BFI Archive's principles and strategies of archiving are based primarily on the security and maintenance of British film history. The preservation and collection of films by the Archive, the aims, principles, laws and practices depends on selective criteria: the BFI collects British film productions that illustrate the art, history and impact of film. The Archive excludes from its collection non-British films, 'except copies of key works that support the BFI's cultural purpose that might not otherwise be available in the UK. The BFI may also accept non-UK material that might otherwise be at risk of loss.' (2011: 9)

Given the specific laws and regulations of the BFI Archive, the institution does not accumulate everything without deciding the value that these materials may hold for future generations. The BFI Archive does not aim to create a complete record of British moving image production or consumption. Many other organizations in the UK also have the role of collecting, preserving and providing access to moving images, including the British Library, the BBC, the National Archives and the Imperial War Museum. The BFI's review states that at the Archive

We aim to collect all British films certified for cinema exhibition. We will also collect a selection of other fiction, factual and documentary films, television programmes and other materials that exemplify the art of filmmaking (broadly defined), its history – including both use and form – and its impact on and relationship to the people of the UK. (2011: 9)

In this review, the definition of ‘Britishness’ encompasses cinematographic work ‘produced wholly or in part by a company registered in the UK’ (2011: 39) or ‘capable of passing the cultural test administered by the BFI Film Certification Unit²³, even if there is no UK production involvement.’ (2011: 39) The BFI Archive, through developing, caring for and interpreting its film collection, has an aim which is to illustrate the art, history and impact of “British” film for the public, with the objective that this be held in perpetuity. This array of institutional purposes (but also material practices), which are specific to the BFI’s set of objectives, reflects the central aims of film archiving and the archive is ascribed as a site of commandment. The BFI Archive selects, orders and specifies the strategies of its practices and the materials that it collects. But at the same time, it acts upon materials, duplicates, digitizes or modifies them, as in the case of restoration. The archival technological practices can initiate new enactments for film materials in relation both to preservation and access. Currently, as digital technologies are advancing as useful means for film restoration, analogue technologies reassert their significance in film restoration projects. As we will see in the following section, the restoration of *Underground* encompassed analogue photochemical devices for ‘cleaning’ the film alongside digital techniques, such as editing and colour grading. By engaging with Derrida’s idea of the archive as commandment and also by undertaking his recognition of technologies as effective to the content and also the practice of archivization, this chapter addresses the archival practices of film restoration as a commencement, a new beginning of a new cycle of time for *Underground* to reach an audience and be reproduced and copied in new material objects: in an analogue and digital format and also on DVD.

²³ The Certification Unit is the first point of contact to certify a film as British. This is exemplified by the film’s British content, practitioners, hubs and contribution to British film heritage. The qualification of the film as British provides the advantages of eligibility to apply to the BFI Film Fund and the UK film tax relief.

6.3 *Underground* (1928-2009)

Film preservation includes security and preventive measures such as storage environments and active methods that consist of repair, duplication, digitization and/or migration to alternative media. One of the first active strategies within an archive is the process of restoration that, in a general sense, means the return of an item to a “known” earlier state, or in some cases – when there is no record of the earlier state – to the best estimation of an earlier state. Houston (1994) explains that:

Preservation involves mainly technical decisions about what material to print from and is carried out to ensure the film a longer archive life ... Restoration goes a stage beyond that level of expectation, the objective being to return a film as nearly as possible to its definitive form, if there ever was a definitive form which can be clearly established. (1994: 126)

She continues that for restoration the archivists are trying to trace ‘whatever may be available, from whatever source, with a view to producing something as close as possible to the definitive version of a film.’ (1994: 79) Restoration is a rather complex process that, firstly, researches film both as a conceptual and material artefact. That is to say, to begin a restoration project the archive needs to gather as much information and knowledge as possible about the context in which the film was produced, when and where it was made, and in what format it was produced. A BFI policy document explains that the restoration needs to ‘include consideration of artistic integrity, accuracy and completeness alongside the repair of physical damage or deterioration.’ (2011: 27) In addition, whereas standardization occurs among film archives in relation to storage conditions, every paradigm of restoration uncovers patterns, manners and attitudes of the specific archive’s operations, since every film formulates a unique case study for the application, examination and evaluation of material techniques. Different examples of restoration use different techniques and methods, such as varying materials and technical tools, and nowadays this also involves co-ordination between analogue and digital technologies.

Before describing the restoration practices and stages of the film *Underground*, it is important to explain in a more specific manner what is meant by film restoration. Archivist Paolo Cherchi Usai (1995) explains that restoration

... is the set of technical, editorial and intellectual procedures aimed at compensating for the loss or degradation of the moving image artefact, thus bringing it back to a state as close as possible to its original condition. (1995: 66)

In addition, Read and Meyer (2000) give more specific information about the objectives of film restoration. They state that by film restoration archivists mean

... the whole spectrum of film duplication, from the most simple duplication with a minimum of interventions up to the most complex ones with a maximum of manipulations. Since every duplication procedure has some decision moments which may influence the quality of the final product, it is important that certain principles are respected. For instance, restoration implies that it is not sufficient simply to transfer the information on a film to another carrier, which could involve video transfer as well, but to maintain as much as possible the original format of the film, in particular 35mm and 16mm cinematographic film. (2000: 1)

As a practice, restoration involves taking actions that modify and manipulate the existing archival materials and shapes of film in relation to technologies. It is distinct from passive preservation, in which the object of film must be kept in the same technical condition, as when it entered the archive. In the practice of restoration film enters into a number of treatments and processes that are defined in relation to the best materials to be restored.

The film *Underground*, made in 1928, is an 84 minute, black and white, silent film, initially produced in a nitrate celluloid print. It is one of the first films of director Anthony Asquith, who is considered the most famous British director of cinema's silent era, after Alfred Hitchcock. The film was shot on location, with many scenes taking place in the London Underground, including at Waterloo Station and at the Lots Road Power Station. In terms of content, the film draws on the fascination, popular in films of the 1920s, with the new transportation systems and the urban working space of the metropolis and it registers ideas about this new mode of life. These two elements, i.e. the film's depiction of the British capital's urban landscape of the 1920s, and its documentation of the new mechanical and industrialised mode of living, played an important role in starting the restoration project. In addition the film is an example of British cinematography of the silent era and a primary example of Asquith's mastery.

Prior to the decision to proceed with this film's restoration, the BFI Archive contained two prints of the film: the original camera nitrate negative, from 1928, from which only two reels

have survived, and a print duplication in nitrate fine-grain, from the original negative from 1948, twenty years after the film's production, which existed in deteriorated condition. The BFI's research in film archives and film collection bodies located a third print, held at the Cinémathèque Royale in Brussels, which made the restoration of the film possible. Both the nitrate, fine-grain print and the French version are second generation prints, made directly from the same original negative. As second generation prints, they are already grainier than the camera negative, that is to say their images have lost sharpness and clarity. Thus photochemical duplication makes manifest a loss of photographic detail with every new generation. The total feature compiled for the start of the restoration has eight reels: two of them derive from the original mix and the other six are a combination of the prints from Belgium with French inter-titles and the 1948 print that resided in the BFI Archive. The two reels of the original camera negative were in a changed state, they had experienced severe scratches, damage and dirt defects, as indicated in a pamphlet (Appendix C) from the world premiere of the restored film at the British Film Institute's 53rd Festival. The restoration started with a technical selection, in which the object, the master element used to make the restoration, is combined from sections taken from all three prints.

In more specific terms, the original film was shot on 35mm, nitrate celluloid film stock, a material used in film production from 1895 to 1952. The anatomy of the nitrate film is the oldest preserved format in film history. Although it is diagnosed as having a lifespan of 100 years, it is common for it to dissolve into dust in its final stage of decay. Nitrate films that have survived until the present day are often changed in many ways, as the nitrate stock is a fragile material, highly flammable and subject to drastic deterioration, and always at risk of loss and destruction of the image. Furthermore, as Usai (1995: 19) notes, the nitrate stock is also perishable, it cannot be used beyond a certain number of showings.²⁴ For instance, based on the fragile nature of the nitrate film stock, the archiving team had to deal with the solarisation problem – a severe form of deterioration – that affected one of the reels. This problem affected the colour of the frames and the images close to the framing lines of the photograms. On other occasions, particular frames were affected, for instance where the

²⁴ The nitrate cellulose, the first product used for the manufacture of the film prints, belongs to the realm of nineteenth-century scientific novelties (along with the invention of cinematography). The nitrate cellulose is a product of black and white photochemistry, which as Robert Friedel (1983: 114) writes, was the 'herald of the modern mastery of material synthesis, the first fruit of the conjunction of the two nineteenth century ideas – that of organic synthesis and that of plastics.' Produced from plastic and organic elements, the celluloid is subject both to the technological automatism of its projection (that wears down the celluloid, as discussed in the previous chapter) and the photo-chemical reactions at the level of its materiality.

image was damaged at a level that transformed the formulation and the symmetry of each frame. Basically, the archiving team sought to recover many of the lost frames from the original UK release.

With these available materials, the restoration of *Underground* employed both photochemical and digital techniques, in order to respond to the technical challenges that the process suggested. The defects, scratches and dirt present on the surface of the prints required the immersion of the film into photochemical solvent that temporarily hid the damage and the scratches on the film, allowing the eradication of the dirt, damage and severe emulsion scratches. All of the reels were placed into a tank of fluid where the solvent replaced the damage on the surface of the film strips; it was then possible to transfer the ‘smoothed’ prints into new, raw, polyester stock. After this, the prints were digitally scanned and the restoration process began. The digital scanning reduced the damage, the wear and tear of the celluloid. A combination of digital software tools, used for the elimination of scratches, dust, and also stabilization of the images, restored the film. With digital techniques and tools, the archivists cleaned signs of the strips’ dust and dirt, repaired the film tears and digitally scanned each frame. The digital software technologies not only helped to identify the areas, the frames that needed to be restored, but they were manually used by the archivist to restore each damaged and deteriorated frame separately. A new, full-length copy enabled the re-release of the film, which could formerly only be seen in a severely compromised form. For the “new” *Underground*, a new negative was produced on 35mm polyester film format.

The restored production of the film is a materially and conceptually hybrid object, an heterogeneous entity in a set of different material components, which relate to the material and conceptual level of the film as a historized artifact: the restored version of the film includes the three analogue prints with their own history of material changes and shifts, distinctive from one another, and the contemporary technique, not of cinematography, but I would argue production, of the digital. In this case the past analogue materials and the present digital and photochemical technologies are combined together to create hybrid results. The employment of specific digital techniques depended on the available analogue materials and their condition, while the analogue relied on the new technological practices brought about by the digital, which offered the possibility for this restoration to be achieved. The digital re-working of the deteriorated frames, the collisions of frames in its unity, the correspondences

between formats transform film into a hybrid or multimedia object, a continuum of overlapping technological and material forms.

At the same time, the restored film becomes a hybrid of different temporalities. The new *Underground* encompasses different layers of time in its new shape and materiality. The new production is composed of the three different prints, one of which is the 'original' camera negative and the other two are second generation prints. Each of these prints has its own internal history of decay and damage. But these prints were stored in archives, at the BFI and in Belgium, and within these sites, the prints' material conditions were regulated by storage environments and principles. The restoration of the film by contemporary techniques and tools alongside the enhancement of digital technologies, makes the film a product of its own, and in current time. The new film carries along with it the conceptual artefact of Asquith's cinematography and the cinematographic techniques of cinema's silent era, while it is a new production at a material level.

6.4 Irreversibility and Reversibility

In his article 'The migration of the aura or how to explore the original through its facsimiles' Bruno Latour describes the astonishment of a visitor, when encountering Holbein's painting *Ambassadors* in the National Gallery in London. The painting looks flat, but the colours are very bright. The visitor knowing enough about the strange customs of curators and restorers leaves the room by thinking that 'the original has been turned into a *copy of itself looking like a cheap copy...*' (2008: 2) Based on this anecdote, Latour claims that when accounting for a work of art, either an original or a copy, we should take into consideration the whole assemblage made up of one or several original(s) and assume a continuously re-written biography for this work. He comments that

... a given work of art should be compared not to any isolated locus but to a river's catchment, complete with its estuaries, its many tributaries, its dramatic rapids, its many meandering turns and, of course, also, its several hidden sources. To give a name to this catchment area, we will use the word *trajectory*. (2008: 4)

Latour's idea of a trajectory for every work of art, either original or its copy ascribes a sense of physicality and movement to it. The work moves in time and is re-shaped in different

versions, through different trajectories. In relation to a work of film, Usai uses another concept: i.e. the 'internal' history of every copy. He defines the internal history as

The history of the places where it was kept, and of the people who, with varying degrees of awareness, preserved it. It is also the history of the changes that took place within the object in the course of time: the history of its progressive self-destruction and, perhaps, of its final disappearance before it could be restored. (1995: 19)

Either seen as trajectories or internal histories, the restoration of *Underground* presented fragile materialities conditioned by their own material changes and temporal conditions of deterioration or damage. The film *Underground*, made in 1928, was in a nitrate base, a material, as I have explained previously, subject to spontaneous decomposition or ignition. The material, mechanical and chemical condition of the nitrate prints changed in response to the passage of time, storage conditions, and the technological enactment of the film through the projection machine. The mutating agency of the passage of time in the film's materiality, and the rarity of existing copies defined the treatment and restoration practices that needed to be applied to the film in order for it to be restored. Specifically, in the example of *Underground*, the different prints, which have become dynamic systems with their own history of material degradation, were compared in terms of image quality (because of the different generation prints) in order for the best possible material to be decided on for restoration, as the irreversible passage of time created material effects unique to each copy, unique trajectories in time's agency.

Bart De Baere (2002: 106) argues that within the cultural meaning of archives, 'preservation does not assume the final position at the end of the process, when the cultural game is played out and the half dead relic is stored away. Preservation in this instance becomes always a first step.' In the practices of film archiving, the localization of film within the archive, its position and placement within practices of preservation, is the first step for restoration. According to Ralph Sargent (1974: 57) 'if one has preserved a film, then it is potentially always renewable; if one has the money, he can make copies. But if a film is lost, or allowed to deteriorate, this can be irreversible.' A film localised in archival preservation is theoretically possible to be saved and become available to an audience. Read and Meyer (2000) state that from all the films produced before the 1930s and the advent of sound it is estimated that 70-80 per cent have been lost. There are various reasons for this: economic (the expense of funding for preservation and restoration processes, films that were destroyed after not being profitable),

practical (storage conditions, availability of storage space) and importantly for the examination of film as a material artefact, chemical, physical reasons (the shifting nature of time, which destroys film's photo-chemical materiality). Sargent, Read and Meyer raise an important issue that accentuates the volatile material conditions of the film artefact that under the physical law of the irreversibility of time can lead to deterioration. Next to the issues of originality or the uniqueness of a print, which are going to be examined in this chapter's next section, the archival film is subject to the irretrievable dissipating agency of time.

In the second law of thermodynamics, the law of entropy makes manifest the irreversible, uni-directionality of time. According to this law, the material world moves from orderly states to increased disorder and disorganization, as the flow of energy moves from a highly ordered and under-equilibrated state to a less ordered state. Although the first law of thermodynamics asserts that all energy is conserved, the second law is based on chemical reactions proceeding from a higher concentration of molecular bond energy to lower bond energies and asserts that energy will eventually dissipate. In the case of celluloid film, the irreversible processes of time are manifested in its materiality by the chemical reactions taking place in the emulsion and the base of the photochemical stock. Specifically, the effect of the second law of thermodynamics on the nitrate was the decomposition and degradation of the film stock, as it is manufactured by the base and the photochemical emulsion is susceptible to the destructive shifts of time. As such, a film is unable to be projected, and thus to be seen. On the other hand, as we have already stressed in the previous chapter of this thesis, film, which is performed and actualised as performance through projection and through the interaction of the film strip with the projection machine, is subject to processes of dissipation, which are generated by the automatic repetition of projection. Therefore, the location of film within the projection apparatus and the material and spatial practice of projection, but also the place of film in time, the measured, scientific time of physics, dissipate its material condition. Time and the vitality of film's projection direct the film's state away from equilibrium.

The passage of time degrades and disorders the material of film, which causes effects on the frames' shape, image quality and unity. Doane explains that 'the notion of dissipation is not equivalent to destruction. When energy dissipates, it changes form so that it becomes unusable to produce work.' (2002: 116) Concluding, she states that:

Thermodynamics is about the inevitability of loss, of dissipation and hence the impossibility of a perfect machine. Yet it is also accompanied by the desire to minimize loss, to manage inevitability, and therefore to manage time. (2002: 115)

Entropy is a measure of probability, and the condition of maximum entropy is the most probable molecular distribution. Furthermore, the law of entropy is allied with information theory, in which entropy is a measure of contingency and variability. Doane (2002) explains that the connection of thermodynamics with statistics positions time in relation to the realm of chance rather than destiny, in which irreversibility connotes probability rather than certainty and rigidity. The state of maximum entropy is the state of maximum probabilities. The inevitable dissipation promotes a descent into disorder and chaos. The condition of the archive is to reduce the temperature within the storage vaults in order to stabilize and level the inner processes (of molecules) of the celluloid object. Rudolf Arnheim (1971: 25) states that ‘a system is in equilibrium when the forces constituting it are arranged in such a way as to compensate each other ... equilibrium makes the standstill – no further action can occur, except by outside influence.’

Seeing the second law of thermodynamics as the temporal condition for the physicality and the materiality of the analogue film prints, and based on Arnheim’s argument, the archive could be seen as an outside force, which through preservation practices aims to freeze dissipation by means of a standardised cool storage space. The degradation of energy between projection and storage, between heat and cold, is minimized by the static residency in optimum quality storage enclosures. In addition, based on the interdependence between film’s material condition and the force of time upon it, film archives need to negotiate the collection not of an “original” print but the print that has survived loss by the process internal to the material passage of time and also by the external, contingent, factors of mechanical projection, in the way that I have addressed in the previous chapter. Within this argument Mary Ann Doane (2002) refers to and explains the desire of the archive ‘to retrieve everything possible, driven by a temporal imperative (before it is “too late”) and the anticipation of a future interpretation (in this sense, the archival process is a wager that stacks the deck: this object, because it is preserved, *will* be interpreted).’ (2002: 222) In this sense the archive, as another heterotopia, in Foucault’s terms (1967), becomes a place that accumulates everything, all times, all epochs and all forms.

