

**‘Conditions of Time and Space’:
A Re-enactment Experiment
with the British TV series *Doctor Who***

ANDREW PHILIP IRELAND

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ABSTRACT

Conditions of Time and Space: A Re-enactment Experiment with the British TV Series *Doctor Who*

Andrew Philip Ireland

The aim of this thesis is to provide a contribution to knowledge in two areas. Firstly, it seeks to further our understanding of the historical conditions of British television drama production; in particular the constraining and liberating influences of production space on the role of the director, and their decision-making process to bring script to screen. Secondly, the work develops the concept of re-enactment as a practice-based augmentation for archive-based textual reconstruction. As such, the thesis offers deeper discussions on the human context missing from current historiographic approaches to broadcast research.

The thesis develops a re-enactment methodology that, via practical realisation, allows researchers to gain insight into the production dynamics of a particular era in history to learn about ‘in the moment’ directing decision-making. This is applied to a practice-based experiment that includes creating a simulation of 1960s production conditions in order to explore the following research question: how would the decision-making process of producing contemporary television drama be affected by the conditions of 1960s production space?

I argue that contemporary location-based production is as constraining as the studio it purports to rise above, yet without the same possibilities for creative reaction to counteract the limitations that historical conditions allowed.

As a flagship BBC series reflecting contemporary industry practice, *Doctor Who* is used as the vehicle for analysis. The experiment focuses on a historical re-enactment of a 2006 episode of *Doctor Who*, “Tooth and Claw”, written by series executive producer Russell T Davies. The re-enacted audio-visual text is provided on DVD along with artefacts that encapsulate the process of production, informing analysis and reflection.

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LIST OF ACCOMPANYING MATERIAL

Alongside this text-based document are audio-visual elements submitted on DVD. It is suggested that readers of the thesis view *Method* and *Results* content prior to reading chapter 3, and *Analysis* prior to reading chapter 4.

Below is a representation of what can be found on the DVD.

Main Menu

- Experiment Aim
- Method
- Results
- Analysis
- DVD-Rom

Method

- “I’ve Just Got to Trim the Moon” (running time: 15 minutes). A documentary of the production process for “Tooth and Claw”

Results

- “Tooth and Claw” (running time: 20 minutes). A 1960s-style re-enactment of the 2006 *Doctor Who* episode “Tooth and Claw”

Analysis

- “Gallery Voices” (running time 20 minutes). A montage that provides a representative overview of the 12 hour studio gallery feed of the “Tooth and Claw” studio day
- Production Photographs

DVD-ROM contents

- Interview Transcripts
- Production Documentation
- Electronic Copy of Thesis

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INTRODUCTION AND AIMS

Janet Thumim (2002, p.1) argues that work on television history inevitably focuses on what she calls “the imaginative recall of a lost object.” The thesis relates to this by combining the traditional text-based approach with a practice-based methodology, offering an experiential journey through research, experimentation, and analysis. Through this work I have two main aims. I seek to challenge the notion of studio space as a limiting, constraining environment for television drama production in the late 1950s and 60s. I also propose a new approach for broadcasting history research – that of experimental re-enactment.

This introductory section sets the context for the research, and outlines the structure of the thesis which is produced as a textual exegesis and a collection of artefacts presented on an accompanying DVD.

The ‘studio-bound’ era of broadcasting history is named this way to provide a shorthand marker of difference from the contemporary, ‘location-based’ method of production. The definition of the term ‘bound’ in the popularized phrase ‘studio-bound’ can be articulated as follows:

Bound *n.* limit of territory; (usu. In *pl.*) limitation, restriction
(The Concise Oxford English Dictionary 1986, p. 106)

The term refers to how Brandt (1981, p.12) describes historical methods of making television: to “favour interior rather than exterior settings it implied a whole series of spatial constraints.” It should be noted that the definition ‘studio-bound’ is not an entirely accurate description; it is usually attributed, I argue unfairly, to the 1950s and 1960s ‘method’ of making television as even in the pre-war 1930s, television was never studio-bound in the sense that production was confined to a studio environment. Rather, outside broadcast units would undertake live broadcasts of theatre performances. As television developed its own language, borrowing heavily from film grammar, drama production gravitated towards studio environments where electronic cameras recorded programmes live, or near-live, for subsequent transmission. Only limited excursions outdoors with film cameras provided

alternative production space, and directors had to work creatively to turn studio limitations into creative solutions in order to effectively bring scripts to screen and to achieve “the maximisation of spatial resources” (Bignell 2010, p.56). The perceived implication for studio-based production is discussed by Lucy Richer, a commissioning editor for independent drama at the BBC:

“For [BBC Four] one of the things they do is just shrink everything, so that they’re doing it, you know, in rooms, it’s very contained, and then just a few exteriors bring it to life. And I suppose, in a way, they are returning to a degree to studio methods in order to facilitate so that there’s a new degree of creativity.”

(personal communication, January, 2008)

The historical studio production methods referred to here are, at the very least, underestimating the scope and range of the places they represented; I argue stories were not ‘shrunk’, nor were narratives ‘contained’. Yet this view is representative of a mythologised account of broadcasting history that warrants closer scrutiny.

I argue that studio production in the early 1960s, before location recording was common place for television drama, achieved a level of reality that did not limit itself merely to the televisual characteristic trope of ‘close up’ shot to evoke a performance (Nelson 1997, p.19). Studio space itself, described as a “factory of the arts” (Sutton 1982, p.12) provides potential for realism, not simply in terms of interior sets that create an illusion of an office, a bedroom, or a living room which are relatively simple illusions to produce, but also in the representation of outdoor spaces which opened up storytelling potential.

Wheatley (2005), in an essay examining costume drama in the 1970s, purports that the studio as an expressive and coherent dramatic space, and posits that the “room is ‘television’s definitive space’” (Wheatley 2005, p. 145). She infers that the television studio (itself a ‘room’) is a space where dramatic space is created via interior sets. It seems clear she is discounting representations of exterior spaces, and it is the illusion of exterior locations where production techniques and technology had to resonate to overcome the limitations of recording in a studio.

I suggest it is the *absence* of technological innovations (colour, portable video cameras, High Definition etc.) that help to create a believable illusion of environment. The historical artifice viewed “at a distance” (Nelson 1997, p10), a ‘window on the world’ that separated television from real life by the intrinsic differences of presentation such as small, black and white images and low resolution pictures, allowed for a level of representation that simply isn’t possible to achieve now. Catherine Johnson argues that:

“History can help us to see the very familiar and everyday medium of television afresh, in new and surprising ways. As such, history can also provide us with a means to challenge the ways in which we think about television in the present.”

(Johnson 2007, p. 65)

I argue there is a strong impetus to explore these ideas at present. Reduced budgets, particularly related to the global recession and the impact on the BBC licence fee as the institution strives to roll-out digital broadcasting by 2012, and the advent of High Definition where creative short-cuts cannot hide from crystal-clear all-seeing glare, all work to decrease opportunities for creative short-cuts. I want to ask, at a time when budgets are lower and expectations are higher, can we rediscover the balance of production condition and creative reaction that occurred in the 1950s and 60s? In that era, limited resources led to television drama capitalising on an aesthetic of austerity and scarcity, yet these production realities have been mythologised out of proportion. If we can bring new understandings to the creative potential inherent in the production process of that era, it may help us to overcome the limitations imposed by the financial pressures and production realities of today. Lucy Richer affirms this:

“Drama is more expensive to make and one of the pressures on us is to reduce that cost. So with the cuts that have been made we’re trying to reduce costs per hour wherever we can. Rather than reduce numbers of shows. And one of the things that is interesting about BBC Four is that they have a much more limited budget and what that is forcing people to do is be more innovative.”

(personal communication, January, 2008)

Such innovation was prevalent when the visionary Sidney Newman spearheaded a powerful, creative force that swept through television on his arrival in Britain in 1955. Ted Willis, a television dramatist of the time, states:

“Along came this man with this dream of putting the story of ordinary people and of our times, the contemporary times, on the screen, and doing this with quality, and giving writers freedom to write... this natural force blew through the corridors of television and blew a lot of the cobwebs out. That man probably had a greater influence on the development of television than anyone else.”

(Willis (no date) cited Jacobs 2007, p.7)

The development of television towards a “newly socialised popular ‘closeness’” (Jacobs 2007, p.7) was reflective of the industry’s evolution into an intimate form. Such intimacy is characterised by television’s preoccupation with the close up shot, arising from the supposedly constraining, hampering, limiting production environment of the live, multi-camera television studios of the 1950s and 60s, and the fact that close-ups provided viewers with visual detail that wide shots could not (most importantly in the context of drama, in the faces of those performing). Yet for every action there is an equal and opposite reaction – and the aim of this thesis is to explore not just the *limitations* of these historical production conditions, but also how the limitations manifested a *creative, liberating response*, to break away from the constraints imposed.

Brandt (1981, p.11) discusses the “technical constraints that guided notions about the ‘inherent characteristics’ of the medium” in the introduction to his text, *British Television Drama*. He expresses them as the following:

“TV was still monochrome ... Second, the 405-line standard (adopted before the war and returned to when service was resumed) gave a low-definition image. Third – and from a playwriting point of view this was the most significant consideration – television drama went out *live*.”

(Brandt 1981, p.11)

This describes conditions of production which extended beyond technical considerations to the related issues of process and practice. A significant collaborative effort of cast and crew was required to engage with demanding process of rehearsal followed by live performance, with no room for error as the ability to

‘go back’ and recover mistakes was either impossible (in live broadcasting) or prohibitively expensive (in ‘as live’ recording on videotape). Sutton (1982, p.8) refers to this with: “Dark tales circulated of actors having to race the cameras from one set to the next, changing *en route* from dinner jacket to full armour.”

I argue that these ‘dark tales’ not only define the context of production in this era, but also shape the director’s decision-making and ability to tell a story in creative ways that do not exist anymore. The aim of this thesis is to explore the appropriateness of a new definition behind this studio-bound era. To again borrow from the Concise Oxford English Dictionary, I propose the following:

Bound *n.* springy movement upward or forward (*by LEAP and bounds*)
(The Concise Oxford English Dictionary 1986, p. 106)

This definition reflects the creative energy, and *creative reaction* to such a broadcast ecology that propels texts beyond the limitations of studio space in ways, and within conditions of practice, that are not possible anymore. An important objective for the thesis therefore is to learn how such a creative reaction occurs, what form it takes and the manner in which it is executed:

“Despite [the] limitations, in spite of the mis-cuts and mistakes, the camera ‘shoot-offs’ that revealed the entire studio in consternation; despite the microphone hovering always on the edge of frame and destruction, the drama itself had an extraordinary quality and energy. Perhaps it grew out of the inevitable tightrope feeling that came from ‘live’ TV; or perhaps it was yet one more example of the indestructible quality of actors, who delight in giving fine performances under the most difficult conditions.”

(Sutton 1982, p.9)

Brandt (1981, p.12) reinforces this, arguing that the live, “hazardous, only partially controllable method” has advantages, citing Bussell, who argues that:

There is always something of a gamble about a television play, a gamble out of which the vast majority of productions come with flying colours. Naturally the artists – and the producer – are nervous. But I believe the best acting springs from artists who are nervous – which after all merely means that their sensitivity is in a heightened state.

(Bussell 1952 cited Brandt 1981, p.12)

The thesis therefore seeks to develop the understanding of the evolving conditions of British TV drama production space; in particular their liberating and constraining influence on directorial decision-making, and in so doing address what I surmise to be a paradoxical term, 'studio-bound'. This approach relates to the work of Patrick Dunleavy (2003, p.23), who asserts that a thesis should be "framed around an intellectual problem or a paradox". The central question I propose is based on the relationship between production conditions and storytelling. While the former have changed and evolved, the latter has been adversely affected. While television has become more technically adept, something has been lost. In what ways has moving beyond the studio and into location been to the detriment of the medium?

The focus of this research relates to the role of the director in British television drama, and thus investigates how the choices a director makes to realise a television drama script are influenced and shaped by the conditions of production. The television drama director has overall creative control of how a script will be interpreted and presented on screen:

"Directing is fundamentally the central effective agency in a production. The direction is the core of the production, and all decisions, choices, and discriminations come from what we call 'the direction'."

(Kazan 2009, p.6)

As such, the director plays a lead, pivotal role in shaping television drama and my own professional background as a television and video practitioner gives me an informed position from which to undertake a practice-based approach. I have produced, directed and edited a range of programmes for television and corporate video production. As noted by Smith and Dean (2009, p.1), practice "brings with it dynamic new ways of thinking about research and new methodologies" that I could engage with in the context of broadcast historiography, and in so doing adopt "a dual role of practitioner and theorist" (Sullivan 2005, p.190). The thesis aims to place in context Jason Jacobs' reconstruction approach with a practical application, and investigate the extent to which a re-enactment approach adds value to broadcasting history research.

I would argue that Jacobs' approach has an over-reliance on surviving programme documentation, which has two limiting aspects.

Firstly, history recorded in print has a goal described as follows: to “render the invisible visible and return the voices of disempowerment to a print-saturated discipline,” yet, as Jacobs presents, “the sonic texture was often lost – and certainly edited – for the page” (Jacobs 2007, p.27). The practice-based approach allows for a re-creation of this human texture – the human intervention into the production dynamic, sonic and visual in nature, which can be preserved for analysis and reflection.

Secondly, much of existing programme documentation that the reconstruction approach relies on is created prior to the director entering the television studio, for example - marked-up scripts, studio floor plans; memos of ‘intent’. But, once entering the studio, conditions of production affect the director’s role. Time plays an important factor that shapes how decisions are made. Problems present themselves that require re-thinking, re-writing, and creative solutions. Essentially – the decisions *change* and the outcomes *differ* from those planned for prior to production. Re-enacting the process of directing television drama within simulated conditions would provide a picture of the ways in which direction and subsequent decision-making is affected. This practice-based experience propagates new evidence and potential for a new contribution to knowledge. Does the re-enactment approach offer something to broadcast historiography that augments and extends reconstruction approaches?

In order to understand, through practice, how production conditions affect the role of the director, the thesis foregrounds an experiment concerning a specific television text. This involved selecting a contemporary drama script and attempting to realise it within the production conditions of historical practice. *Doctor Who* (BBC TV, 1963 – present) is one of a small number of British programmes, besides also *The Sky At Night*, *Panorama*, *Blue Peter*, *Newsround*, *Match of the Day* and *Coronation Street*, which have been in production since the late 1950s / 1960s era. *Doctor Who* is today a flagship BBC series reflecting contemporary practice and high production values, and as such has been chosen to provide the case study for the experiment. The

episode “Tooth and Claw” (2006) was selected and re-made within a simulation of 1960s production space, with myself re-enacting the role of the historical television drama director. The experiment forms the practice-based centre of the research, enabling the investigation of the research topic through examination of the evidence that the experiment generated. To what extent would the script’s intentions require tailoring to enable realisation via the historic, ‘inferior’ studio-bound production method? Jacobs’ approach to broadcasting history research requires existing programme documentation as indicated by Johnson (2007, p.66): “the possibilities for aesthetic evaluation will clearly be limited by the material held in the archives.”

The programme produced, along with behind-the-scenes evidence concerning the process of production, and this text has a relationship that configures and defines the research project. Furlong and Oancea (2005) provide a framework for assessing quality in practice-based work within education which has helped inform my approach. There is much discussion on the merit, and the value, of criteria underpinning practice-based research. It is important to develop a language and structure to contextualise and articulate the practice, to draw out learning and knowledge contribution (see McLaughlin 2009; Winter et al 2010; Brabazon and Dagli 2010). As Brabazon and Dagli (2010, p.27) note, it is necessary to coordinate text and artefact into a “streamlined analysis and argument.” They also argue that “the media object is tethered to the exegesis and has no independent role beyond developing evidence” (Brabazon and Dagli, 2010, p.28). Whilst I appreciate the expression of linkage, ‘tethered’ indicates a linear connection between the two; rather I argue the exegesis should ‘wrap around’ the practice – informed by, and informing, the practice being undertaken. This approach sits more comfortably with notions of ‘practice-based’ research. Interestingly, the model ‘decentres’ reading and writing which Brabazon and Dagli (2010, p.23) note is a strategy that should be approached with caution. Yet I argue while it may *decentre* reading and writing, it does not *devalue* reading and writing, merely repositions them into a new configuration to provide a “reflective exegesis that contextualises the methodologies and significant contributions of the research” as noted by Goddard (2007, p.113).

Chapter 1 sets out the context of the research, reviewing relevant texts that discuss the forming and evolution of television as a medium in the UK, through its

relationship with theatre, radio and film. This provides a context of the historical and technical developments that led to the establishment of the production space and conditions of production at play in the late 1950s and 60s. However it is important to note that, as Cooke (2003, p.3) argues:

“There is inevitably a problem in trying to write a ‘history’ of British television drama... If organised chronologically there is a danger of giving the impression that history unfolds teleologically, with a linear trajectory which develops from ‘primitive’ beginnings towards a state of complexity and ‘sophistication’.”

The chapter does not seek to reproduce a history of broadcasting, but strives instead to provide a contextual framework that the practice-based experiment and subsequent analysis can be informed by. It discusses the role of the director and their decision-making, in the context of British television drama and its developing production space. It establishes the conditions of production that define 1960s television as applied to *Doctor Who*, and then applies them to a case study analysis of how *Doctor Who* responded to the imposed conditions of practice.

Chapter 2 provides an argument for the development of the re-enactment methodology, and proposes a framework for the practice-based re-enactment experiment to operate within. This chapter is therefore presented as a lynch-pin, making connections between the contextual study of chapter 1 with the practice, and subsequent analysis of the practice. The thesis offers a series of cues to questions of methodology. Notions of ‘remake’ and ‘reconstruction’ are deliberated on, and a model is suggested that sets out these notions as constructs that inform the process of re-enactment. The chapter sets up the following enquiry which is developed throughout the work - in what ways can re-enactment provide a valuable contribution to the study of broadcasting history research? Can it provide a development or extension to archive reconstruction techniques?

A model for reporting experimental work provides the framework for chapters 3 and 4, which is interconnected with the artefacts presented alongside the exegesis on a DVD disk. Aspects of the DVD, including the results of the experiment and artefacts that document the process of the re-enactment are referred to within these chapters.

The work proposes a timely intervention into debates of television historiography, arguing for a combination of historiographic methodologies. It is therefore important to progress the development behind this argument as part of the reflective practice I am undertaking. Thus, chapter 4, and the overall conclusion that follows, seeks to conclude both the research itself and the methodology, proposing how each aspect can be taken forward in further work.

Brabazon and Bagli (2010, p.39) argue, “at its best, a PhD should be an explorative, experimental and experiential journey in order to create something original.” I agree – this research has provided me with an *explorative* journey to investigate a hypothesis through *experimental* method, and facilitates my engagement within that as an *experiential* learner.

CHAPTER 1

Liberation and Constraint: Revisiting the Studio-bound Concept

1.1 Introduction

This chapter presents an account of television in the post-war era, charting the developments that established the conditions of production extant in the late 1950s – 1960s in Britain, and television’s relationship with film, theatre and radio. It is important to note that it does not seek to provide a comprehensive analysis of broadcasting history in the UK, which is beyond the scope of this work and has been covered in depth elsewhere (see Brandt 1981; Nelson 1997; Caughie 2000; Roberts & Taylor 2001; Cooke 2003; Jacobs 2007; Wheatley 2007 for example). Rather the intention is to bind together the formative developments that define the conditions of production that will be ultimately explored through the practice-based methodology. Also, this chapter will discuss the ecology of television drama, including its technology, and its evolving production dynamic, and will move on to explore in detail a case-study examination of how television drama overcame limitations with specific reference to one text, *Doctor Who*, that has been in production since this era and is still in production today as a flagship programme for the BBC.

1.2 Theatre, Film and the Establishment of Television Production Space

This section seeks to establish television as a medium that came into its own as its conditions of production matured in the 1950s and 60s. It explores the impact of those conditions upon the role of the director and the determining factors that govern what Jonathan Bignell (2010, p.53) classifies as the studio’s “representation of place,” a key term I shall refer to in this thesis, as it refers to how television “uses the resources of the place where it was made, and how it represents space and place for the viewer on the space of the screen” (Bignell 2010, p.53).

Technology plays a role in determining the environment within which television drama is realised. For example, Bignell (2010, p.54) informs us that:

“The predominant production method for television fiction in Britain until the late 1950s was to shoot in a multi-camera television studio, in monochrome using electronic cameras, and to broadcast live performance, since videotape technology became available only in 1958.”

Bimber (1994, p.80) notes, “a lack of precision about the meaning of technological determinism fuels debates of all kinds about whether the concept accurately describes the unfolding of history.” As well as the technical determinants of practice, the process of making television drama was influenced by the evolving dynamics between television and other media forms, such as film, radio and theatre.

Sutton (1982, p.7), in *The Largest Theatre in the World*, somewhat paradoxically given the title of the book, begins the introduction with:

“Television drama is an art in itself; no longer, as it was at first, a photographed stage play or a poor relation of the cinema film. It is itself, established and individual, with a maturity miraculously grown.”

This view reflects the difficulties inherent in discussing the development of television as a medium without referring to the influence of other media forms, most notably film and theatre, both of which pre-date the arrival of television. Television has rarely been defined and researched as a medium in its own right, as Sutton’s text exemplifies – rather, it is defined *by* these relationships. See for example, works by Ellis (1992), and Hill and McLoone (1996).

Jason Jacobs’ seminal text, *The Intimate Screen* (2007) examines the production contexts and developments of early television drama from 1936 to 1955 – a key period from which very few television texts survive due to the necessary ‘live broadcast’ nature of the available technology of the time. Post-war, the term “family of media” (Jacobs 2007, p.27) was used to describe the relationship of television to other media forms.

Writing in *BBC Quarterly*, Cecil Madden (1948 cited Jacobs 2007, p.28) argues that:

“Some people argue where television drama is going, whether it aims to be a photographed stage play, a competitor to the film, or an illustrated broadcast. The truth probably belongs somewhere between them all.”

As Jacobs (2007, p.28) indicates, this “somewhere between them all” is a “cop-out” but also “indicative of the uncertainty and lack of confidence in thinking about television’s agency as a medium.”

Television’s relationship with theatre dates back to the very inception of the medium. “Pragmatic assumptions about the advantages of using current West End material” (Jacobs 2007, p. 34) led to the relocation of plays to television studios in the pre-war era. As Jacobs goes on to discuss the assumption that less rehearsal time would be required as the actors already knew the play proved incorrect as the performance had to be adapted to the studio space and the technical ability of recording in such conditions. This process of *relocation*, as well as actual OB (outside broadcast) events from the theatre, led to the coined phrase ‘photographed stage play’. The results were deemed unsatisfactory as theatre and television are ultimately different, distinct media, and performance for one medium is not ‘tuned into’ the requirements of the other. The idea that a recorded stage play performance would work in a television aesthetic is simplistic, as it fails to consider the importance of ‘presence’ and the potential of interaction that the theatre embraces. No matter how ‘intimate’ a form television is, one cannot, independently of the camera frame, choose what area of the stage to focus attention on, nor can we marvel at the sights and sounds of the theatre as a performance space; the ‘shared experience’ of audience participation and spectatorship. Eventually, within production, control over shot size, depth of field and lighting would help mitigate the former limitation by leading the viewers’ attention to particular areas within a frame. The recognition of the limitation of photographed stage plays was exemplified by Grace Wyndham Goldie (1939 cited Jacobs 2007, p.35), writing for *The Listener* in 1939:

“Television plays shown from the theatre are in the same class as Royal Processions and Test Matches and outside events generally. These are

things we could see better if we were actually there ourselves but which is it marvellous to see like this if there is no other way of seeing them. Television studio plays on the other hand, are adventures in a new medium. They are bound to go on getting better and better as they leave film on the one side and theatre on the other and become purely television.”

These ‘adventures in a new medium’ evolved into adaptations of theatre texts, that became more and more suited to the television studio environment as technique and technology evolved. Raymond Williams (1974, p.56) argues that “what could be seen from an orthodox theatrical position as the limitations of the broadcasting medium became opportunities for different kinds of dramatic creation.”

These opportunities were born out of technical innovations, such as the ability to accomplish a ‘live cut’, before which stories were told with a single camera offering a static wide-shot, indicative of theatre presentation (and early film, prior to the introduction of film editing in 1895). Jacobs discusses the impact of the ability to cut immediately from one live studio camera to another by referring to how it enabled television producers to articulate a difference to film. Eric Fawcett’s production *Mother of Men* in 1946 was trailed by the *Radio Times* (cited Jacobs 2007, p.101) in the following way:

“Eric Fawcett, who is producing, says he is adapting the piece to what might be called ‘true television’. That is, there will be far more dialogue than in a film version and more action than a stage presentation.”

Nigel Kneale (1959, p.86) points out that due to technological innovation:

“Increasing mechanical resources should make style as individual to the story and teller of it as in any other medium... Television drama at its best will be almost identical with film at its best.”

This view is echoed by Day-Lewis (1998, p.2) who explains that “between photographed theatre and small screen cinema there emerged a distinct art form that was and is television drama.” Williams established a method for locating television output within the technological and cultural contexts of its own production. As Nelson (1997, p.109) notes, although “technology is not seen to determine cultural forms, it is one of the main forces in a field which shapes the programmes to appear

on the small screen.” Technological innovations and the studio production environment led to television’s adoption (and, importantly, adaptation) of film grammar, although the comparison to theatre remained in force throughout the fifties and sixties due to the staging of ‘fourth wall’ drama which required actors to perform out of three walled sets towards the cameras:

“A natural tendency for action to be presented outwards, through an ‘invisible fourth wall’ as on a proscenium arch stage. This arises from TV studio sets generally being constructed around the edges of the studio with space for multiple cameras to move from one to another in the centre.”

(Potter 2007, p.163)

Once drama production moved away from multiple cameras and to single camera production, a more *filmic* portrayal became possible. This is characterised by the use of location – exterior spaces, and interiors, with four walls and ceilings that allow for a portrayal of reality and performance that is closer to film than theatre: “Developments influenced by technologies include an increased emphasis upon visual style, an aspiration to be as close to cinema as possible” (Nelson 1997, p.109). I would argue that television thus shifted towards film, in terms of production influences, as these developments took hold. In terms of visual language, television always appeared more akin to film than theatre, but the technological limitations of early television required theatrical techniques of performance to persist, which provides us with skewed notions of what television, as a medium developing from the 1930s (and still developing today), really is. Raymond Williams (1974, p.56) describes this as follows:

“The technical possibilities that were commonly used corresponded to this structure of [internalised] feeling: the enclosed internal atmosphere; the local interpersonal conflict; the close-up on private feeling. Indeed these emphases could be seen as internal properties of the medium itself.”

These internalised, close-up feelings characterise the ‘immediacy’ and ‘intimacy’ of the medium. As John Caughie (2000, p.59) expresses, “There were many dramas which confirmed the intimate strength of television as a dramatic medium.” Television provided the “instant transportation of material” (Jacobs 2007, p.28)

which brings together events and the viewing of events, signifying “authenticity and realism.” The intimacy of the medium relates to its place within the domestic environment and the use of the televisual trope of the close-up shot to provide a sense of intimate familiarity between viewer and presenter / performer. Jacobs (2007) describes these developing discourses and illustrates how they relate to television’s relationship with film, theatre and radio. Notably, broadcast drama critic Grace Wyndham Goldie (1939 cited Jacobs 2007) used the term “vividness” to describe the advantage of vision, bound up with a sense of intimacy and immediacy. Jacobs (2007, p31) relates this as television’s “fundamental ability to address the viewer as contemporaneous with the events it is showing which sets up an authentic relationship akin to ‘being there’.”

The concept of ‘being there’ can be applied to theatre, where the position of the audience within the space of the performance evokes a truth of representation. Peter Brook, in his seminal text *The Empty Space*, concludes by arguing:

“In everyday life, ‘if’ is a fiction, in the theatre ‘if’ is an experiment. In everyday life, ‘if’ is an evasion, in the theatre ‘if’ is the truth. When we are persuaded to believe in this truth, then the theatre and life are one.”

(Brook 1996, p. 140)

Victor Pemberton, a story editor and writer of *Doctor Who* in the 1960s, tells of the importance of truth as a guiding principle that harmonises television with other media forms:

“We don’t always, necessarily, want to be realistic. We want truth, which is very important. There was a wonderful actress that I was involved in, that was a great friend of mine, and my friend David Spencer and myself did a film about her as you probably know, which we won an Emmy for called ‘Gwen and Juliet Remembered’ and she once said to me, she said ‘It doesn’t matter what else you do, whether it’s in films or in television or in radio or on the stage, there must be truth.’ And she said ‘And the other big thing is imagination. And that’s not only imagination for the actor’ she said ‘but for everybody, from beginning to end. It starts with the writer, it goes on to the producer and director and then it comes down to the artists.’ And I think that’s still relevant today.”

(personal communication, December, 2007)

The contrast between directing for single-camera, location-based production space, and live multi-camera studio-based production space highlights three areas of consideration: technical process, logistical planning, and the effective utilisation of the grammar of production. These aspects are intertwined and inform directorial decision-making. They concern how a director marshals their resources to engage the audience in the story they are telling. Interestingly, the distinction between director and producer did not exist before the mid-1950s. Television ‘producers’ controlled technical decisions from the Central Control Room during transmission. Marie Seton describes the process as follows:

“During the actual transmission the producer can communicate from the ‘bridge’ to the cameramen and sound technicians on the studio floor, but not to the actors. He is, therefore, virtually in the position of a conductor who is invisible to the first violinist. For all these reasons he must be adept in making rapid decisions.”

(Seton 1938 cited Jacobs 2007, p.46)

The role of a director is to collaborate with cast and crew to tell an effective, engaging, absorbing story. This can be phrased as working with *mise en scene*, described in this context as the “framing of space and the performers relationship with it, and aspects of visual style such as camera movement and lighting” (Bignell 2010, p.53).

The script provides the blueprint – the settings, the scenes, the characters, the dialogue – and although it may provide clues to the realisation of those elements, the director’s ‘voice’ provides style, and utilisation of televisual technique (screen grammar), to realise that story as effectively as possible within the available resources. The constraining factors of time and money transcend all others, and apply equally - though manifested in different ways - to historical 1960s production, and contemporary production. The technological determinants of the production environment at play also affect the choices a director makes who can embrace them, to take advantage of supposed limitations. Potter (2007, p.164) argues that in the case of *Doctor Who*, the fourth wall ‘beyond the camera’ “becomes at times the location of the unknown in the series.” This is evidenced in early episodes by a shadow falling across the TARDIS in a desert, cast by an unseen person – a “presence between the viewer and the foreground that we can only guess at” (Potter, 2007,

p.164) and famously, the point of view of a Dalek creature, only its sink plunger extension visible, menacing companion Barbara Wright at the climax of “The Dead Planet” (1963).

The logistical demands of live multi-camera studio recording required consideration of the limitations to ensure adequate camera coverage of the material could be acquired. As Sutton (1982, p.9) notes, “The live mode sorely restricted television writing. Scripts had to be tailored to allow cameras and actors time to move from set to set.”

The ‘closeness’ of assembled sets had the potential to disrupt the illusion of separation that the geographic depiction of the scripted world called for. Sutton (1982, p.9) recalls a story that highlights this point:

“A wartime play, set in occupied France and bomb-scarred London. There was a sequence of scenes, cutting from a barn where the French Resistance planned their next coup, and a bombproof operations room deep below the war office. For the barn scenes, I was unwise enough to include a brown cow and six chickens, to give the impression of bucolic reality. Throughout this tense scene, the chickens clucked gently, and the cow gave an occasional low moo. But no sooner had we cut to the bombproof operations room (in the adjacent set), with the Chief of Staff around the table of destiny, than a fusillade of angry clucking broke out from the hens, and the cow loudly registered her boredom with television. The Staff Officers, trained actors to a man, continued their grave discussion unmoved by this farmyard commotion, fifty feet below London’s pavements.”

Three or four cameras can be deployed at any one time to cover a scene, or scenes, taking place on sets erected in the studio. The challenge of ensuring cameras had time to move from one setup, or set, to another, in live performance led to the development of techniques that would provide the needed flexibility, and time, for such repositioning. The theatrical notion of the ‘interval’ was an early technique developed, and demonstrated a “convenient allegiance to the norms of theatre rather than aesthetic allegiance” (Jacobs 2007, p.44). The interval served as a useful pause for production personnel and actors, as well as a time for repositioning cameras and actors. This ‘interruption’ of live flow had an effect on subsequent writing and planning of material. Scripts would thus be conceptualised and written with the

interval in mind – located within the narrative at a suitable juncture where a required repositioning would occur. Bussell (1952 cited Brandt 1981, p.12) confirms this wasn't a simple approach to master:

“Often inexperienced authors will jump to ‘the next day’ quite forgetting their heroines have not only to get out of their evening clothes, but quite possibly rush to the other end of the studio where the next set is built.”

I suggest that this marshalling of resources around interval breaks heralded the beginning of television articulating its own grammar and narrative structure. This soon evolved to include the use of film inserts, “using either stock film or specially filmed material that would be inserted via a telecine machine in between the live studio transmission” (Jacobs 2007, p.44). Bignell describes their use in the following way:

“Brief filmed sequences were inserted into live and later into videotaped as-if-live dramas, usually in order to establish the location of the action by showing building exteriors and landscapes, or to include special effects that could not be created in the television studio.”

