

Screen Dreams:

**A practice-based investigation of filmic dream sequences, using the
dream theories of Freud, Jung, Revonsuo and Hobson.**

Billy Glew

August 2019

This thesis is submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy in Film.

Lancaster University – Faculty of Arts and Social Sciences

Lancaster Institute for the Contemporary Arts

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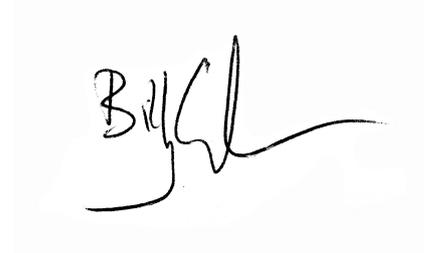
The complementary component of the submission is in the form of a film exhibition
installed in room A23 of the LICA building. The exhibition will be documented through
photographs and a copy of each exhibited film on a DVD included in the permanent
binding of this thesis.

Lancaster University – Faculty of Arts and Social Sciences

Lancaster Institute for the Contemporary Arts

Declaration of Authorship

I declare that the thesis is my own work and has not been submitted in substantially the same form for the award of a higher degree elsewhere.

A handwritten signature in black ink, appearing to read 'Billy Glew', is centered within a light gray rectangular box.

Billy Glew

August 2019

Acknowledgements

I would like to thank my supervisors, Dr Richard Rushton and Professor Emma Rose, for their support and guidance. Their advice has been invaluable during each stage of my research. Thank you to the teaching and administration staff at Lancaster University LICA for making me feel welcome – it has been a pleasure working with you all. Thanks to the Lancaster University technicians for your excellent work setting up my exhibition and for your help with booking vital equipment for my studies. Thanks to all the actors, performers and technical crew that I have had the opportunity to work with, for your hard work, enthusiasm and commitment.

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Abstract

This thesis is a practice-based investigation into the production of filmic dream sequences. The research aims to demonstrate how the dream theories of Sigmund Freud, Carl Jung, Allan J. Hobson and Antti Revonsuo, incorporated into film-making practice, affects the production of dream sequences. The thesis asks: Which techniques denote a film sequence as depicting a dream and how closely do filmic dream sequences correlate with the dream theories of Freud, Jung, Revonsuo and Hobson? In support of answering this question, the thesis investigates what variations in styles of dream sequence are produced by using different combinations of dream-denoting elements. As part of the practice-research, I explore methods for incorporating representations of latent dream content.

After reviewing and comparing the selected dream theories, I compare two opening film sequences with similar content, *8 ½* (Federico Fellini, 1963), depicting a dream, and *Falling Down* (Joel Schumacher, 1993), depicting waking reality, discovering eight dream-denoting film-making techniques. Building on these findings, I analyse a further 49 dream sequences, revealing four additional dream-denoting techniques. I then analyse the dream sequences for correlation with the selected dream theories, including to discover if latent content is ever explicitly represented. I use the findings from my analyses to inform the production of a series of filmic dream sequences, with each film incorporating one or more of the selected dream theories into each stage of production.

The thesis addresses several gaps in theoretical and practice-based film research. In film theory, the thesis provides a structured, repeatable methodology for filmic analysis specific to dream sequences and summarises the form and content of dream sequences up to the present, identifying twelve dream-denoting elements. In practice, the thesis researches detailed methods for producing dream sequences in narrative film including representing latent content, by creatively interpreting and using different combinations of psychoanalytic and neurocognitive dream theories.

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Introduction

This thesis is a practice-based investigation into the production of dream sequences in film, using both primary and secondary sources. My research investigates the dream theories of Sigmund Freud, Carl Jung, Allan J. Hobson and Antti Revonsuo, to determine how the application of these dream theories affects the production of filmic dream sequences.

As a central component of the practice-based research, the thesis explores methods for incorporating representations of latent aspects of dreaming, by creatively interpreting psychoanalytic and neurocognitive dream theories into the film production process.

To inform my research, it is necessary to produce detailed analyses of existing filmic dream sequences from a wide variety of genres, eras and nations, to discover how other film-makers have tackled the challenge of producing dream sequences. This includes considering how and why film-makers include dream sequences in their work, especially in terms of narrative and character development, and if there are specific techniques used by film-makers to denote a dream sequence within a film mainly depicting waking reality, thus ensuring an audience can identify a switch in the modality of representation.

The thesis contains detailed accounts of the dream theories of Freud, Jung, Hobson and Revonsuo, including researching how each of the selected theorists refers to states of consciousness and the unconscious mind. Through identifying each theory's key characteristics, I devise methods to produce dream sequences that cinematically visualise each theory. By identifying differences between the theories, I produce dream sequences which are stylistically varied, in terms of content and

form. The dream sequences I produce provide other film-makers with clear examples of the varying looks of dream sequence associated with the four selected theorists, and the analyses of existing sequences provide a clear outline of dream-denoting techniques used by film-makers worldwide. Thus, making enables theoretical findings to directly inform the production of filmic dream sequences. Reciprocally, reflecting on my film-making processes produces knowledge of how theory and practice interact, by revealing the narrative and film-making implications of applying each of the selected dream theories. Additionally, making furthers my understanding of film-making processes, informing my analyses of existing dream sequences, and provides insights into the processes of dreaming, informing my understanding of the four selected theories.

An important finding emerged through producing dream sequences which combine characteristics from two or more of the four selected theories, for example *Forest Dream* (Billy Glew, 2015), which combines Freud's and Jung's dream theories to generate latent content and *Soviet Soup* (Billy Glew, 2018), combining the theories of Revonsuo, Freud and Jung. Combining aspects of opposed theories provides a basis for producing dream sequences whilst opening many film-making possibilities not available when restricting oneself to a single theory.

Purpose of thesis

I am writing this thesis to address current gaps in several areas of theoretical and practice-based film research.

In film theory, the thesis provides a structured, repeatable methodology for filmic analysis specific to dream sequences and summarises the form and content of dream sequences up to the present.

I identify dream-denoting film techniques, to provide a framework of criteria for the analysis of dream sequences and to provide film-makers with a set of creative tools to produce their own dream sequences.

In my own practice, I creatively explore how the application of scientific dream theories informs and affects the practical production of dream sequences and provide a clear account of my methods so other film-makers can use and develop my findings. This includes investigating if certain dream theories are more practicable for narrative film and producing dream sequences which combine the characteristics of multiple dream theories. Additionally, I explore how representing latent content affects the production processes, visual, and auditory content, of a completed dream sequence. The thesis also discusses and creatively explores how a detailed understanding of dream theories might inform general film-making theory and practice in terms of visualising the psychological states of protagonists.