Doane contextualizes the elaboration of thermodynamics in the field of physics in the 19th century and explains that thermodynamics have emerged in physics from the problematic of the machine. The relationship between film and the machine initiates from the temporal proximity of the invention of cinema and the mechanical, modern life. Cinema is only one element from a nexus of technologies and materials of transportation and communication, such as the railroad and the telegraph, entertainment and consumerism and related to ideas of ephemerality, shock and contingency. For instance, early cinema has been discussed in terms of the representation of the ephemeral, the unexpected and the unpredictable (Charney & Schwartz: 1995, Doane: 2002, Charney: 1998). This temporal irreversibility is exemplified by the projection apparatus' mechanical representation of movement. Within this context, Doane conceptualizes the archive, as an epistemological struggle against contingency. If everything that is archivable loses its presence, that it to say loses its relation to the instantaneous, the ephemeral then the archival technology of cinema compensates for the archival's relation to the finitude, as cinema can record the present, the contingent and the ephemeral.

The scientific time of thermodynamics is a measurable time. It is quantifiable in terms of seconds, minutes and hours.²⁵ Thus time has an impact on the changes of the conditions of storage, of treating and manipulating film, and of developing the conditions of preservation. Archival practices form a protection against the time, the inevitable entropy and loss. They aim to control the corrupting and dismantling work of time on the film stock's condition, by employing regulated temperature and humidity conditions in the archive's storage vaults. As the interactions between the components of a system – the material of film, the technology of projection, time, energy and space – position the system as not only distant from equilibrium but also from linearity, integrity and unity, the archive aims to manage time, when the state of disequilibrium is high and the probabilities for the film are therefore higher. Therefore, the vitality of time's irreversibility becomes a central concern and driving force in the event of archiving film: preservation and storage. The restoration practices act directly upon the film material and its temporal condition of deterioration and damage. By the production of a new film, the new shape of the film will be the one watched by the audience, examined by

²⁵ Significantly, the technological actualization of the event of cinema, the projection, embodied the rationalized and measurable time of modernity, therefore the irreversibility of time. As Doane (2002: 112) phrases it, 'at its most basic level, the film moves forward relentlessly, reproducing the familiar directionality of movements with regularity despite its capability of doing exactly the opposite.'

researchers and be accessed in the future. Thus the practices of film restoration are irreversible.

In effect, it is through the restoration processes that the dissipated and deteriorated film reaches a new equilibrium. The restoration of *Underground* leads the new film production to reach a new equilibrium because it enacts the very vitality of film's life to be projected and thus accessed. Our attention in the next section shifts to the effects of the material agency of the film and the temporal effect's irretrievable loss, to the conceptual artefact, in terms of the re-interpretation of concepts and instrumental notions of originality and multiplicity.

6.5 Originality

The idea of the original, although significant in the collection and preservation of films by an archive, is rather complex, depending on the theoretical contexts that one subscribes to. For the BFI Archive the idea of the original in the context of restoration depends on understanding the intention of the original creator. That is to say, BFI policies relating to the idea of the original concern themselves with issues of artistic integrity, but also the originality of the materials used, formats and media, all of which are considered in any restoration production.

Fossati explains that within archiving practices the original can be theorized as the conceptual artefact (one particular version of the film), the material artefact (the original camera negative), the film that was originally shown to an audience, or the material artefact recovered from the archive. In addition, Fossati adds two more levels in the archival conceptualization of the original: the original film's look or the original format. In this argument, the archival film is not only represented as a deteriorated and damaged materiality but as a practice to be accomplished, to bring 'an archival film back to a form that is as close as possible to the original.' (Fossati, 2009: 71) Given multiple versions of the "original" film, how can we theorize and what can we consider as an original film, when dealing with a technology that is inherently reproducible? How and where can we trace originality as a concept and as an attribute of an artefact in the example of *Underground's* restoration?

In his seminal 1936 essay, 'The Work of Art in the Age of Mechanical Reproduction', Walter Benjamin claims that

... reproductive technology, we might say in general terms, removes the thing reproduced from the realm of tradition. In making many copies of the reproduction, it substitutes for its unique incidence a multiplicity of incidences. And in allowing the reproduction to come closer to whatever situation the person apprehending it is in, it actualizes what is reproduced. (2008 [1936]: 7)

The unique and singular presence of a work of art in time and space ascribes authenticity to it. Authenticity ceases to exist when there is no difference between the original and its multiple copies. Mechanical reproduction allegedly annihilates the difference between originals and its copies. Since Benjamin's work, the concept of authenticity became problematic when examining media such as photography or film that are inherently multiple. In Benjamin's thesis, authenticity becomes an element bound to the function of the mechanical technology of film. Film as a reproductive technology has only multiples and not originals. Benjamin has argued that from a photographic negative, one can make any number of prints, while statements relating to the authentic print make no sense. Taking Benjamin's argument that authenticity ceases to matter when the object of art is mechanically reproduced, Fossati states that 'a newly perceived authenticity is generated, when film enters the archive; it becomes heritage and its copies museum artefacts.' (2009: 118, emphasis in the original) Fossati bases her statement on Boris Groys' interpretation of Benjamin's claim about originality in terms of a 'topological distinction'. If the work of art becomes original due to its unique presence in time and space, Groys states that:

Benjamin views the distinction between original and copy solely as a topological distinction and as such completely separate from the physical existence of the piece of art itself. The original has a specific location a unique object in history. Benjamin's formulation in this context is well known: "There is one thing missing even in the most perfect reproduction: the 'here' and 'now' of the piece of art – its unique presence in its location". On the contrary, the copy is virtual without location, without history. From the beginning, the copy seems to be a potential multiplicity. The reproduction is a delocation, a de-territorialisation – it carries the piece of art into the net of topologically uncertain situation. (2002: 1)

Groys brings the topological multiplicity of film forward, as its analogue copies are potentially everywhere. The virtuality of film is termed in relation to its uncertain topological situation and the lack of history and origin. Able to be everywhere, film is specific nowhere. In contrast, in Fossati's argument, it is the relocation and the re-territorialisation of film in a specific context, the site and institution of the archive, that gives back to film its authenticity

status. Within the archive, film attains history and presence in time, as the archive's agency contextualizes the relationships that exist at any moment in time between material decomposition, history of projections or archival storage. In a way, the archive empties out the multiple copies mechanically reproduced, as within its site one or only a few copies exist, and even if they are not the original negatives of a print, they attain authenticity because of their scarcity. Within the archive, authenticity does not need to be a function of the technology, but a function of archival practices.

More specifically, prior to the enactment of the restoration practices, the site of the archive, with its own precepts and guidelines, is not independent from a conceptual understanding of the film artefact when it enters the archive. The restoration team needs to take into consideration the time, when the original film was produced, that is to say, the different shades of black and white in the nitrate celluloid or the sound resolution. The aesthetics of style and techniques of the period that a film was produced in become a parameter of the discourse on originality. Taking a different perspective from Read and Meyer, Fossati argues that the main aim of the restoration practices should be maintaining the original film's look, rather than remaining true to the original format. From her own point of view, she explains that 'if a digital copy of a film could reproduce (simulate) the original characteristics of an obsolete 35mm color system better than a copy on contemporary 35mm color stock, I would opt for the digital copy.' (2009: 71-72) Therefore, if digital means can better simulate the original look of the film, then they should be preferred to photochemical means.

In restoration processes, the search for other prints situates the archival copy in a net of numerical copies which nevertheless carry differences. Usai (2008) argues that in the situation of film within an archive, it is the material format, the physical space in which film is stored that forms the artefact and not merely the information that it carries. Based on Usai's argument concerning the 'internal' history of every copy, the three copies of the film *Underground*, with their internal, unique history, questions whether the restoration process leads us closer to the original and suggests a restoration that leads closer to a multiplicity.

It is the set of the archival procedures and restoration practices that intend to coordinate these different materials. Within the archive the film *Underground* (singular) is *multiple* (many). Under the title of *Underground*, and moreover under the restored version of the objects, there is a diversity of material objects: the three archival prints and also the digital tools. Given the

state that the available materials were before the restoration, the film object was reproduced in multiple copies. The different copies of the film are not different component parts of a composition that needs to be arranged in order to create the film. These copies are identical reproductions of the same original, the problem in this case is that each copy has been disrupted by ageing and different issues related to storage conditions. At the stage of re-composition, these different conditions, but also the different material artefacts (first and second generation prints and the fine-grain print) of the film formed the material from which the selection was made for the new, “complete” version of the film. In order to compose a film on a polyester format, the best quality sequences from the total eight reels was selected and composed in an ordered, united, new print. For the film *Underground*, the selected material came from chronologically different copies. The different ancestors of the film mapped its heterochronic stages. Classifications of the conditions (the differences in degree) of the available materials were the tools to be used for the creation of the new film production, which is actualized in the temporal instances of the three copies used for the restoration practice (1928 and 1948) and the distinctive spatial locations, in which the copies were kept and their material conditions.

In the practices used during *Underground*'s restoration, the archival copy is considered original, in the literal sense, as an origin, a beginning for a new lifecycle for the film. Originality equals rebirth, which is manifested in the new possibilities of continual acts of reproduction. If the originality of an object relies on its singularity in time and space, an original film must be at only one place and only at one time. The three prints of the film *Underground*, demonstrate an entity which is not singular but multiple, an entity with no essence. The restoration of the film by the BFI Archive will disseminate the film again electronically and mechanically, realizing the multiplications of copies, with no original. The issue of originality in this case is related to the new birth of the film that the restoration practices have accomplished. The new *Underground* becomes an original by means of being the beginning, the origin for the film's new trajectories and internal lives. Given the shape it has after the restoration, the film carries no progeny, or any reproduction.

In this case, the film was formed by the connection of multiple, unstable temporalities of film, as materialized in these three different copies. While entropy brings disorder, the restoration enabled the archival idea to restore time for the continuation of performance and life of the film. In this process the old is incorporated into the new and the legitimacy and the

fragility of the technological interactions rest upon the idea of a newly united, restored film: a hybrid of analogue and digital materials.

6.6 Conclusion

This chapter focused on the institutional framework of the BFI Archive as constituted by the primary principle of safeguarding British film history and heritage. By mobilizing Derrida's principles of the archive of commandment and commencement, this chapter situated its case study, the restoration of the 1928 film *Underground*, within his commandments that is to say the strategies, activities and operations specific to the BFI Archive. In addition, the examination of the particular restoration project, in which the photochemical, organic nitrate film prints are enhanced by digital means for the creation of a new film production, activated this Derridean principle of commencement. This chapter argued that the restored film is a new birth, which apart from being a material (re)birth, also retrieves the film's duration in a new life-cycle of performances and encounters with the public. The understanding of the archive as interrelated with the technologies that are available and compatible with its context, made us think about the archive not only as a conceptual imperative but in terms of technological processes.

By employing Fossati's claim of the archival film as historized artefact, at a material and conceptual level the new restored *Underground* is enacted anew as a historized artefact on both levels, a material artefact recombined and enhanced by digital technologies thus it is re-appropriated and also changed given the way that its new materiality is being shaped. This also occurs as a conceptual artefact, that is to say, the new production is an example of the contemporary techniques and (digital) technologies of our time used in film archival restoration practices.

Moreover, this study problematized the concept of originality as attached to archival discourse by presenting a restoration in which the idea of the original is only to be found in its literal sense, as the new production of the film. In opposition to Fossati's argument that a new authenticity is ascribed to a film when it enters the archive, the restoration project in our study has shown that the idea of authenticity or originality might be valid for the BFI's collection policies, but it is not implicated in the processes of restoration. The restoration of

Underground was made basically possible by the compilation of three different prints, which were the best available material for the restoration.

The next chapter examines the “delayed” employment of digital technologies in theatrical distribution and exhibition practices. As film distribution is irreversibly converted to digital, a digital dilemma concerning the need for 35mm prints is posed to the industry, distribution and exhibition companies, but also archives. The archives’ argument is that the 35mm film stock is the most reliable format for film conservation practices, as the digital media is more volatile due to the fast paced obsolescence of standards and equipment and also the degradation of signals. The next chapter situates film within the analogue and digital practices of theatrical distribution and exhibition. Drawing on the theatrical projection and ‘Video on Demand’ practices of the company Curzon Cinemas, the next study will examine the transition from analogue to digital processes and the technological and material issues conveyed within this shift.

Chapter Seven

Projection: Materiality, (Dis)-location and Network

7.1 Introduction

This chapter examines film, as a marketed, commercial object. Following the examination of the restoration of the film *Underground*, which brought into being a new film production to be distributed and accessed by an audience, thus fulfilling the archive's principle to provide access to its materials, this chapter investigates the technological and material processes that release and sustain films in the marketplace in order to communicate with an audience. This study's focus lies on the practices of film distribution and exhibition within the commercial and operational framework of the theatrical company of Curzon Artificial Eye (CAE) Cinemas in London. At a moment when our audiovisual culture is amplified by the increasingly ubiquitous presence of screens, as host sites of films, and by diverse technological circuits around distribution and exhibition, this chapter emphasises the material and situated specificity of Curzon Cinemas in order to study the material object of film. These include film cans, digital data-packets or coded information in relation to different networks of distribution and exhibition that, in my case study, include movie theatres, the Internet, and screens that link different media, such as the television, computers and mobile phones. The network is both a metaphor (Van Loon: 2006, Wasson, 2007) and a topological system (Law: 2003, Callon: 2003), and will be used to examine the growing connections and relationships between different media technologies, by focusing on the material and technological object of the screen. In this way, this chapter readdresses the idea of film's multiplicity as manifested in new practices of film distribution and transportation, which include new actors. This study is based on the company's two sets of activities around film projection and circulation. Firstly it sheds light on the material practices of analogue and digital theatrical projection that, until now, co-existed in the projection room of the Renoir movie theatre, which is part of Curzon Cinemas' theatrical chain. Secondly, it focuses on the Curzon Cinemas' Video on Demand (VOD) service, 'Curzon on Demand', a host site of movies on demand that enables their streaming in High Definition via cable or satellite in small sized (domestic and mobile) screens, released at the same time as their theatrical run.

In particular, in the transitional period during a ‘paradigmatic shift’ (Crofts, 2011) the introduction of digital technologies has highlighted the film industry’s linkages between film production, distribution and exhibition. This chapter draws on the professionalized framework of Curzon Cinemas in order to trace the complex and multifaceted enactments of films as ‘they happen’ within the locality of the movie theatre and the material and technological networks implicated by the new commercial practice of the Curzon on Demand service. More specifically, the research conducted at the Renoir movie theatre testifies to the relatively recent²⁶ – in theatrical distribution and exhibition terms – shift to digital projection. In this study we will see that, until now, in the theatre’s projection booth digital projection has not overtly replaced analogue projection. The research in this site will show that the change to digital has not so far transformed film’s physical transportation methods, while in terms of projection it signifies many similarities as well as differences with analogue projection. Nevertheless, it has crucially brought changes regarding the technological infrastructure and the systems of technological assemblages of materials and also the workflow and the set of activities operated by the projectionist.

On the other hand, the Curzon on Demand service signals the circulation of film across different systems of transportation. The Curzon VOD signifies a crucial move from the locality of the movie theatre to a set of technological networks that geographically connect the small screens of the viewers-users of the VOD service, and the theatrical screen to a multi-platform configuration of screens, or ‘networked screens’ (Wasson, 2007) that is reformulating the distribution practices of Curzon Cinemas. The description of the CAE’s practices of film exhibition in large, site specific screens in the movie theatre and non-theatrical, small screens, in various locations through the Curzon on Demand system of distribution and exhibition can be examined as an example of a spatial shift away from the ‘space of place’ to the ‘space of flows’, as articulated by Manuel Castells (2002 [1996]). However, while the changing dimensions of the new communication technologies is of considerable significance in the general context of film circulation, the networks that operate

²⁶ Charlotte Crofts explains that the shift to digital projection ‘only really started in 2005, when the DCI Specification was agreed and concerns about interoperability and piracy were addressed. Specifically, in Britain this also coincided with the UK Film Council’s Digital Film Network, which rolled out between 2005-07.’ (2011: 2) More specifically, the Digital Cinema Initiatives (DCI) a joint venture of major studios (Disney, Twentieth Century Fox, Paramount, Sony Pictures entertainment, Universal and Warner Bros) produced a document in 2005 which outlined specifications for ‘Digital Cinema’. These entail information about the ratio, audio, subtitles, digital equipment and delivery of digital films.

around Curzon Cinemas call for an examination of their institutional, material and technological specificity. Relationally, the metaphor of the dis-location of film assumes a spatial way of thinking about the transition from a specific space and time of watching films, in the movie theatre, to the presence of film both in multiple spaces – theoretically the Curzon on Demand viewers can watch films wherever they happen to be – and in multiple moments, whenever they wish to.

Based on the above, this chapter asks: what kind of film material objects and networks appear in this transitional period for film delivery and presentation and what kind of effects do they produce for the practices of film projection? In relation to this, what are the differences and similarities regarding analogue and digital theatrical projection and what are the implications of projection operated by digital means, in terms of professional skills? Moreover, in what way does the screen become a formative element when discussing the technology, site and shape of film, as well as a material and contextual specificity to examine and configure the mobility of film as coded information? In effect, how can we spatially conceptualize the shift of screen practices from the theatrical screen to the ‘networked screen’? How can we use the metaphor of the network as a transformative system that relates the multiple object of film with a new actor, the multiple object of the screen? This study will bring us back to the primary assumption that triggered this thesis, the dissemination and simultaneous presence of film in various locations. This is a challenge for tracing and theorizing film, hence the need to shed light on something else, i.e. new kinds of technological relationships and (discrete) instances of enactment between the theatrical silver screen and other small and portable cinematic screens.