(Bignell 2010, p.54).

Inserts of filmed material could be played in between studio scenes to allow actors and cameras to move between sets without interrupting the flow of the narrative. Additional benefits of specially filmed material meant that you could film exteriors on location in advance of studio, and play them in to provide context for the interior studio sets. Bignell (2010, p.62) argues this helps transcend the studio's limitations: “Film technologies freed programmes from the enclosing television studio, making space ‘real’ on location.” *Z Cars* was recorded in television studios although scenes set in open streets were filmed on location (Lewis 1962 cited Cooke 2003, p.58). As well as location filming, filmed inserts also provided additional flexibility by enabling the inclusion of controlled filming on a sound stage (featuring single-camera, filmic style set ups, of fight sequences, for example) or locations where scenes were required that could not be executed in studio (moving car shots, wide vistas, etc). Naturally, budgets dictated when such techniques could be employed.

Cooke argues that:

“Not only was shooting television drama on film more expensive than producing live TV drama, it meant a move away from the dominant aesthetic of ‘intimacy’ and ‘immediacy’ in live TV drama, and was therefore viewed with some suspicion by those who believed that live television drama was a unique form, with its own virtues.”

(Cooke 2003, p.24)

The ‘immediacy’ of live drama was demanding on cast and crew, and Sutton (1982, p.9) explains: “...the pace was inexorable. Once the play ‘faded-up’, you kept going, even if the leading actor had a stroke halfway through.” Even after video recording became commonplace, drama production followed the ‘live’ model. The advent of video editing transcended the ‘live’ nature of television, and led to asynchronous recording of material. However, the cost of an edit was high – and it rendered the tape it was performed on unusable for subsequent recordings. “The cost of videotape ... made it prohibitive to cut tape for the purpose of editing” (Cooke 2003, p.48).

In the 1960s it was commonplace for video tapes to be wiped following transmission for the purpose of being reused for later productions. There was no assumed need of an archive of television, no ‘repeat’ value, or overseas sales thought possible. The process of editing video tapes involved destructively cutting the video tape itself, and rejoining it using a microscope and cement. Therefore, editing on programmes in the 1960s was kept to a minimum, and programmes continued to be made following the ‘live’ model – but pre-recorded prior to transmission (a process known as ‘as-live’). Here, the interval technique discussed earlier was recast as a recording break, with a small number of live multi-camera recording ‘blocks’ spliced together before transmission to form a whole, continuous narrative. “Consequently programmes were still transmitted with ‘mistakes’ left in (such as a camera lead or microphone boom coming into view) simply because it would prove too expensive to retake the scene” (Cooke 2003, p.48).

The unrelenting, unforgiving nature of live drama led to an ordering of activity, a strategy for success, or at least, minimising the risk of failure. “There was only one chance to get it right; no retakes, no second performances. If an actor ‘dried’, he did so unmistakably in full close-up with all the world and his agent to witness” (Sutton

1982, p.8). The resulting code of practice led to a grammar of production; an aesthetic that hovered between theatre and film. Television drama production, as a live medium, required live cutting between multiple cameras. This meant that whole productions (or recording blocks, if minimal editing was catered for) had to be rehearsed in advance, and logistical planning of performance, utilisation of studio space, film inserts, and deployment of multiple cameras. Scenes had to be pre-lit to ensure all cameras, no matter what the shot, could provide sufficiently lit subjects. Rehearsing actor movements in a set had to be a process undertaken alongside a technical understanding of what could be achieved in studio:

“By virtue of the fact that it was ‘live’ there were certain restrictions in what you could ask any given cameraman to do. Could he, for example, get into one position from the one he was in previously in time to give me that close-up? Particularly as we had only three cameras it meant a good deal of hard arithmetic on paper and the need for very careful timing.”

(Norman 1984 cited Jacobs 2007, p.45)

Examples of constraining factors such as these led to an adaptation of film grammar to promote a televisual language that worked within the multi-camera studio space. One such adaptation was the film technique ‘reverse angle’, whereby viewpoints in a scene would cut instantly from one character to the next, mimicking an observer following a conversation between two others in real life – at times looking specifically at one person, then at the other. The repurposing of this technique for television is described by Potter (2007, p.163) as follows:

“Because the reverse reaction shot we’re used to in film drama can’t be easily achieved without the presence of other cameras or the absence of a far wall to the set being revealed, dialogue is often directed artificially forwards towards the viewer with characters’ reactions covered either in angled close-ups, three-quarter profile two shots, or variations on the classic *Coronation Street* three-shot, with two characters framed tightly in discussion ... with a third overhearing, seen full face directly between them.”

So, whilst television as a medium developed from theatre, directors adapted film grammar to create a language to express drama narratives. This language facilitated ingenious televisual prose that managed to outstrip the ‘binds’ of the space where it was produced.

In this section I have explored the establishment of television as a medium in the late 1950s and 60s, and the issues that help to define studio and location production space, including how it developed its own grammar and directorial approach. The following section will establish the conditions of production that governed the BBC TV programme *Doctor Who* in its first years, and demonstrate how they were harnessed to overcome their limitations.

1.3 Doctor Who Case Study

Choosing a particular programme as a case study lends that programme a particular weight or emphasis. Jonathan Bignell (2007, p.27) in his chapter “Citing the Classics” highlights the issues bound up with citing particular programme examples. He notes the tensions in historiography though the selection of programmes that either supposedly represent an era, or conversely mark a turning point. I suggest that *Doctor Who* is representative of weekly episodic, serial television drama that was a paradigm of regular programming, without excessive budgeting. It relied on ingenuity to tell its stories with little in the way of repeatable sets to help (as opposed to *Z-Cars*, for example, which re-used a number of ‘standing sets’ each week). As a long-standing series, *Doctor Who* did not mark any specific turning point – although it did often experiment with new technologies as they became available. What can be learnt by focusing upon *Doctor Who* can be applied to our thinking and analysis of the current iteration of the series as a means of comparison.

Doctor Who provides an early example of television drama that, through necessity, had to harness creativity to break free from its low-budget, technically inept origins (even by 1963 standards). The series was first broadcast in 1963, and is back in production today (following a hiatus of 16 years from 1989 – 2005). It has “proved malleable enough to respond flexibly both to changing broadcast ecologies and to cultural determinants from inside and outside the BBC” (Chapman 2006, p.3). The hiatus provided scope for the series to be re-launched with contemporary single-camera production methods, and as such was the first of a new wave of science fiction family drama series to be produced by the corporation for many years. Something absent in the first year of the new series in 2005 was the confidence to

represent places that do not exist on Earth, and I will return to this later. Now I will focus on the 1960s iteration of the programme as a case study in overcoming production limitations.

On the 23rd of November 1963, the British viewing public was introduced to a new science fiction television series, *Doctor Who* (1963 – present). In low resolution black and white images, viewers witnessed two school teachers push their way past an irascible old man (played by William Hartnell) and into a common metropolitan police telephone box, only to find themselves blinking under the bright lights of an impossibly large, futuristic control room. The iconic time and space machine TARDIS (Time and Relative Dimensions in Space) had materialised into British culture, with its distinctive dimensional transcendentalism (meaning it is bigger on the inside than the outside) conveyed dramatically through the inventive use of television technology - the ability to ‘splice’ a video recording to join two sequences together that had been recorded separately. Sequence 1 depicts the two teachers, Ian and Barbara, running into the police box exterior prop, and sequence 2, filmed just minutes later in the subsequent recording block, begins with the actors, now in a different set on the other side of the studio, bursting into the TARDIS interior control room. The joining of the two sequences creates a continuity of action from this discontinuous material, and allows a creative narrative development to enthral audiences. It’s an impressive moment to witness – even more impressive when compared to the preceding fifteen minutes or so of conventional studio dialogue and linear storytelling. As Ian Potter (2007, p.165) suggested, it is reflective of “an artful and intelligent marshalling of resources to heighten impact” and I argue demonstrates how scriptwriters had developed, by the early 1960s, the language of television writing to the point they understood the mechanics of production enough to render this type of inventive sequence possible. I would also suggest that the joining of these locations in this way – junkyard and futuristic spaceship – overcomes the boundaries of a restrictive studio environment.

The first full series of *Doctor Who* ran from 1963 to 1964, from “An Unearthly Child” to “The Dalek Invasion of Earth”. It is in this final story that the production team ‘broke away’ significantly from the studio environment and recorded material, with its leading cast, on location for the first time. Therefore, I shall focus my

attention initially upon this first year, technically the ‘studio-bound’ era, where I argue the conditions of production resulted in creative directorial solutions that overcame the limits imposed by the production space.

A broad summary of the conditions that governed the production of the series in this era is as follows:

- An episode is typically 23-25 minutes in length;
- Each episode is produced within a six day period;
- The first day is used for single-camera filming on location, using 16mm B&W film and no sync sound recording capability;
- The second, third, fourth and fifth day form the rehearsal period, where the full cast and director work, normally in a church hall or similar large space, to rehearse the episode and block action and camera positions;
- The sixth day takes place in the television studio, in this case a relatively small studio in Lime Grove (studio D);
- The cameras were fitted with rotating turret lenses instead of current zoom lenses, meaning to change shot size the camera had to physically move closer or further away from the subject;
- The studio was equipped with one or two boom microphones to record all studio sound;
- The studio recorded videotape pictures from three or four large pedestal tube cameras, each recording 4x3, 405 line B&W pictures;
- The script would be broken down into two to four recording blocks;
- The studio day sees the cast and crew block through the episode, followed by a dress rehearsal, full camera rehearsal, and after a break for tea, an evening of recording the pre-determined recording blocks;
- All location material filmed earlier in the week would have been by this point edited together, and fed into the studio live during the studio recording blocks, recording to videotape in real-time;
- All sound, including music and sound effects would be prepared in advance to be played in and mixed with the live studio sound during recording blocks;
- Following the studio day, the ‘best takes’ of the recording blocks would be physically spliced together to form the final version ready for broadcast.

Although the low definition black and white pictures suggested low quality and poor detail, it also provided scope for creativity. In “An Unearthly Child”, a cobbled street could be represented merely by painting a rough pattern on the studio floor. This *represented* a reality, which wouldn’t be portrayed effectively in this way today, under the gaze of our high definition cameras which would require an actual cobbled street to be rendered as an effective representation. Indeed, as *Doctor Who* continued production into the seventies and eighties, and technology continued to sharpen the recorded image, it became increasingly difficult to disguise the studio floor effectively to maintain an illusion of reality. The jungle location depicted in the story “Kinda” (1981) had to be flat and level to accommodate cameras and props being wheeled about:

“During recording there were constant delays as the producer rejected takes because ‘it just looks like a studio floor’, and, after several minutes spent sweeping leaves across, ‘now it just looks like a studio floor with a few leaves on’.”

(Tulloch and Alvarado 1985, p.296).

This state of affairs increasingly led to the production team choosing to film alien worlds in quarries, the most ‘non-UK’ location available. It is difficult to suggest this move led to anything other than a reduction in diversity.

Potter (2007, p.164) argues that “‘as live’ production meant that *Doctor Who*, a programme ostensibly about free movement in time and space, tended to tell stories almost entirely in straightforward chronological order in restricted settings.” However, “An Unearthly Child” depicted events in London (a junk-yard, a school, a street) and events in the far distant past (a desert, a jungle, caves). Therefore, I disagree: the ‘story scope’ at work was quite sophisticated and not limited. The second story, “The Daleks” (1963-64), depicted a petrified forest and a metal city, whilst “Marco Polo” (1964) portrayed the entire journey of Marco Polo all within ‘studio confines’. Potter (2007, p.164-165) observes that, in the case of quest adventures such as “Marco Polo”, that they “observe an almost Aristotelian limitation on time and place, whereby each episode’s action, excluding film inserts, occurs in a small number of sets often specific to that episode alone.” This echoes the

common assumption of the ‘studio-bound’ era as one ruled by constraints that do not exist today. The low-resolution black and white recording allowed for corners to be cut in order to achieve a sense of realism in this first series of *Doctor Who*. The scope of stories was intense and ambitious, and incorporated many more locations than would ever be seen again in *Doctor Who*, including the new series that premiered in 2005, which notably in that year centred all its stories on Earth (or in orbit) to avoid having to attempt to depict ‘realistic’ alien landscapes.

One of the first sets to feature on screen in the first *Doctor Who* story is the junkyard where the schoolteachers find the TARDIS. As the story’s director Waris Hussein tells us:

“Now if you notice the junkyard, this was not a location, it was created [in studio], because we needed fog and we couldn’t guarantee that on an exterior and we didn’t have that kind of money to create fog. So we created [it] and also you’re more in control.”

(personal communication, January, 2008).

The budget for *Doctor Who* in 1963 did not allow for location filming, so locations such as this were created in the studio. As Hussein points out, this allowed them to introduce swirling fog that heightens suspense and drama, which adds to the story. Shooting such a scene on location would lack the control that the use of fog requires. Recording the scene in studio meant that it could be staged at night (as many scenes in this story are) and the low-level lighting helped ‘sell’ the illusion of an exterior scene that was actually a set construction. The edges of the set could be lost in darkness, and it avoided the problems of realistically portraying sunlight and sky. The night-time setting helps add to the dramatic appeal of this mysterious opening serial.

A specific camera technique was employed later in the episode when the TARDIS dematerialises for the first time. The script calls for a shot of London, seen from the air, which disappears rapidly from view by shrinking away, giving the impression that we, the audience, are high above the clouds and are flying straight up, out into space. In a time before CGI effects, and without the budget to hire a helicopter, this effect was achieved in studio by a camera tracking backwards from a photograph

blow-up image of London. It goes without saying that this is a cheaper way of achieving the effect - that again would no longer stand up to scrutiny on screen due to the technological advances in resolution.

One of the challenges of shooting in a relatively small studio such as in Lime Grove was achieving a sense of depth on screen. Lighting and focus are used to depict a more realistic image based on depth and scale, with foreground and background objects and action. This helps to portray a three-dimensional image in a two-dimensional screen. As Ian and Barbara get out of their car and move towards the gates leading into the junkyard, Ian walks ahead while Barbara holds back. This allows the camera shot to provide a sense of depth, with Barbara in the foreground, and Ian in the background. It is one of only a few instances in the episode with a sense of depth in the sets. This attempt at providing depth has an impact on the realisation of the script, as Barbara holds back ‘fearfully’, while Ian ‘boldly’ strides ahead; I suggest this is another example of how the conditions of production affects studio-based storytelling as the director’s use of production space clearly shapes narrative and characterisation strategies, indicating the significance of performativity.

Caughie (2000, p.77) suggests that *Armchair Theatre* plays such as “Lena, O My Lena” (1960) provide evidence that studios in the 1960s became performative spaces, “a space for acting – rather than a narrative space – a space for action.” This is because of the way that cameras moved through the studio space, and how the actors appeared to invest in the space to create a sense of reality, a social space. Caughie (2000, p.77) hinges this observation on how *Armchair Theatre* “expanded the space of live studio drama by shooting in depth with a moving camera.” Thus, he describes *Armchair Theatre* as a “decisive moment in the passage of television drama from its dependencies on theatre and adapted literature to its discovery of a sense of identity” (Caughie 2000, p. 77). Yet, *Doctor Who*, produced in the early 1960s in the cramped Studio D at Lime Grove, was unable to respond to such a ‘decisive moment’. *Doctor Who*’s method of liberating studio space, then, would require employing tactics beyond moving the camera in liberating ways.

A sense of scale and depth could be achieved in the studio with technical innovations that broke through the boundary wall of the studio. An example of this is in the second *Doctor Who* story, “The Daleks.” The Doctor and his companions stand at the edge of a petrified forest, and look with awe at a distant futuristic city. Here, depth of field was achieved through rear-screen projecting into the back of the set previously recorded footage of a model city. This combining of elements was achieved during live studio recording. Such a technique determines some aspects of directorial approach – the placing of actors to ensure they do not encroach onto the projection area, the dressing of the set, the position of the camera – which must remain static to ensure the studio foreground and model background remain in ‘sync’. Bignell (2010, p.59) argues that:

“This suturing process of simulating spatial coherence by using footage of different kinds is an extension of the convention of inserting filmed exteriors to establish place.”

Despite production limitations, the technique successfully allows for a rich potential for storytelling, seamlessly combining the live and pre-recorded into the same image on screen; an illusion of production.

I am using illusion as a term for the “experience of realism in which reality might not be imitated” (Riis 2002, p.93). Riis continues:

“Experiential realism is not identical to the application of the term often used by critics, that is, to designate films that portray the real world, especially its social aspects ... Importantly, it is the audiences’ *experience* of the story world as being realistic, independently of our recognition of events, persons, and places”

“The Daleks” was the first story to feature such scale that accommodated the illusion of exterior locations that were not depicting a sense of reality that the audience could be familiar with. With its petrified forests, sandy plains, jungles, mountains, caves, and a city made of metal, the production team had to balance a sense of realism with a sense of depicting the exciting and unknown, which is a realist / formalist balancing act that the most successful science fiction exemplifies. Traditional techniques of scenery and painted backdrops were employed to portray a scene that

is ‘real’ in the sense that it conveys a ‘truthful’ environment; the actors interact with and move about in the same way they would in a ‘real’ environment. The illusion is complete, of course partially due to the artifice that audiences are aware of when they view and appreciate the story unfolding on screen.

As discussed earlier, a level of awareness was required by writers to make effective use of the studio space, and the storytelling techniques available to them in the ‘as live’ production environment, which carried with it a set of limitations. Here is an example of how narrative was dictated by the conditions of the production space at that time. Camera setups and actor movements on the set were dictated by the need to ensure that no camera would be visible in other cameras’ field of vision. Here, classic shot / reverse shot techniques of recording were rendered next to impossible (Nelson 1997). Directors blocked scenes with actors to move them around the space more, and leave the cameras in passive, static stances (providing the theatrical staged look that is representative of most television drama of the period). The alternative was, while recording, to move a camera through a series of ‘key frames’, known as a revealing shot. Yet, the heavy, antiquated studio equipment used in Lime Grove studio D where *Doctor Who* was recorded meant this option was difficult to maintain as a stylistic choice. Director Hussein recalls:

“All that camera stuff that you see, the movement, poor guy was killing himself. I would think he probably got a bad back, focussing and pushing the platform and the tracking and doing whatever he was doing according to my needs.”

(personal communication, January, 2008)

Although writers were aware of the constraints of set and actor movements bound up in the conditions of production, the more subtle issues of script nuances, small actions, often had to be re-shaped to become practical. An example of this comes from the development of the second episode of “An Unearthly Child”, as revealed through an interview with the director Hussein who has a copy of the first draft script. Hussein reads from this as follows:

“Stones are being fashioned for weapons by being rubbed against the rocks... skins are being splayed, a woman is beating some canes against a rock to make them break... an old man, watched by some children is

drawing the shape of an animal... as he finishes drawing he looks at them and makes a fierce face and sounds the animal alert. They squeal and run away ... we go around the campsite seeing primitive people leading their ordinary everyday life and then we focus on a very curious fellow who sits before a pile of dry faggots rubbing his hand.”

(personal communication, January, 2008)

Hussein points out that this level of sophistication is not possible in the ‘as live’ constraints of the studio recording, and at the time of production he re-wrote the sequence. Because he retained his copy of the script, he was able to share the new version with me:

“Camera 1, elevated group shot, depressed close profile for caveman, pan in close shot from one face to another, close into tribe chief’s hand... Elevate up to catch child on lift, turn with it to woman crabbing right quickly, lose child and come on to the old woman, hold close up.”

(personal communication, January, 2008)

This re-writing, by the director, provides a practical method of taking a complex visual montage and rendering the essence of it achievable within the production conditions available. It is the kind of creative problem solving that will be explored through the re-enactment experiment, as effectively this is accomplishing exactly what I would need to – render the unachievable achievable whilst retaining the essence of the sequence as originally conveyed.

Terry Nation was one of the first writers employed for *Doctor Who*, and penned “The Daleks”, “The Keys of Marinus” (1964) and “The Dalek Invasion of Earth” (1964), all notable for their reliance on a great many locations which posed further space issues to be overcome by the production team. The latter story is particularly relevant to note as it is the first to feature major location work for the series, and as a result spends a great deal of screen time gravitating towards ‘filmic’ presentation rendered by single camera location-based approaches. For the first time, major sequences feature no dialogue, as attention is achieved by the detailed locations on screen and provide a greater sense of *mise en scene* than was ever possible before. However, this combination of ambitious 16mm film recording on location coupled with slow and complex 405 line studio recordings makes for an uneven match of material. As television historian Marcus Hearn (personal communication, February, 2008) points

out: “The ‘Dalek Invasion of Earth’ is insane for something produced in this way.” *Doctor Who* was a far cry from the single-camera, 35mm film-based production techniques employed by ITC at the time (where notably Nation was also a regular scriptwriter, hence his use of extensive location filming), and it is only the development of production conditions to include some limited aspects of film recording that allowed these more ambitious stories to ever reach the screen.

Stories such as “The Dalek Invasion of Earth” and “The Chase” (1965) require numerous and different locations for each episode. It would be inconceivable for these kinds of stories to be made now; the shift to location recording limits the size of the story canvas to extend only to the locations which are feasible to find within travelling distance of the production base. It is no surprise then that *Doctor Who* episodes became very much ‘earthbound’ during the early 1970s, when the conditions of production evolved to embrace finer 625 line resolution and colour recording. Location filming to depict exterior locations became ‘expected’ by programme makers, and therefore stories became grounded in the UK. The number of ‘alien invasion’ of Earth narratives increased dramatically during this period and defined an era in the series’ history.

As noted earlier, almost all alien worlds depicted by the series from this point on relied on quarries for locations, as the nearest stand-in for an ‘alien’ landscape available to a series produced in and around London. Indeed, even the Russell T Davies rejuvenated *Doctor Who* series (2005 - present) has relied on quarries to depict alien worlds, albeit filmed at night, in an interesting reflection of the “An Unearthly Child” scenes filmed in a darkened studio also to ‘hide the corners’ to help sell the illusion.

I suggest that there are advantages with the advent of CGI to again blend the real with the illusion, in a contemporary echo of the suturing back screen projection technique employed in 1963 for “The Daleks.” However – whilst the technology is available, confidence in wielding it has eroded. It took a year before the new series of *Doctor Who* depicted an alien world, yet the original series, within the supposedly limited confines of the studio-bound production space, found ways of depicting many strange and wonderful places from the first episode onwards. Contemporary

Earth was only depicted again for the final story of the season, “The Dalek Invasion of Earth”. While drama production today carries high production values, its reliance on location filming means that stories are limited to the locations available to the production team.

Bignell discusses this constraint of location in relation to shows produced for ITC such as *The Avengers*:

“Where places outside the studio site were used as locations, they were usually in the suburban belt around Elstree, a geographical zone now known as ‘Avengerland’ that consisted of light woodland, suburban streets and some large executive homes.”

(Bignell 2010, p.58)

Doctor Who features time and space travel in a unique, flexible television drama format that can set its stories anytime, anywhere in the entire universe. Yet, whilst studio recording provided fossilised jungles and the journey of Marco Polo, evolving production conditions reduced the potential for place representation and extended a narrowing influence on to the series.

Caughie states that even in his liberative notion of television drama with powerful, expressive studio usage, the studio always “remains a studio” (Caughie 2000, p.77), suggesting no matter what is achieved, it cannot transcend or deny its roots. I argue, through the reconfiguration of ‘studio-bound’ as an environment that facilitates creative reaction it can do just that. Once the ‘four walls’ of the studio have been overcome, surely it isn’t a ‘studio’ space anymore – but an expressive zone that borrows from the contextual arena of theatre and film.

1.4 Conclusion

This chapter has sought to provide an argument for re-evaluating the term ‘studio-bound’ by examining the development of the conditions of production and the role of the director. As television developed into a medium in its own right, oscillating between film and theatre, it constructed a conditioning framework of technology, space and practice that defined the role of the director. I have argued that creative

reactions to limitations provided storytelling solutions that not only overcame barriers, but established television's unique voice in how it responded to them. Now, as television faces new, constraining production conditions, it is timely to bring new understanding to the relationship between directing and production space. Jacobs (2007, p.4) writes that his book *The Intimate Screen* was developed as a "'tentative' and exploratory 'bridge', in order to outline possible ways of thinking and writing about early television which would genuinely 'open the (historical) box' for further work." This PhD seeks to provide such further work and an intervention into debates about television historiography. The following chapter will set out the practice-based methodology employed. A particular emphasis is argued for a combination of historiographic methodologies. This is to enable, through a specific re-enactment experiment, an understanding of the conditions of production and the *process* through which it shapes directorial decision-making.

Chapter 2

Methodology: Issues and Reflections

2.1 Introduction

“Visual arts inquiry can be described as a practice of ‘researching’, which for Brent Wilson (1997), is a quest for new knowledge that is shaped in part by questioning what is known and by offering new conceptions that relate to what *is*, with what *might* be and what *ought* to be.”

(Wilson 1997 cited Sullivan 2005, p. 213).

This chapter provides a critical account of the research design that I have employed for the study of the creative reaction against constrained television production space. I will be analysing three separate yet inter-connected methods – reconstruction, remake, and re-enactment. This is followed by an exploration of the experimental practice-based research methods that I have employed; the methods are then explored through the consideration of the philosophy of remaking work under different testing conditions. This then leads onto a debate about my position as a researcher at the heart of the practice, and is followed by a critique of how reflexivity is a tool that can be used to shape observations and develop the methodology throughout the work. It is important to note that the purpose of the chapter is not to provide an exhaustive account of practice-based research methods, rather to provide an overview of the approach taken and to add new insight into a proposed re-enactment approach to broadcasting history research. As such, the chapter sets out the intentions and mechanics of the method; following chapters will, through the tool of reflexivity, reflect on, debate and further develop the methodology as the practice artefacts are produced.

2.2 Reconstruction, Remake and Re-enactment

“What should I do in order to know X? How should I do it? What are the implications of my knowledge of X in adapting one research procedure rather than the other?”

(Jenkins 1999, p.46)

Research studies that are concerned with revealing new insights into the practices of broadcasting history may turn to archival mining, “akin to an archaeological dig” (Medhurst 2007, p. 127), to illicit new understandings. Bignell remarks:

“Histories often cite and emphasise the same components in different ways, so the weave of historiographic writing in its multiple forms can be understood as a multi-dimensional space in which competing and complementary narratives overlap, coalesce and leave gaps.”

(Bignell 2005, p. 58)

Indeed, ‘gaps’ challenge archival mining which can only attempt to convey a partial, distorted version of the truth; fragments of memos, correspondence and studio plans purporting to represent a mosaic of events. Depending on the research question, this form of evidence and historical commentary may be enough to satisfy the researcher in their quest. In this section, I will debate the limitations of this method within the context of my research. Cooke tells us:

“Early British television drama might well be compared to an iceberg, with a small extant amount viewable, while the vast majority of it will never see the light of day, surviving only in production records and in the minds of those old enough to have witnessed the original transmission.”

(Cooke 2003, p.4)

Johnson argues “the possibilities for aesthetic evaluation will clearly be limited by the material held in the archives” (Johnson 2007, p.66). Jason Jacobs (2007), has few surviving examples of early television programmes to explore through textual analysis due to the fact that many were broadcast live. One such remaining record is a six minute extract from the 1930s adaptation of Dion Boucicault’s *The Streets of New York*. Jacobs (2007, p.17) describes the extract as the broadcasting history equivalent to a “mosquito preserved in fossilized amber.” Whilst this may seem like an overly succinct description, it calls into question the validity of any subsequent

analysis, relying on extrapolation from this extract to provide ‘assumed knowledge’ of other aspects of the production, which are now tragically lost to time. The science fiction film *Jurassic Park* (1991) provides a sobering reminder about the consequences of assuming details that don’t exist. In the film, scientists recreate extinct dinosaurs using DNA fossilized in amber – but by integrating frog DNA to fill in the ‘gaps’ left by the broken and disjointed preserved DNA. The resulting dinosaurs are somewhat different to their genuine ancestors as a result – with the ability to ‘change gender’ an obvious variance (they obtain this ability via the frog DNA). I argue that any such extrapolation of television drama relics will also provide distorted results. A problem with reconstructing fragmented materials is that inevitably there is a certain amount of estimation to ‘gloss over’ missing elements. Whilst the practice may be necessary to learn about aspects of the early television drama form, it does little to unpick and explore the decision-making process underlying the aesthetic and stylistic qualities of television drama production. It may point somewhat towards the *what*, but not necessarily, on editorial levels, towards the *why* – the human paradigm. I argue that a focus on the human texture in broadcast historiography is an area worthy of research. Jacobs in his analysis of drama texts that no longer exist, describes the sources of evidence to call on as “shadows, dispersed and refracted amongst buried files, bad memories, a flotsam of fragments” (2007, p.14). This description does not offer a great deal of support for the reconstruction method which must rely on such material. The BBC Written Archives Centre provides access to extensive production files that help to *contextualise* production, including minutes of meetings, memos, budget breakdowns, scripts, and studio floor plans. These items though only describe a series of disjointed snapshots of a production process that is born out of a complex, collaborative activity, which, through creation, becomes disconnected from the paper records that contextualise it.

Jamie Medhurst (2007, p.136) studied production paperwork and was able to construct an idea of the content and structure of a missing Welsh programme *Dewch i Mewn*. He offers some thoughts on the limitations of relying on programme documentation. Certain information, such as Board minutes, are written for a specific purpose and thus only portray a limited view of the meeting itself. He goes on to give an example of this in relation to how he engaged with a diary of a board member of Teledu Cymru to provide a personal account which could be overlaid onto the board

minutes to give a more holistic, composite view (Medhurst 2007, p.137). Of course, such diaries are rarely available for such an approach, yet the use here is indicative of the benefits of engaging with such different sources.

Jacobs' (2007, p.14) intention was to use archive material in order to "approximate the visual constitution of early television drama." Yet I argue that such 'visual constitution' is substantially hindered by being ultimately expressed in written form. It is not 'reconstructing' as such, as what is referred to as being reconstructed is audio-visual in nature, an entirely separate form to a written description. To reconstruct, then, is to actually *recreate* televisual text – what I argue the re-enactment-centred methodology addresses, which I will discuss later in the chapter.

Jacobs (2007), when discussing the limitations, reflects that as a live performance, early television drama provided those involved with spontaneous opportunities to evolve, shape, and interact with the performances as they unfolded in real time. This could mean as Jacobs (2007, p.116) hypothesises:

"[digressing] from the planned order of shots in the camera script, perhaps because an unanticipated development in the intensity of a particular performance required that the view remained *this angle* and *this close* rather than cutting or tracking to another view as planned."

Jacobs goes on to confirm that this means reconstruction based on records (in the example above, a now inaccurate camera script) is no more than a "provisional account" (2007, p.116). The 'cold' documents do not, and cannot convey, the 'heat' of the moment that relates to real-time decision making that is an inherent practice that helps define the medium.

"What is written down is not necessarily the same thing as what happened on screen. There are many ways in which the live broadcast may differ from that which is planned in writing: actors and technicians may make mistakes, or a particular performance may differ in its emphasis, or quality, in ways that would be impossible to discern from the script alone. The absence of the epistemological guarantee of the audio-visual record *is* a limitation for any historical analysis that seeks to understand visual aesthetics and style."

(Jacobs 2007, p.10)

This issue forms a central context in considering my intentions – a practice-based ‘re-enactment’ method should overcome these limitations by recreating those spontaneous opportunities as they unfold in a simulation of historical practice, and thus end with a deeper resonance in capturing the ‘lived’ experience of the director’s role. It embraces the human nature of decision-making, uncertainty, and making mistakes, and enacted through specific lenses of historical practice, cast light on the relationship between the director’s decisions, and the conditions of production. My approach seeks to provide a “new historiographical narrative for television drama that places new work into productive and deconstructive conjunctions” (Bignell 2007, p. 39).

Mazdon (2000) is one of a number of scholars to critique remakes. Her considerations are useful in contrasting with my intentions. She discusses the idea of remaking texts in the context of French cinema, and draws some observations concerning the source and remake text and production process that can be built on for establishing a methodology of remaking texts for my purposes. The relationship between the source and remade texts is not an easy one; more often than not the link is defined by tension – and in a “dangerous form of attack” (Mazdon 2000, p.13), the remake embraces yet defaces the original:

“Thomas Leitch states that if a remake does invoke its source it is to entice spectators in to the cinema, only to deny this relationship once the film begins. ‘The true remake admires the original so much it wants to annihilate it’.”

(Mazon 2000, p.4).

The act of remaking inevitably produces something that differs from the original. This is not an act of emulating, of (mere) duplication. The intention to remake a text heralds the interaction of new elements that will alter that which is being remade. In cinema, the intention to remake a film is bound up inextricably with the environment within which the remake is born. Spatial and temporal boundaries are transgressed. Mazdon argues:

“The rhetoric around remakes is manifestly bound up with wider issues of production and reproduction, of authenticity and identity. It is then imperative to posit a new approach to the remake, an approach which

avoids the sterile binaries and reductive value judgements ... allowing for the complexities of this particular form of rewriting and of the relations between source and target text.”