The thesis is an important milestone in my personal development as a film-maker and academic. The research has greatly improved my knowledge of Freud, Jung, Hobson and Revonsuo's dream theories and how to creatively apply them in my film-making practice as an integral part of my academic research. Undertaking the research has afforded the opportunity to investigate and categorise dream sequences and to research important artists and art movements which have fundamentally influenced dream sequence production including surrealism and related practitioners such as Luis Buñuel, Salvador Dalí, Germaine Dulac and Maya

Deren. Researching the links between surrealism and Freud's dream theories lead to using the surrealist technique of automatic drawing to produce dream sequence storyboards, which provided the initial narratives and manifest content for *Forest Dream* and *The Shadow* (Billy Glew, 2019).

Throughout the research I have developed my problem solving and technical film-making skills. For example, solving how to apply the selected dream theories to dream sequence production and devising methods to visualise specific effects, such as convincingly recreating the Eastern European locations in *Three Screens: Soviet Soup*, mainly working alone to a very limited budget.

This thesis addresses film theorists and film-makers. Additionally, the findings are useful for dream researchers, art therapists working with film, and researchers working with visualisations of states of consciousness.

The work directly contributes to the fields of film theory and film-making practice by developing a specific theory on the representation of dreams and latent content in film and provides a rich set of practical resources for producing dream sequences within any genre of film-making. Furthermore, the thesis provides detailed methods for developing filmic narratives which incorporate psychoanalytic and neurocognitive theories.

The findings contribute to discussions in general film theory regarding the representation of protagonists' inner psychological states and contributes to a wider understanding of how film collapses and combines temporality, space and representations of memory and psychological states.

In addition, the findings contribute to the ongoing debate around dream theory relating to Threat Simulation Theory as defined by Antti Revonsuo, activation-

synthesis as defined by Allan J. Hobson and Robert McCarley and protoconsciousness theory as defined by Allan J. Hobson, the unconscious as defined by Freud and the collective unconscious as defined by Jung, and contributes insights related to interactions during dreaming between the dreamer and dream characters. Finally, the findings offer interesting potential for use within art-based therapies.

Aims, objectives and research questions

Overall Aim

This research aims to demonstrate how the dream theories of Freud, Jung, Hobson and Revonsuo, incorporated into film-making practice, affects the production of filmic dream sequences.

Objectives

1. Identify and compare the core principles of the selected dream theories.
2. Identify how each of the selected dream theories addresses the concept of the unconscious mind.
3. Analyse a range of existing dream sequences to discover which techniques film-makers use to denote a dream.
4. Analyse existing dream sequences to discover if different combinations of dream-denoting techniques produce different filmic styles of dream sequence.
5. Make a series of dream-sequence films which incorporate the findings from objectives 1-4 including devising form and narrative structure, visual and auditory content, and the representation of latent content.

I discuss the outcomes of applying the theories into my practice in detail in chapters five and six.

Research Question

- a) Which techniques denote a film sequence as depicting a dream and how closely do filmic dream sequences correlate with the dream theories of Freud, Jung, Revonsuo or Hobson?

Supporting Questions

- b) What variations in styles of dream sequence are produced by different combinations of dream-denoting elements?
- c) How can film-makers use the dream theories of Freud, Jung, Hobson and Revonsuo to facilitate the production of dream sequences including incorporating representations of latent content?

Methods and Process

This practice-based research investigates the production of filmic dream sequences and how the application of varying scientific dream theories affects the final output, including incorporating representations of latent content.

Chapter one outlines and compares the dream theories of Freud, Jung, Hobson and Revonsuo through the analysis of key works by each theorist. I selected these theorists due to their contrasting views on the structure of the mind and the functions of dreaming. Importantly, Freud and Jung state the unconscious plays an

integral role in the structure of the mind whilst Hobson and Revonsuo do not account for an unconscious mind within their work.

In chapter two, I analyse and compare two opening sequences with similar content, *8 ½* (Federico Fellini, 1963), which depicts a dream, and *Falling Down* (Joel Schumacher, 1993), which depicts waking reality. The comparison seeks to identify which film-making techniques Fellini employs to denote *8 ½* begins with a dream.

In chapter three, the dream-denoting techniques (which I term as *dream-denoting elements*) used in *8 ½* provide the framework for the analysis of a further 49 dream sequences. In the analyses I discover which of Fellini's dream-denoting elements are utilised by other film-makers and additional dream-denoting elements not used in *8 ½*'s opening but shared by other film-makers. Finally, the chapter investigates the stylistic outcomes of employing different combinations of dream-denoting elements.

Chapter four investigates which of the dream theories the 50 analysed dream sequences most closely correlate with (intentionally or coincidentally). The chapter takes examples from the analysed sequences and discusses how each dream theory, when incorporated into a dream sequence, contributes to narrative development and depicting the protagonist's internal physical and psychological state. Finally, the chapter investigates if the analysed sequences explicitly incorporate representations of latent content.

Chapters five and six provide detailed accounts of my film-making practice. In these chapters I discuss how I incorporate the findings from chapters one to four into my practice, and in turn, how my practice informs the theoretical investigations and discussions contained in chapters one to four.

Context

In 1953, the surrealist film director Luis Buñuel stated, 'The creative handling of film images is such that, among all means of human expression, its way of functioning is most reminiscent of the work of the mind during sleep. A film is like an involuntary imitation of a dream...the darkness that slowly settles over a movie theater is equivalent to the act of closing the eyes...the nocturnal voyage into the unconscious begins. The device of fading allows images to appear and disappear as in a dream' (Buñuel, 1978, p.107).

Since the beginning of cinema, dreams have provided inspiration and source material for productions ranging from Hollywood blockbusters to the avant garde. Films predominantly based within a dream include *The Astronomer's Dream* (George Méliès, 1898) through to *The Wizard of Oz* (Victor Fleming, 1939), *The Woman in the Window* (Fritz Lang, 1944) and modern productions such as *Inception* (Christopher Nolan, 2010). In other cases, films based in waking reality incorporate dream sequences to visualise on-screen characters' internal states for a variety of narrative purposes including revealing vital plot information inaccessible to the protagonist due to amnesia in *Spellbound* (Alfred Hitchcock, 1945), internal physical changes unknown to the protagonist in *An American Werewolf in London* (John Landis, 1981), repressed memories in *The Passion of Anna* (Ingmar Bergman, 1969), anxiety in *The Artist* (Michel Hazanavicius, 2011), premonitory dreams in *Blue Steel* (Kathryn Bigelow, 1990) and existential crises in *The Sacrifice* (Andrei Tarkovsky, 1986).