7.2 Curzon Cinemas

The practices undertaken within Curzon Cinemas can be situated in relation to the current changes in the presentation, encounters and viewing practices around film. In the current debate on film distribution, the “formal” circulation of film is marked by notions of crisis and disruption (Lobato: 2012; Jordanova and Cunningham: 2012). In this discussion, the distributed film is caught up in separate transactions between formal economic systems as shaped by the link between distribution companies and theatre chains, in which CAE is situated, and informal circulatory systems such as Bit Torrent traffic, uploading and viewing

on video hosting sites, pirate disc sales, DVDs, distributions across various media channels, platforms and sites of consumption. Within an audiovisual culture, in which the intertwining of film with other media technologies and forms has indicated a dynamic shift in our understanding and experience of cinema, the examination of Curzon Cinemas forms a specific site with which to understand the way that a theatrical company integrates itself within this field of distribution, exhibition and consumption. In addition, it offers a site with which to discuss the ways in which the company has adopted digital projection and the effects that the transition to digital media and technologies for its theatrical and non-theatrical (that is VOD) practices of film distribution and presentation.

More specifically, the Curzon Artificial Eye is a London-based group formed in 2006 and composed of the UK's longest running distribution company Artificial Eye (founded in 1976), of foreign language and art house films for cinema and home entertainment (as a retail DVD distributor), and Curzon Cinemas, London's independent exhibition company with a tradition in theatrical exhibition since the 1930s. CAE forms the first group in the UK working both as a distributor and exhibitor bridging the gap between often contrasting commercial interests and logics that defines these sections of the film industry. Embracing both practices, the company exemplifies the crossover into the areas of film projection and provision of digital content. It forms one of the most respected independent cinema chains in the UK, bringing the latest releases from independent European and world film, and reflecting the highest standards of international film presentation. This is manifested through a programme of events that includes conversations and interviews (Questions and Answers) with the world's leading filmmakers, film festivals, special screenings, as well as live on-screen opera and theatre from New York's Met Opera, London's National Theatre and many other venues around the world. The Curzon cinemas have more than 600,000 annual admissions, 7,000 members and 30,000 email subscribers, while the company prints 50,000 copies of its bi-monthly magazine Curzon Magazine.

The theatrical company has more than seventy years of cinema experience, since its first movie theatre opened in Mayfair in 1934, the same year that the Gaumont Palace opened in Chelsea, now Curzon Chelsea. In addition, the company has expanded its market position and franchised territory by collaborating with HMV, the HMV Curzon at Wimbledon launching in 2009, which only operates digital projection in its three auditoria. Since 2012 Curzon Cinemas expanded their reach by elaborating synergies with art institutions: the Bridport Arts

Centre, in West Dorset, and the Ivybridge Watermark, in Devon, which host film screenings that are curated, distributed and projected, with digital equipment, by Curzon Cinemas. The company is composed of five movie theatres in London, and among them is the Renoir movie theatre – in which I was an employee for two years, from 2008 to 2010. Since 2010, the company has introduced the ‘Video on Demand’ service, which is the UK’s first High Definition (HD) online Home Cinema. Distinctively, the Video on Demand service of CAE functions as another Curzon cinema, as it brings films to its subscribers simultaneously with their run in movie theatres, “wherever and whenever”. As Curzon On Demand service forms a new outlet for the company’s film distribution and exhibition, Curzon’s theatrical venues and projection rooms have shifted to digital projection. In this transitional period for film technologies of projection, in Curzon Cinemas dual-systems of analogue and digital distribution are operating, as digital projection runs in parallel with analogue (besides Curzon HMV).

The Renoir movie theatre first opened in the Brunswick Centre, in Bloomsbury, central London, in January 1972. After a period of closure, it reopened in 1986, under the management of Artificial Eye, showing first runs of Artificial Eye films. As a first run art house theatre, the Renoir primarily exhibited Artificial Eye releases, which prioritize French works and independent European productions. In 2006 the theatre united with Curzon Cinemas, which expanded its repertoire with more releases, besides Artificial Eye distributed films. It carries the tradition of an art house cinema, hosting films from established directors and new talents from world cinema, but also organizing directors’ retrospectives, screenings of avant garde films, short films and animation. Since 2006, the Renoir has changed its sound system to Dolby Sound and projection practices with the instalment of digital projector consoles, offering a more technologically advanced environment and setting for the “film experience”. In the study of the Renoir’s projection practices, tangible materialities become an integral aspect of the way that contemporary film is transported and displayed.

7.3 Analogue and Digital Theatrical Projection

The Renoir movie theatre has two auditoria. Its projection booth is a large size space. Two thick duty fireproof doors satisfy the safety regulations and heat precautions and protect the rest of the theatre, in case of fire caused by the production of heat from the compact configuration of the machines and the additional heat produced by the operation of the analogue and digital projectors. The space has good air circulation, via an air conditioning system, which needs to cool the heat-sensitive equipment. In its projection booth both analogue and digital systems of projection operate. There are two 35mm analogue projectors and a digital projector, occupying the same space with the analogue ones, which operates HD video projection, DVD, mini DV, Betacam and Digibeta projection.

Technically speaking, digital projection does not radically change the projection as operated by analogue equipment. Certainly, the analogue film platter is replaced by a digital server, the head of the mechanical projector is replaced by a digital head and the film spool by a hard disk drive. But the way that the film images are illuminated in the theatrical screen is done in the same way as with celluloid. That is to say, both analogue and digital projection transform digital data or the images on the photosensitive carrier into the light that appears on the screen. What changes are the technical operations required by the projectionist to operate the film in order to encounter the screen. These are based on the technological distinction between the photosensitive image carrier of the analogue print and the digital as quantified in binary mode in files in their performance in analogue and digital projectors.

At the present moment, only ten to twenty per cent of the films (depending on the festival or events season) projected at the Renoir are analogue prints. In 2008, when I started working in this site, analogue films composed the majority of film projection. Describing the practical day-to-day activities of distribution for analogue projection, the analogue 35mm release print is transported in a can and gets delivered to the projectionist by a courier. Placed in the projection booth, the projectionist first needs to check the reels of the film. If there is more than one case of reels – this happens often – they might need to be checked to see if they are set forward or backwards and then spliced together into one large reel, which is the platter. The projectionist also needs to test the weight of the roll of film on the teeth of the projector, if it is too heavy, it needs to be broken down into smaller amounts of reel, while the flatbed indicates how long it is. The reels will then be assembled with the trailers and the

advertisements and they will sit in a horizontal rotating table, the platter. This means that the projectionist does not have to change the reels during the projection's performance. At the same time, while the film is playing, another, the take up platter, receives the film and winds it into a ready state for the next film showing. The projectionist has to check the light bulb, with respect to the images' luminance. A change in the light bulb's power level could cause flickering on the screen. The film is looped, passed through the projector's sprockets, whereby the strip travels through the gate and the sound drum. After checking the light, the sound and the screen ratio, the projectionist presses the start button: the film is on. The shutter, which by opening and closing controls the time of the standardised speed (24 times per second) of photographic exposure allows light to come through the lens in order to expose the photographic frames. The shutter guarantees that one frame at a time will be projected, for 1/24 of a second, allowing the moving image to be seen, as opposed to just images sliding by one after the other.

In general terms, the nature of the technology and machinery of analogue projection is underpinned by mechanical, optical and electronic principles. The light illuminates each frame that passes in front of it in a three-step act: the frame passed, the frame passing and the frame that will pass. This is the manifestation of the countable movement of the strip. The projectionist needs to hear the sound of the machine in case there is a fault, in which case the noise of the projector will change, thus manifesting the problem. For instance, when the light bulb burns out the projector creates a clicking sound that means that the bulb needs to be replaced. Although, since the rise of multiplexes, analogue projection has become an automated process, it still demands the implementation and congruence of various senses by the projectionist. As described above, it is based on a manual process, which also requires touching, watching and hearing the passing of the polyester strip onto the projector's loop. The material object of the film print enters into immediate contact with the projectionist and the projection machine: the occurrence of technical problems is tactile and materially manifested through the interaction of the photosensitive carrier with the machine.

With digital projection, the principle acts of projection, such as the operation of the shutter, the zoom and the focus are included in a control panel. In the Renoir's digital projection equipment, in order to enter into the settings of these functions, software is integrated into the

projector and can be displayed on the computer.²⁷ The shift to digital projection for the circuits of film distribution and exhibition can be examined based on different driving points, aesthetics, cost, sustainability of materials and access. John Belton (2002) and Charlotte Crofts argue (2011) that the shift to digital projection does not formulate a revolution in the history of cinema distribution. In terms of aesthetics in the experience of film, it is a ‘false revolution’ to use Belton’s characterization. In his argument, more significant moments in film distribution’s history have preceded digital, for instance the shift from nitrate to acetate stock, the advent of sound, colour, the widescreen cinema. Belton states:

Digital projection as it exists today does not, in any way, transform the nature of the motion-picture experience. Audiences viewing digital projection will not experience the cinema differently, as those who heard sound, saw colour, or experienced widescreen and stereo sound for the first time did. (2002: 104)

From the technological perspective, Crofts – writing in 2011 – explains that whereas the distribution and circulation of films rapidly emerge on the web, the adoption of distribution practices in theatrical screens, through digital means, has a slower pace. According to her, the reasons are to be found in the relationship between key elements that mainly deal with different market interests and in the need for a change of the current and long-lasting business model. This change is largely connected with the means of film production, as she states ‘The rollout of digital distribution is contingent upon the wider infrastructure, the adoption of cinema projection by the cinema operators, and the provision of digital content, so there is some unavoidable cross-over into the areas of cinema exhibition and production.’ (2011:1) In particular, according to Crofts, some of the main causes that delay the take-up of digital distribution can be summarised by the analogue film’s reliability as a medium, being both interoperable and universal, and the need for international standardization of exhibition specifications is still lacking in digital projection, including the conflict between distributors and exhibitors about who will meet the cost of the transition, the digital shortfall, especially

²⁷ Other projectors have internal software, installed in a touch panel, embedded in the projector. Others have a basic remote control that does not provide for an overall display of the parameters. See ‘Technical Guide for the Projection Booth in Digital Cinema.’ (2011)

in small venues such as art-house cinemas, and issues related to film preservation and archiving.²⁸

Digital projection was inaugurated as a technology with George Lucas's film *Star Wars: The Phantom of Menace* more than a decade ago, being projected digitally in the United States in June 1999. Since then, the digital practices of projection are gradually replacing the mechanically operated 35mm film format. The digital projection process is based primarily on the conversion of analogue prints into electronic form, which are digitised and encrypted, or the projection of digital-born materials. In the Renoir Cinema the distribution of the digital, commercial film is made in the same way as the analogue film: the electronic copy of the film's content in the form of a hard drive – a data-packet – is delivered physically by a courier and not via satellite or cable; the reason being the fear of piracy.²⁹

The data-packet is a DCI hard drive, which has a storage capacity of 400 GB; this being even better than High Definition. The information is encrypted and also compressed, a method that enables the reduction of the data transfer rate to a size that can be encoded and projected in real time. Each hard drive stores one film. At the same time, the data-packet carries information about how the different files of the film are linked to each other, which sections of the film are contained, and the order in which they need to be screened. Along with the hard drive, a security key code is sent which enables access to the film and its projection for a specific temporal period. The security key is typically sent via email to the exhibitor by a unique KDM (Key Delivery Message), which is encrypted. One key will work for only one film and one server. If the key is delivered for the wrong server or location it will not function, thereby in theory reducing delivery errors that could compromise the security and thus accessibility to the movie. If a key expires then the exhibitor will need a new one; otherwise the film cannot be played. Moreover, the key needs to be compatible with the projector's certificates. The creation of the KDMs is based on a collection of digital

²⁸ According to Crofts' study, and referring to Karagosian's Digital Cinema Report (2011), the major reason for the delay of a "total" conversion to digital projection is the issue of preservation. With the shift to a "total" digital projection that includes digital-born materials and digital distribution and circulation, what is at stake is the 35mm's quality as the safest format for preservation and archivization, even for films that are "born" digital. Kodak's report 'Digital Dilemma' highlights a general consensus that 'because of the degradation of signals and the obsolescence of formats and standards, digital media are more volatile than film.' (2007) The latter element raises a set of issues that have to do, not only with preservation and accessibility, but also with the different set of material durations for digital film. Most importantly, the fast pace of renewals and replacements of digital infrastructure is replacing a model of mechanical operations that has proved to be durable and largely unchangeable.

²⁹ As Kirovski *et al.* (2003) explain, the film industry loses a considerable amount of money yearly due to the lack of proper digital copyright enforcement.

certificates composed of the theatre's equipment, and the manufacturers 'authorization of the creation of the KDMs. Within this context, the exhibition systems need to remain compatible and moreover, the distribution needs to be piracy proof, in order to prevent piracy/leakage of the film's content between screens.

In the digital projection, we have optics and bulb (light) and, in general, the projectionist is looking for the same things as with analogue projection: whether the auditorium's lights are down, whether there are images on the screen and whether the sound is working. But in digital projection we do not have light projected through film; instead technologies like DLP (Digital Light Processing) and LCOS (Liquid Crystal on Silicon) are performing the task where, again, a light switch that enables light to be modulated digitally through a million microscopic mirrors is arranged in a rectangular mode. These are the same technologies at work in computers, television screens and mobile phones. They are technologies that do rely on scanning and transmission, in which light passes through the liquid crystals on the way to the lens and is modulated by these crystals as it passes. The light does not derive from the computer console, in which the film's hard-drive is embedded, but from the projector's lens in which the film, via software, is to be screened. The information data that needs to be checked is listed on the menu of the computer's screen. The ratio, scope and sound are predetermined by the electronic hard drive, through which the projectionist is able to open ideograms, files and functions. The manual role of the projectionist is transformed into the role of a computer user.

If there are faults on the subtitles or the faults on the copy, the projectionist needs to check the theatrical screen. There are a number of faults that can be discerned when screening a digital film: strophic failure, problems with the image resolution, image freezing (on the screen), or loss of subtitles. Since each part of the digital film copy comes in a different file, if there is a fault in one of the files, although the projectionist could check them and test the patches added onto them, they need to be rebooted. With digital projection there is less communication between the projectionist and the server. When a film is projected digitally, anything that does not start as it should might create problems, whereas in the projection of 35mm, the things that could go wrong are all there on the material film and evident in its interaction with the projector. Overall, the projectionist is not dealing with fewer problems but different kinds of problems, those which, instead of demanding knowledge of mechanics, require knowledge of the operation of electronics. As in the case of 35mm, more faults and

mistakes can be fixed within the projection room, by the projectionist, while with digital most of the problems require electronic assistance.

The transition to digital projection as described and based on the Renoir's technological and material operations, highlights a shift in the practices of theatrical projection. However, until now it has not largely simplified theatrical projection, the film is not streamed on the Renoir's theatrical screen, directly from the server, but in contrast, as we saw, material and technological networks of delivery and projection are operating. That is to say what is at stake in the context of this transition from analogue to digital technologies is, of course, the infrastructure, but also and most radically the ways that the projection practices are operated, by the professional projectionist.

This is a part of an ongoing shift in the technologies of film exhibition that gradually eliminates the control and operation of the mechanics of projection by the practitioners' hands. Enticknap (2005) explains that these practices significantly changed in the 1970s and 1980s with the introduction of electromechanical systems that automated a number of projection functions. With analogue projection, he states that in less than two decades 'cinema exhibition had been transformed from a dangerous, high-skilled, time-specific and labour-intensive process to one which could be managed according to economies of scale and carried out with far lower staffing levels.' (2005: 154) The shift to digital projection has added a new aspect to a jigsaw of technologies that have never stopped reshaping cinema exhibition. Thus, as cinema goes digital, the analogue projection machines which, even after the introduction of automated projection devices, were operated by skilled professionals, are changed in digital into a practice that can actualise projection in a less skilled or laborious and rigorous process. Nowadays, digital projection can be handled and executed by almost anyone with computer literacy. In the Renoir, the movie theatre's manager has been trained how to digitally project a film. Informally, the title of the professionals operating digital projection is "technicians". With digital projection, human labour, for the exhibitors, is significantly cut, as this model of practice takes the human touch out of the process of handling the film equipment. In a way, the obsolescence of analogue film in the practices of projection and presentation of movies equals the obsolescence of the professional skills of the projectionist. The shift to digital projection signifies the elimination of a professional group that has been integral to the cinema-going experience for more than a century, as it does not require a mechanical skill-set and craft. As the shift to digital projection is not a short term

endeavour, it fundamentally and irreversibly marks a shift of practices, equipment and professional mastery.

7.4 Curzon on Demand

From the professional and physical practices staged in the Curzon's Renoir movie theatre, which are performed via analogue and digital projectors, the move to the Curzon on Demand service is operated according to streaming. The service delivers the same product, the same film at the same time as the theatrical exhibition, but outside the time and site specificity of a theatrical exhibition in its movie theatres, and is conducted via television, computers and mobile phone screens.

In December 2010, Curzon's Video on Demand service opened with the premiere of the film *In Our Name* (2010) by Brian Welsh, which was presented simultaneously in their movie theatres and on television sets and personal computers. Curzon Cinemas advertise their VOD service as 'a curated online cinema experience – a twenty four hour service, available, wherever you are'. The advertisement promoting the service shows three screens, a television, computer and smart phone screen, graphically designed, with the following promotional straplines: 'redefining cinema' and 'films on the go in all devices'. The service operates as another *Curzon Cinema*, that is to say films are programmed specifically for this site, in line with the releases that the theatrical venues exhibit. Being within the geographical span or boundaries of Ireland and the UK, the service gives the opportunity to its subscribers or pay-per-view viewers to watch the latest cinema releases – films that are currently on theatrical release – on different media platforms but also a curated selection of classic and contemporary film releases, which is streamed in HD, offering 'an excellent viewing experience'. The company aims to counter illegal online downloads and intends to use digital technology to bring their independent film distribution to a wider audience, situated at a distance from their theatrical venues in London. At a cost of six British pounds sterling – cheaper than the current price of a theatrical ticket – for a new release and two pounds for a film from the Curzon's 'library', a film is available to be watched for seven days after its purchase. While previously theatre owners were provided with a limit of three to six months to exclusively show a film in their venues, without having to compete with other formats and

versions of the film, for instance on DVD rental, or in a shorter period on other Video on Demand hosting sites and services, Curzon on Demand annihilates the temporal distinction of a film viewing by offering simultaneous delivery on both theatrical and small screens.