(Mazdon 2000, p.26)

Although this call for a new approach to the remake relates to the context of feature film production, it relates also to the adoption of the form as part of my research design. Yet the act of remaking places the emphasis on the texts themselves (‘source’ texts and ‘target’ texts) and detracts from the process of decision-making that occurs within the process of their creation. For me to experience the conditions of production it is important to place myself at the centre of the action. Acting as the director of the text, and following the rules of engagement laid down by the conditions of practice that are being simulated, I am, in effect, re-enacting a *modus operandi* that suits the era of production, re-treading the path the director walks through the production space of television drama. This foregrounding of personal experiences (Foley 1998) places experiential learning centre-stage and points to *re-enactment* as a key vehicle to explore.

The concept of re-enactment is one often associated with historic battles staged for modern day audiences. For example, in April 2011 I attended a public performance of a re-enactment of a battle between Vikings and Saxons at Corfe Castle near Wareham in Dorset. A large crowd had gathered to watch the events unfold, safe behind a roped barrier. Various scenes were played out including Vikings storming the settlement and both large-scale and one-on-one battles took place. The general events that unfolded were stated as being informed by historic versions of events, but evidently those events, through the act of re-enactment, were being ‘staged’ for the audience. Men fought each other with careful attention to position themselves for the crowd to get a good view of the action. One actor wearing Saxon dress had the task of lying down with his spear beside the cordon rope to ensure members of the public did not lean in and get inadvertently stabbed by an over-enthusiastic Viking. This occurred for reasons of health and safety which offers an example of how the present day world warps the truth of the historical detail. It also demonstrated to me the multi-faceted nature of actors caught up in re-enactments – the requirement to be in two places at once, physically and mentally, transgressing the boundaries that divide

reality from re-enactment – but in so doing, *define* those boundaries. This characteristic of the methodology will be explored in section 2.5 later.

I argue that elements of ‘reconstruction’, and elements of ‘remake’, can be combined to form a core methodology for my practice. The act of reconstruction is to piece together fragments of historical record to bring to life a cohesive narrative. We can take a cue from historiographer Helen Wheatley who suggests it is time to “interrogate the methods by which we approach and interpret this vitally important archive” (Wheatley 2007, p.9). Experimenting with textual archives in this way to construct a simulation of studio space is a new way of engaging with historiography.

The act of remaking is to take a source text and, through the application of practice, produce a new, target text that borrows extensively from the original but has unique features born out of the circumstances of its creation. Combining these forms leads me to propose a ‘re-enactment’ methodology which allows me as a researcher to retread the decision-making process of the past in a simulation of an era that has been remade by reconstructive evidence gathering. Therefore, while re-enactment may borrow from both reconstruction and remake, the environment of the re-enactment has itself been remade and reconstructed. These three ideas are inextricably bound together, yet as re-enactment is the ‘act’ of practice-based research, I will employ the term as a critical device to explore my practice.

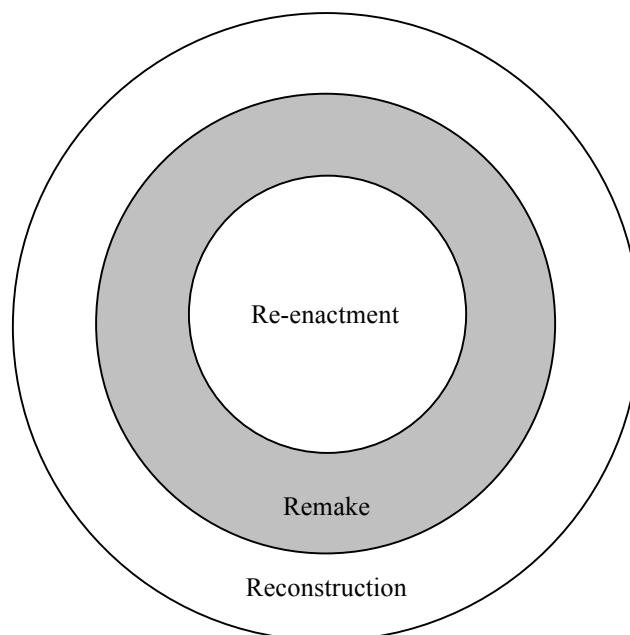


Figure 1. Proposed relationship between Reconstruction, Remake and Re-enactment.

Organised as three concentric circles, I argue the re-enactment activity is placed centrally, foregrounding the agency and process of production that is the focus of the thesis. The re-enactment relates to the in-the-moment decision-making that I am studying. However, that re-enactment requires an effective simulated environment of television production practice, which is ‘remade’ and thus encircles the re-enactment activity. The simulation of practice is governed by our understanding of such production, and is informed by an investigation of historic records that help develop the ‘reconstructed’ rules for engagement to define the remake. Approaching the research design in this way provides me with an informed understanding of the relative worth, value and place of these ideas, from which I can design an experimental approach to practice-based re-enactment.

2.3 Experiments in Re-enactment

It is argued that there are two forms of research in the social sciences which lie at opposite ends of a spectrum of methodology – ‘field research’ and ‘experimental research’ (Brown *et al.* 1975, p.9). Field studies are described here as those which are undertaken in the real world, where researchers observe aspects of life. Experimental studies attempt to manipulate aspects of a situation within a controlled environment (such as a laboratory or a classroom) to understand the relationships at play. Whilst these forms of research can be classified separately, often research endeavours will combine aspects of the two. I argue that the practice-based research I am undertaking is experimental in nature, and borrows from both forms at either end of the spectrum. An important aspect of the experiment is the construction of a simulation of a real-life environment, yet in ‘fake’, controlled conditions.

An experiment begins with an observation which leads to the formation of a hypothesis that can be tested. My hypothesis builds on the previous arguments concerning the positive and negative connotations of the term ‘studio-bound’, and can be phrased as: *The constraints of the 1960s conditions of production are counteracted by liberating opportunities for creative directorial storytelling that are absent from contemporary practice.* This hypothesis provides a line of enquiry that can be subsequently tested by undertaking experiments. Experiments can be defined as “a test or series of tests in which purposeful changes are made to the input

variables of a process or system so that we may observe and identify the reasons for changes that may be observed in the output response” (Montgomery 2005, p.1). Neal White (personal communication, May, 2011) argues that experimental systems are “hybrid constructions” that include social, technical, institutional and epistemic settings. These settings can be applied to an experimental construct for my research where a simulation of practice is determined by the social, technical, institutional and epistemic dimensions of practice. The subsequent analysis of the process and outcomes will allow me to explore and ‘test’ the hypothesis. The *experimental variable* that requires attention is therefore the conditions of production, so, to undertake this experiment, I need to simulate the production of a TV drama script within an altered set of conditions of practice, in order to observe through the re-enactment process as experimenter / researcher / TV director, what impact that change has on the ability to ‘bring to life’ the script. Therefore I intended to undertake an experiment whereby I ‘re-enact’ an existing, contemporary text within simulated 1960s production conditions in order to test how the conditions of production affect the director’s decisions to bring the script to the screen. The aim of the experiment is to respond to the hypothesis, and bring new understandings to historical production practice. The aim of the experiment can be phrased in the following question: How would the decision-making process of directing contemporary television drama be affected by the conditions of 1960s production space?

The immediate issue is one of cost – this is not a small-scale experiment, and would require, in the real-world, a considerable budget. I chose a contemporary script, one whose production and conditions of making could be researched through interview and observation of itself and ‘similar’ productions. This meant I had to actively produce, for the experiment, the historical version. An immediate implication by not making *both* versions is that I am introducing more variables into the experiment. Indeed, for it to formally be a ‘controlled’ experiment, only the conditions of production would change between the original (source) and remake (target) texts. But this would mean hiring the same cast and crew and re-enacting both contemporary as well as historical versions, impossible for budget reasons. This is indeed a limitation on the design methodology; one which I will reflect on later as a factor in determining a re-enactment methodology for future application.

The positive aspect of remaking an existing text is that I can focus the experiment, and available production budget, on devising the simulation of historical practice and produce a version that can be analysed with reference to the original – in terms of the directorial decision-making process and also the final artefact itself.

I, as the experimenter, am also a key ‘constant’ in the experiment design, as the one ‘re-enacting’ the director’s decision-making. I also have access to directors of historical and contemporary *Doctor Who* in order to compare and reflect the decision-making that I undertook in the simulated productions to that which occurred in the ‘real’ productions. These factors help to limit the variance in the experiments and help ensure validity of the experimental design. This is important as:

“the results and conclusions that can be drawn from the experiment depend to a large extent on the manner in which the data were collected.”

(Montgomery 2005, p.2)

Validity in experiment design refers to “the extent to which the experiment measures that which it purports to measure” (Montgomery 2005, p. 11). Experiments that lead to outcomes that are either intrinsically ‘right’ or ‘wrong’ are easy to test as valid or otherwise. As noted by Brown *et al.* (1975), those that refer to aptitude or skill are much harder to define and require intensive investigation of the relationships between inherent factors. The issue of ‘validity’ in the experiments I undertake refers to the control variance at play, and the extent to which the conditions of practice are effectively simulated, and the extent to which cast and crew ‘perform’ in roles that are adopted as role-play in the experiments. These are factors that will be discussed as part of the reflection on the experiments later in the exegesis, but is flagged here as a key issue to consider in developing this re-enactment methodology. Indeed, “Experiments may allow conclusions to be drawn about cause and effect, *if* the design is sound” (Bell 2005, p. 15). However, I argue that in considering experiments into conditions of production, it must be reasoned that these are highly complex behavioural systems, and reducing them to controlled laboratory experiments would itself introduce so many alien inhibiting factors that it would render subsequent analysis futile. Indeed, it can be argued that the closer you get to ‘lock down’ the

variants at play, the further away the truth recedes: “Many subscribe to the view that the search for meaning becomes a tangled goal once the procedures used to determine truth are accepted and codified” (Sullivan 2005, p.35). I am able to draw from the literature concerning how to structure an experimental research report. The table below provides a guide for reporting which has informed the approach and presentation of my work.

REPORTING EXPERIMENTAL WORK	
1. Title	This should state clearly and succinctly what the experiment was about (and when it was carried out)
2. Introduction	A synopsis of relevant previous research
3. Aim	A brief statement of what the experiment set out to do.
4. Method	How the experiment was conducted
5. Results	How the raw scores were obtained and analysed
6. Discussion	How were the results interpreted and what were the limitations of the design and procedures?
7. Conclusion	What conclusions may be drawn from this experiment and how do they relate to previous work in this area?
8. References	

Figure 2. Reporting Experimental Work (Brown *et al.* 1975, p.13).

Drawing from this format, I have derived not just the approach I will take for the chapters that focus specifically on the experiment (in this context, the ‘research report’) but also the overarching design of the exegesis:

REPORTING EXPERIMENTAL WORK	STRUCTURE OF EXEGESIS
<ul style="list-style-type: none"> - Title (this should state clearly and succinctly what the experiment was about (and when it was carried out)) - Introduction - Aim (a brief statement of what the experiment set out to do) - Method (how the experiment was conducted) - Results (how the raw scores were obtained and analysed) - Discussion (how were the results interpreted and what were the limitations of the design and procedures?) - Conclusion (what conclusions may be drawn from this experiment and how do they relate to previous work in this area?) - References 	<ul style="list-style-type: none"> - Introduction and Context - Aim and research hypothesis to be tested - Relevant previous research - Method - Results (DVD) - Discussion - How were the results interpreted - What were the limitations of the design and procedures? - Conclusions - References

Figure 3. Design of Thesis derived from guide to reporting experimental work.

Adopting this structure provides a framework within which the exegesis and practice fit together to form the overall thesis. The results of the experiment are ‘captured’ on a DVD disk which informs a discussion of how the results are interpreted and the limitations of the design and procedures. This relates to both the development of the argument and testing of the research aims but also the development of the re-enactment methodology. This research process is therefore conversational in nature in that there is constant dialogue between core concepts and fieldwork situations (Smyth and Shacklock 1998, p.4). Chapters 3 and 4 that focus on reporting the experimental work form the nexus of practice and exegesis, the heart of the thesis. Following the experimental approach, these chapters are structured to conform to the expectations of such an approach. Chapter 3 focuses on the ‘methods’ used to create the experiment – the simulation of conditions of production, the use of studio and location space, and decisions made when undertaking the studio re-enactment itself. Chapter 4 follows with an analysis and reflections on the key themes developed, then turns to reflect on the re-enactment methodology. These chapters provide evidence of:

“A constant shuttling backwards and forwards between abstract concept and concrete data; between social totalities and particular phenomena; between current structures and historical development; between surface appearance and essence; between reflection and practice.”

(Harvey 1990 cited Smyth and Shacklock 1998, p.4)

This approach involves myself as a researcher also acting as experimenter and TV director. Unable to remain a passive observer once the experiment is underway, I am ‘enacting’ the experiment myself. This raises the question of my positionality in relation to the research (which I will explore in section 2.4). Yet, intriguingly, it also relates to philosopher Hans Georg Gadamer’s notion of the ‘double hermeneutic’ that occurs as an interpreter tacks back and forth between experience and being (Foley 1998, p. 123). In this framing, I am the author of the work, yet also the reader, offering my own contribution to determining the meaning (reading) of the results. This approach is characteristic of the re-enactment methodology being explored.

Considering the spectrum of field research and experimental research, it is clear that while this approach borrows significantly from the latter, the ‘remaking’ of

production conditions within which the experiment is performed relates to field research as the experiment will simulate the real-world environment. Figure 3 above, representing the approach to the ‘experiment’ chapters, places an emphasis on analysis and reflection of the experiment results and reflection on the experiment design applied to the re-enactment.

This debate can be framed in learning and teaching conventions, where the convention of ‘doing it again’ is at the heart of formative to summative assessment strategies (see Kolb 1984). What changes in that instance (student knowledge and understanding) is, for remaking, a change in some aspect that allows for comparison through practice. To engage in such activities, whether they be educational in nature, or experimental in order to illicit an understanding of phenomena, include the steps of ‘briefing’, ‘field experience’, ‘field observation’, ‘field reports’, and ‘debriefing’. Briefing is described as:

“...the time when participants are orientated to the experience. They are provided with their instructions, goals, and the rules within which they can achieve their goals.”

(Pearson and Smith 1985, p.71).

The briefing stage provides those involved with undertaking the simulation of practice with ‘rules’ within which they should operate to allow the re-enactment to be shaped appropriately. This stage is part of defining the ‘remade’ environment.

Field experience is the stage where the re-enactment is underway and myself as the director will experience first-hand the relationship between conditions of production and production itself. The experience is reflected on after the completion of the experiment – and forms the ‘de-brief’ stage. Pearson and Smith (1985, p.70) describe this as “the cessation of this experiencing and the deliberate decision to reflect then on action.”

The practice of producing field reports is to enable observing techniques that do not require any intervention from me during the re-enactment to enable me to remain ‘in character’. This takes the form of recording the re-enactment, most specifically the directorial decision-making. This video and audio material is provided in an edited

(reported) fashion on the DVD (“Gallery Voices” in the Analysis section) and is interrogated as evidence of practice in the experiment chapters.

In this section I have discussed the approach, and some of the limitations and issues arising from the experimental nature of the thesis. The next section will provide details of the research design employed to prepare for the practice-based work, before turning to discuss in more detail issues raised by the research design. Indeed, while it is important to be in control of the research and the practice of undertaking the experiments, in developing a new re-enactment experimental approach to broadcasting history research, the actual experience of doing the work remains largely unpredictable. Hans-Jorg Rheinberger (1997, p.33) frames this in the following way: “Experimentation, as a machine for making the future, has to engender unexpected events.”

2.4 The Research Design

In order to remake the conditions of 1960s UK TV drama production, I engaged with a variety of sources that provide evidential material upon which I was able to draw for information and conclusions (Medhurst 2007, p. 137).

The first of these was an extensive fact-finding visit to the BBC Written Archives unit in Caversham, which holds an extensive collection of programme information relating to BBC productions dating back to the early days of broadcasting. “As Jacqueline Kavanagh observes, ‘the programmes tell us what was said and shown: the written archives may help to tell us how and why’” (Kavanagh 1999 cited in Johnson 2007, p.69).

I focused on programme files that would provide me with information which I could use to inform the creation of a simulation of 1960s practice (see appendix 6 for a description of these files). As my experiments concerned *Doctor Who* I explored the material connected with this series in detail. They included a wealth of information pertaining to the development of the series, including budgets, treatments, script notes, character descriptions, memos, studio floor plans and marked-up shooting

scripts. I found these files useful in building up a picture of the conditions of production, yet had to remain aware of the limitations of such material – it offered a glimpse into a world that no longer existed, and the documentary evidence was purely factual in nature, and lacked the ‘human’ texture, the ‘heat of the moment’ experience that would be important to enable me to replicate the conditions of practice. Importantly, I was able to capture a sense of that through a series of interviews with key practitioners, including Waris Hussein, who directed the first *Doctor Who* story in 1963. I interviewed Hussein at his house, and focused the interview on issues concerning directing in both studio conditions and location. He had retained his own copies of material from the production file, including a floor plan and marked-up script. His commentary on overcoming the issues concerning production of *Doctor Who* in 1963 was very valuable (see transcript of the interview on the DVD-ROM).

Hussein was one of a number of industry practitioners I interviewed concerning approaches to television drama production in order to gain an insight into the conditions of production and the ‘heat of the moment’ decision making required to work successfully within these different production spaces. Interviews provide an important, personal view but are to be approached with caution, at risk of inaccuracy of memory. An example of this is relayed by broadcast historian Marcus Hearn:

“I was sitting with Carole Ann Ford (who played 1960s *Doctor Who* companion Susan) and she absolutely insisted to me that *Doctor Who* was made live, went out live. She actually swore blind to me.”
(personal communication, February, 2008)

Doctor Who has never aired live, yet the vividness of the as-live experience colours the recall of the event, which, to be fair to Ford and others in her position, took place decades ago. Waris Hussein was perhaps the most influential interviewee for me as he directed the first episode and thus could provide a personal commentary on directing which would add to the production files; he also remains a practicing film director today and thus can, through his experience, contrast and compare approaches to production. He retains clarity of memory, aided by script and floor plan documentation that proved a useful source of focus during interview.

I also interviewed Victor Pemberton, a script editor on *Doctor Who* in 1967, and a broadcast historian who has written extensively on the series, Marcus Hearne. I also interviewed a director who has worked on the contemporary version of the series, Graeme Harper. Additionally, I conducted an interview with Lucy Richer, an Independent Drama Commissioner for the BBC. These interviews provided me with personal insights into the conditions of production and decision-making mechanisms from the historical era and the contemporary era, which I draw on in the following chapters that describe and reflect on the experiment. Mariampolski (2001) sets out a number of validation techniques to help justify findings. These include probing, triangulation and interpreting body language. The latter proved difficult to me as only two of my interviews could be conducted face-to-face. The techniques of probing and triangulating (the manner in which you can seek responses from different directions, including direct questions and projective techniques) were employed to ‘test’ the interviewees’ assumptions and assertions about conditions of production.

Alongside the archive material and first-person interviews, I also conducted the historical study of the establishment of the conditions of production that formed the basis of chapter 1. This provided me with a context from which I could develop my research questions and led me to propose and argue the ‘creative reaction’ idea that arises out of decision-making in constrained production spaces such as the 1960s studio system.

The core methodology employed by the research design is the generation of a television artefact, realised in a simulation of production space which would allow me, as a practitioner / researcher, to experience and seek new knowledge about the director’s response to conditions of production. This focused on the re-enactment of a contemporary episode within 1960s conditions of production. I set out to gain the support and backing for the project from the BBC. I made contact with Julie Gardner (the Executive Producer of *Doctor Who*) via email and discussed the project with her and the Brand Manager, Ian Grutchfield. Both were very helpful and relayed my initial enquiry to Russell T Davies who granted me permission to use his script for “Rose” (2005). However, the script included alien characters known as Autons which were the copyright of a previous (and now deceased) script editor of the series,

Robert Holmes. The Estate was not so readily forthcoming with permission, and so I returned to the BBC and asked for permission for a different episode. This time I chose one which featured no elements that would have additional copyright implications – “Tooth and Claw” (2006). Russell T Davies considered this a good choice, as he later explained to me it featured gothic, dark interiors, which were in keeping with the ‘studio-bound’ conditions of production. Although I agreed it was a good choice, it was not for this reason. Indeed, it was the fact that this would prove a *challenging* remake in such conditions, with numerous interior and exterior locations, including the highlands of Scotland, fighting monks, and a boy who changes into a werewolf. The broad scope of the places to be represented as depicted in the script meant this episode would be a more appropriate source text than the original choice “Rose”.

The realisation of a 1960s-style version of this contemporary episode is detailed in chapter 3, along with a reflexive commentary on the decisions made, and the impact of the conditions of production.

2.5 Reflections Upon Issues Raised

“So, although truth is provisional and to objectify it doesn’t make much sense, what is useful to keep in mind is that the process of inquiry itself, irrespective of the methodological perspective, needs to be kept in continual check.”

(Sullivan 2005, p. 42)

As argued by Sullivan, there are several layers at work within the research design that need to be taken into account. I have already presented an argument in this chapter for a practice-based re-enactment approach, and provided an ‘experiment’ framework within which that practice will unfold and be reflected upon. Here, though, I turn to reflect upon the issues raised by my multiple roles of experimenter, researcher, and practitioner within the research.

The first issue is one of positionality – the relationship between the research and the researcher. Traditional academic practice puts great emphasis on the requirement of the author to be absent from the text, regarded as the phenomenon of the “missing researcher” (Smyth and Shacklock 1998, p.1). This is to deny “subjectivity of the

researcher in the pursuit of ‘objective’ and ‘neutral’ collection of empirical data” (Smyth and Shacklock 1998, p.7). Indeed, guidance to researchers is exemplified by the following:

“The positionality and tone of the author is crucial. To evoke an authoritative voice, the author must speak in the third person and be physically, psychologically, and ideologically absent from the text. That lends the text an aura of omniscience.”

(Marcus and Cushman 1982 cited Foley 1998, p.110)

This notion of absence from the text is inappropriate for practice-based research, where the experiences of myself as a practitioner are central to the themes being investigated. I therefore adopt a “hybrid voice” (Foley 1998, p.110) throughout the work, acting as researcher, experimenter, and drama director. In this way, “researcher roles were multiple and shifted according to context” (Carspecken and MacGillivray 1998, p.175).

The first chapter concerns the historical context that informs the research and thus I adopt a more theory-driven, “impersonal academic discursive style” (Carspecken and MacGillivray 1998, p.114) which is appropriate for that part of the exegesis. This chapter on methodology, and the subsequent chapters on the experiments, require me to undertake the practice of “editing the researcher into the text, and not presuming that she/he is a neutral actor in the research” (Smyth and Shacklock 1998, p.4). In addition, within these chapters I also adopt the role of a reflective practitioner, and drama director (within the DVD evidence). I then return to the more academic, discursive style to discuss findings and conclusions.

These three roles occupy different spaces in the research design. Returning to the strategy of combining elements of re-enactment, remake and reconstruction, the different roles can be overlaid in the following way illustrated over the page:

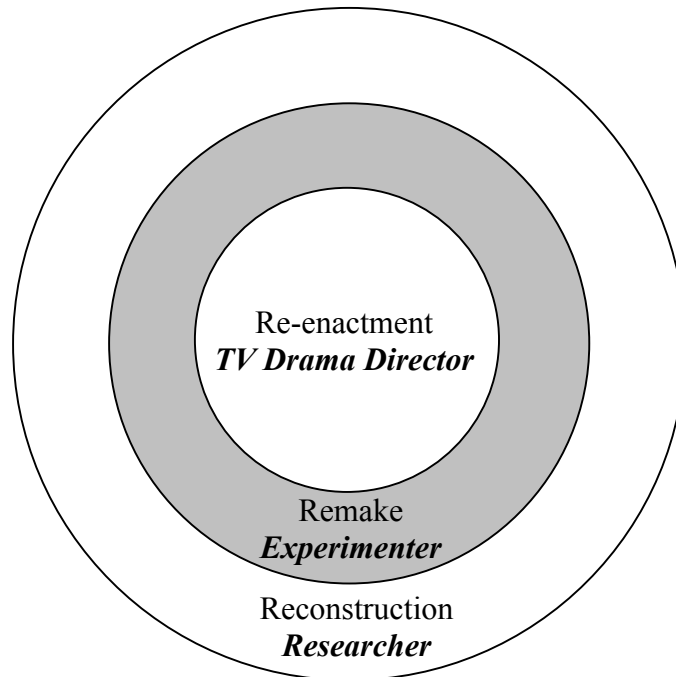


Figure 4. Researcher Roles in the Context of Re-enactment Research Design.

I therefore will be required to inhabit the three spaces, traversing the boundaries that separate (and define) them as the re-enactment arena requires the adoption of a temporal set of conditions for practice, or ‘rules’ of engagement. Yet whilst these three roles seem separate, of course they also co-exist with each other, with myself as the ‘researcher’ - the overriding role as this drives forward the intentions of the work. This brings into question the issue of researcher bias. Carspecken and MacGillivray (1998, p.176) argue that:

“Researcher roles are relevant to the validity problematic in several ways. One such relevancy concerns the manner in which we interpret events: the issue of researcher bias. Certainly, an interpretation will affect what is written in the field notes and what sorts of analysis one produces. Roles can restrict interactions in ways that restrict analysis: producing bias. The other relevancy concerns power dynamics. Researcher roles will affect the subjects of one’s study. Effects like this might have implications for the validity of one’s analysis, especially if subjects feel silenced by a researcher, or if they alter their activities and their talk out of a desire to please a researcher.”

I argue that this particular issue is mitigated by the fact that I play an *active role* in the research – that of inter-acting with cast and crew to direct the drama. I am not attempting to observe from afar – I am, in fact, creating an environment where I can observe *myself*, and how the conditions affect my decision-making. This requires me

to consider how I can become reflexive about my practice. I am after all analysing myself and inevitably my self analysis will be subjective. However, I would argue all analysis is subjective and embracing that is enlightening. Smyth and Shacklock (1988) argue that reflexivity concerns a dialogue with the limitations of the research – it reveals the intentions and nature of the researcher, and recognises that knowledge construction takes place in the real world. They go on to suggest that:

“reflexivity in ‘critical’ research work is important in honestly and openly addressing issues concerning the validation of research findings, as well as those ethical and political questions which arise from relations between the researcher and the researched that are implicit to the research agenda and the research methods.”

(Smyth and Shacklock 1988, p.42)

As Pearson and Smith (1985, p.69) argue:

“Often we are so deeply involved in the experience itself that we are unable, or do not have the opportunity, to step back from it and reflect upon what we are doing.”

The setting out of the three “Re’s” helps me establish a framework within which I can operate in different roles, creating space for stepping out of the re-enactment to reflect on the experience, before ‘re-immersing.’ Recording the process of undertaking the experiments is an important tool to help aid this reflection, and the recording should contain the “primacy of the reflexive moment” (Smyth and Shacklock 1998, p.1), where director and researcher fuse together during the re-enactment activity. So whilst I cannot pause during the re-enactment to be reflexive, I can, post-activity, draw on the reflexive data to convey a narrative and to encapsulate the research outcomes. This dialogue between the researcher and the researched:

“deliberately, intentionally reveals to his [sic] audience the underlying epistemological assumptions which caused him [sic] to formulate a set of questions in a particular way, to seek answers to those questions in a particular way, and finally to present his [sic] findings in a particular way.”

(Ruby 1980 cited Smyth and Shacklock 1998, p.7)

Thus, undertaking a reflexive approach to the experiments, will acknowledge that “we are always on some corner somewhere” (Richardson 1992 cited Smyth and Shacklock 1997, p.7). Richard Jenkins’ insights into the sociology of Pierre Bourdieu are pertinent to relate here. The stepping forwards and backwards between experience and reflection must also lead to a further step back to subject “the practice of the researcher to the same critical and sceptical eye as the practice of the researched” (Jenkins 1999, p. 61). The switch to academic address (that of writing post-activity) creates a one-step-back objectivication. This reflection seeks to “try to make sense of the action, looking for rules with which to understand what is going on” (Jenkins 1999, p.49). Bourdieu argues that a second step back is necessary in order to “reveal and unmask the techniques of the observer’ codification: codification, visualization” (ibid). As my intention is to develop the re-enactment methodology, it is important that I not only reflect on the practice of re-enactment, but also reflect on the practice of reflection to aid in my honest conclusions of the thesis and thus avoid the issue identified by Boud, *et al.* (1985, p.8): “it is easy to neglect as it is something which we can’t directly observe.” Returning to the diagrammatic relationship between re-enactment, remake and reconstruction, this can be further enhanced to model Bourdieu’s two-step-back objectivication, as depicted in figure 5 below.

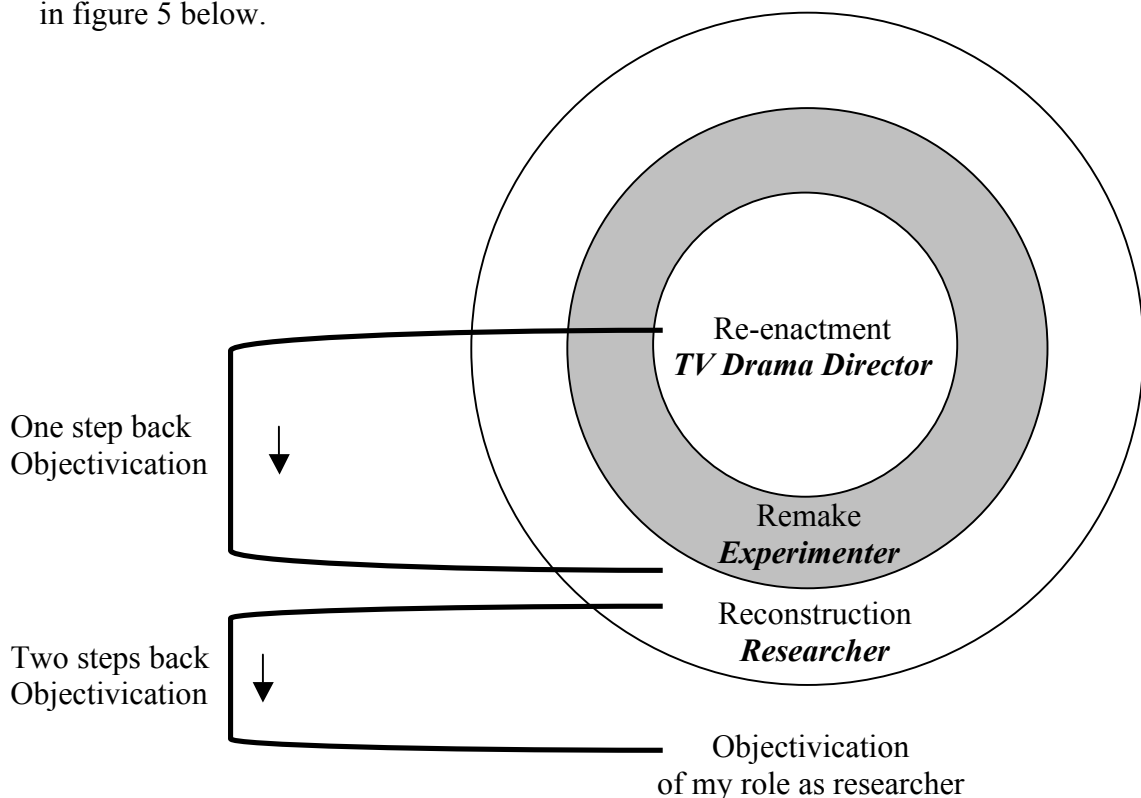


Figure 5. Reflexive repositioning to enable Bourdieu’s Objectivication of Objectivication.

The act of observing and reflecting on the different levels of engagement as noted in this figure is highly complex, and bound up in issues of presentation and structure of the exegesis. Through this process, I will endeavour to remain true to the intentions of the project by being honest with myself about the journey of undertaking the research, and deliberating the findings. As noted by Pearson (1993 cited in Smyth and Shacklock 1998, p.5):

“Published accounts of fieldwork are invariably cleansed of the ‘private’ goings-on between researcher and researched. When the lid is taken off, however, this can be something of a shock.”

Importantly, the experimentation chapters must adopt a ‘confessional’ style of reflection which demonstrates “one’s own biases, through after-the-fact ruminations, and admitting them to the reader” (Carspecken and MacGillivray 1998, p.175). This should give me the best possible insight into the experiments undertaken, and in so doing, articulate “an active process of exploration and discovery which often leads to very unexpected outcomes” (Boud *et al.* 1985, p.7). Moon (2000) offers a useful summary of reflection as a technique to aid learning.

Jenkins (1999, p.46) reasons that Bourdieu’s:

“...encounters with his own backyard inspired him to reflect upon the research process and the relative status of ‘insider knowledge’.”

The insider knowledge that I bring to the experiment is the knowledge of process and experience of directing, as well as a deep understanding of the *Doctor Who* texts.

Carr argues:

“We can view the past, and achieve our understanding of the past, only through the eyes of the present. The historian is of his own age, and is bound by the conditions of human existence.”