Several film theorists have produced works focusing on the relationship between film and dreams. Notable works include Christian Metz' *Imaginary Signifier*, first published in 1974, which specifically addresses the experiential similarities and

differences of watching films and dreaming from a psychoanalytical perspective. A more recent work, Thorsten Botz-Bornstein's *Film and Dreams* (2007), focuses on specific film directors including Tarkovsky, Bergman and Kubrick. Botz-Bornstein discusses the narrative and symbolic content of dreams in films using a combination of Freudian theory and film philosophy. In the final chapter, Botz-Bornstein proposes ten key points related to film and dreams, three of which feature in this thesis (alteration of sound, alteration of colour, and Freud's essay *The Uncanny*, published in 1919). However, neither Metz or Botz-Bornstein consider Carl Jung's dream theories in any detail, and don't discuss Antti Revonsuo's Threat Simulation Theory or neurocognitive theories of dreaming, leaving space for new writings which address these important areas of research. Further, both works purely focus on film theory and don't provide detailed analysis of the application of film production techniques, such as the twelve dream-denoting elements contained in this thesis.

In 2005 Allan Hobson collaborated with art theorist Hellmut Wohl to produce *From Angels to Neurons: Art and the New Science of Dreaming*, which includes a chapter examining links between film and dreams. Hobson examines several dream sequences including *Wild Strawberries* (Ingmar Bergman, 1957) and *8 ½*. Overall, the level of film analysis is not very detailed but an important point which Hobson raises, dream bizarreness, is an important aspect shared by this research.

Typically, filmic dream sequences are visualisations of what Freud termed a dream's manifest content (Freud, 2010, p632). From a psychoanalytic perspective the manifest content acts like a code, generated from the dream's true meaning, the latent (unconscious) content. In contrast, cognitive and neurological theories of dreaming tend to state that analysing dreams to uncover any form of hidden

meaning is an outdated, unscientific process.

Pivotal in translating dream-thoughts into creative works were the surrealists, for whom ideology was central, seeing themselves as a reactionary force against the bourgeoisie and aiming for the liberation of the unconscious (Coombs, 2008, p.19). Luis Buñuel and Salvador Dalí's 1929 surrealist collaboration, *Un Chien Andalou*, used dream logic via discontinuous narrative content and bizarre visual configurations, producing an influential film which still defies easy categorisation. Images featured in the film include moonlit clouds transforming into a razor blade and slicing open a woman's eye, and a man dragging two priests, two pianos and two dead donkeys across a bedroom floor. *The Seashell and the Clergyman* (Germaine Dulac, 1928) utilises a non-linear plot structure to depict a priest's desire for the wife of a military general. The film includes a masterful use of extreme slow motion and innovative special effects including a levitating figure and a head splitting in two, to deliver dream-inspired images. Other notable works of the period include Man Ray's *Emak Bakia* [English trans. *Leave Me Alone*] (1926) and *L'étoile de mer* [English trans. *The Starfish*] (1928), both featuring visual content which initially appears disconnected, encouraging the audience to decipher connections between the carefully constructed images. For example, *The Starfish* features a sequence consisting of a woman carrying a knife up a staircase, filmed through frosted glass, a starfish on a staircase, the intertitle 'les murs de la santé [English trans. 'the walls of health'], hand held footage of a cobbled street, before tilting upwards to the sky, defying conventional narrative cause and effect.

Later artists producing films which incorporate surreal and oneiric imagery include Maya Deren, and Hans Richter with *Dreams That Money Can Buy* (1947).

Deren's most famous work, *Meshes of the Afternoon* (1943) follows a dream-like logic as she climbs the staircase of her house and encounters a cloaked figure with a mirror for a face. The film utilises a range of techniques often incorporated into dream sequences such as slow motion and the use of doubles. *Meshes of the Afternoon* also features the protagonist brandishing a knife. Deren slashes the image of a man which shatters, leading her onto a beach. This film edit demonstrates another important feature of Deren's work, of connecting seemingly disparate locations by cutting on action, producing films which explore and challenge spatial continuity, a characteristic often experienced in dreams, when one location transforms into another. This shifting of locations is central to *At Land* (Maya Deren, 1944), in which Deren shifts from climbing driftwood on a beach, to climbing along a busy dinner table toward two men sat at a chessboard, to crawling through dense undergrowth, cutting back and forth between the three locations in a seamless sequence, until a chess piece falls, leading Deren back to the beach and a rockpool.

Dreams That Money Can Buy centres around a young man who starts a business which sells dreams to clients. The film consists of several dream sequences, including stop frame animations of mannequins and footage of minimalist mobile sculptures, with each sequence directed by a different artist (including Max Ernst and Marcel Duchamp), linked by a simple narrative of different customers visiting the young man's office.

A key difficulty encountered by surrealistic film-makers was how to authentically re-create a dream. As Botz-Bornstein notes, 'One of the main theoretical problems inherent in surrealism thinking is that "irrationality" can be created by means of reason' (Betz-Bornstein, 2008, p.108). However, despite

inherent contradictions within surrealism, the art movement continues to influence and feature in the work of contemporary film makers such as David Lynch, Terry Gilliam and Michel Gondry.

Outside of surrealism, dream sequences play a prominent role in major studio productions, from Metro / Loew's *Sherlock Junior* (Buster Keaton, 1924) and RKO's *Stranger on the Third Floor* (Boris Ingster, 1940) to Marvel / 20th Century Fox's *The Wolverine* (James Mangold, 2013) and DC / Warner Bros' *Batman v Superman: Dawn of Justice* (Zack Snyder, 2016) and in critically acclaimed independent productions such as *White Material* (Claire Denis, 2009) and *The Babadook* (Jennifer Kent, 2014).

Chapter Outlines

Chapter one provides an overview of the dream theories of Freud, Jung, Hobson and Revonsuo including a comparison of how each theory addresses dreaming and the concept of the unconscious mind. I selected these four theorists as each proposed original, provocative dream theories and is a leader in their scientific field. Freud and Jung both emphasise the importance of the unconscious mind whilst Hobson and Revonsuo do not include an unconscious mind within their theories. Importantly, the thesis doesn't aim to find one theory which is 'correct', to be utilised in all film-making situations, instead treating each theory as equally important. Thus, the research focuses on the contrasts and similarities between the respective dream theories and how each of the theories offers different creative possibilities when applied in a film-making context.

Though Freud and Jung both analysed dreaming using psychoanalysis, the two theorists disagreed on several fundamental areas, such as the structure of the

mind and the purpose of dreaming, leading to different outcomes when applied to the production of dream sequences. I discuss several key writings in chapter one including Freud's *Interpretation of Dreams* (originally published 1899), *Beyond the Pleasure Principle* (1920) and *The Ego and the Id* (1923), his theories of the compulsion to repeat, the death drive, phylogenetic inheritance and *The Uncanny* (1919), and Jung's theory of the collective unconscious (proposed in 1916), dreaming and archetypes.