Since April 2012, the company has extended its VOD service by allowing its subscribers to watch film content on iPhones and iPads, subject to the user's connectivity, and also on Samsung's Smart televisions – which is the integration of Internet delivered content with connected televisions – thus enabling consumers to stream movies on their main television set. The service runs through a Curzon on Demand application developed by the company Capablue's Plus, a recently launched connected solution. As a product developer, Capablue's Connected Plus is a cloud-based platform that enables the monetisation of content, in any format, for any media and from any system. The platform transforms the data into apps and portals for any device. In this way Curzon on Demand is available as an app on Samsung Smart TV's, and facilitated by the Internet.

Based on the delivery method of streaming by cable or satellite, Curzon on Demand viewers access the film content directly and live from the provider. In contrast to broadcasting in which content flows from a central unit to a number of anonymous viewers, who receive the same material at the same time, streaming is a non-linear service, as the viewers purchasing a film from the Curzon VOD service can “pull” content from a network at any time and in a non linear viewing context, independent of the linear method and structure of broadcasting, which “pushes” content to viewers. (Gripsrud, 2010:10) The service depends on the customer's bandwidth, the speed of the Internet connection during the time that the viewers pull the content from the Curzon on Demand website or the applications. This service stands at a distance from the processes of film's delivery through physical means (delivery of the film canisters or the data packet and operations by the projectionist) that operate at the Renoir's analogue and digital projection practices and sites, and is based on transportation via the internet. The dislocation of film from a fixed location and its relocation from medium to medium and from site to site inscribe to the object of film mobilization a commodity form that migrates across different geographical points – within the context of the UK – in order to appeal to a wider audience. But besides the Internet's potential for global instantaneous reach and immediacy, with the Curzon on Demand service the way that films are delivered to your personal computer or your television or phone's application is determined by the business

contracts and the networks that the Curzon company has established with electronics companies, such as Samsung, Apple and Capablue.

7.6 The Concept and the Metaphor of the Network

The dislocation of film from its traditional site of exhibition, the movie theatre, and its relocation as coded information to multimedia devices through the Curzon on Demand service indicates a change in technological and material terms, a spatial shift. In a general framework, film as a digitized material, and as distributed and exhibited through online streaming, can be seen as exemplifying the flow of information, a characteristic element of the global economy and the advanced communication systems of late capitalism. As the global economy expands, the digitized communication circuits incorporate new markets and organise the production of advanced services. Therefore, by situating film within the context of practices such as the exchange of services and digitization, the circulation of film as a flow of images and sounds in multiple sites and in multiple receivers can be conceptualized according to the juxtaposition, established by Manuel Castells, between the 'space of place' and the 'space of flows'. That is to say, the juxtaposition between the locality of the movie theatre, described as a space of place and the Curzon on Demand service as being part of the space of flows.

In Castells' study, the notion of space is directly linked to social processes which are not distinctively urban but bound to the practices of capitalist society. In his work on *The Rise of the Network Society* (2002 [1996]) he focuses on 'the transformation of socially and spatially based relationships of production into flows of information and power that articulate the new flexible system of production and management.' (2002 [1996]: 412) In his socio-spatial logic, the argued 'global' space of flows formulated by communication innovations undermines the bounded localized sites, defining them with the term 'space of place'. Castells defines place as 'a locale whose form, function, and meaning are self-contained within the boundaries of physical contiguity'. (2002 [1996]: 453) and identifies the space of place as the 'historically rooted spatial organization of our common experience'. Thus, within the logic of global capital accumulation, the space of place, as bounded by meaningful places, like the home, the city or region, is annihilated by the space of flows. These are flows of capital, flows of information, flows of technology, of images, sounds and symbols.

Crucially, for Castells the 'space of place' and the 'space of flows' are not distinctive from each other but exist in interaction, juxtapositions and states of overlaps and movements between the two. He remarks specifically that 'Localities become disembodied from their cultural, historical, geographic meaning, and reintegrated into functional networks, or into image collages, including a space of flows that substitutes for the space of places.' (2002 [1996]: 375) On the other hand, he accentuates the fact that the space of flows 'does not permeate to the whole realm of human experience in the network society' (2002 [1996]: 423) From an understanding of space as something stable and fixed, Castells underlines a space that is formulated around mobility and, most importantly, around networks. Castells names networks 'as open structures, able to expand without limits, integrating new nodes as long as they are able to communicate within the network, namely as long as they share the same communication codes.' (2002 [1996]: 501) The network in Castells' reading becomes a device for the societies of late capitalism. That is to say, the networks built around information technologies reshape the material basis of contemporary societies. He specifically argues that

Networks are appropriate instruments for a capitalist economy based on innovation, globalization, and decentralized concentration; for work, workers, and firms based on flexibility and adaptability; for a culture of endless deconstruction and reconstruction; for a polity geared toward the instant processing of new values and public moods; and for a social organization aiming at the supersession of space and the annihilation of time.' (2002 [1996]: 502)

Outside the cultural, historical and social locality of the movie theatre and based on the dense grid of information flow, which is primarily exemplified by the internet, the movement of film as flow can be located within the space of flow of information, capital and economic investment. The metaphor of the flow reflects the transformation and formation of our contemporary audiovisual culture, yet to a certain extent obscures the specificity of relations and contexts which interest this project. Thus, if we examine the contextual specificity of the Curzon on Demand distribution and exhibition system, if we place emphasis on the situated practices and micro level description and examination of Curzon's VOD service, we can look at what becomes visible in the description of the two case studies. This includes the enactment of film within identifiable moments and viewing practices and within particular material and technological networks. In this way the network is not an instrument in the

context of late capitalism, but it becomes a metaphor for the examination of relationships between the film object, different screens and the technological shapes of circulation.

For our purposes the network will be employed as a metaphor (Van Loon: 2006) in order to depict the multitude of relationships and spaces in which film finds itself when it exits the movie theatre. In the conceptualization of the network as metaphor and also as transformative within different contexts, Van Loon states that as such the network is primarily ‘a device for organizing and conceptualizing non-linear complexity.’³⁰ Networks defy narrative, chronology and thus also genealogy because they entail a multiplicity of traces.’ (2006: 307) In his tracing of the conceptualization of the term in social sciences, particularly in the context of globalization, the Internet and also in ANT, Van Loon argues that the network is ‘deployed to depict a non-linear grid of multiple connections.’ (2006: 308) For him, the basic characteristics of networks display ambiguity about their finitude and the relativity of a centre. As he states ‘The ontological status of the network boundary is unclear.’(2006: 309) The network phenomenon, implicated in varying and multiple levels and fields of analysis could be initially regarded as inclusive of translations and, at the same time, adaptations of different theoretical approaches.

In the field of ANT, John Law explains that the concept of the network can be situated in various contexts, for instance we can talk about the rail network and at the same time the networks of social power. For him the network is a device to think topologically. Topology, Law continues, ‘concerns itself with spatiality, and in particular with the attributes of the spatial which secure continuity for objects as they are displaced through a space.’(2003: 4) In this sense the network is an alternative topological system, different from the Euclidean space. In a network ‘elements retain their spatial integrity by virtue of their position in a set of links or relations.’ (ibid) The term ‘network,’ in the way that it was coined by ANT in the late 1970s, bore a critical and cutting edge notion in that it meant ‘a series of *transformations* – translations, transductions – which could not be captured by any of the terms of social theory.’ (Latour, 1999: 15) Latour explains that the technical metaphor of the network has lost its “freshness” with the advent of the World Wide Web and a contradictory shift in an understanding of the concept as ‘transport without deformation, and instantaneous,

³⁰ Van Loon (2006) explains that network consists of three elements, the nodes, the links and the mesh. The nodes are the points at which links are being concentrated. The links identify what is, and what is not, bound to the network. Lastly, the mesh is the overall structure of the network and gives shape and dimension to the network.

unmediated access to every piece of information.’ (ibid) Employing the field of ANT in our case studies, actors, such as projectionists, couriers, film canisters and data packets, as well as the software and hardware technologies, form the topology of the network, based on their relational materiality and performativity. Thus the network is never fixed. It is based on unspecified relationships among objects, which are not identifiable. ANT refutes a-priori distinctions between local and global, natural and social, cultural and economic, and is instead focused on network building and network ordering. For ANT, the topological system of the network produces space, not as a stable entity, but as a performance through which these materially heterogeneous elements interact with each other. As Law and Mol argue ‘The network is the production of space, in which distance is a function of the relations between the elements and difference a matter of relational variety.’ (1994: 643) Within the practices of Curzon Cinemas, the object of film and the screen seem to be simultaneously caught up in the relations that are manifested between the film product and the convergence of different media platforms and new screens. These are networks that bear the characteristics of their materiality and technology, but also, in the field of ANT, imply a transformation in the spatial enactments and practices of film.

Deploying Van Loon’s point about the relativity of its centre, the examination of the Curzon Cinemas’ practices of film distribution and exhibition encounters multiple networks.³¹ More specifically, in the Curzon on Demand service the Internet formulates a distribution network, a means of long distance circulation of the film object as digitized in images and sounds rather than objects, such as canisters and data-packets. With a click of the computer’s mouse or the remote control of the Smart Samsung television set, either as an application or a computer’s website, the Curzon on Demand viewer can instantaneously purchase (that is to say rent) a film for seven days, and thus have the films streamed online on her screen. This is the duration for the performance of the Curzon on Demand film. As such, the film can be watched in irregular moments, and the content’s narrative continuity can be controlled by the viewer³², With the Internet’s migration to mobile and smart phones, the service has even

³¹ Alexander Gallaway and Eugene Thacker state that ‘Networks are a multiplicity. They are robust and flexible’ (2007). In their study they examine the shift of power relationships from a traditional understanding of political structures to various networks, both biological and electronic.

³² In the digital-driven elimination of the distance between the viewer and computer and televisions screen, and in the manipulation of the moving images by the viewer-user, Laura Mulvey (2006) stresses how new digital technologies enable a new way of viewing “old” films (i.e. films that were made for theatrical screening and

become available as an app on iPhones and iPads. Available on such platforms, the film can be paused, rewound, watched again and again, within the access period of seven days. This understanding of the network of the Internet as a mediator for the shaping and configuration of different temporal and spatial encounters with film is aided or guided by the geographical and technological networks in which it is located. The bandwidth of the Internet, the connectivity of the Curzon on Demand service on digital Samsung and iPhones, but also on personal laptops, ensures that the viewers of the films are 'everywhere and everywhen' part of a materially and technologically mediated movement, a mode of transportation and transformation of the object of film.

Nevertheless, although the Internet appears as a key communication technology in the information space, the theatrical projection at the Renoir is still organised through physical processes, not via the Internet but by means that are identical to analogue practices; as mentioned already, the data packet is physically delivered to the movie theatre. This forms an ostensible contradiction concerning the possibilities ascribed to the information space and the connectivity of the Internet. Therefore, film as information to be distributed is transformed and shaped across fields: from different technological structures, different principles of standardization and different sites.

Nevertheless, the network of the Internet, as the means of distribution of film, is based on viewers' bandwidth and speed of connectivity, the processing speed of the computer and the size of the platform on which films are watched. The film outside of the locality of the movie theatre is part of a new configuration of spaces where it is hosted, transported and encountered. The description of the Curzon on Demand service suggests that the network is a new topological system for film to be examined, and not restricted to the world wide structures of information and communication. If film in the practices of theatrical distribution and exhibition is included in networks of transportation and distribution – that include film canisters and data-packets, projectionists, the site of the projection booth and the site of the auditorium – the Curzon on Demand service suggests a new network that includes the Internet, the Curzon apps available on specific branded media devices, the viewers-users of the small sized screens and the film as coded information, which flows around different sites and platforms and can be accessed in a non linear manner.

which could only be seen in the movie theatre because at the time of their production this was the only venue that the viewer could watch them in) by pausing, rewinding or skipping images.

Curzon's VOD signifies a spatial shift away from the locality of the movie theatre to geographical locations where screens are connected through subscription to the node of the 'On Demand' service. In Curzon Cinemas and on a smaller, rather than global, scale and within the geographical context of the UK and Ireland, Curzon on Demand exemplifies the mobility of the film object, and reconfigured and merchandised in new platforms and hosting sites, of screens. Nevertheless these are attached to the material and contextual specificity of the networks and moreover the screens that link them. The Curzon Company reflects the film industry's systems of technological and economic convergence (Jenkins, 2006) as the film object becomes a part of a commercialised, branded network of actors that reformulate the object of the screen on different platforms. Technologies of reception and projection of images and our encounters with first release films appear via collaborations with digital platforms, and Samsung TVs and iPads, i.e. distinctive media companies and technological innovations, and through overlapping relations between merged media companies. The simultaneous release of the feature film in both small and the large screens exemplifies the convergence of previously distinctive, in terms of time and space, events: films were first released theatrically and only later reached domestic screens. Thus, through a specific server, i.e. the Curzon Cinemas Company, the different sites and platforms are connected in a system based on the compatibility of actors: the communication systems between distinctive media, the theatre's screen and small screens. The server of Curzon Cinemas can extend across Britain in a form of a nodal grid, which enacts the distribution of the film commodity in various screens. The network is exemplified in the form of the communication between Curzon Cinemas as a hosting site, and multiple screens, as in the case of the Internet, where it becomes a technological figuration of interconnectivity. As such the spatial topology of the network becomes a way to examine an object that is dislocated from a demarcated place, while in a metaphorical sense the network can be an appropriate means to articulate the enactment of film in 'networked' screen practices.

7.5 *The Enactment of Film in Screen Practices*

Certainly film becomes a node in the technological, institutional and business oriented networks around Curzon Cinemas. But film is also situated, hosted, displayed and reflected through lit screens. Screens, though, are not autonomous, isolated or singular entities, but ‘intimate consorts of specific material and institutional networks’ (Wasson, 2007: 73), or part of the apparatus³³ in which they are situated (Huhtamo, 2001). The metaphor of the network and its transformative nature, as a conceptual device and in terms of the relationships that it creates, helps articulate the shift from the object of film as it is practiced in the movie theatre, to the object of the screen, which hosts the film images both on the large theatrical screen and Curzon’s VOD small multimedia screens.

The screen as technological arrangement of the working system (Horwath, 2008) of film’s performance carries within itself a complex conceptualization and appropriation of the field of film studies. Erkki Huhtamo (2001) explains that the screen has a complex genealogy and as a concept changes across time, in the same way that the relationship between the screen and the viewer are changing. For instance, within the specificity of the dark auditorium and in the context of the viewing experience, Cavell (1971), as we saw in the second chapter of this thesis, discussed the screen as a metaphor for the construction of modern subjectivity. In his argument, the screen “screens” the world from the viewer, rendering the viewer invisible and anonymous. He posed the question ‘What does the silver screen screen? It screens me from the world it holds – that is, it makes me invisible. And it screens that world from me – that is, screens its existence from me.’ (1971: 24) The philosopher has argued that films project and screen the world to us, rather than representing it. Yet the screen becomes a representational metaphor for our relationships with the world. Cavell’s screen became a new way of looking at the screened world, the object of representation not merely as an indexical trace, but as something that permutes and mediates the way that we see ourselves.

But besides their visual reception, within the movie theatre, screens have a history of accounts of their transformations attached to different media technologies. For instance,

³³ Erkki Huhtamo explains that cinemas studies’ concept of the apparatus comprises not only the technical apparatus of cinema but the relationship between the viewer and the screen. Connected to this, in *Psychoanalysis and Cinema: The Imaginary Signifier*, Metz remarks on the sociological, cultural and psychological experience of entertainment and pleasure: ‘The cinematic institution is not just the cinema industry, it is also the mental machinery which spectators ‘accustomed to the cinema’ have internalized historically and which has adapted them to the consumption of films. The institution is outside us and inside us, indistinctly collective and intimate, sociological and psychoanalytic ... the institution as a whole has filmic pleasure alone as its aim.’ (1982: 100) See also Chapter 5 and its references to Jean-Louis Baudry.

cinema has emerged out of screen practices that date back to the 17th century (Charles Musser, 1990). In Musser's study on pre-cinema and early cinema, the history of screens is staged beyond cinema's narrative text, as the screen becomes the common spatial pattern merging the various technological entertainment devices that were popular before, and ran parallel with, the advent of the cinematograph. Musser maps the evolution of different kinds of screens, practices and presentation of images, which are based on the changes and advancements of technologies in relation to cultural, social and economic contexts.