(Carr 1990 cited Wheatley 2007, p.7)

I suggest the re-enactment methodology puts this to the test in a new way – undertaking a simulation of the past within our contemporary understanding, yet that knowledge is what gives us insight into the outcomes of the experiment. Without it, we carry nothing of use with us into the simulator.

An issue that should be raised here and commented on during the post-experiment reflection is the extent to which my knowledge of the existing texts distorts my judgements about how to realise the scripts in the different conditions of production.

This issue of 'knowingness' is explored here:

“There has been a good deal of research on retraining, and a recurrent finding is that long established patterns of behaviours are remarkably persistent and difficult to change. Whether it is kicking a football, driving a car, reading a book, operating a piece of industrial equipment, or indeed almost any other skill, something which has become habitual has a remarkably self-sustaining capacity.”

(Candy *et al.* 1985, p.102)

How 'real' is the re-enactment supposed to be? For it to generate useful results that inform subsequent analysis, the operation of the re-enactment and the motivations and actions of those 'acting' in it (the cast and crew) must remain true to the conditions within which they are operating. Yet it is a 're-enactment' operating inside a 'remade' simulation of practice. The collaborators and I undertaking the many varied roles required in television production are aware of this fact, and therefore it influences our actions. The purpose of the briefing session is to establish the protocols for engagement within the simulation, and to ensure the people involved in the experiment understand their place and 'role' in the simulation. The chapters dealing with the experiments will reflect on these issues as part of the methodology. Boud *et al.* (1985, p.9) note that in reflective role-play simulations:

“Initially, the experience may tend to overwhelm, new observations may rapidly follow each other with insufficient chance for them to be organized and the learner may resort to coping strategies which involve doing what is most familiar.”

Whilst these 'coping strategies' did manifest themselves in the experiments I undertook, I sought assurance that such 'coping strategies', once invoked, provide evidence that the individuals concerned had been, in fact, successfully immersed into the simulation.

Exploring paths through these problematic areas is a key benefit of undertaking the experiment and therefore will lead to a more refined, tested (piloted) methodology and set of recommendations for future work.

2.6 Conclusion

This chapter has critically appraised the research design and methodology employed, and offered an account of the issues arising from adopted a practice-based approach to re-enactment. I am proposing to combine methods into an experiential approach that prioritises re-enactment to undertake a remake of a source text within reconstructed conditions of practice.

I have discussed the experiment design to structure the practice-based approach, and to configure the exegesis and artefact into a cohesive research entity. The chapter determined the experiment's aim to be explored, and discussed the issues raised by the research design, in particular the concept of positionality, and the requirement for different modes of being – experimenter, practitioner, researcher. Bourdieu's concept of objectivation was then considered to address issues of reflexivity and objectivity.

The next two chapters take the form of a research report, and link to the DVD. They provide context, analysis and reflection of the experiment that was undertaken.

CHAPTER 3

The “Tooth and Claw” Re-enactment Experiment – Part 1

3.1 Aim

The aim of this experiment is to investigate and respond to the following research question: how would the decision-making process of directing contemporary television drama be affected by the conditions of 1960s production space? This chapter provides a critical, discursive commentary on the decisions made during the re-enactment experiment. It provides an augmentation of Jacobs’s (2007) approach to learning about historical media practice, taking his philosophy into a practical arena to set the context for critical reflection.

This chapter concerns the discussion of ‘method’ as applied to the re-enactment experiment. I begin by determining how the 1960s conditions of production can be simulated in order to undertake the experiment. I then follow this with a discussion of the decisions made during the different stages of the experiment beginning with the script adaptations that were made to suit the conditions available for the production. The work then turns to the decisions made concerning location space and studio space, before focusing on the process of undertaking the live studio re-enactment process itself.

The “Tooth and Claw” experiment was planned during the year of 2009, with the studio date set for Friday the 25th September. The week leading up to this date therefore followed the production process as dictated by the conditions of practice. The 21st of September was set as the location filming day, followed by three days of rehearsal from the 22nd to the 24th, leading to the studio day on the 25th.

Please note that a synopsis of the “Tooth and Claw” episode can be found in appendix 1.

3.2 Method: Simulating the Conditions of Production

It is important to establish the rules of participatory engagement whilst undertaking the experiment. Without this, any such simulation of historical production practice would be rendered obsolete, polluted by contemporary slippages in behaviour and authenticity. Chapter 1 provided a historical critique of the development and establishment of the 1960s conditions of television production practice that are required, and it is the application of those conditions in practice that will provide a robust (or not) simulation. Indeed, the application and testing of such conditions provides fertile ground for reflection and development of the re-enactment methodology, and the next chapter will explore that outcome of the experiment in detail.

For the purposes of defining the conditions of production within which this experiment is operating, I am focusing on television drama series and serials produced by the BBC in the early 1960s period. This was the environment in which *Doctor Who* was conceived and produced during 1963, and thus I can identify the conditions of production that governed the programme during this era (1963 – 1965, from the first episode to the first time the series began recording substantial sequences on location with the regular cast).

In chapter one I discussed the formation of the conditions through which *Doctor Who* was produced in the early 1960s. I shall now return to these conditions, and discuss them in the context of providing an authentic reconstruction of them in a simulated 1960s BBC TV production environment. Access to resources such as a television studio and the crew necessary to facilitate its operation provides me with what Bignell (2007, p.39) describes as an opportunity “for new historiographical scholarship on television drama in the field of television science fiction and fantasy.”

An episode is typically 23-25 minutes in length

The current approach to *Doctor Who* is 13 x 45 minute episodes, and the “Tooth and Claw” episode from 2006 was produced within this mould. One of my first considerations was how to ‘adapt’ the script to fit the conditions of the 1960s, where

episodes of 22-25 minutes were produced on a weekly basis. I initially planned to produce the entire 45 minutes within the one-week time-frame. However, this would not conform to the condition (of length) related to the time period. An alternative would be to cut the script into two equal halves, and treat it like a two-episode serial, producing two episodes in two weeks. However, the budget implications for the experiment would be prohibitive, and in any event the requirement was needless – I could focus on the first half of the script, and produce ‘Episode 1’, without needing to produce ‘Episode 2’. It does not matter that the entire source script is not produced. Following the dominant narrative archetype of *Doctor Who*, I would plan to leave the episode on a ‘cliff-hanger’ narrative climax, thus enacting the full experience of an episode of this series within the context of the 1960s.

Each episode is produced in a six day period

This production schedule is based on the approach of an allocated filming day on location, followed by four days of rehearsal, concluding with a day in the studio. In adopting this condition of production, there is a significant cost to the production budget. The budget available for the experiment was £8,000. Each actor was paid a daily fee, in accordance with Equity (the actors’ union) rates. One of the constraints with this condition of production is the need to engage the services of all the actors for the entire rehearsal and studio period, instead of determining a shooting schedule that prioritises the availability and cost-effective out of sequence filming that is prevalent today. The script required the services of 8 speaking parts, which would prove costly to accommodate. I had to balance the requirement for rehearsal time against the number and cost of speaking parts. In order to retain the script’s requirements for speaking parts as fully as possible, I decided to lose a rehearsal day. So, it is clear that the budget available to me affected my ability to adhere strictly to this condition, although I was able to maintain the *spirit* of the condition by retaining a lengthy (3 day) rehearsal process prior to the studio recording session.

The first day is used for single-camera filming on location, using 16mm B&W film and no sync sound recording capability

This condition of production was achieved by simulating a film camera’s operation through the use of a video camcorder. Although a different format, both are in fact light-weight, manoeuvrable cameras that can record material for later editing into

sequences, in contrast to the multi-camera approach employing heavy, pedestal-based studio tube cameras. The video camera was set to B&W recording, and 4x3 ratio to simulate the practice of producing images with the film camera. Although I could have used a film camera, the cost would have been extensive and as the practice of using the film camera could be easily transferred to the video camera, on balance I decided to proceed in this way. This simulation would have no impact on the process of the work being undertaken in the experiment.

The second, third, fourth and fifth day form the rehearsal period, where the full cast and director work, normally in a church hall or similar large space, to rehearse the episode and block action and camera positions

Our three-day rehearsal period took place in a large room on the Bournemouth University campus, with masking tape used to mark out the positions of scenery and studio flats. This enabled the cast and myself to rehearse and block out action which could be transposed to the studio floor (see Appendix 4 for a complete set of studio floor plans). It was important to choose a rehearsal space that had the same floor space as the television studio for this purpose.

The sixth day takes place in the television studio, in this case a relatively small studio in Lime Grove (studio D)

The studio used for recording *Doctor Who* serials in the 1963-65 period was Lime Grove studio D, very much smaller than other studios used at the time (Bentham 1986). Ironically, at 100 square feet, the studio I used for this experiment was even smaller, and designing the sets to make best use of this space was a complex task.

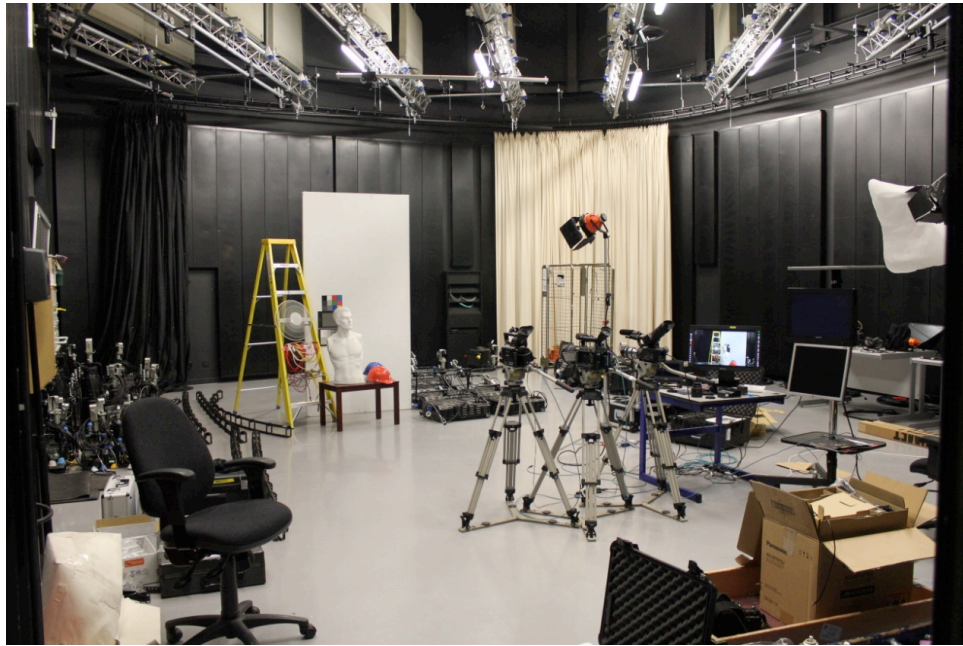


Figure 6. Bournemouth University’s HD TV studio – smaller than even the “tennis court” size of Lime Grove Studio D (Bentham 1986, p.27).

The cameras were fitted with rotating turret lenses instead of contemporary zoom lenses, meaning to change shot size the camera had to physically move closer or further away from the subject

The studio I used was a high-specification High Definition television studio, and a number of changes had to be made in order to adopt the technical conditions of production. Whilst the cameras were equipped with zoom functionality, I had to brief the camera crew that to change shot size they should not use the zoom control, but instead physically track the camera forwards and backwards to achieve the desired shot size. While this helps to simulate the capabilities of the earlier pedestal cameras (Bentham 1986), it is important to note that the weight of the cameras would be different as the original cameras were very heavy by comparison, although still operated by one person.

The studio was equipped with one or two boom microphones to record all studio sound

This condition was simulated by the use of two boom operators, each with an extendable boom arm fitted with a directional microphone to capture sound. Each boom was employed to cover half of the studio space, adopting the same approach

utilised in the early 1960s to allow cutting between scenes across the studio without needing time for the boom to swing across to record continuous sound.

The studio recorded videotape pictures from three or four large pedestal tube cameras, each recording 4x3, 405 line B&W pictures

The studio has four pedestal cameras, normally set to record wide-screen 16:9 High Definition colour images. This technical condition of production was simulated by a two-stage process – firstly, the vision mixer receiving the signals from each camera converted them to black and white by stripping out the colour values, and a 4:3 black-bar frame was added to the vision mixer output. So, providing the camera operators used 4:3 guides on their monitors, images would be composed correctly and the video output of the studio would be 4:3 and black and white. The second stage of the process was to reduce the resolution from High Definition to 405 line resolution, achieved by running all the recorded material through filters applied in video editing software to simulate the ‘look’ of 1960s video recordings. I argue that making these changes ensured that the condition of production was effectively simulated. Unfortunately, working multi-camera studios utilising the original technology are not readily available, so simulating the equipment, and its operation, is the viable option.

The script would be broken down into two to four recording blocks

Although some studio drama was recorded literally ‘live’, without any recording breaks throughout, *Doctor Who* was never produced in this way. From the very beginning the series adopted an asynchronous mode, recording large blocks of script continuously, but with the ability to pause recording to break the technically demanding shoot into more manageable size elements. I would plan to break the “Tooth and Claw” script into recording blocks following the same reasoning behind the rationale for choosing breaks in 1960s *Doctor Who* scripts, to accomplish time compression aspects of the script (such as moving immediately from one set to another with the same cast) or to accomplish technical trickery such as the TARDIS dematerialising (Bentham 1986, p174).

The studio day sees the cast and crew block through the episode, followed by a dress rehearsal, full camera rehearsal, and after a break for tea, an evening of recording in two to four recording blocks

The plan for the studio day was configured to follow this condition of practice, although the lack of experience in the crew of operating in this fashion affected our ability to conform entirely to this process. This issue, in particular, will be discussed in the next chapter.

All location material filmed earlier in the week would have been by this point edited together, and fed into the studio live during the studio recording blocks, recording to videotape in real-time

Material filmed on location was edited into sequences in parallel with the rehearsal process. Completed sequences were then prepared to be played into the live studio session on cue.

All sound, including music and sound effects would be prepared in advance to be played in and mixed with the live studio sound during recording blocks

Sound effects would have been played in on certain cues in the script, known as “grams” (Bentham 1986, p.174). A version of the script was marked up for sound and music cues, and this led to the preparation of each individual sound element that was then played in live to the studio environment from a digital source, simulating the practice of this condition of production. All sound was mixed live and recorded to tape, along with the output of the vision mixer.

Following the studio day, the ‘best takes’ of the recording blocks would be physically spliced together to form the final version ready for broadcast

The recording blocks were digitally transferred to nonlinear editing software to undertake this task. Although this process did not involve physically cutting videotape and re-attaching it with cement glue and a microscope, the practice of selecting the best take of each recording block and (digitally) splicing them together simulated the historical practice perfectly. However, the limitless possibilities available with nonlinear editing (Fairservice 2001) did give rise to temptation to do more than simply splice together large blocks of recording – which I again shall discuss in the next chapter whilst reviewing the methodology.

In considering these conditions within the context of the experiment, there are four over-arching themes that influence the extent to which I can replicate or simulate them. They are – the available budget, crew experience, studio space, and accessibility of historical technical resources. This chapter will refer to these themes within the context of the decisions made during the re-enactment. The following section will explore their ramifications within the context of the development of the re-enactment methodology.

3.3 Method: Studio Space and Location Space

The BBC provided a copy of the script for “Tooth and Claw” for my use during the production. An initial read-through of the script revealed the key issues that would prove difficult to resolve in the re-enactment; certainly the script reflects its contemporary origins – it is dynamic, visual, emotional, fast-paced, with big-budget themes and an array of locations. It reflects the contemporary nature of production for a bold, contemporary series like *Doctor Who*. Executive Producer Russell T Davies clarifies this as:

“There’s a huge difference between drama on a Monday night at nine o’clock and a drama on a Friday at six o’clock. Knowing from the word go that we were up against Ant and Dec on ITV1, with that scope, that format and that vitality, enabled us to make sure people didn’t channel hop over to them. Our Doctor Who is very, very, very Saturday night.”
(Davies cited Russell 2006, p.35)

Indeed, the extent to which the script could be produced within 1960s conditions whilst retaining its contemporary narrative and stylistic qualities is the very exploration of the core question at the heart of the experiment. Please note that a summary of all script changes between the original script received from BBC Wales, and the prepared rehearsal script, can be found in appendix 2.

With the end of the episode chosen as the moment the werewolf breaks free and bays at the moon, the resulting script ran to 32 pages, and called for the following locations:

1. An Observatory (with large telescope as a centre-piece)
2. Large manor house exterior
3. The Scottish moorlands
4. A kitchen
5. The interior control room of the TARDIS
6. A bedroom
7. Various oak-panelled corridors
8. A dining room
9. A cellar

A full breakdown of scenes and locations can be found in appendix 3.

It would not have been possible for 1960s *Doctor Who* to portray such a range of locations within the confines of Studio D. Even by choosing to film some on location or at an alternative venue such as the Ealing film stage, the 9 locations required by the script were a key factor for me to consider. I had to consider each location and justify its inclusion in either the studio or location, or whether it could be included at all. To maintain the validity of the experiment, I endeavoured to retain all locations the script called for as they referred back to Davies's directive of scope, format, and vitality present in the contemporary series (Russell 2006).

With one day allocated to location filming, my primary consideration was to choose which locations could be filmed on this day to avoid the requirement for studio space. However, acting within the constraint of no sync dialogue to be recorded on location, the choice of scenes was limited. Filming on location offers the ability to provide a sense of depth and scale that is difficult to achieve in the studio (Kelsey 1996, p.13), and so I looked for the location requirements that would benefit the most from this approach. The manor house exterior, and the Scottish moorlands, were the two locations that required wide vistas, although it should be noted both necessitated dialogue to be delivered. The opening sequence of "The War Machines" (1966) demonstrated the technique that I could employ – here, the TARDIS materialises on a street corner in a wide-shot filmed on location, then the camera cuts to a mock-up of the same scene in the studio, where the Doctor and his companion emerge from

the police box and deliver dialogue. If I could replicate a small section of both moorlands and house exterior locations in studio then I could carefully orchestrate movements between filmed material spooled in from VT and live studio material with a careful eye on actor continuity.

What I was learning was the importance of the establishing wide-shot, a film grammar technique of revealing the geography and scope of a location, normally at the head of a scene, before cutting in closer to the action subsequently for the scene to evolve (Rabiger 2003). Prioritising location-based wide-shots for filming allowed me to overcome the constraints of the studio space, and ‘mocking-up’ the same locations within the studio would help deliver an illusion that there is no transition between modes of action.

The exterior house location would also provide an opportunity for staging the fight sequence that occurs in the pre-titles sequence between the monks and the stablehands. The fight sequence was drawn from the description written in scene 4 of the script:

“SLO-MO FLIGHT, bullet-time, pure Crouching Dragon, MONKS sailing over the heads of the stablehand!

They land – so the MONKS now form a circle, the stablehand trapped in the middle –

And then cut, cut, cut, sticks, jaws, punch, *whap* - ! MONKS spinning! Man sent flying!”

(Davies 2006)

My approach to realising this scene can be drawn from scrutinising how previously directors tackled such complex sequences in the studio-based approach. In the episode “The Fire Maker” (1963), two cave men fight each other in a cave environment. This begins in the live studio space, then cuts to a pre-filmed, more detailed fight recorded previously at Ealing film studios. This was to overcome the problems of staging realistic fighting in a multi-camera environment, and the mocked-up set works well to sew the two sequences into one.

Although the budget would not accommodate the extensive action described here, what could be achieved would be a fast-paced sequence of lots of different angles and actions. The location-based single camera approach, working with fast-paced music (the same music as the source 2006 version) could convey something similar in dramatic value to the original. This sequence would be very difficult to portray effectively in the limited studio space, and relies on specific camera positions to mask fake body-contact during the fight. Again, with careful organisation I could move from the studio mock-up to the pre-filmed fight with no noticeable transition provided it was carefully planned in advance. Here, I must block aspects of the actor positions for the location shoot, pre-empting rehearsal decisions by the necessity of the filming taking place before the rehearsal period.

Breamore House in Dorset provided scrubland where I could film moorland scenes, a large house which could double as the script's Torchwood Estate, at the side of which the fight scene could take place. Visiting the location with the production manager allowed us to take reference photographs and draw a top-down plan of the locations in order to understand how they would need to be replicated in the studio.



Figure 7.

Comparison between Breamore House location (left) and studio mock-up (right).

Figure 7 above demonstrates a corner of the house photographed on location – this is a reference photograph from the location-finding recce. The photograph was taken as it shows a two-walled area that could be replicated as a mock-up in the studio. The image on the right in figure 7 shows this set, with similar two-tone brick pattern and drain pipe. What is missing from this area are the large windows, as I was constrained by the size and shape of the studio flats to work with in creating the set.

The house is only filmed in a wider shot on location so the absence of the windows in the studio mock-up would not be obvious in the episode itself.

It was important that I staged the scenes on location taking into account the studio space that provided the replica set for the dialogue. On the transition of film insert to studio as the monks arrive to confront the Steward, the final positions of the Steward and Father Angelo were noted within the space provided by the corner of the house. Filming from a wider position showed the total environment and established the house as a large, rambling manor. Within this shot, the actors could walk in and reach their pre-designated end positions, followed closely by the extras, the monks and the stable hands.



Figure 8a

Figure 8b

Matching pre-filmed VT insert with studio mock-up of the same environment.

During the studio recording, I knew I would be cutting live from this end frame (8a) to the studio replica (8b), with the Steward and Father Angelo in the same positions to provide continuity. Dialogue from studio could be heard over 8a before cutting visually to 8b (a split edit). This technique is commonly used to hide the visual disruption of an edit-point by staggering the sound and vision moment of the cut. Engaging with VT inserts provides a means of introducing this film grammar technique to live studio, providing a smoother transition between environments to create a single sequence entity.

The moorland is the setting for monks walking towards the house, the TARDIS materialising, and the Doctor and the royal party also travelling to the house. Whilst the monks travelling did not require any sync sound and therefore could be filmed in its entirety on location, the other sequences did. Therefore, whilst undertaking the

recce of the location we also sought out an area of scrubland that could be replicated in the studio (the technique used in “The War Machines” noted earlier). At first I considered making a large photographic blow-up of the background of the area which could then be erected in studio, but for budget reasons I chose instead to find an area where I could film from a low angle (see figure 9 below).



Figure 9. The Production Manager stands in to test filming angle to ensure ‘whiteout’ background behind actors when replicating the backdrop in the studio.

The TARDIS, Doctor, Rose, and soldiers could be filmed in this location and if taken from a low angle such as is demonstrated above in figure 9, the area behind the actors’ heads that would be seen in any following mid-shot or close-up, would be a simple one-tone colour. This could be replicated easily in the studio using the cyclorama stretched tight behind the TARDIS and lit appropriately.

With a strategy in place to portray the house exterior and moorlands effectively, using a combination of pre-filming location work and studio mock-up, I could turn my attention to the remaining sets and consider how best to utilise the studio space to render them. A scale model of the studio was constructed to help me consider best use of the available space (see figure 10).

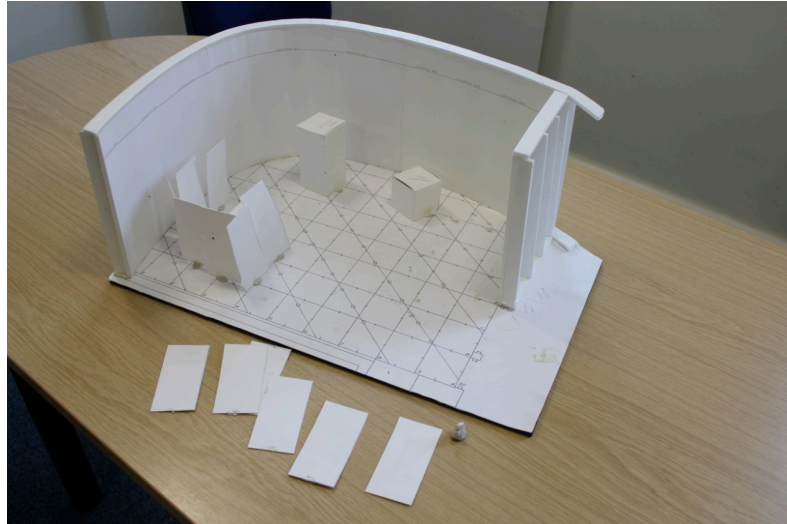


Figure 10. Scale model of studio space to help plan effective use for required sets.

What was striking was how quickly the space filled up once flats and props were factored in. With a clear understanding of how the location filming and studio mock-ups could intersect, I began by blocking out areas of the studio for the moorlands mock-up and also the two-walled mock-up of the house exterior. Waris Hussein (personal communication, January, 2008), the director of “An Unearthly Child”, relayed the difficulties in getting a sense of depth on screen in studio, due to the normally ‘flat’ nature of most sets. As I have discussed previously, he managed to achieve a sense of depth by walking Barbara towards the gateway of a scrap yard, whilst Ian hung back near his car. The space afforded to this set allowed a greater sense of depth than normal, with Barbara in the distance and Ian close by, near the camera. The cellar location offered me an opportunity to attempt to create a sense of depth, between Rose manacled in the foreground and the Host trapped in a cage. Attempts to make this long and potentially narrow set fit the space in the studio provided only two options – along either of the two flat stretches of wall (see figure 10 for an indication of shape and dimensions). The curved wall area proved most appropriate for the cyclorama around the TARDIS, as the moorlands represented the only non-straight walled section of set required.

I managed to save space by combining the corridor set and the cellar set into one area, as both shared the need to be relatively long sets. In fact, having flats constructed to offer the corridor meant that the other side of the flats (usually unseen on camera) could be used to depict the cellar location provided they were dressed with rags, webs, and under-lit. This decision of ‘sharing’ set elements helped to

increase studio space for the realisation of the house exterior set, which had to be rather large to accommodate six actors at the same time.

A requirement of the studio space was a window overlooking a courtyard. Again making concessions, the house exterior set was modified to provide a window in its short wall. This helped provide a sense of windows being present which would help it match the location material (see figure 7 above) but led to further complexity – it was important that, for the scenes that involved looking in through the window, there had to be visible set dressing behind, not just darkness. With still the dining room set to be located within the studio space, that became the obvious position for it, and so careful planning of that set allowed for visibility through the window from the adjoining house exterior.

What I was finding was that there were methods of realising the requirements of the script within the small studio space, but I was combining elements of sets together and they were not acting as separate, isolated spaces for drama. The combining of spaces became the key for effective portrayal of the range of locations required by the script.

By this point, available studio space had been accounted for and there was still the question of a kitchen, a bedroom, a large observatory with telescope, and the TARDIS interior.

The kitchen featured in scene 19 where monks are brewing a sleeping potion and tying mistletoe into wreaths. Examining the script, it begins by stating “A wide, Spartan, flag-stoned room” (Davies 2006). Beyond this description, all activity is described with an eye on the detail of what they are doing, e.g. “tying mistletoe into wreaths and garlands, big enough to wear around their necks. Intense work,” and “another MONK turns from the stove, where he’s brewing a pan of coffee-coloured liquid. He ladles it into a number of simple cups...” (Davies 2006). I made a concession to lose the initial wide-shot of the room, and focussed on depicting the activity here as a sequence of tight close-ups on a table. This allowed me to depict the kitchen through just a table in a dark area of the studio, and forego any set walls at all. The bedroom scenes were treated in a similar fashion, as they depict Rose

holding up various evening dresses to a mirror. Therefore, a large mirror erected in the studio provided me with what I needed – the mirror image of Rose, holding up dresses, and seeing her face in the reflection as she does so. Although there is no wide-shot establishing this as a bedroom, it is quite clear from the narrative that she is indeed in such an environment, the Queen having asked her to change before dinner in a proceeding scene.

The realisation of the observatory proved problematic. It was the location for a large amount of story exposition, with dialogue focused on the large telescope that dominates the room. The dialogue, and the telescope's presence in the story, had to be retained for narrative, as well as the experiment's credibility, but there was no way of installing such a set in the studio space, and it couldn't be a location element due to the requirement of synced dialogue which, following the conditions of production, was beyond the limits of what was possible. My solution was to change the location from the observatory to the exterior of the manor house. Instead of the Doctor and his party proceeding from the manor house exterior to the observatory to examine the telescope, I decided to keep them in the exterior set, looking up beyond the 'fourth wall' to the telescope that was looming out of the observatory high above their heads. A photographic image of their point of view, showing the observatory and telescope, could be inter-cut with the actors looking past the camera, as depicted in figure 11 below:

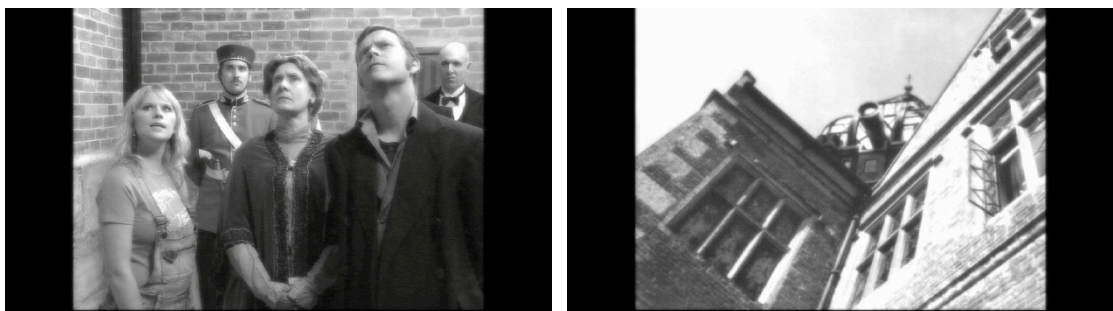


Figure 11. The Doctor and party look beyond the 'fourth wall', to a photographic blow-up of an observatory and telescope.

This technique allowed me to overcome the constraints of the studio space and removed the cost of the telescope and observatory. Barbara was menaced by an unseen Dalek (save for its 'sink plunger' arm) in "The Dead Planet" (1964) because

the full Dalek prop was not built by the time the episode was recorded; I was able to use the ‘fourth wall’ to overcome a similar practical issue. Now, as the Observatory scene (scene 16) had been relocated to take place in the exterior house set, it meant that scene 15 had to be omitted. This was a short scene where Captain Reynolds and the soldiers are inside the house, putting the jewellery case into a safe. It was important for the sake of continuity that Reynolds remained outside to link into the observatory scene. Although the episode makes sense without scene 15, it does demonstrate that plot changes do flow from adopting the constraints of the studio environment.

The TARDIS interior also proved demanding to achieve in the remaining studio space. In 1963, as evidenced by studying studio floor plans available in the BBC Written Archives Centre, approximately half the studio would be occupied by this one set alone for the recording of the first episode, “An Unearthly Child”. Whilst subsequent episodes saw a reduced set comprising a couple of large flats and the control console, it would still occupy a sizable area of the available studio space. A solution came to me by way of the archives. In one of the 1960s *Doctor Who* production files I came across a memo that discussed the production team’s use of the space “beyond the safe limits of the studio”. The memo from Head of Serial Drama Donald Wilson indicates similar practice:

“It seems to be generally understood that for years the problem of equipment storage on D stage has led to difficulty in beginning lighting on any show with a one day stand. This has usually been overcome by a tactful P.A. and a realistic fireman getting together. On this occasion it seems the “old boy” network sprang a leak and the always possible situation arose where everyone decided to stick to the strict letter of the rules. There is only one way to avoid troubles of this kind and that is to make sure that directors and designers use only the amount of space in studio D which can be filled with sets without overflowing on to the necessary storage space. It could be said that this adds to the already difficult problems of making “Dr. Who” in studio D but my opinion is that this problem will only be exaggerated if the directors and designers demand more of the studio than it is capable of supplying. Please see to it that all directors and designers bear this in mind as long as “Dr. Who” is being produced in D.”

(Donald Wilson, Memo to Verity Lambert, March 1964)

This gave me the idea to use the storage area to the side of our studio as an overspill area, opening up its two large swing doors through which our cameras could point. In this space we then constructed the TARDIS interior set. There is a nice synergy with the conditions of the past that we ‘broke out’ of the studio space in this way; it is testament to the fact that we were adhering to the conditions, and practice, of the past – even ‘cheating’ the space the same way they did back then.

The output of the reconstructed studio environment was to be recorded in black and white, and the image graded in post production to achieve the lower-resolution look of 405 lines. This helped to blur the limitations of the budget, with the set looking a lot more realistic in the gloomy dark (especially the claustrophobic interior of the TARDIS set rendered as such by the use of a black drape to hide the clutter of the scene dock in which it was filmed). See figure 12:



Figure 12.

A low-cost TARDIS console room rendered possible by 1960s conditions of production.

With a plan developed to render all required set spaces within the studio, a further model was built to aid the rehearsal process. This model was used during the rehearsal period to illustrate to the actors how they could inhabit the space (see figure 13 on the following page).



Figure 13. Photographs of the studio space model produced for the project.