The contemporary theorist Allan J. Hobson is a vehement critic of psychoanalysis and has devised two influential dream theories, activation-synthesis in 1977 (with Robert McCarley), and protoconsciousness theory, first proposed in 2009, whilst Antti Revonsuo introduced his Threat Simulation Theory in 2000, partly as a rebuke to theories such as Hobson's activation-synthesis theory (Revonsuo, 2000, p879). I outline and discuss Hobson and Revonsuo's dream theories in chapter one.

Chapter one also contains a brief analysis of R. D. Laing's writings, in relation to meeting others in dreams, and Jacques Lacan's theory of the mirror stage, which contributes to the understanding of how, in film, one might depict the dream self, of meeting others in dreams, and the uncanny quality of dreams.

In chapter two I discover which film-making techniques are used to depict a dream. To this end, I make a close comparative analysis of the opening sequences of Federico Fellini's *8 ½*, which depicts a dream, and Joel Schumacher's *Falling Down*, depicting waking reality. The sequences feature similar content, in which both film's protagonists are anxious and trapped in their vehicles during a traffic hold-up. I make a close analysis of *8 ½*'s opening, producing a shot-by-shot account of the sequence,

including visual and aural content, shot type, shot duration, performance, narrative development, and technical considerations such as camera technique and editing. I compare these findings with the opening of *Falling Down* to determine how the sequences differ, producing a set of eight dream-denoting elements which are present in the opening of *8 ½* but absent from *Falling Down's* introduction sequence.

In chapter three, I analyse a further 49 dream sequences from a range of genres, eras and territories to investigate if they share the eight dream-denoting elements of *8 ½* and to discover if additional dream-denoting elements exist, revealing four further elements. From these analyses I produce detailed statistical information which records how often each dream-denoting element occurs per sequence. I use this data to underpin a further analysis of the sequences in which I establish the stylistic characteristics of combining different dream-denoting elements.

In chapter four, I compare the dream theories of Freud, Jung, Hobson and Revonsuo with the 50 analysed dream sequences, to ascertain which sequences display features of the selected dream theories (either purposefully or coincidentally). I discuss the suitability of each dream theory for use within film, particularly in terms of narrative development and the visualisation of the protagonist's internal states, referring to examples from the analysed sequences to illustrate my points. Finally, I discuss whether any of the sequences explicitly represent latent content, as defined by Freud, Jung, Hobson and Revonsuo.

Chapters five and six provide detailed accounts of my practice, including how my practice incorporates findings from chapters one to four, and how my practice feeds back into my theoretical researching and analysis. Chapter five covers my first

three films, each designed for playback on a single screen. In chapter six I discuss my final film, *Three Screens* (2019), designed for simultaneous playback on multiple screens, which incorporates and develops the methodology of the first three films.

From chapters one to four my practice incorporates:

- chapter one, Freud, Jung, Hobson and Revonsuo's dream theories, along with Laing's theories of meeting others and Lacan's theory of the mirror stage,
- chapter two and three, the twelve dream-denoting elements,
- chapter three, the combinations and low percentage use of dream-denoting elements,
- chapter four, findings of how the four selected dream theories produce a differing effect on narrative development and the visualisation of the protagonist's inner psychological and physical state,
- chapters one and four, how to represent latent content within a dream sequence.

For sequences based around Freud and Jung's theories, I directly theorise latent content whilst for sequences based on Hobson and Revonsuo's theories (which don't specifically focus on unconscious content), a combination of Freud and Jung's theories were applied to generate possible latent content. Mixing and matching theories lead to a variety of creative possibilities. For example, I interpreted the content of *Three Screens: Night Walker* (Billy Glew, 2018), initially inspired by Hobson and McCarley's activation-synthesis, from a Jungian perspective to generate Jungian-inspired latent content. Utilising the twelve dream-denoting

elements within each dream-film ensured the images will be read as a dream sequence.

Forest Dream centres around Freudian theory and uses the surrealist technique of automatic drawing to generate an initial storyboard, due to the close connection between surrealism and Freud's theories of the unconscious. After filming the storyboard, I analyse the dream-film from a Freudian perspective to reveal possible latent content which I visualise and add as a second layer to *Forest Dream*. During this second stage, I also incorporated Jung's theory of the collective unconscious, adding greater conceptual depth to the completed film.

Mira Dream (Billy Glew, 2015) draws upon Hobson and McCarley's activation-synthesis theory. To imitate the random recall of memories occurring during REM sleep, I use a computer algorithm to randomly select video clips of varying lengths and content. Once selected I link the clips and synthesise them to create a final film. The synthesis stage includes developing a narrative by combining and manipulating the source material, and by incorporating the dream-denoting elements.

Dream Three (Billy Glew, 2016) attempts to replicate an actual dream report. The dreamer is involved at the pre-production and production stages of the film-making process, in pre-production via several interviews and during production as a technical assistant and on-set consultant. Once the original dream report is visualised as a film, I use Freudian dream theory to determine possible latent content and incorporate representations of the latent content into *Dream Three's* soundtrack.

Three Screens (Billy Glew, 2019) brings together the findings from *Forest Dream*, *Mira Dream* and *Dream Three* to produce a film in a triptych structure, based around one of my own dreams which I named Soviet Soup. Each screen begins by

presenting a waking reality sequence. The waking reality sequence is the same on each screen, recreating key events which occurred the night before I had my Soviet Soup dream. Following the waking reality sequence, each screen depicts a different dream sequence. *Three Screens: Soviet Soup* seeks to replicate one of my own dream reports and utilises Revonsuo's Threat Simulation Theory to generate representations of latent content. Upon waking from my Soviet Soup dream I immediately produced a series of automatic drawings which became the storyboard for *Three Screens: The Shadow*. For *The Shadow* I use Jung's theories of dreaming to generate representations of latent content. Finally, *Three Screens: Night Walker* is based around Hobson and McCarley's activation-synthesis by utilising footage shot up to the night of my dream, which is randomly selected by a computer algorithm using the same methodology as *Mira Dream*.

The triptych form allows viewers to directly compare three dream sequence production methods outlined in this thesis, with the source material for each sequence sharing attributes but leading to markedly different results. As the dream sequences are of differing durations the three screens become unsynchronised, allowing the audience to shift their gaze between different stages of each film, leading to contrast and collaboration between the images. A fourth screen, positioned separately from the triptych, plays the three dream sequences in a loop using headphones for audio playback, enabling audience members the choice of quickly viewing the sequences in series.

Chapter One: Review of Selected Dream Theories

'Mother: What the hell are dreams anyway?