The theatrical screen, as Anne Friedberg (2006) has noted in her book the *Virtual Window*, has continuously undergone transformations: from the Cinerama, to drive-ins and multi-screen installation works. The differences between screens, in terms of spatial settings, sizes and practices, seem inherent to the history of cinema. As they are transforming throughout the practices and contexts of their enactment, they do not appear to represent a single cinematic ideal (Wasson, 2012). The movie theatre's screen, in Friedberg's account, has been seen as a window to the world, thus continuing the pictorial perspective that Alberti formulated as he conceived of the frame of a painting as an open window onto the world. She (2006) explains how the significance of the metaphor of the window became a defining point in studies of painting, architecture and moving image media, and for the theorization of the space of vision. In this sense, with the co-dependency between the theatrical screen, the television and the computer screen 'Cinema now merely forms an originary visual system for a complexly diverse set of "postcinematic" visualities.' (2006: 6) In her analysis, the metaphor of the window as a frame for perspectival view takes a different account in the trope of the window in computer software. As Friedberg notices, 'The computer "window" shifts its metaphoric hold from the singular frame of perspective to the multiplicity of windows within windows, frames within frames, screens within screens.' (2006: 1-2) As such, we now receive images 'in spatially and temporally fractured frames' (2006: 7) Similarly, Janet Harbord (2007) claimed that the metaphor of the window becomes a site for a new relationship between film and space. The windows of contemporary dispersed screens situate the viewer in "othered" time and space, away from the specific temporal and spatial context of the movie theatre. Moreover the release of a film in multiple windows, such as of theatrical release, DVD release, or satellite broadcast 'has become a choice of types of viewing, with the combined effects of different technological interfaces and spatial locations creating the possibilities.' (2007: 37)

Considering the proliferation and centrality of the screen in new media environments, Erkki Huhtamo claims that nowadays the screen becomes part of the practices of everyday life, and ‘We don’t stare at the screen; we gaze at what it transmits. But there is more: screens also hide the history of their own becoming, turning into a kind of ever-present nonpresence, on anomalous object.’ (2012: 145) Huhtamo ascribes to the screen a perpetual present, which is inhabited as nonpresence. The screen becomes an object in the contemporary world that is everywhere and everwhen, and therefore difficult to be grasped or defined.³⁴ The screen cannot function as an autonomous, fixed and singular object. As we saw in the previous chapters, it transforms and is differently enacted across varied media and also multiple practices and institutional sites.³⁵ Thus the screen is relocated in different types of spaces, from art galleries to urban public screens and, as the Curzon on demand service has shown, to personal laptops and domestic screens. Thus, although nowadays the screen can be present everywhere, it still requires our close attention to the (socio-material) relationships that are created around it.

Haidee Wasson (2007) conceptualizes the screen as a networked entity in order to discuss the contemporary circuits, technological, material and institutional forms in which images travel, the environments in which they become visible and the screens that frame them. In her analysis, screens are not autonomous forces but active agents within the systems and structures that sustain them. Wasson deploys the metaphor of the network to analyse the specificities of the “networked screen”, which suggests its ‘formative role in transforming celluloid, electronic and digital images into differentiated social and material sites of cultural engagement.’ (2007: 72) She considers the screen as an entity in which site specificity and

³⁴ Marc Auge’s (1995) concept of non-place is pertinent when addressing the screen as a substrate attached to digital devices and communication networks, in temporary, ephemeral and fleeting moments, a place in effect of the conditions of the contemporary overtly mediated world, of supermodernity. Understanding the screen as a non-place, carrying, what Auge describes as the absence of symbolic ties and social relations, we can denote the shift from the symbolic site and screen of the movie theatre which defined for the longest part of film history the traditional space for a cultural and socially collective experience and perception of cinema to the multiple screens of digital devices that, as Auge describes non-places, have no singular identity or fixed relations.

³⁵ In this thesis, the screen has appeared as constituted by the locations and its performance within these locations. The screen in LUX’s projection machine dilutes any aesthetic and immersive element in my viewing of the film in order to check it. In this site it becomes the instrument for a metaphorically medical gaze to examine the faults and damage on the film print. In the gallery exhibition of *Line Describing a Cone* the flat surfaces of the gallery’s walls function as screens for the beam of light that describes the cone will end to. In *Living London*, all the surfaces of the gallery space become hosting sites of London’s moving images. In both cases these kinds of screens disappear with the images projected across them at the end of each exhibition. In the case of the Curzon on demand circulation networks, the screen could theoretically be moving everywhere and can become animated ‘everywhen’ but it is attached to the specifications of its industrial and technological links.

different material and technological actors come together. Thus Wasson does not specify the networked screen within the contemporary moment of digitization. On the contrary, her study situates the screen as being always part of complex material and technological networks that change the shape of film as an object to be circulated and also the routes it can travel, and the spaces in which it can be seen. As she states:

Such changes in technology demonstrate that moving images have long been part of abstract systems of transport (airwaves, magnetic tape, digital discs) which have always supported the various contractions, expansions, and modifications of images themselves. Whether carried by celluloid and semi-trucks, by video discs or fibre optic cables, the packaging (or compression), the distribution, and the exhibition of moving images is intimately tied to the material specificities of the networks through which they travel, their particular technological form, and the specific screens on which they appear. (2007: 78-79)

In Wasson's framework, the metaphor of the network can gradually gain further importance in our examination of the small and big screens as central objects in our contemporary audiovisual culture. Drawing on the examples of QuickTime and the IMAX³⁶, the small and the spectacular screen, Wasson's 'networked screen' is a material object that changes shape, as the routes and the spaces in which it travels change or are increased. Her thesis on the networked screen brings about the material and technological networks that have always defined cinema, but moreover are re-enforced in the contemporary moment of digitization.

The description of the Curzon Cinema exhibition of film on small and large screens animated by either celluloid or digital sources, embody the variation of our contemporary encounters with moving images. Cinema seems to transform across varied media, as a computer interface for the Curzon VOD and as a scheduled activity in the movie theatre's auditorium. As we have seen in the studies of practices of Curzon Cinemas, the formal theatrical presentation is dislocated from the centre of the company's distribution practices and

³⁶ In Wasson's study, Apple's QuickTime streams films that exist on the Web, thus turning 'the computer screen into a private on demand playback system, providing a platform that links the click of a mouse to thousands of short little movies that remain on their host sites.' (2007: 79). The images that they are shown on the QuickTime screen are branded, 'with and already branded computer screen, browser interface, and operating system, with its own QuickTime logo and proprietary design.' (2007: 84) As with Quick Time, IMAX is an example of a distinct network of technological specificity and institution: 'It is replete with its own camera, celluloid, release schedules, projection systems, and screens. Rather than browsers, servers, operating systems, and computer manufacturers, IMAX has long been intimately interconnected with museums, scientific organizations, tourism, and more recently with grand entertainment complexes.' (2007: 84)

relocated in the means of film distribution in digital, television and computer screens. The networked screen as metaphor can be useful in the in depth investigation of the Curzon Cinemas' systems of circulation and presentation of film as screen practices which redefine and configure cinema as expanded in locations and time. The Curzon on Demand service formulates and shapes a new kind of distributive architecture, a network for disseminating films in new spatial contexts and material platforms, which give accessibility to content outside theatrical circulation. In my examination of Curzon screen practices, the screen is seen as detached from Cavell's conceptualization of the screen as a reflective entity on human subjectivity. Instead of focusing on the imaginary or mental relationship of the viewer with space on the screen, I am interested in the spatial and material networks attached to it. In relation to its materiality, at a given place and at a given time, in which a film is watched, the screen connected or networked with Curzon's VOD configures our encounters with them in different ways. The relationship between the screen and the Curzon on Demand viewers is defined by proximity, interconnection and relationality in our spatial and temporal enactments of the purchased films.

Undertaking Wasson's concept of the networked screen and applying it to Curzon Cinemas' theatrical and Video on Demand screens enact and engender different configurations of time and programming and in effect new conditions for spectatorship. VOD as a technology of film distribution has brought its own changes in the consumption of film outside of the movie theatre. Besides other platforms for the distribution of film, which are also operated by CAE, such as VHS and DVD, and which depend on television screens for exhibition, VOD bears the specificity of its distribution form and technological form of the screens on which it appears. For instance, with a window within a window on a computer's interface, the screen incorporates the pause, fast-forward buttons and the length of the film's duration. Moreover, the Curzon on Demand service commercialises the screen, whether that is a Samsung smart television or an iPad, the screen bears the marks of the Capablue's design of application or the Curzon website's browser interface.

The consumption of film through Curzon on Demand mobilises film in different locations. Films can move between places, as films can be watched on mobile screens. But films also move between times, as the networked screen has spatial implications, but also temporal ones. In contrast to the theatrical screening where the narrative and durational linearity of film stays intact, through Curzon on Demand, a film can be accessed in irregular time, in

changing temporal moments, as access to films can be immediate, continuous and repeatable within a week's time. The viewer attains agency over the film, directly programming the viewing according to her/his schedule, while at the same time she/he can pause the film, re-watch it or repeat certain scenes. At the same time, through the curated programming of old classics, these films find a new context in which to be viewed. Screens become a constitutive element of the Curzon Cinemas practices of distribution and presentation. Next to the professionalised practice of film projection, as described in the Renoir's projection booth, VOD viewers are using applications, pushing buttons, purchase a film online, added to a shopping basket in the same manner as other purchased commodities.

In particular, the Curzon on demand service is marketed as a discrete entity to be consumed: a specialized channel devoted for current film releases but also the programming of classic films. Curzon Cinemas' activities, stepping aside from the idea of a singular technological apparatus, the theatrical screen and a specific location, the movie theatre, enact screen practices that become nodes that link audiovisual branded conglomerates, such as Samsung, Apple and Capablue. Thus, the circulation of film as information between and within the Curzon Cinemas' networked screens creates the aura of media that do not exist in isolation from each other. The networked screen deploys exactly this interconnectivity, not only between film materials, but between different technological media and different industrial components.

In this way, the extensive technological networks of Curzon Cinemas gain increased significance, and prior to the local site of the company's theatrical venues. The temporal specificity of the theatrical release existing only in theatrical settings is annihilated by the simultaneous release on Curzon subscribers and pay per view viewers' different size and shaped screens. However, the spatial network of screens constructs a new topology, a new locale for new enactments of film. As film appears dislocated in different technological screens and across different spaces, new networks are revealed, in terms of practices. The varied shapes and permutations of the screen and its presence on different sites and in different enactments, a new object emerges to be examined, creating spatial, adaptive and viewing practices. Meanwhile the shift of focus on the screen suggests that the object of film is only one element of multiple technological assemblages.

7.7 Conclusion

This chapter examined the new digital attachments in the structures, practices and materials of film distribution and projection in terms of their material systems and technologies. Through packaging in canisters or data-packets, compressed and encrypted and sent with a KDM, sent via satellite or fibre optic cables, the multiple versions of the commercial film are attached and enacted through the transportation, distribution and technological networks in which they are a part.

The close attention to the site specific practices of film distribution and exhibition has presented new forms of materialities and physical practices. The connections between media formerly considered distinct, rooted in particular spatial configurations and maintaining stable distribution patterns, expand and shift the specificity of the medium to the specificity of spatial networks that connect screens. The practices of Curzon Cinemas have shown that the distinction between the small screen and the theatre cinema screen are collapsing, as well as the distinction between theatrical release and non-theatrical release. The idea of interdependence between the different screens does not exclude the distinction between the two platforms of film distribution and display and the technological appropriations of the two modes of distributing and the aimed spaces for an audience's encounter with a film. The specification of the screening, either in the movie theatre or via the Video on Demand service, inhabits the present practices of Curzon Cinemas and situates film in an ephemeral network of simultaneity and non-linear access, in different locations. The metaphor of the network can become an integral part of cinema's history of presentation, exhibition – but also perception – of moving images. The Curzon on Demand service exemplifies one more transformation of cinema's spatial and temporal material networks and its screen practices, one that engages with material and technological objects but also practices of distribution, exhibition and production of space.

In the question that Mol (2002) poses concerning the way that a multiple object co-exists within different operational sites is directly relevant to the case studies examined in this chapter, which have shown that the heterogeneity of the film multiple is connected through the operation of networks. In the cross-fertilization, not only of media, but also of the spaces or distribution channels which interact at different times and locations, film secures its status as cinema and as a commercial product. On the other hand, the expansion of the commercial

film can be related to an expanded idea of cinema enacted processually through transformation, change and movement.

Chapter 8: Conclusions

A film projected in a gallery installation, a film positioned in a film archive's vaults, a film purchased to be streamed on a computer screen, a film that is being checked for the third time in a month in LUX, these are just a few of the multiple objects of film. Relationships between film materials and technologies, practitioners, viewers and institutions are being continually revised or reshaped. Also, new actors appear and others disappear, thus transforming the effects of the above socio-material relationships in the enactment of film.

The effect of digital technologies on our conceptualization and practices of film has been articulated as a moment of 'transition' for the ontology of film (Fossati: 2009). As a state, transition is responsive to both the "old" and the "new", and as such it has informed this project's primary claim that film can be found in a state of transition in theory and location. That is to say, film appears as an object to be investigated in traditional and contemporary film studies and as a material artefact to be practiced in both historically demarcated and emerging locations. From one theory, location or device to the next, a different film is theorised, discussed, projected, distributed, enacted.

Drawing on the philosophy of Mol (2002), the concept of enactment that this project has proposed formed a theoretical and practical tool for thinking about film theories, sites and artefacts. Adopting the conceptual and empirical means of enactment, we are in the realm of the real, the ontological (Mol: 2002). Taking this field of investigation, this thesis explored how the natures, identities and realities of film exist in different and distinct knowledge practices, empirical sites and situated practices, such as the Renoir's projection room, the Curzon on Demand service, the installations of *Line Describing a Cone*, *Living London* and *My Westphalia Days*, the restoration of the film *Underground* at the BFI National Archive, the film checking projection at LUX. On the one hand, the employment of the methodological and philosophical device of enactment is intended to bring together diverse elements and contexts of film, as addressed by film theory, from photography's indexicality (Bazin) and digital image-making (Manovich), to history (Cubitt) and the setting of the movie theatre (Casetti). I have defined these enactments as knowledge practices, rather than theoretical perspectives. Against perspectivalism, I have claimed that the different theorists examined do not approach film as a singular object, to be seen and theorised by different perspectives, but they perform and stage film in practices. Thus, in theory film is constituted

and reconstituted in relation to various elements, “essences” and entities, such as indexicality (Bazin), duration (Rodowick), image making (Manovich), the material world (Cubitt) and the representational world (Cavell) and space (in the studies of Harbord, Casetti and Burgin).

Therefore, the first step when examining the multiple nature of film was to claim that multiplicity is inherent in film’s theoretical enactments. On the other hand, by examining film as a material and technological object, as it was staged and performed in specific institutional practices, the concept of enactment proposed a new way of looking at film’s nature as multiple. Based on Mol, by ‘foregrounding’ instead of bracketing the practices in which film is situated and handled, manipulated and executed, that is to say installed, checked, restored, projected and distributed, we see that film bears multiple ontologies. Thus, by describing the enactment of film in practices, we are examining the ontology of a multiple object.

Drawing on the tenets of the material–semiotics of Actor-Network Theory, I have proposed that film theory and practice can be enacted relationally and, thus, they can act upon each other. In these ways, the film enactments that this project examined exist “somewhere”: in the four aforementioned sites in Britain, but they are also part of the audiovisual practices of the first decade of the twenty first century and they have become a part of the knowledge practices that surround film.

The transition to the description and investigation of the case studies has been framed by a practice-informed research. Mol has introduced the idea of praxiography, a method for research on local, socio-material practices. In Mol’s account, praxiography is both an epistemological tool, namely, a method to know about things, but also a philosophical device for an ontology-in-practice. The philosopher’s praxiography does not research universal facts or essential properties of objects, instead it focuses on localised practices in which objects attain their shape and identity in the moments in which they are practiced. Following Mol’s claim that the new “is” is a situated is, my project focused on four sites that foregrounded different institutional, that is material, artistic, commercial and archival, ways of practicing film.

Therefore, by employing praxiography as a method of research, but also as a way to trace the ontology of film, the object of my study appears to be more than one and less than many, it appears to be multiple. Embarking on the examination of specific institutional sites and particular work flows, technological operations and spatial orderings, the description of practices run parallel with contemplating or considering what film is. Film is not a coherent

object, it can exist in analogue or digital technologies, but it can also come into being in digital restoration software, theatrical and networked screens, data packets, projection machines, editing table machines, the Internet and transportation systems.

The examined sites have disclosed the effects of film's technological transition in sets of daily activities, strategies and principles that have been, until recently, defined largely around analogue technologies, and thus have created a pertinent ground to examine the coordinations, interchanges but also the complexities and discontinuities that occur in the shifts between analogue and digital materials. Both analogue and digital film has appeared to be variable, adaptable and fluid in different settings and within different practices. Therefore, this project has proposed that an understanding of film as a multiple object can be particularly informative in the current technological transition from analogue to digital technologies. Instead of proposing ontological breaks between the two technologies, as Rodowick has argued, and instead of thinking of digital technologies as re-defining the identity or history of cinema, as Manovich has articulated, the connections between digital cinema and the image-making pre-cinematic practices of animation and the avant garde, the film multiple has shown that the transition is located in practices which demonstrate complex, hybrid and interdependent relationships between analogue and digital artefacts.

For instance, the theatrical release of a film in the movie theatre can coincide with its release on the Video on Demand service, as another commodity to be purchased online and watched at any time within a week's span. With the Curzon on Demand service, the regularity of the movie theatre's screenings are related with, and juxtaposed to, temporally irregular and intermittent practices that the service invites: pausing, restart, repetition. In addition, as a physical agent, time irreversibly deteriorates and damages the photochemical analogue prints and relationally affects their visual look. At the BFI Archive and at LUX, the irreversibility of time defines the appropriation of the film artefact respectively as a historized and archival object. In the case of the gallery, Fox's multi-screen installation extends the location and the situation of the screen. By installing the screens on the ceiling and the floor of the gallery space, the exhibition annihilates any point of attention or perspective.

The description of institutional situated practices made apparent what has normally been invisible by theoretical enactments about and around film. Close attention to practices, to their specificities, alternations, challenges and re-appropriations has not been employed adequately in film's theoretical enactments. By casting light on the hidden, less tangible and

noticeable by theorists, but also by the public, the reader of this thesis, the viewer of the restored film *Underground* in its theatrical projection, or the distributed and exhibited film by LUX in an art gallery, we can see that film is not a single object and as such it cannot be at the centre of theoretical or institutional practices. Film is different each time and yet also a related object. It is a deteriorated materiality that needs to be photochemically cleaned and digitally scanned in order to be restored. It is a part of a network of screens that are connected through the Curzon on Demand streaming service. It is a checked film in LUX's editing machine but also a distributed and an archival film. It is an installation practice in the site of the gallery.