As discussed in chapter one, the illusion of the TARDIS being dimensionally larger on the inside than the out was provided by making a costly edit at the point where Ian and Barbara first step over the threshold – from one set (a junkyard) to another (the TARDIS interior). Joining the two separate pieces of video tape together provide a continuity of action as the two schoolteachers force their way inside the police box, only to find themselves inside a brightly lit, futuristic control room. A similar tactic would have to be employed in the “Tooth and Claw” re-enactment to depict the Doctor and Rose leaving the TARDIS interior only to find themselves surrounded by soldiers in the Scottish moorlands. The realisation of this sequence is further complicated by the continuous delivery of a lengthy piece of dialogue from the Doctor as he pulls on his coat, exits the TARDIS, and stops speaking only when he realises they are being held at gunpoint:

“THE DOCTOR: (CONT’D) (laughing) 1979, hell of a year, China invades Vietnam, the Muppet Movie, love that film, Margaret Thatcher, Skylab falls to Earth, with a little bit of help from me, nearly took off my thumb, and I love my thumb, I need my thumb, I’m very attached to... my thumb...”

(Davies 2006)

Whilst the continuous dialogue may help ‘sew’ the two locations together into one cohesive sequence, the construction of the illusion would be problematic. How to get the two actors playing the Doctor and Rose from one set, on one side of the studio, to another set, on the other side of the studio, in a continuous recording? As with “An Unearthly Child”, one solution would be to ‘cut’ at the point of leaving the TARDIS interior set, and resume recording at the TARDIS exterior set. However, the continuous dialogue being spoken ‘over the edit’ would make this difficult to accomplish for timing purposes, especially as the delivery of the dialogue is scripted with the intention for fast-paced delivery. In the studio space, I timed the real distance between the two sets at a moderately fast walking speed. It came to about 6 seconds. I therefore would need a ‘real time’ cutaway to cut to visually, to cover the time it takes for the two actors to cross the studio floor. I had already planned for a wide-shot to be filmed on location to ‘sell’ the idea of the TARDIS being in moorlands, so there was already a solution at hand. However, visual continuity becomes important to convey the real-time illusion of action, expressed as action match editing (Rabiger 2003, p.52). As the Doctor exits the TARDIS in the wide-shot, he should finish pulling his coat on, and then stand with Rose, hands above their heads. These actions would then knit together with the end of the first studio sequence, and the beginning of the second, as depicting below in figure 14.



Figure 14. Screenshots depicting movement from studio to location and back to studio, a discontinuity in production but a continuity in narrative.

The other consideration was the actor’s delivery of the dialogue at this point, which would have to be delivered while on the move, across the studio floor, picked up by the microphone the whole time, whilst visually we would cut away from the studio to the pre-recording wide-shot at the correct moment.

As discussed earlier, this wide-shot was planned to be filmed from a low angle to ensure that behind the Doctor and Rose’s heads is just the white light of the sky – a perfect match for the white cyclorama stretched behind the set in the studio. The

wide-shot does more than allow us to overcome the real-time issue of moving actors out of one set and into another, however. It also does more than introduce us to the geography of the moors which can be simulated afterwards in studio. It serves to establish a large number of soldiers in the story where in reality, only one existed due to the budget constraints on the experiment. This single shot therefore becomes an important lynchpin in the episode – it accomplishes three different things. To simulate more than one soldier, a split-screen technique was employed:



Figure 15a
Original sketch depicting the arrival of the TARDIS in the Scottish Highlands surrounded by guards.



Figure 15b
Screenshot of the final image following post production image layering.

Filming a static shot, the actor playing the soldier moved into a number of different positions, always bearing in mind the location of the Doctor and Rose. The different soldier positions did not overlap, which meant that in post production we could splice different regions of the shot together to create the illusion of many soldiers. It is important to stress that this non-linear editing technique did not disrupt the 1960s simulation, as the budget would have allowed for more extras than I could manage on my smaller budget. This technique simply allowed for a short-cut to be made. Yet, it is also indicative of my contemporary practitioner ‘self’ asserting during my re-enacting role-play, indicating the plurality of roles evident in undertaking the experiment. The use of this wide-shot did highlight the importance of shots such as this. They all concern establishing ideas in the mind of the audience that cannot be realised in the studio. Once we see five soldiers surrounding the TARDIS, we do not need to see them again. One will suffice. Once we see the large, rambling manor house in an extreme wide shot, we do not need to see it again. An indication of bricks and mortar behind our actors will provide the essential geographic continuity.

Another aspect of the script that would prove problematic to realise in real time was the transformation of the Host into a werewolf. In the original version produced in 2006, CGI techniques were used in conjunction with post production editing techniques to render the dramatic transformation of a boy into a large werewolf. Achieving such a result would test the constraints of the conditions of production. Without contemporary CGI techniques, I had to devise a solution to produce the same narrative development, as a dramatic turning point in the story. Two actors were used – one as the Host, the other as the werewolf. At the right moment in the story, a reverse angle of Rose could be chosen, watching in horror whilst off-camera, stage-hands switch the actors over. As the character is inside a cage at the time of transformation, a prop cage was constructed that was made of lightweight material, and featured no under section, so it could be lifted clear of the actors while they swapped over. Although this solution did not accommodate a gradual transformation, it allowed the focus to be on the dramatic moment of the reveal, and the reactions in the faces of those watching – I would argue where the real human drama was taking place. Not the actor, but the “acted upon” (Rabiger 2003, p.57). This replaces the concept of visual spectacle prevalent in contemporary production with the intimacy of human engagement via the close-up trope of television. An argument for or against the opposing approaches presented here is beyond the scope of this work, the difference is articulated as it demonstrates that although my directorial decision was guided by what the production conditions would and would not allow, the decision is ameliorated by an argument that I am simply working to the strengths of the medium as an intimate space.

A script alteration concerned the Doctor and Rose conversing with each other during the walk across the moors with the royal party. Originally I was planning on shooting the soldiers walking with the Doctor and Rose across fields which would be filmed (mute) on location. Filming from a wide angle would ensure lip-sync would not be a problem when overlaying the spoken dialogue from the Doctor and Rose live from the studio. However, logistically there was the problem of how to show a procession of soldiers, and the royal carriage, on a modest budget. Furthermore, the question was how to keep a ‘wide shot’ visually interesting for the duration of the sequence, as you would naturally want to cut in closer to move the audience closer to the action and identify with the characters. I couldn’t move closer without revealing lip-sync

issues as the sound would have to be fed live from studio and thus would not match the movement of actors' mouths on the film insert. Ultimately, I had to change the script to accommodate my budget, but also to accommodate the grammar of production issue, which is more pertinent. A director would not choose to stay wide for such a sequence, therefore I should not. I therefore decided to change the location of this scene to instead play against the side of the TARDIS, as the soldiers prepare to continue travelling, instead of actually after they have moved on. The altered scene ends with Captain Reynolds stating "We're back on the road, move on" (a line moved from earlier in the scene) and the Doctor and Rose depart the frame. This had the added advantage of keeping the TARDIS prop on screen a little longer, helping the scene look busier and more visually interesting, as otherwise the background would be just the plain white backdrop.

The episode required eight speaking parts, one of which was a minor part that I decided to remove, in order to ease the burden on the budget. Although this decision impacted on the control factors in the experiment, I argue it had limited impact. In the original script, Rose, whilst changing for dinner, finds a hiding maid in a closet, and they talk briefly before they are both discovered and dragged off by the monks. This scene sets up a character dynamic between Rose and the maid which features in the second half of the script. As I was not producing that, the removal of this scene would have negligible impact on the narrative that was unfolding in the first half. No other speaking parts were taken out, although the number of supporting actors (such as fighting monks, stable-hands and maids) were reduced as much as possible again to help manage the logistics and the budget. However, it is important to note that where the script calls for extras of these types, they are present in the re-enactment, just not in the quantity described in the script. This is not to do with the conditions of production, more to do with the available budget, and thus I would argue does not affect the experiment nor its results. Scene 13 features some small cuts due to budget constraints. However, these cuts do not impact on the overall research aims as they refer to the number of extras in the scene. Originally, two soldiers are referred to by name (Mackeson and Ramsay) and the script details:

"Two SOLDIERS – MACKESON & RAMSAY – are already by QUEEN VICTORIA's carriage. MACKESON is lifting out a SMALL

JEWELLERY CASE, shaped like a treasure chest. He carries it reverentially, RAMSAY as his escort.”

(Davies 2006)

As there was only one soldier for the production, in this scene just one soldier is seen carrying the case. Although this means he does not have an escort, as scripted, it still conveys the importance – the box he carries, reverentially, across the screen, whilst the Doctor and co look on. Captain Reynolds’ next line is curtailed slightly, as it refers to the rest of the soldiers. As none are visible in the frame, this line was removed as it would have drawn attention to their absence. Again, this small dialogue change was made due to budget constraints. A more appropriate budget for this work if undertaken for broadcast would have been able to afford another one or two soldiers who could have been placed within the scene. However, I do reflect now whether it was right to have omitted the line –with the soldiers off-camera, it would be enough to refer to them without raising suspicion. The focus is not on the soldiers, but on the other actors, and dialogue, in the scene at this moment. It was probably therefore a needless extraction.

The conditions of production impacted on how I could depict Queen Victoria riding in her carriage. It quickly became clear that it would be impossible to have horses in the studio. Although not entirely convincing, the horses were portrayed via sound effects, played into studio to depict horses waiting, and travelling, and arriving at the house. The carriage was referred to in dialogue: “You will approach the carriage and show all due deference”. From then on, Queen Victoria is shown in close-up, with laced material behind her depicting the back of her carriage (see figure 16). In reality, the actress playing Queen Victoria sat on the edge of the table in the dining room set, whilst the Doctor and Rose stood a couple of feet in front of her while to the side, a stage-hand held a piece of lace behind her.



Figure 16. Queen Victoria's carriage depicted in close-up only.

This approach avoided the cost (in terms of budget expenditure, but also of space requirement) of having a carriage in the studio; the relatively insignificant carriage could be conveyed more effectively in the manner I adopted. Yet, it is clear that the solution impacted on the decisions I would make as a director. The tight close-up approach, although appropriate due to the nature of the conversation and the introduction of the Queen, was a compositional choice driven in fact a lack of scenery around the Queen's head. Had more of a carriage set been a possibility, I would probably have tried to vary the shot more, to match the wider two-shot reverse-angle approach I took with the Doctor and Rose during the scene.

I planned a maximum of two recording breaks for the studio recording and tried to find appropriate junctures for these breaks to occur. The concluding two minutes of screen time – scenes 32 to 36 – build to the cliff-hanger and the metamorphosis of the Host into the werewolf. To depict a stylish, fast-paced sequence I decided to include music as a method of providing cohesion to the sequence which would be cutting between different scenes quite rapidly, and also to allow for an additional layer of synergy between images and sound. Contemporary *Doctor Who* uses a great many music cues per episode, requiring approximately 30 minutes of music per 45 minute episode (Russell 2006, p.131). It was important to include this aspect of contemporary production within the 1960s remake. I had included music in the fight

sequence at the beginning of the episode, but that music was, by its very nature, a ‘sound bed’ to provide a sense of action and urgency to the proceedings. The only other music-related aspect was the title sequence which, like the fight sequence, was played in from videotape. So, the concluding moments of the episode, told within the live multi-camera environment, provided a good opportunity to develop a methodology of working with highly synergistic music and live dialogue cues and blocking of action. The complexity of the execution for this led to the decision to encapsulate this music sequence in its own recording block. This allowed for multiple retakes to get it right, without the need to re-record lots of material. With the final recording block therefore set at just 4 and a half pages of script, I had to find an appropriate point to create another recording break in the preceding 25 and a half pages. Stepping through the script it became clear that from a technical point of view, the first half of the script was complex, featuring all of the pre-filmed VT clips. Therefore I introduced a recording break at the point soon after these had occurred – when the Doctor and Rose join the soldiers travelling to the house (10 and a half pages in). So, the recording blocks were organised as follows: Block 1 – 10.5 pages, Block 2 – 15 pages, and Block 3 – 4.5 pages. Planning the number of blocks in such a way adopted the approach used by the BBC, as noted by director Christopher Barry ((no date) cited Bentham 1986, p.171):

“The stopping and cutting of tape was always said to be very expensive, not only in the cost of the tape but also in the man hours needed to do it. You certainly wasted studio time and resources, so one was actively discouraged. In fact at various times there would be BBC rulings issued down concerning the number of breaks you could have in a recording, so you had to choose your breaks with great discretion to make best use of them.”

The post-transmission script was modified to reflect the changes brought on by the conditions of practice. This included changing the format of the script to adopt the multi-camera script layout, having all scene directions and dialogue on the right hand side of the page, giving space for shot number, camera set up, frame size and cut point on the left (Fairweather 1998, p.125).

3.4 Method: Undertaking the Studio Re-enactment

The conditions of practice dictated that a single day of location filming could be allocated to the episode. This took place on the 21st of September 2009 on location at Breamore House in Dorset. Simulating the use of a 16 mm film camera and corresponding production team, a number of sequences were filmed that benefited from the location space aesthetic. The breakdown of scenes in appendix 3 provides details of what material was filmed on location in comparison to the studio.

I shall now turn to the studio re-enactment itself, which, due to the status of studio space in the practice of 1960s production, provides the core of the experiment.

The episode moved into rehearsals (22nd – 24th September 2009) while the location footage was edited into sequences ready to play into the studio live, and the sets were prepared ready for installation. Rehearsals saw the entire cast get together for the first time, and I had three days to work with them and devise the blocking of action, camera positions and shots. These would then be transferred onto top-down plans of the studio and camera cue cards would be created for each camera operator (see appendix 3). A shooting script would also be prepared based on the plans developed in rehearsal. It was important therefore that the rehearsal space corresponded to the studio floor space, and I was able to refer to the model of the studio that had been worked with previously to ensure the space was simulated in rehearsal, with tables, chairs, and masking tape used to indicate the position of sets, walls and props.

During the final day of rehearsal on the 24th September, I divided my time between rehearsing with the actors and overseeing the set being erected and lit in the studio. A problem that I had not planned for was the light spillage between sets. Due to the relatively small size of the studio, all the sets were crowded up against each other, indeed, as discussed earlier, a number of sets came together – the cellar and hallway, the dining room and house exterior. The moorlands exterior and the house exterior were required to be brightly lit, day-time exterior locations. The cellar interior, by contrast, was supposed to be very dark and moodily lit, with shadows on the walls. However, the cellar set was only comprised of one long set wall, and thus was

exposed to the bright lights of the other sets. This problem could only be alleviated by a change in the lighting setup during recording. As luck would have it, the moorlands exterior scenes were contained in block 1, and took place after the title sequence. This allowed us to begin recording with the lights dimmed in this set, allowing for the Steward and Lady Isobel to find themselves in the (dark) cellar opposite the cage, and then during the title sequence the lights could come up, in time for the Doctor and Rose to step out of the TARDIS in this set and be confronted by Captain Reynolds. At the end of the block, which featured no more of the cellar location, the lights could be faded out again so no further light pollution could occur. This light pollution factor was not one I had considered during preparation for the experiment, and I was fortunately able to limit its impact. However, it points to a key area of consideration when planning the execution of live drama such as this in a closed studio environment.

The studio recording day took place on Friday the 25th September. A practised, modern approach to shooting contemporary dialogue scenes is to film the scene from two angles, over each character's shoulder (a useful discussion of this is expressed as the subject to object axis (Rabiger 2003)). The first live sequence in the studio was such a dialogue exchange between the characters of Father Angelo and the Steward. I had planned in rehearsal to have two cameras covering the scene, one over each shoulder. This single camera technique does not translate well to live studio as it is difficult to obtain two good angles over opposing shoulders simultaneously without getting the other camera in shot. Typically, this type of scene would involve the actors moving more to show their face to the camera in time with their dialogue, or, both actors would face the camera, projecting outwards towards the 'fourth wall' in a theatrical style. As this scene was written as a confrontation, it was important to have the characters facing each other. Although complex to accommodate, as this was the first camera and actor setup of the first recording block, it was achievable. Camera and actor positioning could be tuned without pressure of live recording. Had the scene occurred later in the story, a different plan for coverage would have been required. The 'fourth wall' projection solution is indeed used in the episode where the cast look up at the telescope and Queen Victoria talks about her late husband. The actress is able to use the telescope to motivate her approach to the scene, fixing her eyes on her husband's creation, thus giving meaning to the staring out of shot.

Without this kind of motivational rationale, the fourth wall becomes a constraint. Scenes in the cellar also suggest a reverse angle approach for the confrontation between Rose and the Host. However, it is notable that the coverage of these scenes does not follow the same approach as the scene involving the Steward and Father Angelo. This is not because of the problem of cameras being in each other's shot (although, this would have been an issue if this type of filming had been attempted). Rather, the lack of space in the studio meant that the set had only two walls, with no space for a further wall behind Rose. So although we could film the Host staring down the camera lens, and thus involve the audience and provide that intimate angle on the action, we could not achieve the 'mirror' reverse shot of Rose, or it would have actually revealed the house exterior set behind her. Shots of Rose invariably in this set are filmed side-on, which has the advantage of picking up the other actors chained up with her in the cellar, but reduces the audience's involvement with her character and the ensuing confrontation that takes place over a number of scenes. This stylistic divergence from the reverse angles (in figure 17a below) is unfortunate as it disrupts stylistic consistency with no story-telling rationale.



Figure 17a. Exterior Reverse Angles depicting Father Angelo and the Steward's confrontation.

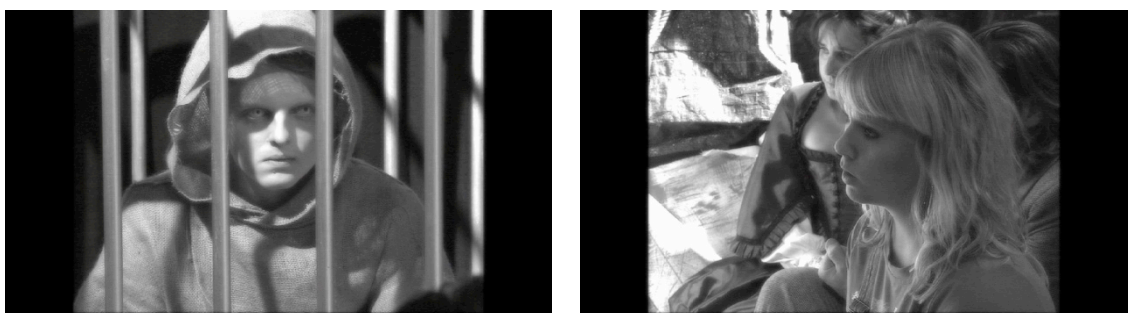


Figure 17b. Exterior Reverse Angles depicting Rose and the Host.

There were a number of occasions during rehearsals when it was clear the plan would have to change. Even a standard slow camera pan from Rose to the Host in the cellar set could not be achieved as planned due to the position of the lights overhead.

As the camera panned across the set, the full shadow of the camera and operator is projected clearly onto the back wall of the set (see “Gallery Spaces” in the Analysis section on the DVD). An alternative had to be found. At this point in the proceedings, the other three cameras were required in other positions covering other sets, thus I had chosen to use a single camera to show the audience both Rose, and the Host, by panning between them (instead of the reverse-angle approach discussed earlier). Unfortunately the only way of overcoming the shadow problem was to lose the pan, and focus instead on a shot of the Host raising his finger to his lips. To make this work as a single shot, a more stylised approach was taken whereby just the face of the host would be shown as a close-up. Had I merely been constructing an idea of the likely finished artefact from the studio floor plans drawn up in rehearsal, I would not have encountered this connection between studio space implications (in this case, the position of the lights in relationship to the position of the camera and the set) and the final artefact created.

As discussed earlier, the end of the first recording block contained lengthy dialogue between the Doctor and Rose as they walk across the moorlands with the royal party; this was changed for my re-enactment to take place against the TARDIS whilst the soldiers prepare to move on. For the dialogue to function effectively in this changed location, it was important that the dialogue was spoken discretely, quietly, or else the soldiers would overhear. However, on reviewing the scene following recording it is clear that the dialogue is being projected quite loudly between the two actors. This undermines the secretive nature of their exchange (described in the script as ‘sotto’), and is a result of the ramping up of anxiety throughout the cast and crew as we near the end of the complex first block of recording. During recording of the block, frequent large mistakes were being made that forced us to return to the beginning and start again. As the block entailed the four cameras covering multiple sets, any visual cut to the wrong camera would therefore be catastrophic for the recording as we would be violently displaced from the current location of drama, forcing us to begin recording again from the very start. Tension would mount as we got closer and closer to the end of the block, without – yet - making mistakes. One time we could not cut to reveal Queen Victoria in her carriage as another camera had not tracked backwards to its planned position, and was therefore blocking the Queen from the camera trained on her. So, by the time we eventually got to the Doctor and Rose’s

dialogue exchange at the end of the block, tensions were running high not to make any mistakes. The tension drives the performance, and the discrete dialogue becomes overly projected. What is particularly interesting about this is my role as director. Situated in the gallery and thus disconnected physically from the actors, the focus had turned from performance to technical achievement. Not making a technical error had become the goal, instead of crafting a genuine performance with the successful marriage of actor and technique. I was not even aware of the overly projected nature of the dialogue until reviewing afterwards, when I had moved from studio director to objective viewer.

Other examples of this priority for ‘technical mistake avoidance’ occurred during the setting up of a scene in the house exterior, where a large group of actors arrive and hold a lengthy discussion. Upon reviewing the gallery feed, the Floor Manager can be heard commenting that there is a camera cable visible on the floor, at the bottom of the shot. My response is to say not to worry about it – it could be anything. My actual words were: it could be a snake. Although this may seem arbitrary and superfluous, due to the limitations of production, this observation offers realism relative to the conditions. The disregard for details such as this is testament to the shift in focus that occurred during this type of live studio drama recording. The priority is on recording the material, with actors and cameras in the right place at the right time, the vision mixer cutting to the right shots on cue. Reflecting now, it makes me consider that the 1960s studio director is more a production manager – intent on adhering to the schedule with less of an eye on performance and achieving the highest standards possible from the actors and the crew. Perhaps this is being unfairly critical, yet the segregation of rehearsal as a discrete unit of practice devoid of technology prior to the studio day helps to reinforce the idea that there is a major shift in approach, not just of practice, but of expectation for the director. A move from rehearsal space - people and ideas driven - to technological space, driven instead by the complexity of live production.

Increasingly as the day went on I spent more and more time in the studio space. This occurred whenever the plan had to shift and change, and makes me think that these technical constraints opened a door to allow me to direct actors again, usefully blurring the boundaries between rehearsal and production. In this way, I would argue

that the studio space becomes a liminal boundary, where the requirements to change the plan exposed by the re-enactment enable a blurring of space – performance reverting to rehearsal space and back again.

Reviewing the gallery feed artefact “Gallery Voices” on the DVD, there is a moment when I am on the studio floor, directing an actor to lean forward as he delivers the line, “I’m sorry my lady, but they’ve got my wife!” I can see myself encouraging the actor to lean far further forwards than would be natural, to ensure that the camera can feature him adequately in the shot. The actor, unused to this unusual motivation for movement, tries valiantly with the material, and mimics shaking the shoulders of the Queen as he has now had to move much closer to her in the space. He tries speaking to me about it, but I have already moved away. Again I argue that events like these confirm the *deprioritisation of performance* as a concern for me as the director – the subtlety of acting for the screen in contemporary production lost to the demands of the live studio work ethic. However, the resulting sequence, with a sense of heightened motion strongly echoes 1960s practice of theatrical presentation.

Block 2 was originally planned as the longest block, 15 pages of uninterrupted recording. During camera rehearsal on the studio day it became clear that this was going to prove very challenging. Not because of the length of material to cover, but because the nature of the material included a sequence that contained no dialogue, only a montage of three elements:

- A Monk creating a sleep-inducing potion in the kitchen
- Rose admiring various outfits in her bedroom
- A soldier standing guard in a hallway, eventually succumbing to sleep



Figure 18. A montage of three inter-cutting scenes with no dialogue proved difficult to time effectively in studio.

What I learned was that because this montage contained no dialogue, it became difficult to time the different elements to intersect with each other. It was impossible to cue the actors, and the camera operators, for this relatively simple sequence of staged directions to unfold on screen. In the end, I divided block 2 into two separate sections, effectively producing another block, with this sequence right at the top to allow for fast re-recording if timing issues arose. This way I would not have to repeat any material filmed up to this point. Making this decision, within the constraints of the 1960s simulation, meant that I was now required to make three post-production edits (to adjoin the best takes of block 1, block 2, block 3 and now block 4) and not just two edits. Whilst this does not 'break' the rules of the simulation, it does impact on my simulated 1960s budget where each edit would have cost a substantial percentage of the total budget of the episode, which was £2,500 in 1963 (Bentham 1986, p.92). What I learned here was that dialogue plays a crucial role in 1960s live studio drama; it provides a built-in cueing system that allows actors and crew to retain timings and positions beyond that which floor managers would be able to accommodate. The "Tooth and Claw" script was designed with single-camera film grammar, montage being one tool available (montage by its very nature means editing, a post-production technique which was, as expressed above, prohibitively expensive for live studio-based drama recorded onto videotape). My solution to provide a means of effectively facilitating visual montage in live studio was to construct a specific self-contained block to affect the sequence.

The final recording block was the shortest of the three, covering 4.5 pages of script, devised as a music-led sequence. The use of music has evolved along with the conditions of production. Music was predominantly used to underscore and highlight dramatic moments, and set particular moods, to give the audience an emotional key to a scene (Proferes 2005). There was little, if any, interlocking synergy between musical motifs and visual grammar due to the non-exacting nature of live performance with music prepared beforehand with no visual cues to work with. However, contemporary drama uses music in a very different way to punctuate and enhance the visual subtleties of production grammar. The "Tooth and Claw" script is no exception, and in order to retain the narrative, tone and style of the text I would need to include synergistic musical elements within the constraints of the 1960s

conditions of practice. This final, music-led block features action that can be summarised by the following description:

The moon is revealed high in the night sky. The Host reacts to the light, beginning to transform into a werewolf. Rose and the others try to break the chain to escape. In the dining room, Father Angelo stands muttering in Latin by the window while the Doctor and Sir Robert exit fast, leaving Captain Reynolds protecting the Queen. In the cellar, Rose and the others are still attempting to break free, while the werewolf is trying to escape its cage. Captain Reynolds confronts Father Angelo, who knocks him out and approaches the Queen. Rose and the others break free from their chain as the Doctor enters. The werewolf breaks out of the cage as the others escape, but the Doctor stays behind to watch in delight – then alarm. End credits.

The process of taking this fast-paced, complex music sequence and enabling it to be shaped by the conditions of 1960s practice was liberating. It provides evidence that contemporary drama production can indeed be produced in those ‘constraining’ conditions, although certain elements did change from those scripted which I will now discuss.

The music sequence was contained to its own short block to ensure we could record numerous takes before selecting the best one for editing into the final episode. The music itself was the same piece of orchestral music used in the 2006 source episode, edited for the appropriate amount of screen time. It therefore works to convey the tone and pace that the script intended. The music was also joined to the closing credits theme music so they ran together, and could be played into the studio live as one single music cue. With the timing of the cut to the end credits VT sequence pre-determined by the point the music changes, the remaining number of seconds under the music could be used to time the actors moving between the scenes (scene 31A to scene 36) and delivering their dialogue. There was approximately a minute of material to choreograph in time with the music, which could be played live during rehearsals so the actors could get a sense of the timing. During studio recording, the music would not be able to play live in the studio as it would be picked up on the microphones and interfere with the recording of dialogue, so once the actors had got a sense of the timings, they had to perform ‘cold’. This required them to speak their

dialogue at a higher level than normal, straining over the music that was being recorded in the overall sound mix.

It took six takes to obtain, from my stand-point as director, a satisfactory performance, combining accurate camera movements, actor movements including stage fighting, dialogue, and special prop actions such as the werewolf bursting out of its cage. The gallery feed on the DVD (“Gallery Voices”) demonstrates the numerous takes, and mistakes, to get all these elements to work together with synergy. As the recording of this ambitious sequence took place at the end of a lengthy production schedule, tiredness had crept in and it was proving difficult for everyone to keep focused and concentrated. The positive note about this was, the production team were as experienced as they were ever going to be by this point, and were therefore able to keep up with the fast-paced demands of the sequence.

3.5 Conclusion

This chapter is presented as the first of two that focus specifically upon the re-enactment experiment. This first chapter provided a critical account of the decision-making processes required to produce the contemporary script within the simulated 1960s production space. It first looked at adopting the conditions of production, arguing for a reconstruction approach to build an effective environment within which to conduct the experiment. It then examined the script’s requirements for logistics, with a focus on the use of space, to determine how the script needed to be adapted to work within the conditions of production. This provided a lens through which I could establish the most effective use of location space and studio space. Finally, I turned to the decisions made during the re-enactment itself, with a focus on the studio day.

The following chapter will provide an analysis of the decisions made, reflecting on the approaches taken and reviewing the implementation of the re-enactment methodology.

CHAPTER 4

The “Tooth and Claw” Experiment: Part 2

4.1 Introduction

The re-enactment experiment was designed to respond to the following research enquiry: How would the decision-making process of directing contemporary television drama be affected by the conditions of 1960s production space? The experiment focused on a specific source text, the 2006 *Doctor Who* episode “Tooth and Claw,” to explore how the realisation of the script would be affected by 1960s conditions of production.

This chapter continues the reporting of the re-enactment experiment, specifically, it moves on from the discussion of method in the previous chapter to reflect on the results of the work and present the findings. This includes a reflection on my role as a television drama director within the simulated conditions of production. The process I undertook, as an ‘experience-laden’ contemporary drama director, provided me with a significant opportunity to explore, through practice, the impact of spaces in 1960s television drama. The chapter then turns to discuss the methodology employed, reflecting on the design and the procedures adopted. I will discuss the effectiveness of the simulation, and the propose ways in which this combination of re-enactment, remake and reconstruction adds to Jacobs’s (2007) reconstruction approach.

4.2 The Findings

In this section I ‘step back’ from the simulation to reflect on the experiences that were shaped by the experiment. I shall begin by focusing on the extent to which the contemporary script could be brought to life within the simulated conditions of 1960s practice. I will then discuss how the process of working within the simulation illuminated the mechanisms, constraints and possibilities that my work as a director was influenced by.

Contemporary aspects of the script such as the dialogue, pacing, use of music and visual storytelling scope were able to be retained, even within the much smaller studio being used for the experiment than was used by *Doctor Who* in the early 1960s. Certain elements of the script, most notably the visual representation of the observatory and telescope, were altered to fit the spatial constraints. I would argue however that the solution to this problem, the utilisation of the fourth-wall, enabled me to identify the power of theatrical presentation as a creative response.

The fourth wall – a liminal space where production design ends and audience imagination begins has proved to be a powerful unseen space harnessed through studio production. Examples of this from the original *Doctor Who* series in the 1960s, include a shadow of a cave man approaching the TARDIS in “An Unearthly Child” (to create a cliff-hanger, and because there was no as-yet actor cast as the caveman character in that episode), and an unseen Dalek – save for its sink plunger - menacing Barbara (as the Dalek machines had at that point not been fully constructed). Readers of the *Radio Times* voted the entrance of the Daleks as the second greatest moment in the history of television drama (Cull 2001), indicating the powerful nature of the use of the fourth wall. I was appreciative of the fourth wall as it gave me additional choices as a director, unshackled by budget and spatial restraints. Through the process of directing within this experiment, I would suggest that the concept of the fourth wall as an unseen space liberates production out of the studio; literally, there is no ‘fourth wall’ to constrain.

In chapter 1 I discussed how television draws from theatre and film to define its own identity; I suggest it is the use of the fourth wall that acts as an appropriation of radio drama’s use of audience imagination, of the unseen, that infused early television drama through effective use of unseen space. In the 2006 “Tooth and Claw”, audiences were exposed to a visual effects spectacle to realise the boy metamorphosing into a CGI werewolf. In my re-enactment, the transformation is achieved off-screen through the use of actor reaction shots and growling sound effects. In another example, Queen Victoria stares off-screen at the telescope while talking about her dead husband. The actress engaging with the fourth wall in this way helps her performance as she negates eye contact with the other actors, yet the need for it emerged simply from the technical limitation of camera placement in the

available studio space where it was not possible, within the two-walled set, to cross-cut between characters facing and talking to each other without shooting off-set.

Nelson (2007, p.11) argues that television is increasingly cinematic, and indicates that the term may refer to:

“...an enhanced visual means of story-telling in place of the dialogue-led television play with its theatrical, rather than filmic, heritage.”

A significant aspect of the re-enactment was to discover the extent to which I could retain the contemporary approach to action and pace that the script called for - promoting visual-led sequences as opposed to dialogue-led, although, it must be noted that the script itself contains a moderate amount of exposition to convey the story. Complex sequences to re-enact in the simulation included the early fight sequence. The realisation of the fight sequence via pre-filmed insert, using film-based production grammar, was a clear priority in terms of deliberating the best use of filmed material for the episode. In the previous chapter I discussed a similar fight sequence conveyed in the 1963 episode “The Fire Maker” where two cavemen move to fight each other in the studio set, before cutting to a pre-filmed single-camera fight recorded previously. The technique is exactly the same. Although there is, in the re-enactment, a sudden change at this moment from relatively static dialogue-based delivery to a fast-paced, single-camera style on location, I argue that there is appropriate continuity based on the build-up to the fight in the studio, and the sudden onset of music that comes in at the moment the visual cuts to the pre-filmed insert. The music takes attention away from the visuals and creates a moment of impact and spectacle. Using music and editing in this way provides a means of overcoming the issues of the spatially hybrid nature of the text.