Doctor: Mysteries. Incredible body hocus-pocus. The truth is we still don't know what they are...or where they come from' *A Nightmare on Elm Street* (Wes Craven, 1984)

Dreams continue to generate debate amongst researchers, their contents viewed by some as meaningless epiphenomena, yet by others as deeply personal, revealing, even spiritual. This chapter considers four competing theories of dreaming and the unconscious mind, as proposed by Freud, Jung, Hobson, and Revonsuo. In the subsequent chapters, the theories inform the analysis of a wide range of filmic dream sequences and my production of four films. I have selected these theorists for three main reasons. Firstly, Freud, Jung, Hobson and Revonsuo have all introduced ground-breaking, influential theories of dreaming which challenged previously accepted views. Secondly, there are fundamental oppositions between the four theorists (outlined in more detail in the chapter below) which I believe provides the basis for dynamic research and original findings. Finally, setting a limit of four theorists enables a detailed level of investigation and comparison. Further research could add wider context to the findings but is beyond the scope of this thesis. For example, future analyses could incorporate the work of female dream theorists such as Ursula Voss and Jennifer Windt and feminist critiques of Freud's claims.

Freud posited a person's mental life consisted of a dynamic relationship between the id, ego and superego, residing within the states of conscious and

unconscious, that each dream is a disguised infantile wish fulfilment, and decoding a dream reveals repressed material which deeply affects the dreamer's mental life. For Jung, the mind consists of an interplay between the conscious, personal unconscious and collective unconscious and dreams provide rich personal insights via archetypal images. Jung notes that if a person understands the significance of their dreams they can get closer to achieving a state of individuation. Hobson posits consciousness is a dynamic state, with alterations in brain-mind chemistry responsible for the shift along a single continuum between waking, REM sleep and non-REM sleep. With his original theory, activation-synthesis, dreaming was an epiphenomenon caused by the chemically-induced shift in brain states. Hobson's more recent theory of protoconsciousness proposes dreaming acts as a kind of virtual reality simulator, preparing the child, *in utero*, for life in the world whilst for Revonsuo, dreaming has a specific purpose, threat simulation, to increase the chances of fitness (survival). The differences and links between the four theories demonstrates the many perspectives to view dreaming, providing a rich source of material for film makers producing dream sequences within their works.

Finally, I review selected writings by the psychoanalyst and philosopher Jacques Lacan, and psychologist R. D. Laing, as Lacan and Laing provide material which can be used to add greater depth and detail to the filmic production of dream sequences, particularly in relation to objects and characters people meet in their dreams.

Sigmund Freud (1856 – 1939)

Freud's professional career spanned nearly six decades. Amongst his many achievements he is credited as the father of psychoanalysis. In recent years psychoanalysis has come under attack from practitioners operating within a range of fields including neurology, sleep science and cognitive science. However, psychoanalytic theory continues to influence many areas of research such as *The Use of Dreams with Incest Survivors* (King and Sheehan, 1996), the treatment of post-traumatic stress disorder (PTSD), anxiety and eating disorders (Hobson and Yakely, 2017) and newer formulations of the unconscious, such as Timothy Wilson's *Strangers to Ourselves: Discovering the Adaptive Unconscious* (2002). Additionally, psychoanalysis still plays an important role in areas such as post-modern philosophy (influencing thinkers such as Julia Kristeva and Slavoj Zizek) and in the creative arts. Many Freudian theories and terms have been absorbed into western culture, influencing the perception and life experience of western citizens on a day-to-day basis (for example, the unconscious mind, the Freudian slip).

Furthermore, the surrealist art movement was heavily dependent on Freud's theories, which in turn has continued to influence popular culture from the 1920s to the present time. Therefore, understanding Freud's theories is very helpful when analysing a range of creative works such as Salvador Dalí's dream sequence in *Spellbound*, the films of Luis Buñuel, the comedy of Monty Python and contemporary productions by directors such as Lars von Trier, Michel Gondry, David Lynch and Michael Haneke.

The phenomenon of dreaming was central to many of Freud's most widely read works from *The Interpretation of Dreams* (Freud, 1899) through to dealing with

issues such as post-traumatic dreams in the controversial *Beyond the Pleasure Principle* (Freud, 1920).

Throughout his long career Freud developed and adjusted his model of the mind. At times these developments contradicted or questioned his previous works, as to be expected from a life-long theorist and practitioner.

In *Interpretation of Dreams*, Freud provided a detailed explanation of his psychoanalytic theory with the structure of the mind consisting of a conscious, preconscious and unconscious. Through his daily work as a practicing psychoanalyst, Freud deduced that neuroses in his patients were caused by dynamic content in the unconscious parts of their mind. He proposed the solution was to bring the unconscious contents to conscious awareness so a patient may confront and overcome repressed material, enabling the subject to put their mental energy toward more positive use.

For Freud, dreams provided 'a royal road to the unconscious' (Freud, 1997, p441). He reasoned that whilst a person sleeps and dreams, their conscious mind is less dominant, allowing glimpses of the unconscious. However, Freud's methodology was far from straightforward and still required the skill of a psychoanalyst, with each dream consisting of several processes which needed decoding before arriving at a dream's true meaning.

He hypothesised a dream consists of manifest content (the explicit events experienced by the dreamer whilst sleeping and recounted upon awakening) and latent content (the unconscious, hidden aspect of the dream) (Freud, 1997, p169). Freud reasoned the latent content would be too traumatic for the dreamer to experience directly and would cause them to wake up. Therefore, latent content is

distorted by what Freud terms as the censor (Freud, 1997, p53) into a more acceptable form, to preserve sleep, a process Freud referred to as the dream-work (Freud, 1997, p169).

The various forms of distortion applied to a dream include condensation (whereby two or more objects are combined into one, for example a person encountered in a dream might physically look like one person but might have the personality or voice of one or more others) (Freud, 1997, p48), displacement (in which a traumatic event is represented by an associated, less disturbing image) (Freud, 1997, p191) and secondary elaboration (the mind tries to make sense of the distorted information by combining it all into a narrative). Underlying all of this, Freud contends that every dream is a form of wish fulfilment (Freud, 1997, p68).

Furthermore, he states the dream is a childhood wish, as this is when the unconscious first formed, with many of its earliest experiences being unresolved, and finally, each wish is a fulfilment of the libido, of the sexual instincts. Freud's dream theory is intimately linked with another of his central theories, the Oedipus complex, which deals with a child's psychological and sexual development, and a child's relationship and identifications with their father and mother.