On the other hand, this thesis' case studies foregrounded what is bracketed within the framework of institutions and practitioners' knowledge around film's material nature and the given technological and material circumstances under which they work. The hands of the practitioners presented different ways of doing film: the analogue film reels are weighted before they are projected, the analogue print gets publicly screened before it is checked in LUX. As part of different activities, film changes from one stage to another, from one site to another.

My case studies' examination of film can be described relationally. Firstly, this praxiography of film presented institutions in which the core practices related to film are partaken: distribution, exhibition, archiving and also a form of production based on the new restored film *Underground*. The examination of these practices has shown that sometimes they merge and in other moments fall apart within the different frameworks. The practice of projection creates different objects in LUX, at the Renoir's projection room, and in the space of the art gallery. Respectively, it becomes a diagnostic process that identifies the signs of damage on the film's material and thus visual condition. It also illuminates on the theatrical screen the digital files that are embedded in a data packet. It is a practice, separated from the component of the screen in the case of the installation of the film *Line Describing a Cone*, or one that demarcates the obsolescence of the projection apparatus in the case of Torres' *My Westphalia Days*.

By foregrounding these institutions' practices around film, new situations are meant to happen and new enactments can be described. The "pathological" condition of film in the site of LUX stands far away from an aesthetic experience of a content or the experiential possibilities offered in the "normal" exhibition site of the gallery, as the study of McCall's

Line Describing a Cone has exemplified. A cinematic experience enacted in the site of the dark auditorium of a movie theatre is redefined by the theatrical chain of Curzon Cinemas and the Curzon on Demand service that forms an alternative way to view movies in private settings, in which the viewer has control over the linearity and the duration of the film's content.

As the case studies have suggested, multiplicity suggests ephemerality, relocation and dislocation, expansion, fluidity, relationality and hybridization. In the empirical chapters of this thesis, we have seen chronicles of technologies as constants and variables, as disfigured and reconfigured. Thus, the impermanence of the film object, in shifting platforms, spatial networks and provisional temporalities, is not a fact attached to the digital and the present moment. The case studies aimed to demonstrate that film as analogue and/or digital can exist in states of flux and ephemerality, a fluid object with unstable boundaries, which located in different sites while it is also shaped by the tradition, principles, strategies and spatial orderings of these sites.

The film multiple does not fit solely in the Euclidean space and a singular, homogeneous time. Instead, the studies showed that there are multiple times and spaces in which it is enacted. In the operations that I have mapped, the metaphors of the 'network' and 'fluidity' are alternative spaces for film to be situated, as the material object of film is transformed into the coded information of images and sounds, as in the case of Curzon on Demand service, and bears the signs of alternation in its material quality in the site of LUX. Drawing on the last chapter of this thesis, the concept of the network becomes a metaphor to move away from the object of film to the object of the screen. Situation and situated practices not only foreground where film is, but also asks where does it come from and where it might go. For instance, the screen practices addressed in this project move from an assumed exhibition of the actuality film of *Living London* in the early twentieth century as an attraction to the networked screen of the Curzon on Demand service.

This project has explored situations of film in the moment that they "happen". The artistic tool and the installation component of a film installation invites a method of perceiving and experiencing it located during ephemeral events. The checked analogue film has foregrounded its material agency as neither firm nor fixed but fluid both in terms of performance/projection and material, as well as its photochemical nature. The archival, historized artefact, as an exemplar of British heritage, regains an originality that is to say a

new life span, by means of a digitally enabled restoration. The commercial product is instantaneously streamed on your television and it is delivered physically as a data packet to be digitally projected in the Renoir's auditorium.

From this study, a series of questions have emerged regarding the material and technological nature of film. For instance, the obsolescence of analogue film in its presentation in the movie theatre poses questions about the place of analogue films when they will no longer be able to be projected in a theatrical setting due to the lack of analogue equipment. The transfer to digital formats and the soon to occur obsolete materiality and projection technology of the 16mm film print questions the permanence of its use and exhibition in gallery installations. Also, will the analogue films which are unable to be projected in a theatrical setting potentially attain the status of archival? Or is the attachment of film in different screens to be hosted, exhibited, projected and reflected signalling a new object to be researched?

The research approach presented in this thesis, namely the praxiography of film in institutional practices, can become a point of reference for research that focuses on film's materiality as entangled in different institutional settings and also different socio-material practices. It can be informative for research about what film technologies and materials do, how they are enacted and how they are manipulated in different settings, within different systems and in different moments. At the same time, this research appropriates and expands the field of Actor-Network Theory and Mol's praxiography, and transfers it to a different object of study to which these approaches have not yet been employed. While Harbord (2007) has argued that the field of film studies needs to accentuate relationships with other fields of knowledge, this project proposes an interdisciplinary approach between science and technology studies, and film studies and new media studies, which can be further explored and developed.

Yet this methodological approach has encountered challenges in the course of this research, namely, a praxiography of film in institutional settings presupposes access to these settings. Also, it presupposes the framing of the practices which are going to be examined. Like the metaphor of the network which does not have a specific finitude, or is relative about its centre (Van Loon: 2008), the practices examined in this project often overlap with each other, or they are discernible regarding their scope, finitude, or 'boundaries' as they extend to other practices. At the same time, the thesis focused on certain practices while it left others aside, in which new versions of film can appear and different technological and material enactments

can be produced. In this light, the particular case studies have made apparent instances and situations of film governed by the given local and temporal circumstances of the research.

At the same time, a practice-based research that foregrounds the materialities and technologies of film appeared elusive in the description of the experiences that the object of film creates. In particular, the installations described in the site of the gallery can form examples of “film practices”, but cannot communicate the effects of the film’s performance to the visitor. The relationships between sites, technologies and practices are informative about the transformative nature of the object of film, but they do not clearly elucidate and disclose the object’s attachment to ideas and experiences of cinema. Yet in these sites, technologies, practices described and the different, multiple objects enacted within them, the experience of film’s temporality in the site of the gallery, the deteriorated materiality in the site of LUX, the reconstitution of damaged and fragmented film prints in the BFI Archive and the instances of film’s streaming in the Curzon on Demand service are all moments, states of cinema’s becoming.

Thus, this project argues that cinema lives in all the material, but also theoretical, enactments of film described, in the instances when films come into being and then disappears. But it also lives in a variety of other moments and other processes which have not been addressed in this project. The practices described make apparent some tendencies of cinema as a transformative and malleable entity. By following Bergson’s method of intuition, cinema can be considered as an entity that can be known from the inside; that is, it can be intuited. Thus, cinema as duration is based on the simultaneous enactments of technologies and their new potentialities and possibilities. Cinema as duration, change and movement, transfers from one entity into another with a nature that endures, which bears a becoming that is indefinitely varied, including the past, moving from the present into the future. As such cinema can be translated into a kaleidoscope of unmaking and making of matter in which we find it: wires, software, code, projectors, screens, editing machines, discs, celluloid, canisters, sounds, film technologies, sites and practices.

Bibliography

- Acland, C. (2003) *Screen Traffic: Movies, Multiplexes, and Global Culture*. Durham, NC: Duke University Press.
- Akrich, M. and Latour, B. (1992) A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. In Law, L. and Bijker, E. W. (eds) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Cambridge, MA: MIT Press. Pp. 259-263.
- Arnheim, R. (1971) *Entropy and Art: An Essay on Disorder and Order*. Berkeley, LA: University of California Press.
- Auge, M. (2000) [1995] *Non-Places: Introduction to an Anthropology of Supermodernity*. Translated by Howe, J., London and New York: Verso.
- Baker, G. (2008) Photography's Expanded Field. In Beckman, K. and Ma, J. (eds) *Still Moving: Between Cinema and Photography*. Durham, DA: Duke University Press. Pp. 175-188.
- Baker, G. (2004) Film beyond its Limits. In Legg, H. & McCall, A. (eds) *Anthony McCall: Film Installations*. Coventry: Mead Gallery. Pp. 9-99.
- Baudry, J.L. (1970) Ideological Effects of the Basic Cinematographic Apparatus. In Nichols, B. (ed.) (1985) *Movies and Methods, Volume II*. Berkeley and Los Angeles, CA: University of California Press. Pp. 529-536.
- Bazin, A. & Gray, H. (1960) The Ontology of the Photographic Image. *Film Quarterly*. Summer, Vol. 13, No. 4, 4-9.
- Bazin, A. (2005 [1967]) *What is Cinema?* Essays selected and translated by Gray, H. Foreword by Renoir, J. New foreword by Andrew, D. Berkeley, LA: University of California Press.
- BFI Collection Policy (16 November 2011). Available from: [bfi-collection-policy-2011-11-16.pdf](#). Pp. 1-41[Accessed 17 April 2012]
- Belton, J. (2002) Digital Cinema: A False Revolution. *October*. Vol. 100, Spring, 98-114.
- Benjamin, W. (2008 [1936]) *The Work of Art in the Age of Mechanical Reproduction*. Translated by Underwood, J.A., London: Penguin.

- Bennett, B., Furstenuau, M. & Mackenzie, A. (2008) *Cinema and Technology: Cultures, Theories, Practices*. Basingstoke: Palgrave Macmillan.
- Bergson, H. (1998 [1911]) *Creative Evolution*. Translated by Mitchell, A. Mineola and New York, NY: Courier Dover Publications.
- Bergson, H. (1999 [1912]) *An Introduction to Metaphysics*. Translated by Hulme, T.E. and Introduction by Goodge, A. Thomas, Indianapolis/Cambridge, IN: Hackett Publishing Company.
- Bijker, W.E. (1995) *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change*. Cambridge, MA and London: MIT
- Bloemheugel, M. & Culdemond, J. (1999) *Cinema Cinema: Contemporary Art and the Cinematic Experience*. Rotterdam: Stedelijk Van Abbemuseum.
- Bolter, J. D. & Grusin, R. (1999) *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.
- Bruno, G. (2007) *Public Intimacy: Architecture and the Visual Arts*. Cambridge, MA: MIT Press.
- Buckingham, M., Iles, C., Foster, H., Baker, G., Turvey, M. (2003) The Projected Image in Contemporary Art. *October* Vol. 104, Spring, 71-96.
- Burgin, V. (1996) *In/Different Spaces: Place and Memory in Visual Culture*. Berkeley, CA: University of California Press.
- Burgin, V. (2004) *The Remembered Film*. London: Reaktion.
- Butler, J. (1990) *Gender Trouble: Feminism and the Subversion of Identity*. New York and London: Routledge.
- Canguilhem, G. (1989 [1940]) *The Normal and the Pathological*. Translated by Fawcett, C.R. in collaboration with Cohen, R.C., and Introduction by Foucault, M., New York, NY: Zone Books.
- Carroll, N. (1996) *Theorizing the Moving Image*. Cambridge, MA: Cambridge University Press.
- Casetti, F. (1999) *Theories of Cinema, 1945-1995*. Translated by Chiostrri. F., Bartolini-Salimbeni, E.G. & Kelso, T., Austin, TX: University of Texas Press.

- Casetti, F. (2011) Cinema Lost and Found: Trajectories of Relocation. *Screening the Past: 'Screen Attachments: New Practices of Viewing Moving Images'*. No 32. Available from <http://www.screeningthepast.com/2011/11/cinema-lost-and-found-trajectories-of-relocation/>. [Accessed 20 November 2012].
- Castells, M. (2002 [1996]) *The Rise of the Network Society*. Oxford: Blackwell Publishers.
- Cavell, S. (1979) *The World Viewed: Reflections on the Ontology of Film*. Cambridge, MA: Harvard University Press.
- Charney, L. (1998) *Empty Moments: Cinema, Modernity, and Drift*. Durham, N.C.: Duke University Press.
- Charney, L. and Schwartz, V.R. (eds) (1995) *Cinema and the Invention of Modern Life*. Berkeley, CA: University of California Press.
- Christie, I. (February, 2009) The Girl with the Speck of Dust in her Eye: Living London Returns. *Senses of Cinema* [Online] issue 49. Available from <http://www.sensesofcinema.com/2009/49/living-london/> [Accessed 17 February 2009]
- Connolly, M. (2009) *The Place of Artists' Cinema: Space, Site and Screen*. Bristol and Chicago, IL: Intellect.
- Corfield, P. J. (2007) *Time and the Shape of History*. New Haven, CT: Yale University Press.
- Crofts, C. (2011) Cinema Distribution in the Age of Digital Projection. *Post Script: Essays in Film and the Humanities*, Vol. 30, Issue 2, Winter, 82-98.
- Couldry, N. (2004) 'Actor Network Theory and Media: Do they Connect and On What Terms?'. In Hepp, A. (ed.) *Connectivity, Networks and Flows: Conceptualizing Contemporary Communications*. New York, NY: The Hampton Press. Pp. 93-100.
- Couldry, N. and McCarthy, A. (2004) Introduction: Orientations: Mapping MediaSpace .In Couldry, N. and McCarthy, A. (eds) *MediaSpace: Place, Scale and Culture in a Media Age*. London: Routledge. Pp.1-18.
- Cubitt, S. (2007) Precepts for Digital Artwork. In Marchessault, J. and Lord, S. (eds) *Fluid Scenes, Expanded Cinema*, Toronto: University of Toronto Press. Pp.304-319
- Cubitt, S. (2005) *The Cinema Effect*. Cambridge, MA: MIT.

- Cunningham, S. and Iordanova, D. (2012) *Digital Disruption: Cinema Moves Online*. St. Andrews: St. Andrews Film Studies.
- Curtis, D. (2007) *A History of Artists' Film and Video in Britain*. London: British Film Institute.
- Cussins, C. (1996) Ontological Choreography: Agency through Objectification in Infertility Clinics, *Social Studies of Science*. Vol. 26, No. 3, August, 575- 610
- De Baere, B. (2002) Antwerp: Prolegomena. In Balkema, A.W. and Slager, H. (eds) *Concepts on the Move*. Amsterdam: Rodopi.
- de Laet, M. and Mol, A. (2000) The Zimbabwe Bush Pump: Mechanics of a Fluid Technology. *Social Studies of Science*, Vol. 30, No. 2, April, 225-263
- Deleuze, G. (1991 [1968]) *Bergsonism*. Translated by Tomlinson, H. & Habberjan, B. New York, NY: Zone Books.
- Derrida, J. (1996) *Archive Fever: A Freudian Impression*. Translated by Prenowitz, E. Chicago, IL: University of Chicago Press.
- Doane, M.A. (2002) *The Emergence of Cinematic Time*. Cambridge, MA: Harvard University Press.
- Eisenstein, S. (1988) *Selected Works/ S.M. Eisenstein: Vol. 1, Writings, 1922-1934*. Edited and translated by Taylor. R., London: British Film Institute.
- Elsaesser, T. and Barker, A. (1990) *Early Cinema: Space-Frame-Narrative*. London: British Film Institution.
- Enticknap, L. (2005) *Moving Image Technology: From Zoetrope to Digital*. New York, NY: Wallflower Press.
- Fossati, G. (2009) *From Grain to Pixel: The Archival Life of Film in Transition*. Amsterdam: Amsterdam University Press.
- Foucault, M. (1989 [1973]) *The Birth of the Clinic: An Archeology of Medical Perception*. Translated by Sherindan, A.M., London: Tavistock Publications.
- Foucault, M. (1986) Of Other Spaces. This text entitled Des Espaces Atres and published by the French journal: *Architecture, Mouvement, Continuité* was the basis of a lecture given by Michel Foucault in March 1967. Translated by Miskowiec, J. *Diacritics*, Vol. 16, No. 1, Spring, 22-27.

- Foucault, M. (2002) *The Archaeology of Knowledge*. First published (1969) *L'Archéologie du Savoir*, by Editions Gallimard. London: Routledge.
- Fowler, C. (2008) Into the Light: Re-reading Off-screen and Off-frame Space in Gallery Films. *New Review of Film and Television*. Vol. 6, No. 3, December, 253-267.
- Fowler, C. and Voci, P. (2011) Brief Encounters: Theorizing Screen Attachments Outside the Movie Theatre. *Screening the Past*. Issue 32. November. Available from <http://www.screeningthepast.com/2011/11/brief-encounters-theorizing-screen-attachments-outside-the-movie-theatre/> [Accessed 2 November 2012]
- Freud, S. (2005[1930]) *Civilization and its Discontents*. Introduction by Menand, L. Translated by Shrahey, J. Biographical Afterword by Gay, F. New York, NY: Norton.
- Friedberg, A. (2000) The End of Cinema: Multi-Media and Technological Change. In Gledhill, C. & Williams, L. (eds) *Reinventing Film Studies*. London: Arnold. Pp. 438-451.
- Friedberg, A. (2006) *The Virtual Window: From Alberti to Microsoft*. Cambridge, MA: MIT Press.
- Friedel, R.D. (1983) *Pioneer Plastic: The Making and Selling of Celluloid*. Madison, WI: University of Wisconsin Press.
- Galloway, A. and Thacker, U. (2007) *The Exploit: A Theory of Networks*. Minneapolis, MN: University of Minnesota Press
- Grainge, P. (2011) *Ephemeral Media: Transitory Screen Culture from Television to YouTube*. London: British Film Institute.
- Greenberg, C. (1940) Towards a Newer Laccon, *Partisan Review*. 7, July-August, 296-310
- Gripsrud, J. (2010) Television in the Digital Public Sphere. In Gripsrud, J. (ed.) *Relocating Television: Television in the Digital Context*. London: Routledge. Pp. 3-26.
- Gunning, T. (1990) The Cinema of Attractions: Early Film, its Spectator and the Avant-garde. In Elsaesser, T. (ed) *Early Cinema: Space, Frame, Narrative*. London: British Film Institute. Pp. 56-62.
- Hammersley, M. and Atkinson, P. (1983) *Ethnography: Principles in Practice*. London: Tavistock.