Contemporary *Doctor Who* calls for a synergistic approach to musical accompaniment where music is used to signify emotion, tone and character intent. Editing pre-filmed material to the fast-paced music of the fight sequence is not problematic. By contrast, however, vision-mixing a fast-paced sequence in the studio space to a piece of music that requires certain visual cues to happen at particular instances of the score proved challenging. Historical drama rarely used music in this

way, opting for more of a sound-bed to provide an emotional tone to an episode. However, the “Tooth and Claw” re-enactment successfully produced such a contemporary approach to a sequence, within the simulated conditions of production. Admittedly, this is partially due to the reduction of a recording block to accommodate just the execution of this sequence alone, and therefore permit re-recording a number of times within the time-frame of the studio session in order to choose the ‘best’ take for inclusion. The practice of doing this highlighted to me the issues incumbent in such an approach which is why historical production didn’t engage in such techniques that appear the domain of post-produced edited material, yet it is important to stress that it was accomplished within the simulated conditions proving it was *possible*. Therefore, I was pleased with the re-enacted approach that challenged the actors and crew to produce a sequence that included specific musical timings and visual cues. It was important to include this sequence as it reflected the contemporary approach of the script and helped to ramp up the story-telling and the pace to make the most of the moment where the werewolf makes its appearance at the climax of the sequence.

Working within the 1960s limit on the number of recording blocks required me to prioritise how best to strategise their use, the start and end of which was the only way (beside playing in pre-filmed material) to free up the studio space from real-time delivery of the script. As the script was not written for the 1960s conditions, it did not need to avoid cutting from one location to another in real-time with the same actors present in each. 1960s television drama, following the ‘as-live’ model, would carefully construct a script to avoid such occurrences, inserting short scenes (or filmed material) to allow actors to move from one set to another (Sutton 1982). Subsequently, the two real-time issues I was required to overcome were the Doctor and Rose’s exit from the TARDIS, and the transformation of the werewolf (the exact mechanics of both solutions are discussed in detail in chapter 3). No instances of the script required modification due to the real-time, linear nature of recording as solutions were implemented in accordance with the possibilities offered by the conditions of practice. Appendix 2 provides a summary of all the required script changes. In all, there were 9 modifications. Five of these are in response to production constraints concerning the budget available to the experiment (see following section), leaving only four instances which were driven by the 1960s

production constraints. These relate to shortening an action sequence depicting monks overcoming resistance when breaking into the house, altering the location of dialogue between the Doctor and Rose to take place outside the TARDIS and not en-route to the Torchwood Estate, a small scene depicting Captain Reynolds placing the diamond inside a secure cabinet to ensure he remained at a different location, altering the location of the telescope scene to take place outside. None of these changes affected the telling of the story, yet they did curtail aspects of the script's expansive portrayal – reducing locations, and cutting back on a dramatic take-over sequence. The production conditions did, therefore, have an impact of limitation on the script, I argue this is in the form of not a constraint so much, as a glass ceiling on the storytelling potential – the story inherent in the script was visible, yet was held in place by the limitations of the conditions. None of the script changes, including the ones brought about by the budget and logistics of the simulation experiment itself, overly distorted the intention of the story, the plot, the characters, the pace, the 'essence' of what was being conveyed.

I shall now turn to discuss issues concerning place representation and how studio and location spaces combine to form a synergistic, spatially hybridised text. The script called for a wide range of locations that required representation on screen. Due to the need for dialogue in exterior settings, the studio space was needed to represent exterior spaces as well as interiors. Visual continuity of place from pre-filmed material to studio representation, such as the walls of the manor house being present in both spaces, ensured a synergistic approach. Studio space limited the number of sets that could be erected, and the observatory became victim to this yet I maintain that the solution of utilising the fourth wall, and seeing the observatory in a point of view shot, overcame the limitation with a creative response. Never was the production 'studio-bound' – there were a number of ways of breaking away from the studio, and these were employed as appropriate during the realisation of the script. Methods included the use of pre-filming material, the fourth wall, photo blow-ups, and the creative use of sound. Even with the smaller than Lime Grove studio available to me, at no point did I feel that I could not represent all locations that the script called for.

The technical limitations of the studio space provided a stimulating environment for creative approaches. The black and white, low resolution image provided scope for cutting corners which would not be possible with contemporary high resolution. Using a white curtain to simulate the moorland skyline is perhaps the most obvious example; contemporary green-screen technology would provide a similar workaround. Using roughly painted studio flats is another example – far cheaper than set construction needed for HD standards. The werewolf baying at the moon was realised by simply pinning a cut-out moon image to the black drape behind the set. This works as a technique in context of the historical practice yet certainly would result in much derision today. This provides greater scope for the representation of place (Bignell 2010, p.53) within studio spaces than current methods allow; the location-based filming alternative would require an expensive night shoot with, in all probability, a CGI moon added during post production.

Other methods of overcoming limitations included the use of location inserts, sound, and use of still images such as photographic blowups and paintings. Location inserts introduced discontinuous production techniques into the continuous studio recording environment, effectively rendering the continuous discontinuous, and creating a “hybridly spatialised text” (Bignell 2010, p.63). The most powerful technique employed via location inserts is the ability to establish the idea of an environment with a wide-shot filmed on location, followed by closer action recorded in studio. This enabled me to illustrate the Torchwood Estate through an establishing wide shot, before cutting to a small section mocked-up in the studio where the remainder of the action plays out. Location inserts also provided the opportunity of filming the fight sequence that takes place at the start of the episode which would prove impossible to effectively manage in a multi-camera studio environment. Again, the appropriation of film techniques used to record location inserts cancels out the time differential between historical and contemporary conditions of practice.

Sound was also used to break out of the studio limitations – as well as the growl sound effects employed to cover the werewolf transformation discussed earlier, other examples include attempts to convince audiences that a horse and carriage were present. This would have been more effective had I used a horse and cart on location to establish the idea in the mind of the audience. Just using the sound effects on their

own (along with some references to horse and carriage in dialogue) was ineffective. I also used a variety of still images to help overcome studio space limitations – the use of a photographic blow-up of a manor house with an observatory added to it was an effective way of visualising the observatory and telescope in the story. However, employing the use of painted images of the valley stand out as stylistically divergent and in hindsight were a mistake – a model shot, or real location photograph would have been more effective. Not even the low resolution hides their stylistic variance, at odds with the rest of the episode. This was something I was aware of during production too, and thinking back I could have removed them from the running order and substituted simple fades to black as an alternative. I can only surmise that the issue was de-prioritised by me as keeping to time and achieving technically satisfactory results in the studio were deemed more important. This relates back to something I raised earlier – my feelings as a director upon entering the studio environment. Whilst studio space is conducive to re-rehearsal and directorial decision-making, the adjacent gallery space limits the director's voice as their focus is drawn towards technical priority.

The concept of de-prioritising known issues is important to deliberate here. It is a concept born out of the practice-based re-enactment experience. Aspects of directorial consideration including creative, performance, and technical issues, become less important than the need to finish on time. While I knew that the use of painted images was not conducive of a stylistically-consistent approach to narrative, my mind was occupied by the technical requirements of the shooting script – e.g. the cameras and actors being in the right position, the vision mixing of the script to convey the story. As a director of multi-camera, the attention is always on the *next*, and not on the *now* – looking ahead, planning the next shot, the next cut, the next sound effect. This is very different to the contemporary focus on the individual shot that is being recorded at that precise moment, and leads me to consider that the director of 1960s drama simply can't focus on the 'moment'. Really – due to as live recording to tape with minimal post-production, the 'moment' is too late, it is already committed, therefore the priority becomes what is coming up, what is the next 'moment', and never the 'moment' itself.

An example of this was the visible camera cable on the floor of the manor house exterior set. Whilst details such as this are carefully scrutinised on a single-camera shoot, when the moment of that shot is the focus of all attention, directing from the gallery removes this intensity of focus from the director, and the realism demonstrable on screen. My inattentiveness to the issue, and derisory comment, “maybe a snake”, are testament to the attitude I adopted to ensure I could achieve the priority of finishing on time with the script recorded to tape. In fact, the floor manager asking me about the cable visible on screen adopted more the role of the contemporary director, whilst I became more a production manager, intent on the production schedule, and not focusing on the issues of story telling quality. Aside from spontaneous re-rehearsal to solve issues, the ‘directing’ felt very much consigned to the rehearsal room – devoid of technology. Once technology was introduced (on arrival in the studio), the role switched to one of ‘getting it done’, and ‘ticking the box’. As such, I was directing technology-actors and not human-actors. It was difficult to focus on the subtlety of performance – of actor faces, reactions, emphasis on dialogue – as there was a technological (and geographical) barrier between myself in the gallery and the text being recorded in the studio. Notions of subtlety were lost due to the numerous peripheral distractions – crew engaged in operation, calling out shots, etc. It is interesting how this is far removed from the contemporary silence that falls when cameras turn over nowadays. With the director in the same space as the actors (and microphones), silence becomes important. In the separation of studio and gallery spaces prevalent in 1960s production, sound from the crew is imperative for studio operation, yet again hinders the director’s ability to focus on the ‘moment’. I assert that gallery space and its relationship to studio space and the role of the director is an under-explored aspect of broadcasting history that I propose should be further explored. My work has illuminated for me the impact it has in comparison to contemporary television practice.

The production process of 1960s *Doctor Who* followed a typical model for BBC series and serials in that it included a rehearsal period separate from the television studio environment. The BBC written archives provide marked-up scripts and studio floor plans that demonstrate the rehearsal period is a creative process whereby the director and actors rehearse scenes and record the placement of actors and studio cameras, ready for the studio recording session. The spaces of rehearsal and

recording, or ‘rehearsal room’ and ‘studio’, are presented as quite separate, each possessing their own characteristics and meaning. Yet, I found that whilst the rehearsal space remained purely a rehearsal space, the studio recording space continued to oscillate between recording space and rehearsal space. In so doing, one of the primary determinants of difference between contemporary practice and historical practice disappeared. In contemporary practice, the director would inhabit the same space as the actors and crew, rehearsing and recording scenes one camera set-up at a time. With the apparent segregation of historical rehearsal and studio time, it appears that once you enter the studio, the plan has been created and is simply executed with minimal deviation. There is little time to ‘create’ in the studio, and the director is divorced from the actors by the physical space of the studio – the director sits in the gallery, the ‘nerve centre’ of the environment, while the actors inhabit the adjoining studio space. Yet, there were many times during the re-enactment where I had to enter the studio space and re-engage with the actors and the rehearsal process to overcome issues. Every time I did this, technical and spatial barriers (issues of lighting, camera shadows, cable lengths, problems of positioning cameras in the available space etc) ‘shorted out’ the time differential between the contemporary and historical approaches to production through this forced rehearsal reinvention. Due to time constraints, the rehearsal reinvention could be classified as moments of ‘creative emergency’, and I argue that I found them to be highly creative moments of decision-making; indeed, I would propose they are the essence of creative ‘reaction’ to the constraints of the studio space and a practical realisation of what I hypothesised in chapter 1 – studio-bound relating to springy, upwards movement manifested in rehearsal reinvention through instances of creative emergency.

An example of this is a sequence towards the end of “Tooth and Claw” in the third recording block. Rose and the others in the cellar attempt to break the chains that hold them away from the wall. We had planned for this to be accomplished by a series of shots that feature the actors pulling on chains that disappear out of shot, intercut with a close-up of the chain manacled to the wall (see appendix 4, ‘Block 3: All Cameras’ for the associated studio floor plan). This manacle could then, on a cue, break away. During camera rehearsal it became clear that during this music montage sequence it proved impossible to move a camera to the correct position to film the close-up of the manacle, and I had to rethink the sequence. The solution was to

redirect the actress playing Rose to hold the chain up and pull on it in a different fashion to the previous rehearsals, so the chain would be prominent in their shot all the time and thus eradicate the need to cut to a close-up of the chain. In a sense this was simplifying the sequence, and remains an example of rehearsing again with actors to overcome constraints of the studio space and in so doing return to the contemporary method of rehearse / record – fleetingly – until the creative emergency had passed and equilibrium of historical conditions restored.

A further example of the phenomenon occurred when it became clear that a pan from Rose chained in the cellar to reveal the boy in the cage could not be executed without revealing the shadow of the camera on the wall of the set (see ‘Block 2, Camera 4 Floor Plan’ in appendix 4). The creative response that I developed was to substitute this camera pan with a track forward, from Rose’s perspective, towards the boy in the cage sitting with his head bowed. As the camera moves closer, the boy lifts his head and raises his finger to his lips. Reflecting on this change, I believe the result is more effective. Instead of a sequence that shows us first Rose, and then the boy, each one at an angle to the camera looking ‘off camera’, we now have a sequence where we are putting the camera directly on the line of action, involving the audience more as they assume the point of view of Rose staring at this unnerving boy. This change of camera positioning was inspired by technical constraint. The time factor was a key driver in forcing this approach, as when I had plenty of time (during original rehearsal) I deemed it important to retain Rose in the sequence as well as the boy, a pan being the most appropriate way of visualising the scene. Ultimately, constraint led to liberation and a creative, more satisfactory response.

Overall, my conclusion is that from the view of a director charged with realising the script on screen, the “Tooth and Claw” script was able to be produced within 1960s production conditions. The historical conditions of production enabled the realisation of the contemporary text, retaining aspects of contemporary pacing and use of production grammar. I found that the constraints imposed by the conditions did engender creative and liberating responses that counteracted the impact of the constraints. Whilst there were significant issues impacting on the role of the director, the overall process was successfully contained to the five day period, producing a 22 minute episode that reflected an effective simulation of 1960s practice. The same

script segment would, following contemporary conditions, take approximately 6 days to film (based on a 12 day average filming period for a 45 minute episode) and at least a month in post-production. I would argue that the term ‘studio-bound’ related, in this experiment, to the ‘leaps and bounds’, positive definition as described in the thesis introduction, rather than inferring a limitation.

This section has drawn together reflections on my engagement as a director of television drama within the re-enactment experiment, and illuminated aspects of practice. These are the concepts of rehearsal and recording space, and the shorting-out of the time differential between conditions of production through the process of creative re-rehearsal. I have discussed the fourth wall as a powerful and expressive zone that breaks out of the studio limitations, as well as other methods of overcoming limitations such as filmed inserts and the use of sound. I have discussed how studio space and gallery space can influence and inhibit the voice of the director, and the concept of deprioritisation that is a symptom of that phenomenon. These are issues of 1960s production space that I have discovered through my engagement with the simulation, and my knowledge of contemporary practice provided me with the tools of reflection.

4.3 Reflections on the Re-enactment Methodology

One of the aims of the PhD was to attempt to develop Jacobs’s (2007) reconstruction approach. The concept of using archive material to form a way of reaching back into the past is fascinating. It was my intention to explore the possibilities that would arise from combining this approach with a re-enactment strategy as a way of extending the methodology through practice; thus the PhD has become the prototype for a new approach to broadcasting history research that combines different methodologies. The purpose of this section, at the end of the experiment, is to reflect on the approach taken and learn about its implementation, to provide a series of cues for further work in the field.

As argued in chapter 2, it is important to undertake a reflexive approach, and follow Bourdieu’s two-step back objectivation to reveal (to myself) how I am codifying

and implementing the methodology (Jenkins 1999, p.61) in order to be critical and honest in my appraisals. I should adopt a “confessional style” (Carspecken and MacGillivray 1998, p.175) and be true to myself in such reflections. Said *et al.* (1988, p.42) suggest that reflexivity in ‘critical’ research work is important in honestly and openly addressing issues concerning the validation of research findings.

It should be noted that the cost and logistics of producing artefacts is indeed a limitation of the methodology. The re-enactment process for broadcasting history requires access to production equipment, and, in this case, a multi-camera studio. I was fortunate to have access to the required equipment and facilities through working at a university that offers degrees in media production. This also gave me access to staff and students who had the knowledge, experience and enthusiasm required to adopt the conditions of production required for the effective simulation. The budget for the re-enacted text was £8,000 – which was used to hire actors for the production period, and paying for costumes, props and scenery. Therefore, it is not an inexpensive research endeavour; the need for practical application narrows the opportunities for researchers to engage with re-enactment methods.

I argue that the most important aspect of the methodology is the question of the validity of the experiment. Validity, as defined in chapter 2, refers to the control variance at play, which in the case of the experiment were the conditions of practice. Validity, then, can be measured by assessing the extent to which the 1960s conditions were effectively simulated, and the extent to which cast and crew performed in their ‘simulated’ roles.

Issues that affect the validity of the experiment are – (1) the studio space available and the access to historical production equipment, (2) the funding available, (3) the fact that we were not remaking the 2006 source text, thus introducing more variables than just the ‘conditions of production’ control measure, and (4), the experience of the cast and crew. I shall now discuss each of these in turn, reflecting on their impact on the validity of the experiment.

There are two representations of ‘laboratory’ for this experiment. The first relates to the studio space within which the experiment was conducted. The second relates to myself as a laboratory, reflexively testing myself as a re-enactor, directing 1960s television drama production. The most appropriate space for conducting the experiment would have been Lime Grove Studio D, home to *Doctor Who* during the historical period in question. However, the studio, and the equipment used for making monochrome 405 line television drama is not accessible for such experiments. Therefore, only by studying the specific characteristics of these lost properties through archival mining can one approximate, through simulation in such conditions, in order to undertake an experiment. I believe, from the documentation available, and through interviewing individuals concerned with production, that I was able to build up a reliable picture of how the studio was managed, and how the equipment operated. The only unfortunate factor is the size of the studio – the one that I was able to use was significantly smaller than the one at Lime Grove, which meant that, if anything, the relocation of the script would be more difficult to accomplish than would necessarily be the case. However, the fact that I reacted to this challenge by accommodating the set storage space at the side of the studio as a way of increasing available space – just in the same way that 1960s *Doctor Who* resorted to do – gave me confidence that I was indeed re-enacting similar solutions to issues they faced. Therefore, I maintain that this issue did not overtly distort the validity of the experiment.

The second validity issue relates to the budget available, which had an impact on realising some aspects of the script. As I was attempting to determine how the conditions of production would affect the realisation of the script, it is unfortunate that other drivers brought about changes too. However, as I can identify which changes were as a result of which driver, I suggest I have controlled this variable. It is true though that the building of a large telescope for the observatory set would have been beyond the remit of the budget, and this would have impacted significantly on the realisation of the script. However, the primary driver for not including such a large prop is not one of budget, but of space – and the impressive size of the telescope inferred by the script would have been beyond the scope of Lime Grove too. So, although issues of budget are an important consideration in

effectively managing a simulation of practice, I believe it did not have a detrimental effect on the experiment.

The third issue which impacts on validity is the concern that I did not ‘re-enact’ the original 2006 source text before making the 1960s version, something that would have allowed me to have the same cast and crew working on both productions. This would limit the variables between versions. However, this would be more of an issue if the outcome of the experiment was to analyse the artefacts themselves. Whilst the experiment produces an artefact, it is a by-product (evidence) of the process of making the text, which is the focus of the work as it relates to the ‘in the moment’ decision making of the director. Of course, it would not be possible to produce the 2006 version as the budget required would be prohibitive, and the availability of materials that document the production process of contemporary (and historical) *Doctor Who* help ensure a consistency of approach. The presence of the original script through the re-enactment experiment provided the consistent source material that both artefacts (the 2006 and the 1960s version) stemmed from.

The fourth issue is the lack of experience that the cast and crew had of this type of production process, and more than that, the challenge for them to ‘role-play’ within a simulation of historical practice. I believe I under-estimated the need to brief the crew adequately before the studio recording day. In the “I’ve Just Got to Trim the Moon” documentary on the DVD, there is a moment when a colleague asks if we should bring the crew into the gallery for a briefing. I hesitate – this briefing was not something I had considered at this point – yet, it was crucial to give the crew time to consider how the production conditions of 1960s drama manifested themselves in the activities of the crew. As we were working with a simulation of the technology, this was particularly important. Some aspects of the production, such as cameras moving to the correct position and offering the appropriate shot-size, were hampered as a result of the crew’s (and my own) inexperience of historical multi-camera directing within these conditions. It is therefore safe to assume I was slower than would have necessarily been the case had this experiment actually taken place in the 1960s. This issue affects the validity of the experiment, but again I believe it is a manageable commodity, and in essence something to be aware of but not to be inhibited by. Production personnel from the 1960s who are still practicing today are few and far

between, and as an experiment in re-enactment, I felt it important to place myself in the directorial position, to occupy a space as both researcher, and practitioner.

The focus on this experiment was the decision-making process of the director, and I had decided to undertake this role myself within the simulation as an aspect of the project. The alternative option would be to shadow a director and record observations. Carspecken and MacGillivray (1998) refer to power dynamics between the researcher and researched, where activities change due to the presence of a researcher. Reflecting on yourself takes away this unknown variable. I wished to develop the methodology by blending my experience as a director with my research enquiry, therefore I adopted this multiple-faceted role. Whilst it avoids issues arising between the researcher and the researched, it is not without its own implications.

The concept of re-enactment places the emphasis on the person themselves, the personal journey of the one doing the action of 're-enacting'. This "foregrounding of personal experiences" (Foley 1998, p.114) is a concept related to modes of experiential learning which require a reflexive approach in order to share the outcomes of the research. One must be prepared to reveal, and face the revelations, of what has been uncovered through the process. I argued that the re-enactment process takes the focus of the experiment, a process that exists within the creation of a media text – the 'remake' of the source material within (in this case) a changed set of conditions. This set of conditions surrounds the remade text in a reconstruction of historical practice. Although I inhabit the central space as a historical television drama director, I am also 'experience-laden' with the knowledge that I do so within an experiment, a simulation, and that itself is an arrangement I have devised as a researcher of broadcasting history. For the re-enactment to be true, I need to foreground the director role, yet I cannot deny the knowledge of the other two roles. Gadamer (cited Foley 1998, p.123) refers to a double hermeneutic – the self as author and reader together – and this becomes both a threat to the simulation but also the key to its success. For without the knowingness of contemporary practice, there would be no contrasting perspective from which to develop an argument. Placing myself at the centre of the experiment suggests I consider myself the laboratory – inhabiting and displaying multiple personalities at once. It is the experience I take that gives me the ability to be reflexive on practice, and the setting out of the ideas

for ‘director’ (re-enactment), ‘experimenter’ (remaking), and ‘researcher’ (reconstruction) helps me understand their relationships – stepping out of each zone until I finally exist outside each, looking in on the experiment from the outside in an attempt to achieve Bourdieu’s objectivication of objectivication.

Yet whilst the ‘knowingness’ that I carried into the simulator is not only unavoidable but *required* for judgements to be made, the knowledge of the crew is more destructive. As noted by Candy *et al.* (1985, p.102) “established patterns of behaviours are remarkably consistent and difficult to change,” and there was an argument between me and a member of the crew who could not see the purpose behind the structure of the studio recording day. Following historical practice, we should undertake camera rehearsal for each recording block, and then commit to a final run through prior to dinner, after which we return to the first recording block and record it to tape before moving to the second recording block and recording that, and so on. However, there was a certain amount of pressure to record the first block to tape after rehearsing that with the camera crew, prior to dinner and before moving onto camera rehearsal for the second block. This may seem logical as it may be better to record the first block to tape while it is still fresh in the minds of the crew, yet the video recording machine would not have been available until later that day, hence the practice of recording all the blocks at once in the evening. As the crew were not familiar with 1960s studio drama production, it took some time to rehearse each block in the studio until they were ready for recording. I found it difficult to hold the line on this, even though it was breaking the simulation and risking the validity of the results. In the end, the first block was recorded prior to dinner as a concession to the lack of experience of the crew meaning it was taking longer than expected to camera rehearse each recording block. As a result, it meant we departed from the established conditions of production which was regrettable, yet in a sense only the placement of the dinner break was moved – so it did not seem to have a destructive effect on the experiment overall. Yet it demonstrated the impact of knowingness, and ingrained patterns of behaviour, and how they can impact on role-play within the simulation.

In all, my experience of undertaking the experiment as ‘director’, ‘experimenter’ and ‘researcher’ was an enlightening one. The process of delivering a 2006 *Doctor Who*

episode within the conditions of 1960s television drama illuminated issues of process whilst delivering a 1960s-style artefact. The recording of the process through ‘behind the scenes’ camera crew, and importantly recording the gallery talk-back output for the entire recording day, gave me sources of evidence to inform the reporting of the experiment.

There is currently an impetus in television historiography to find new approaches to learning about early television drama, and new ways of engaging with archives to “trace the history of production spaces in television”. This is one of the issues being addressed in a current AHRC-funded research project being led by Jonathan Bignell at Reading University, “Spaces of Television.” My intention was to respond to this impetus by experimenting with a fusion of re-enactment, remake, and reconstruction. The PhD is, in part, intended to offer a first step into this experimental field and therefore contribute to the development of historiographic research methods. I believe my approach moves on the debate about reconstruction technique by engaging with practice, and thus illuminating not just textual analysis of artefacts, but explore the processes through which artefacts are created. I maintain that relying on programme documentation to build a ‘picture’ of the past provides a sterile outcome, devoid of human engagement. Re-enacting the process of making media within simulated conditions is an attempt to recapture that human texture that is absent in text-based approaches (Jacobs 2007, p.27).

The approach centres on the *process* of making television, not the artefacts themselves; these are of course created as a by-product of the re-enactment process and in turn offer an opportunity for objective research in their own right. Imaginatively re-creating “lost subjects of the past” (Thumim 2002, p.1) through re-enactment is a way of creating new evidence that has some credibility for analysis, as a stand-in for the actual ‘lived’ experiences which are lost to time and hazy memory recall.

As discussed earlier, Cooke (2003, p.43) compares early British drama to an iceberg, only a small extant amount viewable, the majority of it “will never see the light of day.” Ultimately, the re-enactment methodology aims to work within simulated conditions of practice in order to learn about the process of making early British

drama, and in so doing, new textual artefacts are generated for analysis. The resulting artefacts will never be the same as the original, but through the process of re-creating them we are able to uncover information about their production, to reveal more of the iceberg.

4.4 Conclusion

This chapter has concluded the experiment which illustrated, through practice, how historical production spaces and technologies impact on the work of the director, in comparison to contemporary methods of production. I discussed the results of the experiment, and the factors that affected the realisation of the script within the simulation. This included issues of representation of place, establishing continuity between location and studio, issues of real-time storytelling, and retaining contemporary aspects of practice. I argue that the historical conditions of practice allow for contemporary notions such as pace, musical synergy and the wide vistas required by the contemporary script, indicating that the differences between conditions of practice, and the potential they offer, or curtail storytelling, is not as extreme as popular views suggest. The chapter provided a reflective account of the role of the director from a “knowing” vantage point of myself as director / researcher entering a simulation of practice. I discussed ways of breaking away from studio space limitations, such as the fourth wall, and blurring of rehearsal and studio spaces brought about by rehearsal reinvention. I reflected on the deprioritisation of issues, and how the gallery space impacted on my voice as a director, as well as assuming the role of a production manager within the gallery space.

The chapter then turned to reflect on the methodology, combining archive reconstruction with remake and re-enactment to form a new extension to Jacobs’s (2007) exploratory bridge to archival research. I argued for the re-enactment method as a timely intervention into historiography, illuminating issues of human intervention within broadcast history text creation. I reflected on the experiment as conducted, in particular the limitations of the design and implementation such as issues of validity, the ‘space’ of the laboratory as both studio and also myself as researcher, experimenter, and television director. I also discussed issues of

knowingness, arguing for this not as a inhibitor to being objective but the key to learning through contemporary comparisons.

CONCLUSIONS

The aim of the research was to challenge the notion *studio-bound* as a term to describe the limiting, constraining space of British television drama production in the 1960s. Furthermore, it was to explore the value of developing a re-enactment methodology that builds on historiographic archive techniques to gain new insight into contemporary and historical conditions of production and offer a new approach for television historiography.

This conclusion revisits some of the evidence and arguments in the thesis and draws together overall the contribution to knowledge. In so doing, I am attempting to undertake Bourdieu's second 'step back' from my role as experimenter and director within the study to "reveal and unmask the techniques of the observer' codification" (Jenkins 1999, p.49). This positioning on the periphery of the exegesis gives me an opportunity to reflect to address the most important lessons to be learnt from the work; I will also suggest future research which might draw from this thesis.

Studio Space and the 1960s Conditions of Production

Studio space is a concept linked with conditions of production, a fundamental principle I did not fully appreciate at the beginning of the thesis' journey. I began by questioning the constraining connotations of the popular usage of the term 'studio-bound' and how it is used to negatively describe television production when compared with contemporary approaches. Studio space is affected by conditions of production that form a framework around practice – and incorporate technical, procedural and institutional dimensions, as well as being informed by the geographic location of production. The original hypothesis was that, due to the expressive nature of the representation of place demonstrable in 1960s *Doctor Who*, compared to the contemporary series, moving away from the studio and into location was, in some ways, to the detriment of the role of the director. This hypothesis led the way for the practice-based investigation I undertook that examined the creative possibilities of historical practice through their application to a contemporary *Doctor Who* script. Chapter 1 drew together the developments of television that formed the conditions of production that were to be simulated in the experiment, and then explored the

application of creative solutions evidenced through examining early *Doctor Who* episodes and interviewing practitioners. This provided a sense of how the constraining characteristics could lead to a creative response, and I then put that to the test through the application of the contemporary script to see to what extent that script could be realised ‘out of its time’, within supposedly inferior production circumstances. I learned that *studio-bound*, with its negative connotations, is an inappropriate term, as the work was never constricted by the four walls of a television studio. The studio space has implications for the representation of place, and the process of directing. Representation of place was liberated by use of the fourth wall, film inserts, photographic blowups, sound – the careful seeding of an idea of place; the establishment of geography. The process of directing was constrained by separate rehearsal, gallery and studio spaces, yet the process of rehearsal reinvention engages the director in a process akin to contemporary drama – working with cast and crew in the studio.

‘Studio space’ is a term used to describe the environment in which place can be represented within studio conditions. The studio space itself comprises a network of distinct geographies - including separate spaces for rehearsal, the control room or ‘gallery’, and a separate sound ‘booth’ where technicians can focus on issues of sound recording. The multi-camera studio director is located during production within the gallery space, and the activity in this space during recording impacts on their work. I have found that the focus on what is coming up next always dominates the moment of recording itself, which prevents the director from focusing on nuances of performance. The vocal crew, engaging with the production, become part of the company of actors, all contributing to bringing the script to the screen, all performing and feeding off each other, all ‘visible’ on screen. Gallery space brings to the fore the idea of human creation of cast and crew working together on a text that embodies its creation. The gallery space inhibits the director’s engagement with actors through the physical separation that the space incurs; yet, the director, through engaging with issues of constraint can enter the studio space and again adopt the characteristics of director, working with actors and crew to overcome creative emergencies through rehearsal reinvention. The manner in which the gallery space impacts on the role of the director was one that manifested itself through the practice of the experiment.

Implications for British Television Drama Production

If historical studio space provides a powerful, expressive zone that represents place and creates “a world in which the show can take place” (Burnett and Hall 1996, p.17), then how does moving beyond this space become an advancement for storytelling possibilities? The medium’s gravitation towards filmic grammar and presentation now requires a pristine High Definition image and the corresponding cinematic production values. Yet, this quest for detail and increased aesthetic realism requires real-world locations that accommodate the requirements of the script. It can be no coincidence that the stereotypical *Doctor Who* representation of alien place became a quarry as soon as it moved away from the studio, just as *The Avengers* relied on the suburban belt around Elstree Studios for exterior representations (Bignell 2010, p.58). I have argued that location-based production is as constraining as the studio it purports to rise above, yet without the same possibilities for creative reaction to counteract the limitations that the historical conditions allowed. This state of affairs, combined with the current economical climate in the UK and shrinking production budgets, leads me to surmise that television drama production is heading into an evolutionary cul-de-sac. I argue it is time for television drama to flex its muscles of intimacy. As director Waris Hussein argues:

“A face which is telling you something of interest, I mean if they’re not telling you something of interest, you know, forget it, but a face is the most eloquent thing you can have on television and I still maintain that.”

(personal communication, January, 2008)

Contemporary programme makers should consider and benefit from the creative liberations possible with expressive studio space, and experiment less in a quest for cinematic realism, but more for a truth of intimacy. The BBC-owned Langham group was established in 1956 to develop a grammar of production for television, to help find its place between theatre and film (Mulvey 2007, p.7). Perhaps it is time to make use of previous production contexts and engage with representation of place, to return to television’s strength of intimacy to harness new creative possibilities.

Implications for Broadcast Historiography

The re-enactment approach I have developed in the thesis crosses the tentative bridge (Jacobs 2007, p.4) that Jacobs has constructed in his work concerning archive reconstruction, by offering a new perspective for historiography. The thesis offers scope, which integrates with current research investigations, such as the AHRC project “Spaces of Television – Production, Site and Style” (2010-2014), and as such form parts of wider research, designed to stimulate new academic investigations and approaches.