There are several points in Freud's dream theory which are open to criticism. For example, in summarising *Interpretation of Dreams*, one statement reads, 'the fact that it [the dream] is unrecognisable as a wish, and its many peculiarities and absurdities, are due to the influence of the psychic censorship to which it has been subjected during its formation' (Freud, 1997, p375). This implies either the unconscious has taken the responsibility of distorting the dream content (which would contradict everything Freud has stated about the nature of the unconscious)

or that the censor resides within or alongside the conscious and distorts the dream. However, to censor the traumatic unconscious material, first the censor would have to analyse and understand it (to be aware of which content would be potentially disturbing for the dreamer and may cause the person to wake up) and to then alter the dream content into a more acceptable form. Therefore, between the conscious and the unconscious would need to be a second analytic mental capability which doesn't rise into a person's consciousness, but can act within itself in a conscious, self-aware state and act positively on behalf of a person's well-being, to make logical decisions of what and how to censor. Further, all these functions would need to be performed simultaneously within the mind of the same sleeping person.

Amongst Freud's shorter publications, *The Uncanny* (1919) is especially relevant to his theory of dreaming, noting, 'the uncanny is that species of the frightening that goes back to what was once well known and had long been familiar' (Freud, 2003, p124). His essay includes a ten-page analysis of the word *uncanny* and the related German words *heimlich* and *unheimlich* (in English the nearest semantic equivalent is uncanny, eerie but etymologically corresponds to unhomely), (Freud, 2003, p124). Freud concludes *heimlich* (homely) and *unheimlich* (unhomely) are merged or bound together, with *unheimlich* being in some ways a 'species' of *heimlich* (Freud, 2003, p134), thus providing the possibility an event or object may embody both aspects, appearing simultaneously homely and unhomely (a positive and negative experience), generating a sense of the uncanny.

These experiences frequently occur in dreams, particularly during incidences of condensation, for example, where a dreamer might meet a person who looks like a close relative but have traits from a different individual. In one of Freud's personal

dream accounts he notes, 'I. My friend R. was my uncle. – I had a great feeling of affection for him. II. I saw before me his face, somewhat changed' (Freud, 2010, p638). Condensation can occur where a dream location looks like one place but 'feels' to be somewhere else. For example, commenting on one of his own dreams, Freud states, 'the place in which I found myself was called Rome, but I was astonished at the quantity of German posters at a street corner' (Freud, 2010, p793). Alternatively, the properties of familiar objects can change, 'I walked through a wall. It was easy. I just willed it so' (Bosnak, 1996, p220). Dream distortion and dream censorship also evoke a sense of the uncanny by purposefully replacing a traumatic image (latent content) with an acceptable image (manifest content), the dreamer experiencing stimuli which appear benevolent but contains a hidden layer of threat or trauma.

Freud continued to develop his conception of the mind. Most controversially, in the essay *Beyond the Pleasure Principle* (1920) he introduced the theory of the death drive. Here, Freud argued that in opposition to the life drive, Eros, each person has a desire to return to stasis, to death, (Freud, 1971, p50), by reasoning that pleasure is caused by a lessening of excitation and pain is caused by a heightening of excitation. Therefore, a total cessation of excitation is the aim of the death drive. To explain why a person does not just commit suicide to fulfil this urge, Freud argued that each person will battle to continue to stay alive until they can die on their own terms stating, 'the organism shall follow its own path to death' and 'the organism wishes to die only in its own fashion' (Freud, 1971, p33). Both Eros and the death drive reside in the unconscious and exert continual influence in each person's life. The death drive further complicates Freud's theory of dreaming, as two aspects of

the unconscious exert influence and compete during sleep: on one hand, dreams are the unconscious realisation of early childhood (libido-based) wish-fulfilment whilst on the other, dreams are potentially an unconscious expression of the dreamer's desire for cessation (death). *Beyond the Pleasure Principle* is unusual due to Freud demonstrating uncertainty in the final pages, stating 'I am not convinced myself' and 'I do not know how far I believe in them' (Freud, 1971, p53). Freud's search for meaning in death and in questioning immortality reflect his own personal and culturally experienced traumas, with Freud's eldest daughter dying halfway through the text's production and his coming to terms with the devastation wrought by the First World War. The notion of a death drive is still hotly contested, often being rejected by Freudian and non-Freudian theorists alike.

In *Beyond the Pleasure Principle* Freud attempted to tackle the issue of trauma dreams such as those experienced by First World War veterans, which would now be termed as symptoms of Post-Traumatic Stress Disorder (PTSD), as this type of dream seemed to contradict Freud's theory of dreams as wish fulfilments (Freud, 1971, p7). He proposed that recurring traumatic dreams were symptoms of every person's compulsion to repeat which is more primitive than, and so over-rides, the pleasure principle (Freud, 1971, p17), whilst also suggesting there may be a masochistic element (Freud, 1971, p8), linking trauma dreams to the death drive. Freud used the example of an infant boy's repetitive game, termed as fort-da (English trans. 'there gone') (Freud, 2010, p3739), to illustrate how people use repetition to work through frustration and to achieve a feeling of control when confronted with potentially traumatising events (Freud, 1971, p11), implying trauma dreams could be attempts to gain mastery of the traumatic memories they contained

through the process of repetition. Five years later, in his paper *Remarks on the Theory and Practice of Dream Interpretation* (Freud, 1925), he noted, 'Dreams that occur in a traumatic neurosis are the only *genuine* exceptions [...] to the rule that dreams are directed towards wish-fulfilment' (Freud, 2010, p4039).

Freud continued to deepen his formulation of the mind and in *The Ego and the Id* (Freud, 1923) formally introduced the tripartite construct of the id (German trans. 'Es'), ego (German trans. 'Ich') and super-ego (German trans. 'Uber-Ich'). The id is totally unconscious and contains everything that is repressed and all that is forgotten, and the Eros and death drives. The id is not capable of being good or evil, it is just a source of dynamic material. The super-ego is mainly unconscious and embodies all the laws learnt and enforced by the family and society. The role of the super-ego is of the conscience and to cause feelings of guilt for thoughts which contradict the laws and remorse for actions which contradict the laws. The ego is mainly conscious and must balance the demands of the id for immediate gratification (the pleasure principle) with the demands of the super-ego. This usually involves delaying pleasure until a more suitable time (the reality principle). Delaying pleasure raises excitation and causes unpleasure (pain), whilst enacting what is desired releases pressure, causing pleasure. In this model, the raw dream material resides in the id. During dreaming, the super-ego is less influential, and the ego can (unconsciously) allow the id's materials and desires to release in manifest form, altered from the latent form via the censor (in this case, the unconscious aspect of the super-ego).