- Haraway, D. J. (1991) *Simians, Cyborgs, and Women: The Reinvention of nature*. London: Free Association Books.
- Harbord, J. (2007) *The Evolution of Film: Rethinking Film Studies*. Cambridge: Polity.
- Hemmingway, E. (2007) *Into the News Room: Exploring the Digital Production of Regional Television News*. London: Routledge.
- Hetherington, K. (1997) *The Badlands of Modernity: Heterotopias & Social Ordering*. London: Routledge.
- Hjorth, L., Burgess, J. and Richardson, I. (2012) *Studying Mobile Media: Cultural Technologies, Mobile Communications and the iPhone*. New York, N.Y.: Routledge.
- Houston, P. (1994) *Keepers of the Frame: The Film Archives*. London: British Film Institute.
- Huhtamo, E. (2012) Screen Tests: Why Do We Need an Archaeology of the Screen? *IN Focus: Screen Technologies* (edited by Wasson, H.). *Cinema Journal*, 51, No. 2, Winter, 31-82.
- Huhtamo, E. (2001) Elements of Screenology: Toward and Archaeology of the Screen, *ICONICS. International Studies of the Modern Image*, 7, 31-82.
- Huhtamo, E. (1997) From Kaleidoscomaniac to Cybernerd: Notes towards an Archaeology of the Media. *Leonardo*, Vol. 30, No. 3, 221-224.
- Iles, C. (2000) Film and Video Space. In Suderburg, E. (ed.) *Space, Site, Intervention*. Minneapolis, MN: University of Minnesota Press. Pp. 252-261.
- Iles, C. & Huldish, H. (2005) Keeping Time. In Altshuler, B (ed.) *Museums and Contemporary Art: Collecting the New*. Princeton, NJ: Princeton University Press. Pp. 65-84.
- Iles, C. (1990) *Signs of Times: A Decade of Film, Video and Slide-tape Installation in Britain, 1980-1990*. London: Museum of Modern Art.
- Iles, C. (2001) *Into the Light: The Projected Image in American Art 1964-1977*. New York, NY: Whitney Museum of American Art.
- Jenkins, B. (2000) The Machine in the Museum; or, The Seventh Art in Search of Authorization. In Suderburg, E. (ed). Pp. 263-272.

- Jenkins, H. (2006) *Convergence Culture: Where Old and New Media Collide*. New York, NY: New York University Press.
- Karagosian, M. (April 2009) Digital Cinema Progress Report for 2009. Available from <http://mkpe.com/publications/d-cinema/reports/2009-april-cinema-report.php> [Accessed 15 May 2012].
- Klinger, B. (2001) The Contemporary Cinephile: Film Collecting in the Post-Video Era. In Stokes, M. and Maltby, R. (ed.) *Hollywood Spectatorship: Changing Perceptions of Cinema Audiences*. London: British Film Institute. Pp. 132-151.
- Kirovski, Darko., Peinado, M. and Petitcolas, F.A.P. (2003) Digital Rights Management for Digital Cinema. *Multimedia Systems*. Vol. 9, No. 3, September, 228-238.
- Kodak 'The Digital Dilemma' – Academy Report Addresses Future of Today's Films. Available at <http://motion.kodak.com/motion/uploadedfiles/digitaldilemma.pdf> [Accessed 20 December 2012].
- Krauss, R. (2000) *A Voyage on the North Sea: Art in the Age of the Post-medium Condition*. New York, NY: Thames and Hudson.
- Krauss, R. (1999) Reinventing the Medium. *Critical Inquiry*, Vol. 25: No. 1, 289-305.
- Krauss, R. (1986) *The Originality of the Avant-Garde and Other Modernist Myths*. Cambridge, MA: MIT Press.
- Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Clarendon.
- Latour, B. (1999) On Recalling ANT. In Law, J. and Hassard, J. (eds) *Actor Network Theory and After*. Oxford: Blackwell.
- Latour, B. (1987) *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.
- Latour, B. and Woolgar, S. (1986 [1979]) *Laboratory Life: The Construction of Scientific Facts*. Princeton, NJ: Princeton University Press.
- Law, J. and Hassard, J. (1999) *Actor Network Theory and After*. Oxford: Blackwell.
- Law, J. (2004) *After Method: Mess in Social Science Research*. New York, NY: Routledge.

- Law, J. (7th December 2003 [previously published at <http://copm.lancs.ac.uk/sociology/soc029jh.html>, 1999]) Materialities, Spatialities, Globalities. Published by the Center for Science Studies, Lancaster University, Lancaster LA1 1YN, UK at: <http://www.comp.lancs.ac.uk/sociology/papers/Law-Hetherington-Materialities-Spatialities-Globalities.pdf> [Accessed 28 February 2008].
- Law, J. (paper last revised on 6 December 2003 [previously published at <http://> 2000]) Objects, Spaces and Others. Published by the Center for Science Studies, Lancaster University, Lancaster LA1 1YN, UK at: <http://www.lancs.ac.uk/fass/sociology/papers/law-objects-spaces-others.pdf> [Accessed 13 May 2007].
- Law, J. (Version of 9 April 2009) The Materials of STS., Available from: <http://heterogeneities.net/publications/Law2008/MaterialsofSTS.pdf>. [Accessed 17 September 2010].
- Law, J. (webpage last revisited on 6th December 2003 [previously published at <http://copm.lancs.ac.uk/sociology/stslaw.html>, 1997]) Topology and the Naming of Complexity. Published by the Center for Science Studies, Lancaster University, Lancaster LA1 1YN, UK at: <http://www.lancs.ac.uk/fass/sociology/papers/law-topology-and-complexity.pdf> [Accessed 15 December 2010].
- Law, J., Singleton, V. (19th December 2003) Object Lessons. Published by the Center for Science Studies, Lancaster University, Lancaster LA1 1YN, UK at: www.lancs.ac.uk/fass/sociology/papers/law-singleton-objects-lessons.pdf [Accessed 28 March 2008].
- Law, J., Singleton, V. (2000) Performing Technology's Stories: On Social Constructivism, Performance, and Performativity. *Technology and Culture*. Vol. 41, No. 4, October, 765-775.
- Law, J. (Version of 15 July 2008) On Sociology and STS. Available from: <http://www.heterogeneities.net/publications/Law2008OnSociologyAndSTS.pdf>. (downloaded on 18th December, 2009). [Accessed 16 June 2012]
- Law, J. and Mol, A. (2004) Embodied Action, Enacted Bodies. The Case of Hypoglycemia, Published by the Center of Science Studies. Lancaster University, Lancaster LA1

- 4YN, Available from <http://comp.lancs.ac.uk/sociology/papers/Mol-Law-Embodied-Action.pdf>. [Accessed 4 February 2012]
- Law, J. and Mol, A. (1994) Regions, Networks and Fluids: Anaemia and Social Topology. *Social Studies of Science*. Vol. 24, no. 4, November, 641-671.
- Léger, F. (1973) Functions of Painting. Edited and introduced by Fry, E.F. with a preface by L.K. Morris, G.L.K., London: Thames and Hudson.
- Lobato, R. (2012) *Shadow Economies of Cinema: Mapping Informal Film Distribution*. London: British Film Institute.
- Lenoir, T. (1994) Was That Last Turn A Right Turn? The Semiotic Turn and A. J. Greimas. *Configurations*, Vol. 2, 119-136.
- Loon, V. J. (2008) *Media Technology: Critical Perspectives*. Berkshire: Open University Press.
- Loon, V.J. (2006) Network. *Theory, Culture and Society*. Vol. 23, No. 2-3, May, 307-314.
- Mackenzie, A. (2006) *Cutting Code: Software and Sociality*. New York, NY: Peter Lang.
- Mangolte, B. (2004) Afterword a Matter of Time: Analog Versus Digital the Preennial Question of Shifting Technology and Its Implications for an Experimental Filmmaker's Odyssey. In Allen, R. and Turvey, M. (eds) *Camera Obscura, Camera Lucida: Essays for Annette Michelson*. Amsterdam: Amsterdam University Press. Pp.261-274.
- Manovich, L. (2000) *The Language of New Media*. Cambridge, MA: MIT Press.
- Marks, L. (2000) Ten Years of Dreams About Art. In Reinke, S. & Taylor, T. (eds) *Lux*. Toronto: YYZ Books. Pp. 15-33.
- Marvin, C. (1988) *When Old Technologies Were New: Thinking about Electric Communication in Late Nineteenth Century*. New York, NY: Oxford University Press.
- McCall, A. (2003) Line Describing a Cone and Related Films. *October*, Vol. 103, Winter, 42-62.
- Mcdonough, T. (2009) Production/Projection: Notes on the Capitalist Fairy Tale. In Eamon, S.D.a.C. (ed.) *The art of projection*. Ostfildern: Hatje Cantz. Pp. 124-140.

- McKemmish, S. (1994) *The Records Continuum: Ian Maclean and Australian Archives: First Fifty Years*. Clayton (Victoria): Ancora Press in Association with Australian Archives.
- Mol, A. and Law, J. (1994) Regions, Networks and Fluids: Anaemia and Social Topology. *Social Studies of Science*, Vol. 24, No. 4, November, 641-671.
- Mol, A. (2002) *The Body Multiple: Ontology in Medical Practice*. Durham, NC: Duke University Press.
- Morse, M. (1998) *Virtualities: Television, Media Art, and Cyberculture*. Bloomington, IN: Indiana University Press.
- Mould, O. (2009) Actor-Network Theory and the Production of Robert Connolly's Three Dollars, in Mayer, V., Banks, M.J. and Caldwell, J.T. (eds) *Production Studies: Cultural Studies of Media Industries*, New York, NY: Routledge. Pp. 203-213.
- Mullarkey, J. (2009) *Philosophy and the Moving Image: Refractions of Reality*. Basingstoke: Palgrave Macmillan
- Mulvey, L. (2006) *Death 24x a Second: Stillness and the Moving Image*. London: Reaktion Books.
- Musser, C. (1990) *The Emergence of Cinema: The American Screen to 1907*. Berkeley, CA: University of California Press.
- Nowell-Smith, G. (2011) Foreword. In Knight, J. and Thomas, P. (eds) *Reaching Audiences: Distribution and Promotion of Alternative Moving Image*. Chicago, IL: Intellect.
- Oswald, K. and Packer, J. (2012) Flow and Mobile Media: Broadcast Fixity to Digital Fluidity. In Packer, J and Crofts Wiley, S.B. (eds) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, New York, NY: Routledge. Pp. 2-9.
- Osborne, P. (2004) Distracted Reception: Time, Art and Technology. Morgan, J., Muir, G. (eds) *Time Zones: Recent Film and Video*. London: Tate. Pp. 66-83.
- Packer, J. and Crofts Wiley, S.B. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*. New York: Routledge.
- Parikka, J. (2012) *What is Media Archaeology?* Cambridge: Polity

- Parikka, J. and Huhtamo, E. (2011) *Media Archaeology: Approaches, Applications, and Implications*. Berkeley, CA: University of California Press.
- Parks, L. (Winter 2000) Orbital Viewing: Satellite Technologies and Cultural Practice. *Convergence: the Journal of Research Into New Media Technologies*, Vol. 6, No. 4, Winter, 10-15.
- Pickering, A. (1992) *Science as Practice and Culture*. Chicago, IL: Chicago University Press.
- Pool, I. de S. (1983) *Technologies of Freedom*. Cambridge, MA: Belknap Press.
- Read, P. & Meyer, M.P. (2000) *Restoration Of Motion Picture Film*. Oxford: Butterworth & Heinemann.
- Rees, A.L., Ball, S., Curtis, D. and White, D. (2011) *Expanded Cinema: Art, Performance, Film*. London: Tate.
- Rodowick, D. N. (2007) *The Virtual Life of Film*. Cambridge, MA: Harvard University Press.
- Rotman, B. (1987) *Signifying Nothing: The Semiotics of Zero*. New York, N.Y.: St. Martin's Press.
- Rushton, R. (2011) *The Reality of Film: Theories of Filmic Reality*. Manchester: Manchester University Press.
- Sargent, R. (1974) *Preserving the Moving Image*. Washington, Corp. For Public Broadcasting.
- Schönian, K. (2011) From Virtuality to Practice: Researching the Intranet as "Socio-material Assemblage". *Graduate Journal of Social Science*, Volume 8, Issue 3, December, 142-160
- Silverstone, R. (1994) *Television and Everyday Life*. London: Routledge.
- Silverstone, R. and Hirsch, E. (1992) *Consuming Technologies*. London: Routledge.
- Strathern, M. (1991) *Partial Connections*. Savage, MD: Rowman & Littlefield.
- Terranova, T. (2004) *Network Culture: Politics for the Information Age*. Ann Arbor, MI: Pluto Press.
- Trodd, T. (2011) *Screen/Space: The projected Image in Contemporary Art*. Manchester: Manchester University Press.

- Urricchio, W. (2004) *Historicizing Media in Transition*. Thrburn, D. & Jenkis, H. (eds) *Rethinking Media Change: The aesthetics of Transition*. Cambridge, MA: MIT.
- Usai, C.P. (1995) *Burning Passions: An Introduction to the Study of Silent Cinema*. Translated by Rittle, E. S., London: British Film Institute.
- Usai, P. C. (2001) *The Death of Cinema: History, Cultural Memory and the Digital Dark Age*. London: British Film Institute.
- Usai, P.C., Francis, D., Horwath, A., Loebenstein, M. (2008) *Film Curatorship: Archives, Museums and the Digital Marketplace*. Vienna : Osterreichisches Filmmuseum : SYNEMA--Gesellschaft fur Film und Medien ; Pordenone, Italy : Le Giornate del Cinema Muto.
- Walley, J. (2012) Materiality and Meaning in Recent Projection Performance. *Cinema Journal*, Vol. 70, Fall, 15-30.
- Walley, J. (2003) The Material of Film and the Idea of Cinema: Contrasting Practices in Sixties and Seventies Avant-garde Film. *October* 103, Winter, 15-30.
- Walley, J. (2008) Modes of Film Practice in the Avant-garde. Leighton, T. (ed.) *Art and the Moving Image: A Critical Reader*. London: Tate Publishing. Pp.182-190
- Wasson, H. (2012) In Focus: Screen Technologies. Introduction. *Cinema Journal*, Vol. 51, No. 2, (Winter), 141-143.
- Wasson, H. (2007) The Networked Screen: Moving Images, Materiality and the Aesthetics of Size. Marchessault, J. & Lord, S. (eds) *Fluid Screens, Expanded Cinema*. Toronto: University of Toronto Press. Pp. 74-95.
- Youngblood, G. (1970) *Expanded Cinema*. New York, NY: E.P. Dutton & Co. Inc.
- Technical Guide for the Projection Booth in Digital Cinema (2011) Edited by Hennion, J.B., Conducted by the CST [French Image and Sound Superior Technical Commission] (Besse, A., Hébert, L.) and the Fédération Nationale des Cinémas Français [National Federation of French Cinemas] (Landfried, S., Patry, R.) Available from: FNCF_CST_Guide.pdf. [Accessed 10 November 2012].
- Zielinski, S. (1999) *Audiovisions: Cinema and Television as Entr'actes in History*. Amsterdam: Amsterdam University Press.
- Zoller, M. (2008) Anthony McCall in the Flow, *Sculpture Magazine*, September, 32-37.

List of abbreviations

ANT	Actor Network Theory
BFI	British Film Institute
DCI	Digital Cinema Initiatives
DLP	Digital Light Processing
DV	Digital Video
HD	High Definition
KDM	Key Delivery Message
LCOS	Liquid Crystal On Silicon
LED	Light Emitting Diodes
STS	Science Technology and Society
VOD	Video on Demand

Appendices

Appendix A: Films

Nunhead Cemetery and Soho Nights: films from the Exhibition 'Living London'. 2008. Gerry Fox. [DVD]

My Westphalia Days. 2008. Mario Torres Garcia. [16mm]

Star Wars: The Phantom Menace. 1999. George Lucas. USA: Lucasfilm. [DVD]

Line Describing a Cone. 1973. Anthony McCall. USA [16mm]

Underground. 1929. Anthony Asquith. UK: British Instructional Films. [35mm]

Streets of London. 1906. Charles Urban. Australia. Preserved by the National Film and Sound Archive in Australia. [35mm]

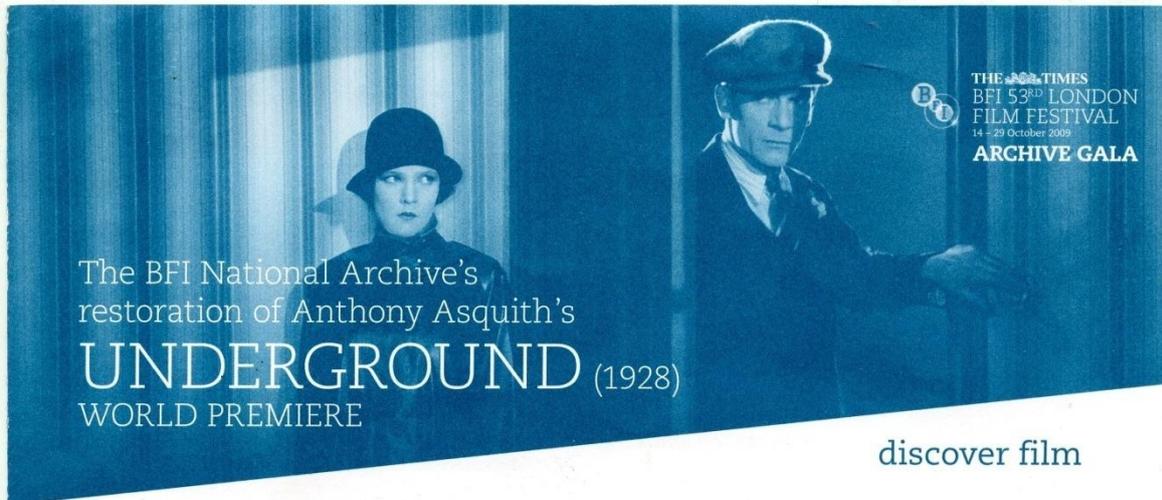
Living London. 1904. Charles Urban. Australia. Preserved by the National Film and Sound Archive in Australia. [35mm]

Appendix B: Websites

LUX: <http://www.lux.org.uk>

Curzon Cinemas 2012: http://www.curzoncinema.com/film_on_demand/

Appendix C: Press Releases and Inscription Device



Background

For many years the BFI has been researching and encouraging interest in its collection of silent films. Few British productions have been received into the international canon of silent classics but now we can confidently elevate a number of our titles to world-class status. Unsurprisingly, the early works of Alfred Hitchcock appear in these ranks, but also the work of another talented young director, Anthony Asquith. Of the four silent films which Asquith directed at the end of the silent era, *Underground* was the film most in need of restoration and circulation to a wider audience.