Jacobs’ reconstruction technique offers ways to reconstruct missing television, yet it does so through the interpretation of archive fragments. The resulting judgements inform a reconstruction in text form. I argue that any resulting text-based description is *not* a reconstruction; to *reconstruct* a televisual artefact is to *remake* a televisual artefact. My re-enactment approach thus decentres the archive focus to instead use it to inform the creation of the simulation. Placing re-enactment at the centre of the experience uncovers the hidden experience of the process, producing historical television artefacts. The artefacts themselves become the result of the re-enactment. Re-enactment, then, focuses on the human texture of history creation, and places a timely emphasis on the ‘how’ and the ‘why’, not necessarily on the ‘what’. My approach developed in the thesis, provides researchers with a new avenue of enquiry.

The re-enactment approach can be used to bring new understandings concerning the evolution of television drama through further experiments that combine contemporary and historical approaches with experimental variables. Following on from the thesis, a re-enactment experiment I am conducting relates to a historical drama script being re-enacted within contemporary production conditions, in effect, a reverse approach to the work produced for the thesis. The methodology also provides a powerful way of addressing missing texts from archives. I would like to investigate how missing *Doctor Who* episodes can be effectively reproduced through studying the style and direction inherent in existing episodes of the era, and applying that to the re-enactment of missing episodes. Instead of the focus being on the *process* of the re-enactment as it was for this thesis, this interpretation of the methodology puts the emphasis on the result itself – the artefact produced through the re-enactment. The *Doctor Who* episode “Mission to the Unknown” (1965) would be a good choice for

an experiment such as this as it is the only episode in the series that does not feature the regular cast, therefore the issue of actor representation (itself a fascinating study for future research) can be avoided. In addition, early television from the 1930s such as plays delivered live from Alexander Palace could be brought back to life, to give us greater insight into how they manifested as visual-audio artefacts.

A further appropriation of the re-enactment methodology is in the development of pedagogic approaches to broadcasting history. Students studying television and film production could learn about broadcasting history through practice – and undertake their own practice-based experiments. This is a learning and teaching method that I will be investigating within my own teaching practice, with students producing scripts within different contexts and then reflecting on the characteristics of the production conditions and their interaction with practice.

Final Words

The PhD contributes to knowledge by providing new insight into historical conditions of production for television drama, specifically their interaction with the role of the director as the driving force bringing script to screen. Producing a contemporary script within historical production conditions provided a unique opportunity to generate evidence of such interaction through practice. Through producing a historical version of a contemporary *Doctor Who* script, I demonstrate how the historical production conditions provide opportunities to counteract and overcome limitations in creative ways. As such, I have contributed new understandings to the debate about studio-bound conditions in 1960s television drama. The experiment illuminated the impact of gallery space which I found had particular characteristics that impact on the role of the director who becomes a process-driven ‘production manager’, yet retains the ability to re-adopt directorial characteristics within the studio space when encountering moments of creative reaction.

A further contribution to knowledge relates to the development of re-enactment as a new way of engaging with broadcast historiography to produce evidence for analysis. I focused the research on the role of the director within historical spaces of television, creating agency for the human texture missing from text-based

reconstruction approaches. I have demonstrated how combining methodologies of reconstruction, remake, and re-enactment can illuminate aspects of the production process that address the limitations of archival mining. This is a significant step towards new ways of learning about broadcasting history; hopefully the work can act as a cue for researchers to continue developing and refining the re-enactment approach and its applications to practice-based historiography.

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APPENDIX 1
“Tooth and Claw” episode synopsis

Scotland, 1879. A large country house comes under attack by travelling monks. Maids and stable hands are left manacled in the house’s cellar; the monks drag in a large cage and as it is uncovered – the maids scream...

The Doctor is attempting to take Rose to see Ian Dury in concert in the year 1979, but instead the TARDIS materialises in the Scottish moorlands a hundred years early. They find themselves surrounded by soldiers who are escorting a carriage carrying Queen Victoria to Balmoral Castle. Unfortunately, a fallen tree on train tracks has forced the Queen to travel by road. The queen believes it to be related to an assassination attempt. Posing as a doctor, the Doctor and Rose join the royal party as it continues towards the nearby Torchwood Estate to stay the night. This is the house that has been overrun by the monks, led by Father Angelo. The monks in fact arranged for the tree to fall in order to divert the party to the house where they await, baiting a trap.

In the cellar of the house, the Steward and maids are transfixed by a boy locked in a cage; this is ‘the Host’, a boy that possesses an alien intelligence. The monks’ plan is to use the light of the moon to activate the alien, transforming the boy into a wolf. If the wolf bites the queen, then the alien intelligence will pass into the royal blood line, allowing the monks to control the British kingdom.

Unaware that the monks are now running the house masquerading as butlers and servants, Rose changes for dinner and discovers a maid hiding in her closet. Whilst going for help they are overcome by the monks and taken to the cellar. Upstairs, the Doctor discovers the trap yet it is too late – the moon is out and the boy transforms into a werewolf, breaking free of the cage and baying at the moon.

Note: This is the breakpoint where the 1960s re-enactment ends, approximately half-way through the episode.

The Doctor and Sir Robert, the owner of the house, free the people chained in the cellar. A cat and mouse game with the werewolf then takes place whilst the Doctor tries to understand what is happening and how to stop it. Realising Sir Robert's father was a keen astronomer is the key – he had been planning for this moment, and the Queen's prized Koh-i-Noor diamond has been designed to act as a focus for the telescope in the observatory. Luring the werewolf there, they manage to use the intensified moonlight to accelerate the transformation still further into a being of pure energy. The boy, trapped in the beam, begs for an end to the suffering caused by the Host creature, and the Doctor increases the concentration further until the being of energy is dissipated entirely.

The next day, the Queen honours the Doctor and Rose with royal titles, but, due to her horror at their lifestyle, she banishes them from the kingdom before ordering the creation of an institute designed to forever keep aliens away from Britain. Based on the name of the house, this is to be known as the Torchwood Institute.

“Tooth and Claw” was written by Russell T. Davies and directed by Euros Lyn. It was first broadcast on BBC1 on the 22nd April 2006, as episode 2 of the second series of the re-launched *Doctor Who*.

APPENDIX 2

Summary of Required Script Alterations

The intention of the re-enactment experiment was to produce a contemporary *Doctor Who* script within the production conditions of 1960s *Doctor Who*. Changes to the script were to be kept to a minimum as the script itself is a control factor in the experiment. However, due to the change in production conditions, and at times due to the limitation of budget or other logistics, some changes had to be made. Here is a summary of all script changes that occurred between receipt of the script from BBC Wales, and the production of the 1960s version produced during the experiment.

1. Original montage depicting monks overcoming resistance in the house, in the form of two short sequences in the kitchen and stairwell, was reduced to a monk running down a single corridor.
2. In the moorlands, Queen Victoria ends her speech to the Doctor with “drive on”. The following scene consists of dialogue between the Doctor and Rose while they walk across the moors, travelling with the royal party. The location of the dialogue was changed to take place in a static position, in front of the TARDIS, whilst the Doctor closes the TARDIS doors and the party prepares to move on. At the end of the dialogue, Captain Reynolds walks on to address his soldiers, adopting the Queen’s original line “We’re back on the road, move on.”
3. Sir Robert, looking out of his window, observes the royal entourage approaching. This originally is described as a point of view shot; this was altered to focus on Sir Robert looking past the camera, using SFX to avoid seeing the carriage on screen due to budget constraints.
4. Captain Reynolds refers to two soldiers, Mackerson and Ramsay. This was changed to just Ramsay to keep the number of speaking parts down due to budget concerns. The following sequence depicts these two soldiers lifting down a jewellery case from the carriage before carrying it across the

courtyard. This was changed to just Ramsay carrying the case across the courtyard, excising the action of lifting it from the carriage as the budget was not available to depict the carriage in the studio, or afford one for location filming.

5. A further line from Captain Reynolds in the courtyard was removed that referred to the rest of the soldiers that we do not see due to budget constraints. To avoid drawing attention to this, the line was deleted.
6. A small scene of the jewellery case being placed in a secure cabinet was removed as it featured Captain Reynolds, and it was important that character remained outside the house in the courtyard for the following scene.
7. The observatory location was impractical to realise within the studio space, and therefore was substituted for the courtyard instead, helped by the fact the characters required for the scene were already at that location. A doctored photograph of the roof of the house, featuring the telescope, provided the focus of the scene and allowed the dialogue to play out as originally scripted. Instead of the Doctor examining the telescope close-up, he uses a small toy telescope from his pocket, modified with the sonic screwdriver prop – an action in keeping with the use of the sonic screwdriver in the series.
8. Flora, a maid who hides in Rose's cupboard to escape the monks, was deleted from the script to lower the costs of additional speaking parts. In terms of the episode being re-enacted, this had minimal affect as she merely serves to act as a catalyst for Rose to leave her bedroom and subsequently get kidnapped. Instead, Rose hears the sound of a soldier outside her door falling drugged to the floor, and she exits her room to investigate. The sequence then continues as originally scripted.
9. Some references to seeing soldiers being drugged and collapsing were removed due to the logistics of having only one soldier extra in the studio space.

10. The re-enactment episode ends as the wolf howls at the moon, approximately half-way through the original script. This provides an appropriate conclusion to the episode, now timed at a natural length for the 1960s conditions of practice.

APPENDIX 3

Breakdown of Production Blocks, Scenes and Locations

Scene No.	Scene Header	Studio / Loc	Cast Required	Props Required	Additional Information
<i>Block 1</i>					
1	EXT. SCOTTISH MOORLANDS	L	FATHER ANGELO, MONKS X 2	HAND BELL, 3 X LONG STICKS, CART, CAGE, TARPAULIN	
2	EXT. SIR ROBERTS HOUSE. COURTYARD	L	STABLEHAND, STEWARD, MONKS X 2, FATHER ANGELO	3 X LONG STICKS, CART, CAGE, TARPAULIN, BARREL, SHOVEL	
3	EXT. SIR ROBERTS HOUSE. COURTYARD	S	STABLEHAND, STEWARD, MONK X 1, FATHER ANGELO	3 X LONG STICKS, TARPAULIN, BARREL, SHOVEL	STUDIO SET REPLICATES COURTYARD
4	EXT. SIR ROBERTS HOUSE. COURTYARD	L	STABLEHAND, STEWARD, MONKS X 2, FATHER ANGELO	3 X LONG STICKS, TARPAULIN, BARREL, SHOVEL	FIGHT SEQUENCE
5	INT. CELLAR.	S	STEWARD, LADY ISOBEL, MAID, MONK, FATHER ANGELO, HOST.	CAGE, TARPAULIN, HANDCUFFS, CHAIN	
	TITLES VT.				
6	INT. TARDIS.	S	DOCTOR, ROSE	CONSOLE	
7	EXT. FX SHOT. TIME VORTEX.				VT CLIP
8	INT. TARDIS.	S	DOCTOR, ROSE	CONSOLE, MALLET	
9	EXT. COUNTRY ROAD.	L	DOCTOR, ROSE, CAPT. REYNOLDS, SOLDIER	PISTOL, RIFLE	CONTINUOUS ACTION FROM PREVIOUS SCENE

10	EXT. COUNTRY ROAD.	S	DOCTOR, ROSE, CAPT. REYNOLDS, SOLDIER, QUEEN VICTORIA	PISTOL, RIFLE, PSYCHIC PAPER, TARDIS KEY	STUDIO SET REPLICATES PREVIOUS LOCATION
11					CUT
<i>Block 2</i>					
12	INT. DINING ROOM / EXT. COURTYARD	S	SIR ROBERT, FATHER ANGELO		
13	EXT. COURTYARD	S	SIR ROBERT, FATHER ANGELO, MONK, SOLDIER, SIR ROBERT, QUEEN VICTORIA, THE DOCTOR, ROSE	JEWELLERY CASE	
14	INT. CELLAR.	S	STEWARD, LADY ISOBEL, MAID, HOST.	CAGE, TARPAULIN, HANDCUFFS, CHAIN	
15					CUT
16	EXT. COURTYARD	S	SIR ROBERT, FATHER ANGELO, MONK, SOLDIER, SIR ROBERT, QUEEN VICTORIA, THE DOCTOR, ROSE	PLASTIC TELESCOPE, SONIC SCREWDRIVER	INCLUDES PAINTING POV SHOT OF THE TELESCOPE ON THE HOUSE
17	EXT. SKY – EVENING.	S			PAINTING
18	INT. BEDROOM.	S	ROSE	HEAVY FORMAL DRESS	PART OF THE CELLAR SET TEMPORARILY REDRESSED
19	INT. KITCHEN.	S	MONK	STOVE, LADLE, CUP, LIQUID	CU SHOTS OF TABLE NR. TARDIS INTERIOR SET
20	INT. BEDROOM.	S	ROSE	PAIR OF BLOOMERS	
21	INT.	S	MONK,	CUP, TRAY,	

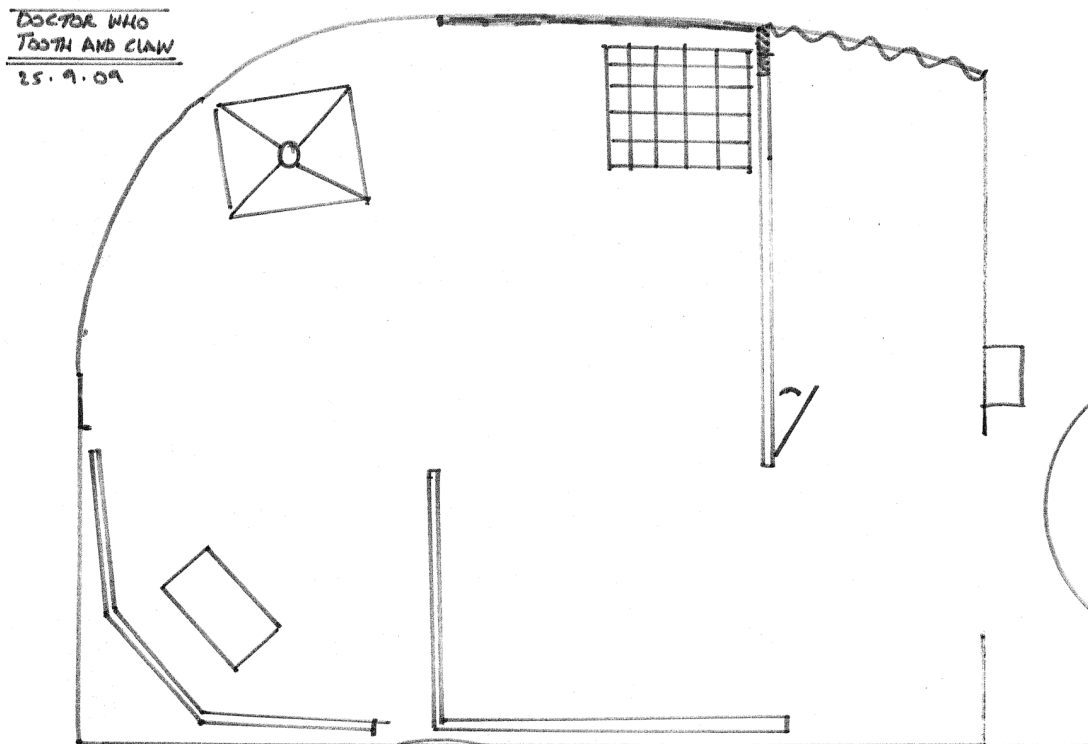
	CORRIDOR.		SOLDIER	RIFLE	
22	INT. BEDROOM.	S	ROSE	NICE DRESS	
23	INT. CORRIDOR.	S	SOLDIER, MONK, ROSE, FATHER ANGELO	CUP, RIFLE, DECANTER	
24	INT. DINING ROOM.	S	SIR ROBERT, FATHER ANGELO, THE DOCTOR, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	
25	INT. CELLAR.	S	HOST, LADY ISOBEL, STEWARD, MAID, ROSE	CAGE, TARPAULIN, HANDCUFFS, CHAIN	
26	INT. DINING ROOM.	S	SIR ROBERT, FATHER ANGELO, THE DOCTOR, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	
27	INT. CELLAR.	S	HOST, LADY ISOBEL, STEWARD, MAID, ROSE	CAGE, TARPAULIN, HANDCUFFS, CHAIN	
28	INT. DINING ROOM.	S	SIR ROBERT, FATHER ANGELO, THE DOCTOR, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	
29	INT. CELLAR.	S	HOST, LADY ISOBEL, STEWARD, MAID, ROSE	CAGE, TARPAULIN, HANDCUFFS, CHAIN	
30	EXT. NIGHT SKY.	S			PAINTING
31	INT. DINING ROOM.	S	SIR ROBERT, FATHER ANGELO, THE DOCTOR, QUEEN	DECANTER, PURSE, REVOLVER	

			VICTORIA, CAPTAIN REYNOLDS		
<i>Block 3</i>					
31 A	EXT. NIGHTS SKY / MOON.	S			PAINTING
32	INT. CELLAR.	S	HOST, LADY ISOBEL, STEWARD, MAID, ROSE	CAGE, TARPAULIN, HANDCUFFS, CHAIN	INCLUDING LIGHTING FX
33	INT. DINING ROOM.	S	SIR ROBERT, FATHER ANGELO, THE DOCTOR, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	
34	INT. CELLAR.	S	HOST, LADY ISOBEL, STEWARD, MAID, ROSE	CAGE, TARPAULIN, HANDCUFFS, CHAIN	INCLUDING LIGHTING FX
35	INT. DINING ROOM.	S	FATHER ANGELO, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	FIGHT SEQUENCE
36	INT. CELLAR.	S	WEREWOLF, LADY ISOBEL, STEWARD, MAID, ROSE, THE DOCTOR, SIR ROBERT, WEREWOLF	CAGE, TARPAULIN, HANDCUFFS, CHAIN, SONIC SCREWDRIVE R	INCLUDING PAINTING OF MOON B/G WEREWOLF SHOT
37	INT. DINING ROOM.	S	FATHER ANGELO, QUEEN VICTORIA, CAPTAIN REYNOLDS	DECANTER, PURSE, REVOLVER	QUICK CUT ON BANG SFX
38	INT. CORRIDOR.	S	WEREWOLF, LADY ISOBEL, STEWARD, MAID, ROSE, THE DOCTOR, SIR ROBERT, WEREWOLF	HANDCUFFS, SONIC SCREWDRIVE R	ON-SCREEN CAPTION "NEXT EPISODE: THE TRAP WITHIN THE TRAP"

APPENDIX 4

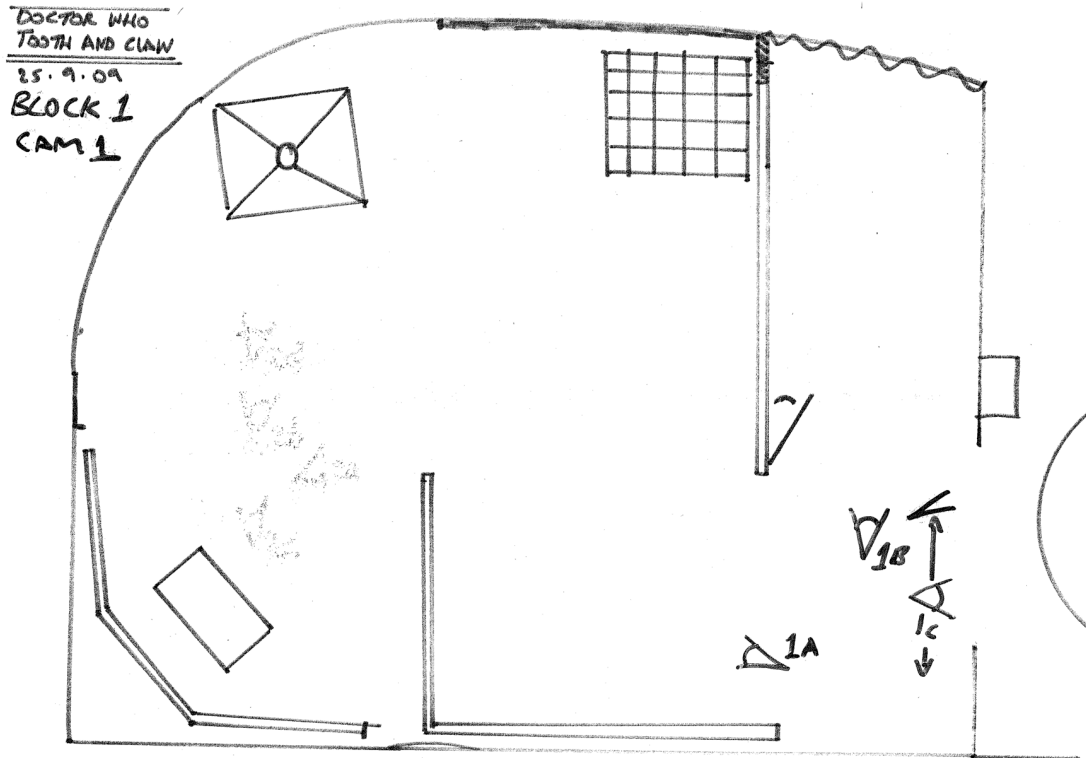
“Tooth and Claw” Re-enactment Experiment Studio Floor Plans

The following floor plans were produced to plan camera positions and movements prior to the studio recording day: a process derived from the historical practice of undertaking rehearsals in a separate space before entering the studio. They refer to the ‘plan’, and not the reality, where the plan had to change during recording to overcome issues such as camera cables not being long enough, and changes to rehearsed action. The floor plans are provided here as a record of the planning for the production.



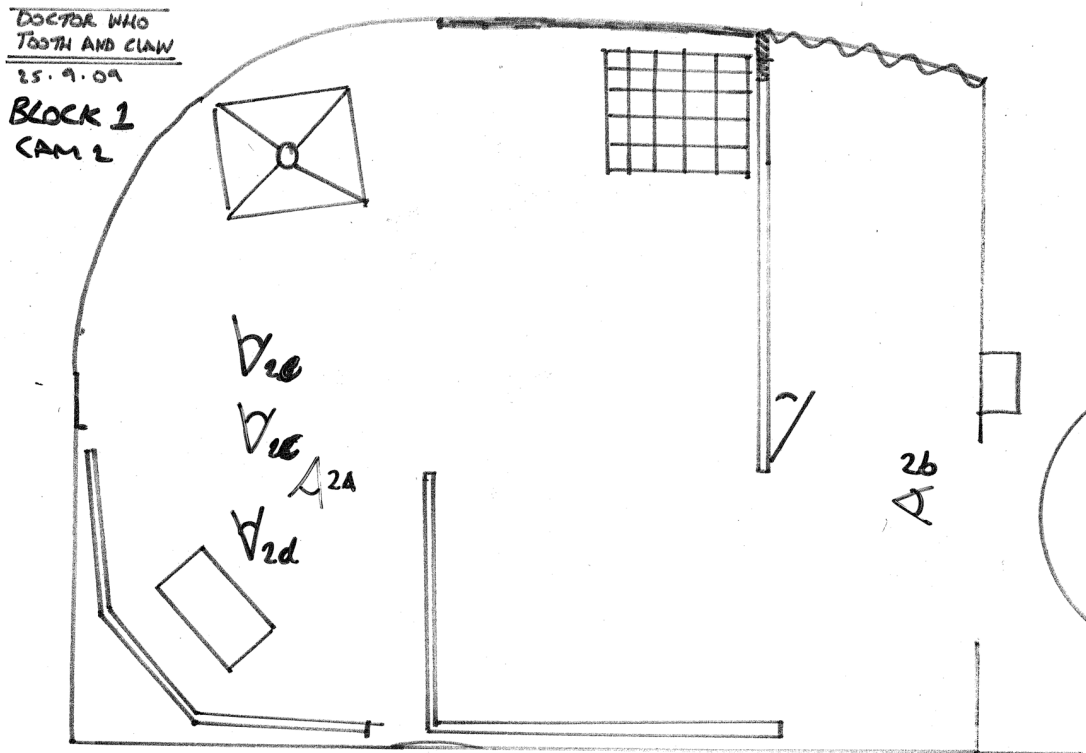
Studio plan prior to camera positions being added.

This plan provides a top-down view of the studio with the positions of scenery and props marked out. Starting top-left and working clockwise: the TARDIS prop against a white backdrop, the cage and wall of the cellar set, the hallway with functioning door, the opening into the storage area featuring the TARDIS console, the courtyard of the house, and finally the dining room.



Block 1: Camera 1.

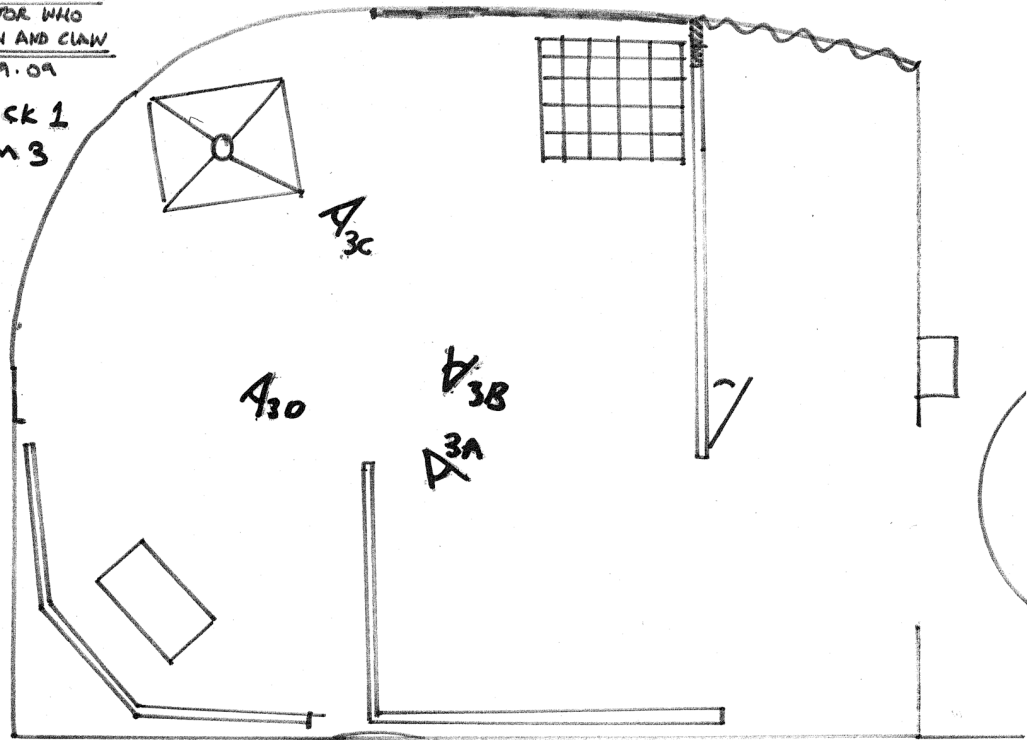
Cameras are hand-drawn on plastic acetate sheets and photocopied together with the floor plan to create the finished plan.



Block 1: Camera 2.

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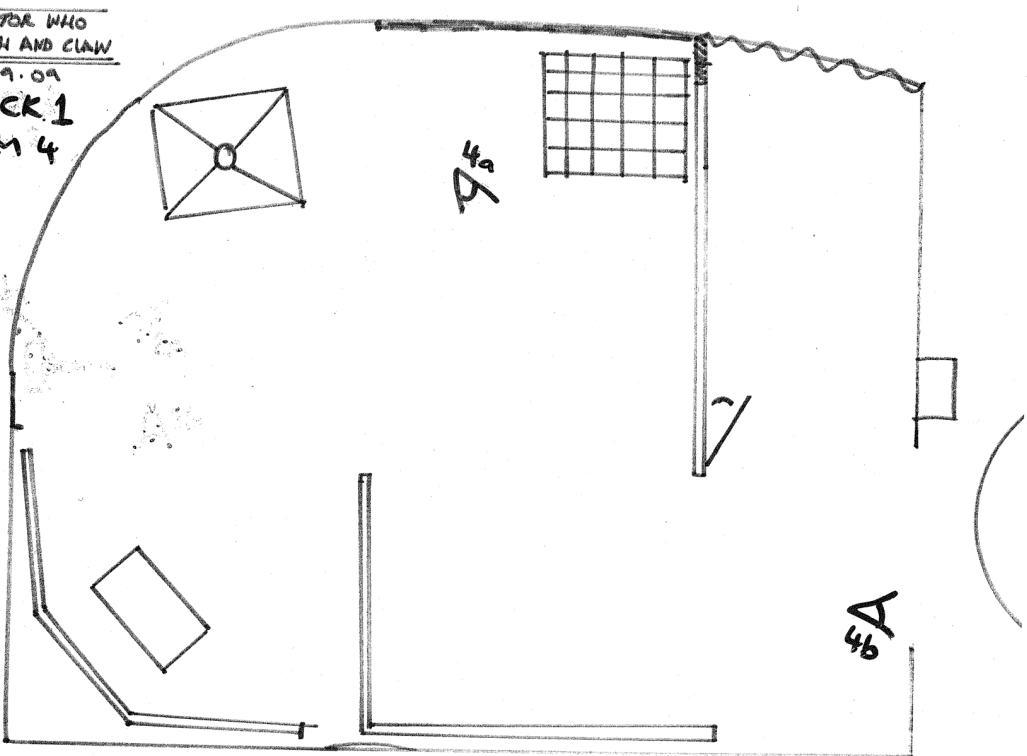
BLOCK 1
CAM 3



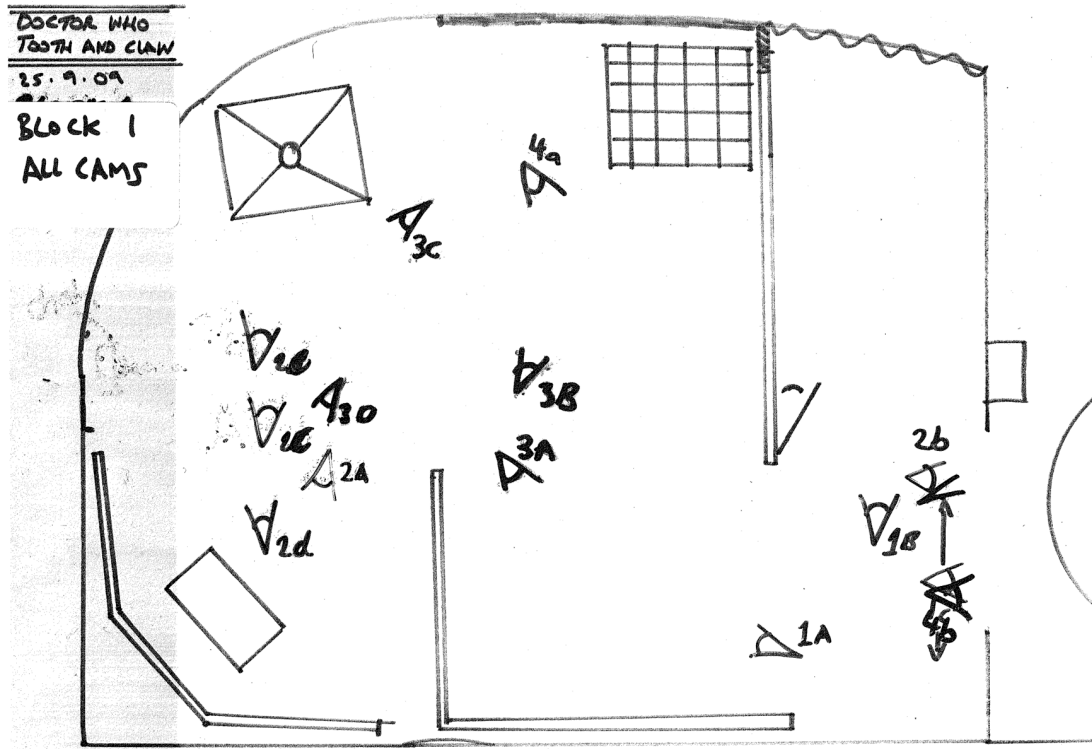
Block 1: Camera 3.