From a contemporary perspective, it is possible to combine modern research with Freud's writings on repetition, war trauma dreams, and the id, ego and super-

ego, to maintain Freud's theory of all dreams as wish-fulfilment, an issue which caused him great difficulty during his lifetime. For example, the work of psychoanalyst and sleep researcher Ernest Hartmann, in analysing traumatic, repetitive dreams experienced by Vietnam War veterans (Hartmann, *Trauma and Dreams*, pp.100-113) closely links to Freud's work in *Beyond the Pleasure Principle*. Hartmann found soldiers suffering from PTSD dreams shared several common features. Usually they experience a single, traumatic event repeatedly in their dreams, involving the death of a close friend or buddy which the sufferer was standing next to at the time of their friend's death. The average age of the soldiers suffering from PTSD was 17 ¼ when the event occurred. In comparison, Hartmann's control group of soldiers had an average age of over 21 when they experienced their most traumatic event and in interviews stated they made a conscious effort to not get too close to other soldiers, as they didn't want to see someone they cared about get injured or killed (Hartmann, 2001, p.111).

These findings demonstrate an event is potentially more traumatic if experienced as an adolescent. Whilst a teenage soldier represses the event into the unconscious, a fully-grown adult may have a better chance to consciously resist the trauma, preventing the event becoming repressed. In Freudian terms, the super-ego unconsciously generates a sense of guilt in the teenaged survivor: 'How come he's dead and I'm alive?' (Hartmann, 2001, p.110) which may be repressed when awake but lead to the re-experiencing and repetition of events when asleep, with the dreamer attempting to gain mastery and control over the painful memories. The repetition is an attempt at wish-fulfilment, to overcome the guilt and move past the

event but the friend cannot be brought back, meaning repetition may never bring a resolution.

Carl Jung (1875 – 1961)

Carl Jung worked closely with Freud, from 1906 until their well-documented split in 1912, the same year in which Jung published *Psychology of the Unconscious*. Within this work were several deviations from Freud's theories including the crucial difference whereby Jung placed less importance on libido and the influence of early sexual behaviour, in terms of shaping the core personality. Jung later stated, 'Common-sense will always return to the fact that sexuality is only one of the biological instincts, only one of the psycho-physiological functions, though one that is without doubt very far-reaching and important' (Jung, 1970, p338). Thus, as also occurred with other distinguished thinkers such as Otto Rank and Alfred Adler, Freud and Jung's working relationship ended due to theoretical differences. Freud considered Jung's ideas to be unscientific and based around superstition and myth; Jung saw Freud as too rigid in his thinking, being unable or unwilling to consider theories which were outside of his own psychoanalytic system.

Jung first introduced his tripartite model of the mind, consisting of the personal conscious, personal unconscious and collective unconscious in 1916. Jung stated the personal conscious is all that a human being is currently aware of, including current thoughts and emotions, memories which are being reflected upon and actions which are being consciously undertaken. The personal unconscious contains everything which a person has forgotten or has repressed, and everything which a person has learnt but isn't currently active in the personal conscious. It is

Jung's third element, the collective unconscious, which deviates most from Freud. For Jung, the collective unconscious is shared by all humankind stating that in addition to the personal conscious and unconscious, 'there exists a second psychic system of a collective, universal, and impersonal nature which is identical in all individuals' (Jung, 1975, p43). The collective unconscious contains everything which humans have inherited from their ancestors, stretching back into the ancient past, and extends far into the future, to be inherited by the generations of people to come.

Jung stated the collective unconscious consists of archetypes-as-such (Jung, 1975, p43). These can be interpreted as tendencies shared by all humans. Jung likens the archetypes-as-such to the mechanism of how a crystal forms and to the potential of a dried riverbed. As a human develops, just as a crystal grows from a pre-described pattern or how water collects and then flows along a dry river bed, so each human will tend to develop in specific ways, delineated by the archetypes-as-such. Jung explains that many elements of human culture, for example reoccurring myths and stories such as the great flood and the hero, which are common to many disparate civilisations, are examples of how the archetypes-as-such take shape, influencing and guiding human culture. Jung classifies the crystallisation of the archetypes-as-such into recognisable forms which repeat throughout history as archetypal images. Examples of archetypal images include the wise old man, the mother, and symbols such as the cross and the circle.

Jung states a person cannot directly access archetypes-as-such as these are purely psychic tendencies (Jung, 1975, p48). However, a human can create objects or texts which refer to archetypal images and a person may act in ways shaped by the

collective unconscious. In dreams, a person may directly experience archetypal images. Therefore, experiencing and analysing dreams is central to many of Jung's theories, as dreams are the main source of an individual's contact with archetypal images, as they are not falsified by the conscious mind (Jung, 1971, p45). Jung states, '...their effect [the archetypes] is always strongest, that is, they anthropomorphise reality most, where consciousness is weakest and most restricted, and where fantasy can overrun the facts of the outer world' (Jung, 1975, p67). Thus, dreams provide an important key to self-development and individuation, and to an overall understanding of human nature. Jung describes several archetypes which may psychically form, with each archetype created as the embodiment of different phenomena existing unconsciously within the dreaming person. Regardless of any criteria such as ethnic and cultural background, sexuality, religion or historical period, Jung argues that the archetypes are common to all people, residing within the collective unconscious of each human being. 'From the unconscious there emanate determining influences which, independently of tradition, guarantee in every single individual a similarity and sameness of experience, and also of the way it is represented imaginatively' (Jung, 1975, p118).

During sleep, a variety of energies and emotions may be active which can trigger, or be triggered by, unconscious thoughts and memories. This psychic activity is channelled by the archetypes-as-such (human tendencies residing in the collective unconscious), causing the formation of an archetypal image which is perceived by the dreamer. This process is analogous to viewing a distant object at night-time, shrouded in shadows. Peering into the darkness, the viewer will note an object's shape, size and movement and perceive it as a specific thing. In the same way, whilst

dreaming, the personal conscious will be aware of a grouping of psychic phenomena and via the tendency-forming aspects of the collective unconscious, the grouping will appear as a specific form; an archetypal image. Additionally, the day's residue, memories and thoughts contribute to the manifest content of the dream, such as providing locations or characters.

Jung states there is no limit to the number of archetypal images which humans can generate (Jung, 1975, p48). However, there are several key archetypes which Jung considered central to every person's development. These are the persona (the different identities or masks which a person assumes in given situations, for example how a person presents themselves to work colleagues and close family members), the anima and animus (the female aspect within a male and the masculine aspect within a female), the shadow (everything which is repressed, all aspects of one's self which one denies, those parts which are concealed by the persona) and the self (the overall collection of all the parts of a person, the centre from which all other parts of a person extend). In dreams it is possible for these archetypes to reveal themselves, often in a hidden or cryptic form. For example, a person struggling with repressed anger may dream of an angry child or a violent attacker (the shadow) or a man unable to show love or other sensitive emotions might dream of a mother figure or shy female (the anima). By identifying the archetypes which appear in dreams a person can gain clearer understanding of their self, enabling them to develop and mature. Additionally, archetypes do not have to embody as human figures. They can also take the shape of animals, such as the faithful dog, or as a location, termed by Jung as an archetype of transformation (Jung, 1975, p38), for example a forest or a lake.