Underground tells the story of four young working people making their way in 1920s London. The parallels with life in the metropolis today are poignant and it is fascinating to see location footage of the Underground network, old London pubs, department stores and of course the climactic chase through the Lots Road Power Station in Chelsea. The filmmaking is assured, efficient and spare with the occasional impressive flourish, a trademark of Asquith's style, which, like Hitchcock's, had been influenced by European and Russian cinema. Asquith had a remarkable ability to portray the lighter and darker aspects of life through staging and cinematography. He was aided by the superb and unusually goodlooking cast of Brian Aherne and Elissa Landi as the nice young couple, with Norah Baring and Cyril McLaglen as the unluckier, troubled duo.

For many years restoration of *Underground* was unfeasible. It was felt that not enough improvements using photochemical methods could be made to the existing film materials to justify the work. With recent developments in the technology available to the film restoration team, it was at last possible to make a significant improvement to the surviving film elements. This involved a combination of the photochemical and digital work that the team had developed on other projects and which was known to work well for fragile early film.

CREDITS

A film by: Anthony Asquith
Presented by: Pro Patria Films Limited
Producer: H. Bruce Woolfe
Photography by: S. [Stanley] Rodwell
Lighting by: Karl Fischer
Art Direction by: Ian Campbell Gray

UNCREDITED

Production Company:
British Instructional Films
Assistant Director: Hal Martin
Scenario: Anthony Asquith
Studios: Cricklewood Studios,
Elstree Studios

CAST

Elissa Landi (Nell, a shop-girl)
Brian Aherne (Bill, an underground porter)
Norah Baring (Kate, a seamstress)
Cyril McLaglen (Bert, an electrician at the Powerhouse)

United Kingdom 1928
84 mins

Prima Vista Social Club

An eclectic, European group of improvising musicians, the Prima Vista Social Club met through the Giornate del Cinema Muto in Pordenone, Italy. Guitarist Denis Biason and Bass player and accordionist Romano Todesco are from Italy, drummer Frank Bockius and violinist, pianist, composer and conductor Günter Buchwald are from Germany. Composer and pianist Neil Brand hails from the UK. All are experienced and renowned players with a love of jazz but a real interest in all aspects of music for silent film. Together they have performed silent film accompaniments to great critical acclaim, including Harold Lloyd's *Safety Last*, the silent *Chicago* and Keaton's *Seven Chances* at events as diverse as Finland's Midnight Sun Film Festival, Paul Merton's 'Slapstick' and 'Silent Clowns' tours and film festivals throughout Europe. For *Underground* they will be improvising around themes composed for the film by Neil Brand.

**Underground screens
in the Queen Elizabeth
Hall, Southbank Centre
at 19:30 on Fri 23 Oct**

www.bfi.org.uk



The restoration

Our main restoration goals were to eliminate the severe scratches, damage and dirt defects and to deal with the solarisation problem – a severe form of deterioration – affecting one of the reels. We also wanted to recover the many lost frames from the original UK release and to produce both film and digital copies for screenings.

We were fortunate to find a nitrate print of the French version of *Underground* (*Cri dans le Métro*) in Brussels' Cinémathèque Royale, and this was used to improve several sections. Despite missing some sequences, this print performed so well in scanning tests that we chose to use it as the basis of our full 2k restoration, using three other nitrate sources in our own collection to achieve the full UK release length. This played a vital role in eradicating the solarisation effect (where characters are surrounded by flare), originally caused by poor chemical fixing of duplicate sections and which had already started to destroy the original negative as early as 1948. Other materials that we used were the only two surviving reels of camera negative and a UK print from 1929, previously considered too battered for anything other than reference. We successfully incorporated the various source materials into the digital environment for further restoration work in which dirt, damage and severe emulsion scratches were painted out, frame by frame.

The original main titles and ten missing intertitles have been reconstructed and seamlessly re-integrated. The running speed of 20 frames per second was reproduced when the restored files were recorded back to film. A significant challenge was to reproduce (without flaws or artefacts) accurate film movement in digital projection which is currently fixed at 24 or 48 frames per second. *Underground*, our first full 2k silent feature restoration, has led us to develop a fruitful working relationship with our commercial partner Ascent 142 to meet the archival demands for the projection of silent film in new digital formats. This combination of photochemical and digital skills has enabled us to bring back to the public a film that would otherwise only ever have been seen in a severely compromised form.

Anthony Asquith (1902–1968)

Anthony 'Puffin' Asquith was born in London in 1902, the son of the Liberal Prime Minister Herbert Asquith. He overcame some resistance to his chosen career to become one of Britain's best known directors. Although more often remembered for his later sound films such as *Pygmalion*, *The Demi-Paradise*, *We Dive at Dawn*, *The Way to the Stars*, *The Winslow Boy*, *The Browning Version* and *The Importance of Being Earnest*, Asquith deserves to be better known for the three important silent films which he made at the beginning of his career: *Shooting Stars*, *Underground* and *A Cottage on Dartmoor*. The young Asquith, like Hitchcock, spent time at the German UFA studios which in the 1920s were the most highly developed in the world and excelled in film lighting. Asquith experimented with a variety of techniques culled from Russian and German film technicians and also wrote his own original scripts. Somewhat ironically, he became known in later years for the more static filming style associated with adaptations of stage or literary works. His early films, however, show all the grace and inventiveness that were characteristic of the best

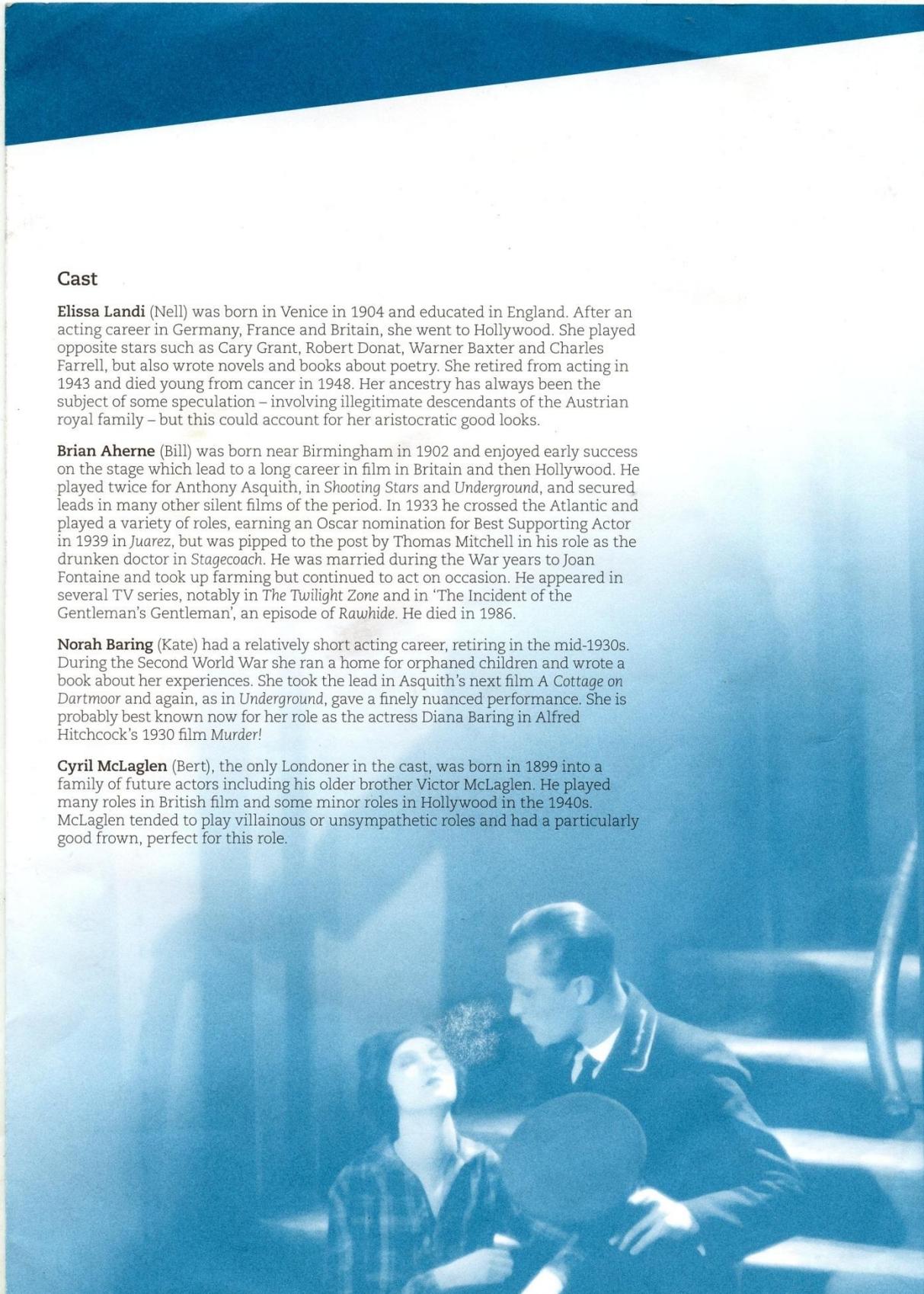
Cast

Elissa Landi (Nell) was born in Venice in 1904 and educated in England. After an acting career in Germany, France and Britain, she went to Hollywood. She played opposite stars such as Cary Grant, Robert Donat, Warner Baxter and Charles Farrell, but also wrote novels and books about poetry. She retired from acting in 1943 and died young from cancer in 1948. Her ancestry has always been the subject of some speculation – involving illegitimate descendants of the Austrian royal family – but this could account for her aristocratic good looks.

Brian Aherne (Bill) was born near Birmingham in 1902 and enjoyed early success on the stage which led to a long career in film in Britain and then Hollywood. He played twice for Anthony Asquith, in *Shooting Stars* and *Underground*, and secured leads in many other silent films of the period. In 1933 he crossed the Atlantic and played a variety of roles, earning an Oscar nomination for Best Supporting Actor in 1939 in *Juarez*, but was pipped to the post by Thomas Mitchell in his role as the drunken doctor in *Stagecoach*. He was married during the War years to Joan Fontaine and took up farming but continued to act on occasion. He appeared in several TV series, notably in *The Twilight Zone* and in 'The Incident of the Gentleman's Gentleman', an episode of *Rawhide*. He died in 1986.

Norah Baring (Kate) had a relatively short acting career, retiring in the mid-1930s. During the Second World War she ran a home for orphaned children and wrote a book about her experiences. She took the lead in Asquith's next film *A Cottage on Dartmoor* and again, as in *Underground*, gave a finely nuanced performance. She is probably best known now for her role as the actress Diana Baring in Alfred Hitchcock's 1930 film *Murder!*

Cyril McLaglen (Bert), the only Londoner in the cast, was born in 1899 into a family of future actors including his older brother Victor McLaglen. He played many roles in British film and some minor roles in Hollywood in the 1940s. McLaglen tended to play villainous or unsympathetic roles and had a particularly good frown, perfect for this role.





Watch more restored and re-discovered classics from archives around the world in the **Treasures from the Archive** strand.

J'accuse (Abel Gance, 1919)

Sat 24 Oct | 17:30 | NFT1

Laila (George Schnéevoigt, 1929)

Thu 29 Oct | 18:30 | NFT1

Leave Her To Heaven (John M Stahl, 1945)

Wed 28 Oct | 21:00 | NFT1

The Night of Counting Years (Sadi Abdel Salam, 1969)

Sun 25 Oct | 16:00 | NFT2

The Savage Eye (Ben Maddow, Sidney Meyers, Joseph Strick, 1959)

+ *Interviews with My Lai Veterans* (Joseph Strick, 1970)

+ *Muscle Beach* (Irving Lerner, Joseph Strick, 1948)

Sun 25 Oct | 20:45 | NFT3

BFI Membership

Support the crucial work of the BFI National Archive and enjoy a great package of benefits. For more information visit

www.bfi.org.uk/more

The locations

Underground is a story of four young working-class characters in the big city. The city and work were popular themes in European and American cinema of the 1920s, ranging from 'city symphonies' to feature films. The films register the changes in the behaviour and expectations of a generation and reflect the growing visibility of women in the urban workplace. Location was all important in underlining the 'modern' feel of these films. Crowd scenes, cityscapes and new forms of transport particularly appealed to directors like Asquith who could exploit their cinematic qualities.

Underground was largely shot on location on the London Underground, at Waterloo station, as well as at the Lots Road Power Station which provided power for the Underground network and was therefore under the jurisdiction of London Transport. One scene, where we see a tunnel opening, is likely to be at Lambeth North. There are scenes set on the Chelsea Embankment, Thistle Grove Alley – a block away from the river bank – and a large London park which we have yet to identify.

Restoration credits

Restoration supervised by James White, Ben Thompson and Bryony Dixon for the BFI with Alastair Macdonald, Angelo Lucatello, Peter Marshall, David Gurney and Chris Stenner.

Ascent 142 team: Paul Collard, Trevor Brown, Tom Barrett, Mark Bonnici, Dana O'Riley, Lisa Copson, Debbie Battler, Tony Cleasby, Emily Greenwood, Rob Gordon, Marie Fernandes, Laurent Treherne, Patrick Malone and Simon Constable.

The restoration of *Underground* was made possible by the generous support of Simon Hessel.

More from the BFI National Archive!

Underground is one of almost 900,000 films and TV programmes from the BFI National Archive – one of the world's biggest moving image archives.

You can watch over 1500 complete films and TV programmes from the BFI National Archive free of charge in the Mediatheques at BFI Southbank, London, the QUAD centre for art and film in Derby, and the new Central Library in Cambridge.

A selection of BFI films can also be viewed on our YouTube channel www.youtube.com/BFIFilms

Sign up to our FREE monthly emails and keep up-to-date with what's going on at the BFI. To subscribe visit www.bfi.org.uk

Programme notes and credits compiled by the Filmographic Unit, BFI National Library.

www.bfi.org.uk

FILM CHECKING SHEET

NAME: DATE:

LUX CODE				
TITLE OF FILM				
ARTIST NAME				
HEAD / TAIL (yes / no?)				
ACADEMY LDR (y / n?)				
TRAMLINES (faint / heavy?) (at edges / in centre?)				
SCRATCHES / GREEN TRAMLINES (**If GREEN hell staff**)				
DIRT (light / heavy?) (consistent / in part?)				
SPROCKET DAMAGE				
NO. OF SPLICES				
FADING / WARPING				
NOTES				
GRADE (1 - 4)				

Mario Garcia Torres

White Cube Hoxton Square

29 February – 29 March 2008

Preview Thursday 28 February 2008, 6-8pm

White Cube Hoxton Square is pleased to announce its first exhibition with **Mario Garcia Torres**. Garcia Torres is known for work with a playful – and sometimes nostalgic – take on the history of Conceptual art, unlocking many of its forgotten narratives to bring forth new ideas and meanings. Through his interventions, slide projections, films and installations, Garcia Torres rethinks the history of contemporary art in a personal way to create what has been called an 'aesthetics of information'. The exhibition will feature two works: *What Doesn't Kill You Makes You Stronger*, a slide installation, and *My Westphalia Days*, a 16mm film.

What Doesn't Kill You Makes You Stronger combines text and photographs to create a kind of visual essay about Martin Kippenberger's attempts to establish a modern art museum on the Greek island of Syros. The form is characteristic of the artist: acting as a cultural archaeologist, he digs up a piece of the recent past to create a discursive portrait – half travel log, half proposal – of one of the more quixotic episodes in the history of contemporary art. *My Westphalia Days* is a short film based on a few lost days in the history of an icon of contemporary sculpture. The Conceptual artist Michael Asher has presented, as an artwork, a commonplace caravan at Sculpture Project Munster since its inception in 1977. Last year, on 21 July, the caravan disappeared, only to be discovered four days later at the edge of a forest in the outskirts of the city. Garcia Torres has proposed a fiction about these missing days, filming a 30-year-old Mercedes Benz stealing a caravan almost identical to the one used by Asher from the site where it disappeared. The result is an open-ended, fragmentary road movie that follows the meandering path of the caravan as the car pulls it through busy streets, open autobahns and quiet, rural roads before it is abandoned amidst the forests and farmlands of Westphalia.

White Cube and Mario Garcia Torres will also publish a limited edition CD based on the artist's long-term project called *I Promise ...*, a work that monitors his daily practice as an artist. Whenever Garcia Torres stays at a hotel, he writes, on hotel stationery, a variation on this note: 'I promise to do my best as an artist, at least for the next [period of time]'. In a recent collaboration with musician Mario Lopez Landa, he recorded a song called 'I Promise Every Time', which will be released as a CD in an edition of 500.

Mario Garcia Torres was born in 1975 in Monclova, Mexico and is based in Los Angeles, California. He has exhibited in many group and solo exhibitions, including the Thyssen-Bornemisza Art Contemporary, Vienna (2008), Kadist Art Foundation, Paris (2007), Stedelijk Museum, Amsterdam (2007), Frankfurter Kunstverein, Frankfurt (2007), Venice Biennale (2007), Musée d'Art Moderne de la Ville de Paris (2004, 2005 and 2007), MCA Chicago (2007), Tate Modern, London (2007) and the Moscow Biennale (2007). He was the recipient of the Cartier Award at the Frieze Art Fair (2007).

White Cube is open Tuesday to Saturday, 10am to 6pm. For further information, please contact Honey Luard or Sara Macdonald on +44 (0)20 7930 5373.

48 Hoxton Square London N1 6PB United Kingdom
Tel +44 (0)20 7930 5373 Fax +44 (0)20 7749 7470
www.whitecube.com