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BLOCK 1
CAM 4

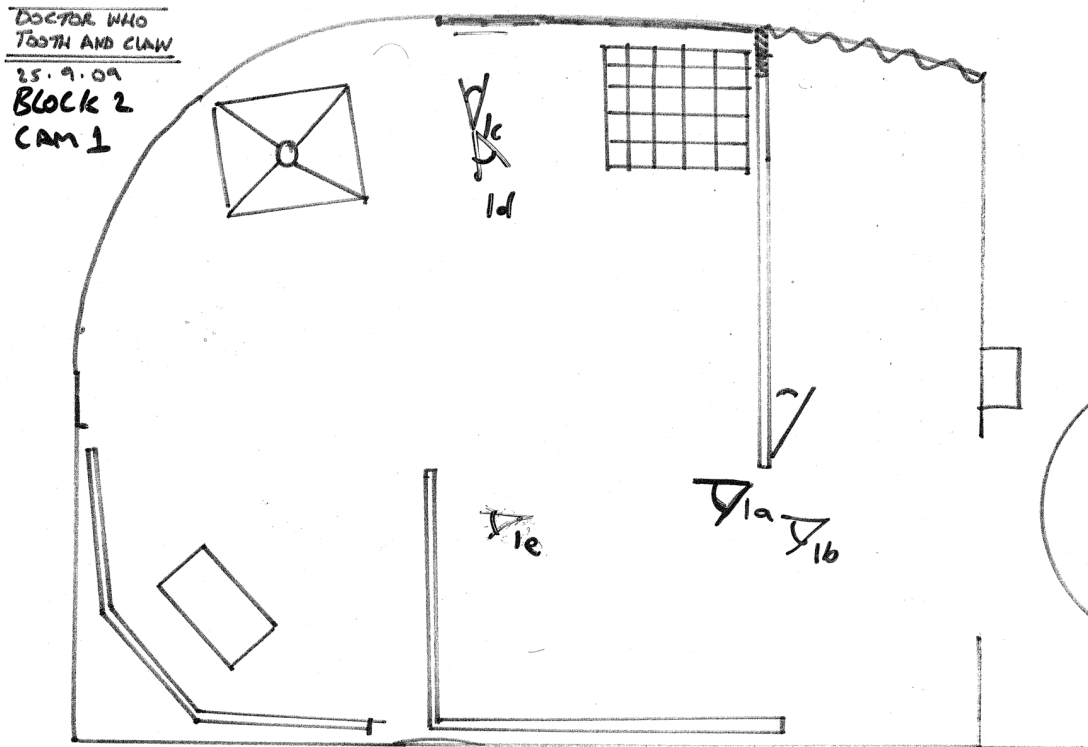


Block 1: Camera 4.



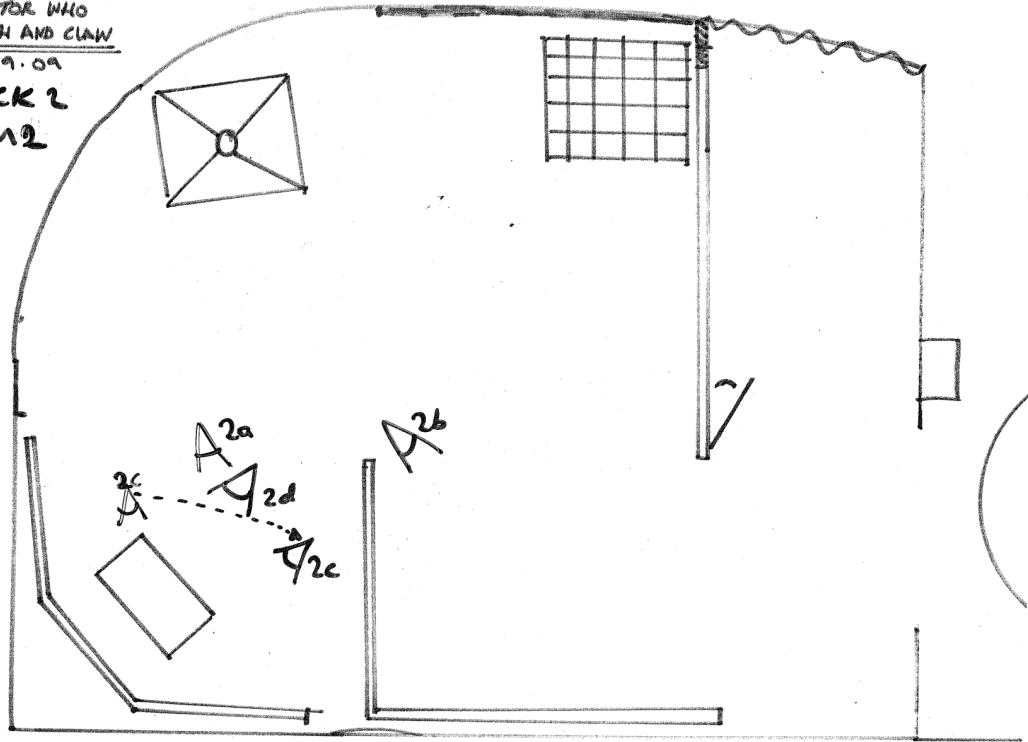
Block 1: All cameras.

Overview of all camera positions and movements planned for the first recording block. Notice the confusion on the right-hand side – multiple cameras were initially allocated to the TARDIS interior set which proved complex to realise (see ‘Gallery Voices’ on the DVD).



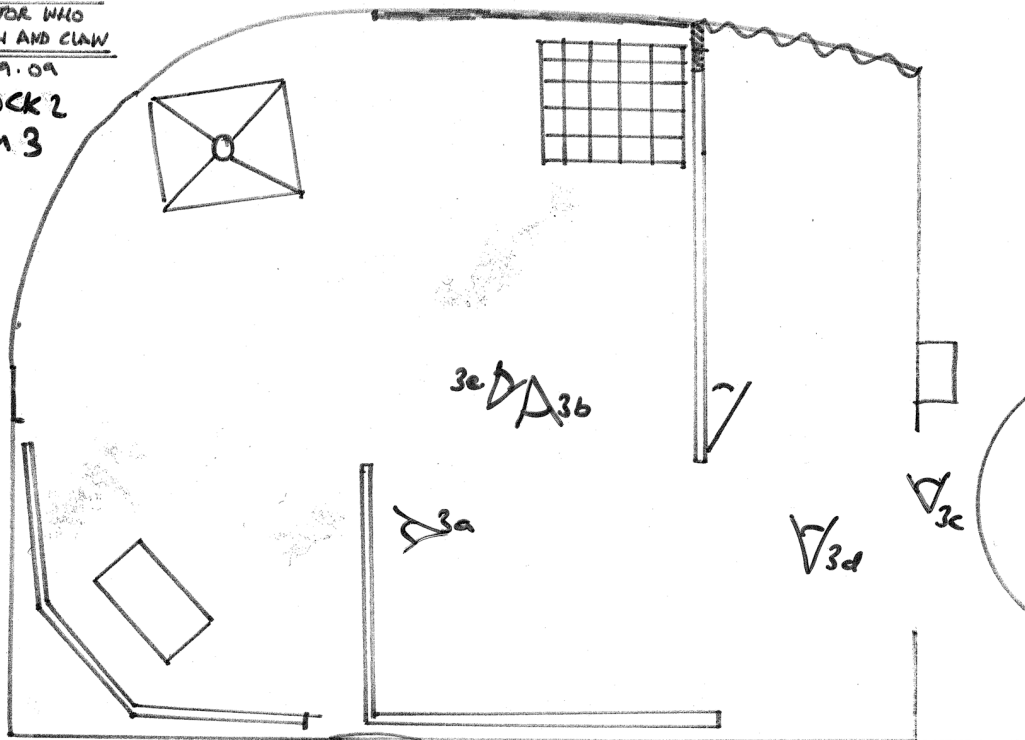
Block 2: Camera 1.

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BLOCK 2
CAM 2

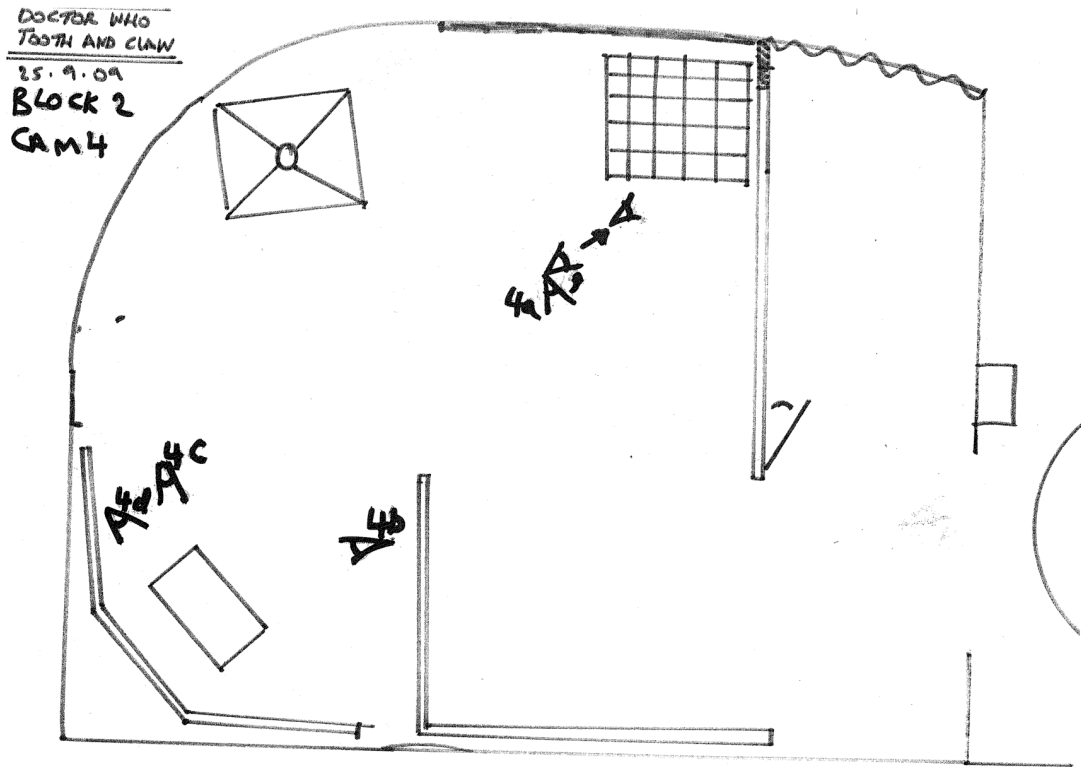


Block 1: Camera 4.

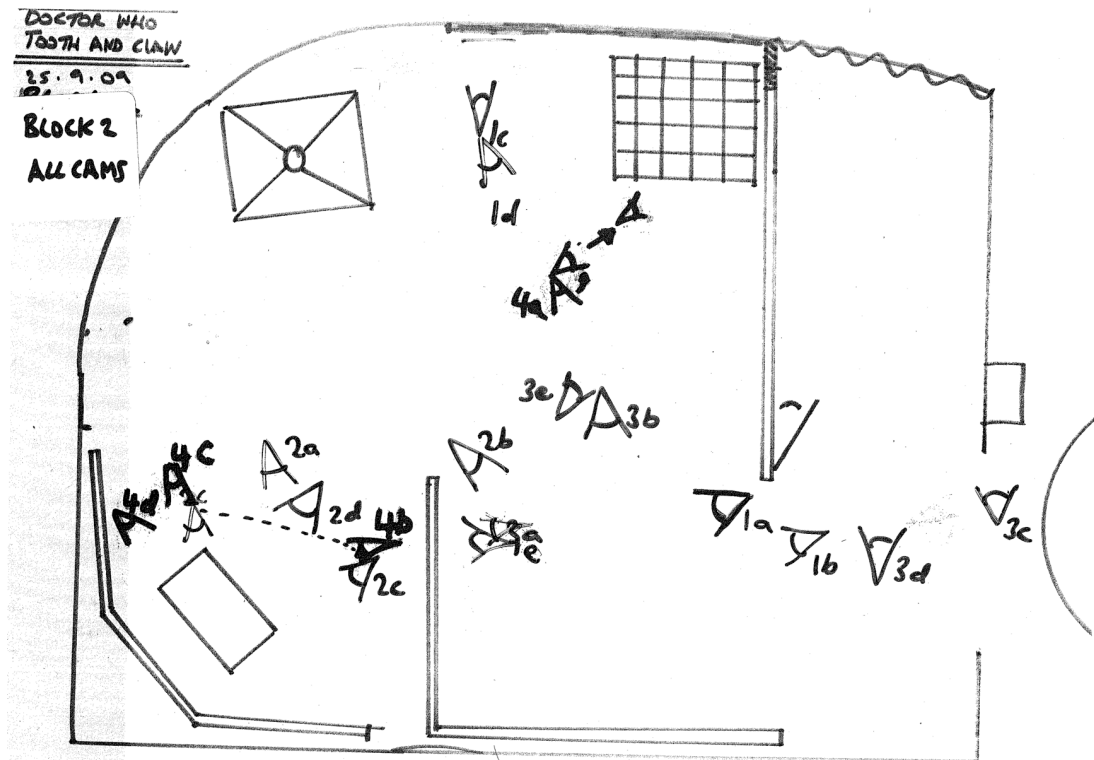
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BLOCK 2
CAM 3



Block 2: Camera 3.

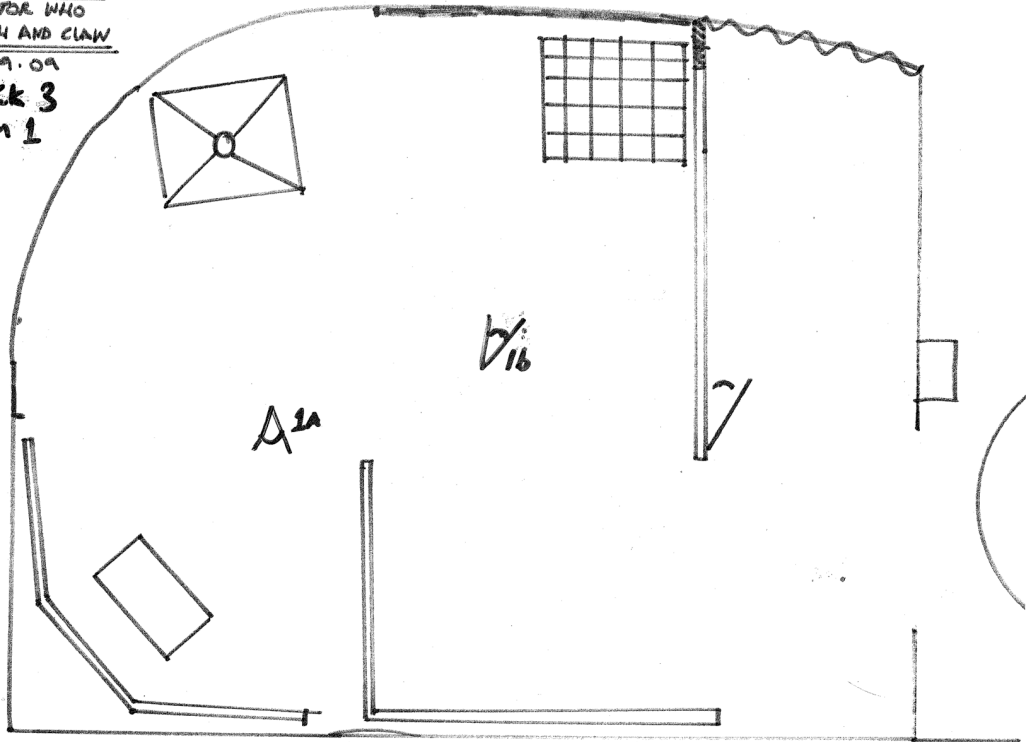


Block 2: Camera 4.



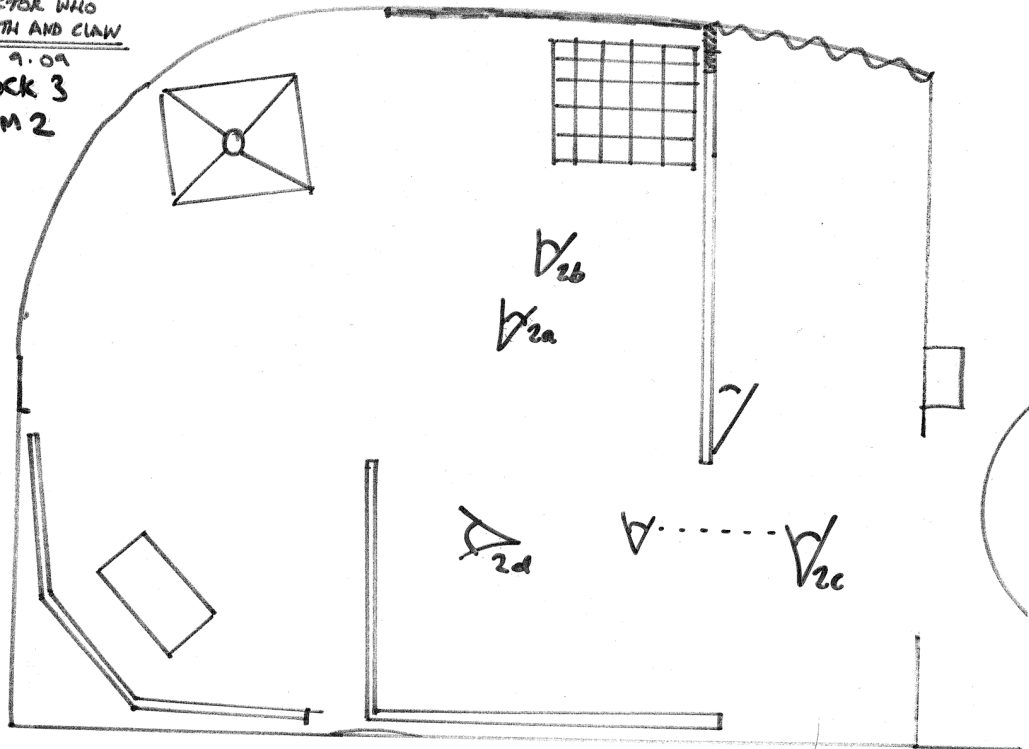
Block 2: All cameras.

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BLOCK 3
CAM 1

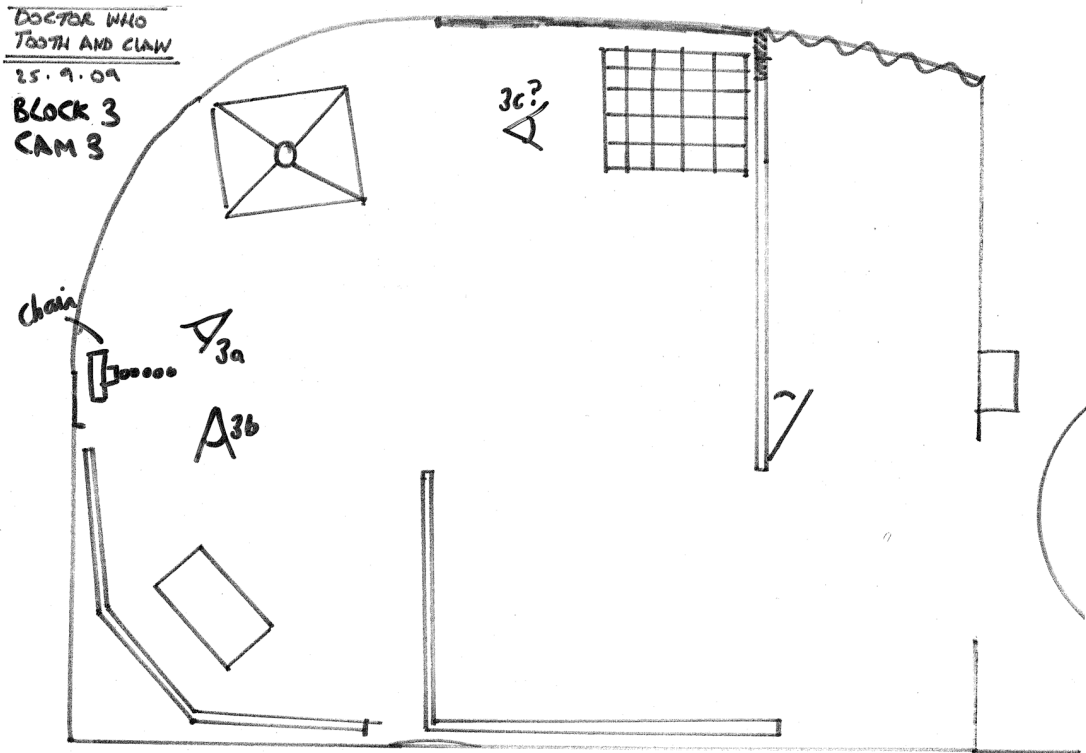


Block 3: Camera 1.

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BLOCK 3
CAM 2

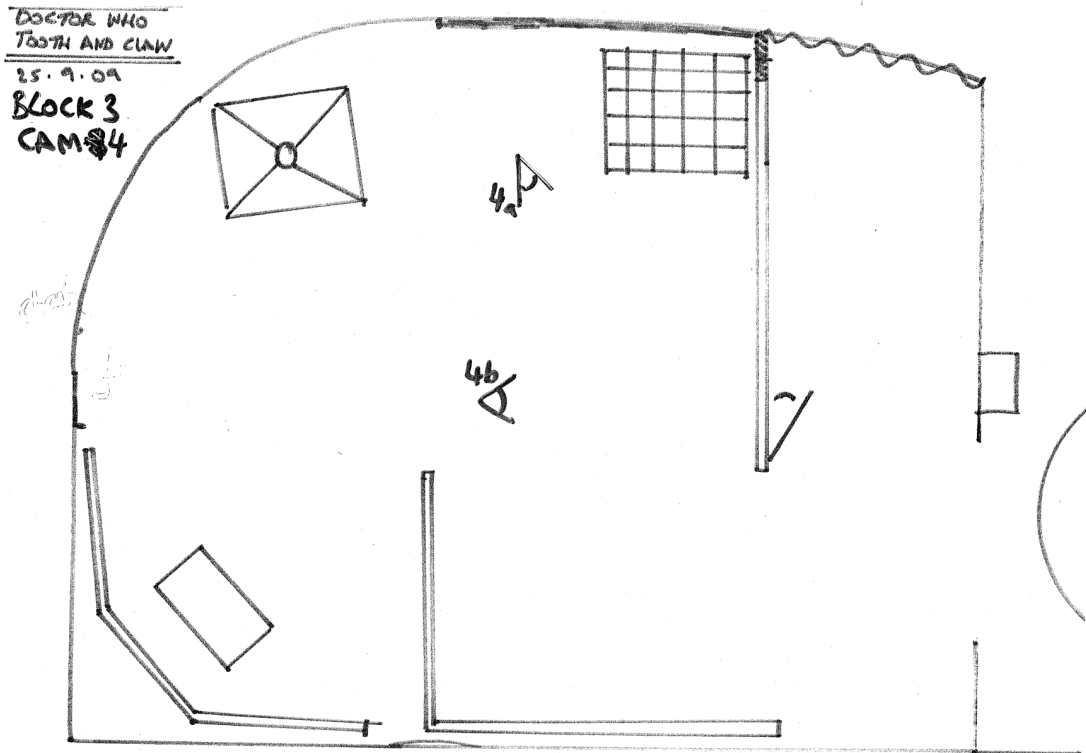


Block 3: Camera 2.



Block 3: Camera 3.

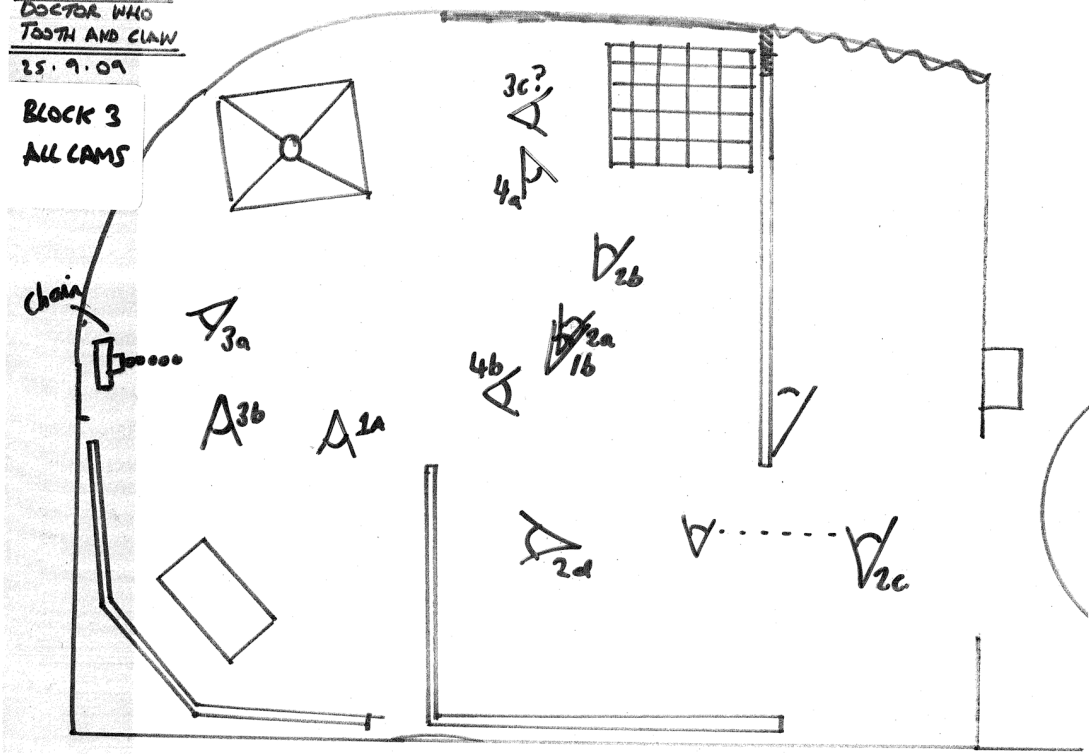
Initially camera 3 covered a close-up of Rose's chain being pulled out of the wall. This was dropped during recording as we couldn't move the camera into position in time, an example of how re-enactment augments Jacobs (2007) reconstruction approach with the nuances of production.



Block 3: Camera 4.

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TOOTH AND CLAW
25.9.09

BLOCK 3
ALL CAMS



Block 3: All Cameras.

APPENDIX 5

Re-enacting the *Doctor Who* Title Sequence

The *Doctor Who* title sequence has evolved over the years and has pioneered creative techniques and technical breakthroughs (Bentham 1986). The original title sequence, devised by Norman Taylor in 1963 built on experiments conducted by a department within the BBC called the Langham Group which was established in 1956 to consider experimental forms and language of television (Mulvey 2007). An electronic video camera recording its own monitor feed created a feedback loop resulting in moving and swirling shapes on screen. The effect could be enhanced by the introduction of a further camera signal being fed into the feedback loop via a vision mixer. This technique was used to create a feeling of space and time travel as the opening titles of the series, the swirling shapes on screen resolving into the ‘Doctor Who’ title at the end of the sequence. Although the techniques evolved over the following 26 year run of the original series, the concept of space and time travel remained. The 2005 re-launch of the series retained this concept, although it is now realised entirely through computer-generated images (CGI). A challenge for me was to recreate the CGI title sequence required by “Tooth and Claw” through a simulation of 1960s production techniques. Although not part of the re-enactment required for the realisation of the episode itself, the production requirements necessitate a title sequence that can be played in from a source during the recording of the episode. Hence, I decided to re-enact the title sequence as an initial trial of a re-enactment methodology.

By examining the current title sequence, I was able to re-create the original ‘brief’, including the timings of the elements that the sequence had to satisfy, including a swirling time vortex, the TARDIS, actor names, the *Doctor Who* logo, episode title and writer’s credit. I was then able to produce a sequence of video clips that realised the elements, timings, and actions of the titles.

This particular setup involves a model of the TARDIS placed in front of a black drape, lit from the side. The image of the TARDIS was keyed over the output of another camera filming its own image via a vision mixer. Constantly introducing the TARDIS image whilst recording in this ‘feedback loop’ creates the desired effect,

enhanced when the light source illuminating the TARDIS model is interrupted, in this case by moving a hand backwards and forwards between the light and the model (see top-left image below). The resulting video sequences were then treated to become B&W 4:3 and edited together to form the sequence as used in the re-enactment.

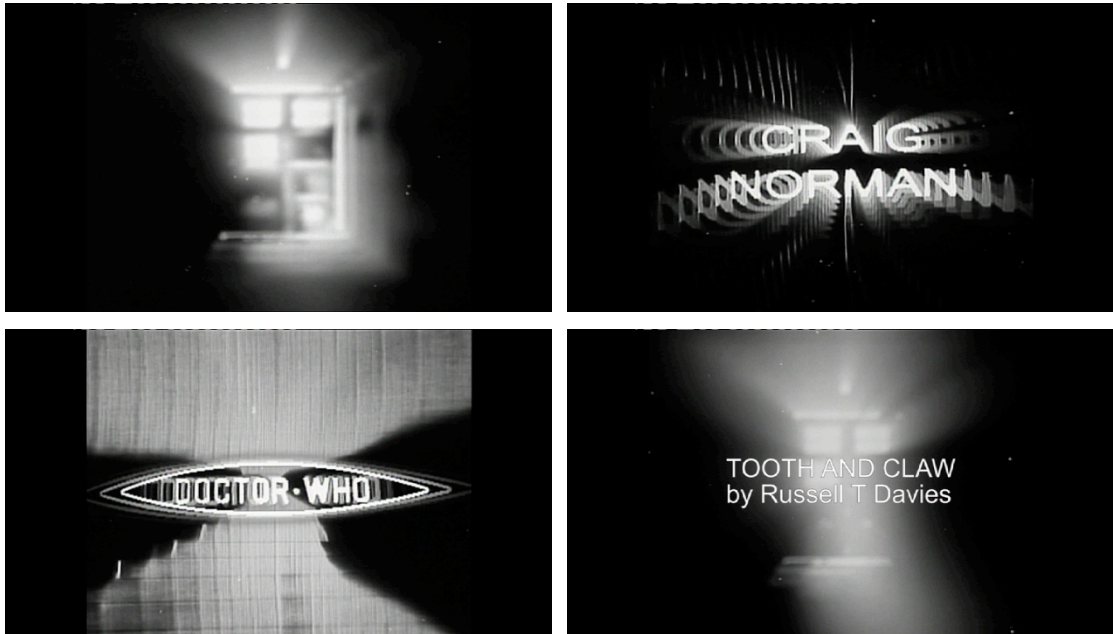


Figure 19. Screenshots from the re-enacted “Tooth and Claw” title sequence using a simulation of the conditions of 1960s practice.

A model of the TARDIS was used to generate the vortex tunnel effect (see image top-left) that flowed towards the camera, reflecting the iconic police box shape. Interestingly, whilst the 2005 version features a circular vortex, the production company that produced the title sequence, The Mill, have stated that:

“Originally we were going to have the shape of the vortex slightly distorted by the TARDIS as it flew down it, as happened in the Jon Pertwee and Tom Baker 1970s iterations of the sequence where the vortex briefly matches the outline of the TARDIS. We didn’t have time to do that, unfortunately.”

(Russell 2006, p.109)

It is interesting that my approach echoed their original intentions. The realisation of the title sequence proved to be a useful early indicator of what I was attempting to do. As a minor project in itself, separate from the logistical demands of the episode, it gave me an opportunity to experiment with techniques and re-enact the process that

would have happened in the 1960s to create this sequence. The success of this gave me the confidence that the re-enactment methodology was achievable.

APPENDIX 6

Commentary on BBC Written Archive Sources

The BBC Written Archives Centre in Caversham Park near Reading offers researchers an invaluable insight into the history of the BBC. As part of my research into the production conditions of *Doctor Who* in the early 1960s, I visited the Written Archives and studied programme files relating to the origin of the series.

This section describes the file contents that helped to inform my understanding of the production conditions, and my approach for the re-enactment experiment.

- The treatment for *Doctor Who* as prepared by Donald Wilson, C. E. Webber, and Sydney Newman, dated 16th May 1963.
- A later, revised synopsis of the series produced by BBC Enterprises, describing the first four episodes in detail and providing advice for future contributors of the series.
- A detailed scene-by-scene breakdown of the first serial.
- A document entitled “Drama Synopsis” that clarifies the recording and transmission dates of the first story “An Unearthly Child”, as well as key production personnel, episode durations, episode titles, and an overview of the story.
- A document that is addressed to “Verity” from “David” (presumably producer Verity Lambert, and story editor David Whitaker) detailing comments on the scripts for “An Unearthly Child”, including character descriptions and name changes.
- Entitled “Television Casting Form”, a sheet detailing rehearsal dates and times, and filming date, for the first serial, as well as a list of artists required.
- A memo entitled “Costs of Dr. Who: A series” from Verity Lambert on the 18th November 1963 that details the budget allocations and estimated costs for the pilot, and the first four episodes. A following commentary describes how the costs for the TARDIS interior set will be paid off over fourteen episodes.

- A memo from Donald Wilson to Verity Lambert on the 24th March 1964 that discusses the problems of directors and designers utilising storage space to the sides of the studio, with the instruction that all future episodes only utilise ‘normal’ studio space.
- A letter to “David” (presumably David Whitaker, the story editor), from an individual (signature illegible) that discusses the appearance and size of cavemen. It also indicates the script may be a little too long.
- Correspondence from director Waris Hussein to Brian Hodgson that illustrates how the director has indicated where certain sound effects will be required, along with approximate timings.
- A memo detailing technical problems that impacted on the recording of episode 1 of “The Daleks” and the subsequent plan to re-record that episode out of sequence with recording the remainder of the episodes of that story. The memo indicates the production team are producing episodes six weeks ahead of transmission.
- A document entitled “Programme Recording Form”, intended for the Presentation Desk, indicating the duration of the first episode of “An Unearthly Child”, and describing the opening sequence and the closing sequence.
- A memo to composer Tristram Cary from director Christopher Barry dated 9th December 1963 thanking him for the music for episode four (of “The Daleks”), and describing the music requirements for episode five.
- A memo from director Richard Martin to story editor David Whitaker dated 31st October 1963. The subject of the memo is “Dr. Who, Serial B, Episode 5”, and it provides feedback from the director on different scenes, including alternative dialogue for one particular sequence.
- A number of large studio floor plans from “An Unearthly Child” that detail set placements as well as camera and boom positions.