Growing self-knowledge contributes to the process of individuation, one of Jung's key principles, in which a person becomes a fully actualised human being, living a balanced and positive life (Jung, 1975, p275). The analysis of one's dreams is central to individuation, as recognising the presence of archetypal images during dreaming can lead to important realisations about oneself. Individuation involves a person developing, so they don't feel the need to hide behind a persona, are able to accept and incorporate the anima / animus, and to bring as much of the shadow into the light as possible, to accept rather than repress negative elements of the personality. Closely related to this process is Jung's concept of personality types, whereby a person is classified as possessing a specific combination of character traits. Within this personality theory each person has a dominant trait and an under-developed, weak trait (Frager and Fadiman, 1998, p64). Most well-known in this theory are Jung's conception of the two attitudes of introversion and extroversion, with the other elements used to define an individual's personality being the cognitive functions of thinking and feeling, and sensation and intuition. The dominant function resides mostly in the personal conscious of a person and has a strong effect on their conscious actions and persona. The least developed function, called the inferior function, mainly exists within a person's unconscious and is therefore less controlled and less mature. Thus, the inferior function is liable to make a person feel guilty or ashamed when acted upon, meaning the under-developed trait has a large influence on shaping a person's shadow archetype. As the shadow mainly resides in the unconscious, it often reveals itself during dreams.

Paying attention to dream content greatly contributes to the individuation process and the development of personality. Jung argues the revealing of archetypal

images and the information contained in dreams enables a person to gain understanding of their personal unconscious and to provide insight into actions and beliefs which affect their daily, conscious lives. Thus, a person may make changes in their behaviour and so move further in the process of individuation.

Key disagreements between Freud and Jung: collective unconscious, libido and religion

One of the central differences cited between Freud and Jung is their models of the mind, with Freud's model consisting of conscious and unconscious, and Jung incorporating an additional component, the collective unconscious. However, whilst Freud didn't openly acknowledge the existence of a collective unconscious, he referred to very similar phenomena in his own writing, often using the term phylogenetic. In *The Interpretation of Dreams*, Freud quotes Nietzsche contemplating the nature of dreaming: 'there persists a primordial part of humanity which we can no longer reach by a direct path' (Freud, 1997, p389) and then in his own words states, 'We are encouraged to expect, from the analysis of dreams, a knowledge of the archaic inheritance of man, a knowledge of psychical things in him that are innate' (Freud, 1997, p389).

In *From The History Of An Infantile Neurosis*, published in 1918, Freud states his view that the Oedipus complex is phylogenetic (Freud, 2010, p3594) and in *The Ego and the Id*, published in 1923, a statement that can clearly be related to the process of dreaming, 'Thinking in pictures is, therefore, only a very incomplete form of becoming conscious. In some way, too, it stands nearer to unconscious processes than does thinking in words, and it is unquestionably older than the latter both

ontologically and phylogenetically' (Freud, 2010, p3955). Later in *The Ego and the Id*, when discussing the super-ego, Freud states; 'But the derivation of the super-ego from the first object-cathexes of the id, from the Oedipus complex, signifies even more for it. This derivation, as we have already shown, brings it into relation with the phylogenetic acquisitions of the id and makes it a reincarnation of former ego-structures which have left their precipitates behind in the id' (Freud, 2010, p3982). Freud refers to the phylogenetic concept in later works such as *The Future of an Illusion* (Freud, 1927) and *Civilisation and Its Discontents* (Freud, 1930) in relation to religion and the development of human culture. For Jung, the collective unconscious plays a pivotal role in both areas. The main difference is that Freud, by not denoting the phylogenetic as a specific component of the mind, is able to infer that human nature is partially hereditary, without needing to give an overall definition of the phylogenetic; it is enough to state this phenomenon is contained within the unconscious, in the id and super-ego. By using the term phylogenetic, Freud incorporates the concept into the structure of the brain, perhaps making his theory seem more scientific than Jung's, whilst also avoiding the need to acknowledge the acceptance of one of Jung's central concepts.

An important disagreement between Freud and Jung centred on the notion of the libido, a theoretical difference which has a large effect on dream interpretation. For Freud, the libido refers to sexual energy, originates in the child's growing sexuality, and completely fuels the Eros component of a person's psyche. Furthermore, all dreams originate as wish-fulfilments derived from this libidinal source. Jung acknowledged the sexual instincts were very powerful but argued there were important other, separate, elements of a person which didn't contain sexual

energy that also wield a strong influence, such as those of survival and especially of a spiritual self. Consequently, for Jung, libido was a general term which denoted all the active, creative energy within a person. Jung noted, 'We moderns are faced with the necessity of rediscovering the life of the spirit: we must experience it anew for ourselves. It is the only way to break the spell that binds us to the cycle of biological events' (Jung, 1970, 339).

Freud and Jung's opposed views on religion had a strong influence on their dream interpretations. For Freud, an ardent atheist, religion was a kind of neurosis, derived from Oedipal instincts related to the father, whereas for Jung, a Christian with a strong spiritual and academic interest in many religions, the importance Freud attributed to the longing for a father was a displaced, unconscious longing for a relationship with God. These differing positions resulted in Freud producing *The Future of an Illusion*, a heavy critique of religious belief, whilst Jung consciously incorporated religious ideas and experience into the treatment of his patients.

J. Allan Hobson (born 1933)

Hobson's career spans over 60 years and incorporates neurochemistry, psychology, psychiatry and sleep science. His influential work in the field of dream research can be roughly split across two periods, relating to his two major dream theories: activation-synthesis theory, first proposed by Hobson and Robert McCarley in 1977 and protoconsciousness theory, first proposed by Hobson in 2009.

Approximately, activation-synthesis mainly deals with the physiological and neurochemical mechanics of dreaming whilst protoconsciousness theory focuses on the evolutionary reasons of why people dream.

The activation-synthesis theory states that dreaming is a physiological phenomenon (Hobson, 1988, p204) and during sleep, as the body regulates and heals itself, chemical reactions and subsequent neurological activations occur which trigger the release of stored data such as memories and images. Attempting to understand the internally generated information, the brain-mind synthesises the data by creating associative links. In this theory there is no underlying, latent meaning to a dream as the triggered memories are randomly produced, allowing no scope for an unconscious mind as proposed by Freud and Jung. If the dreamer finds meaning in a dream upon waking, it is purely subjective and coincidental. Consequently, activation-synthesis could contribute toward disproving the existence of an unconscious mind, as researchers often cite dreams as a central form of evidence to prove the existence of an unconscious self.

Modulations between waking and dreaming states of consciousness occur through alterations in brain chemistry and these processes are situated in the brain stem. Increasing the cholinergic drive increases REM sleep (and REM-associated dreaming) whilst an increase in the aminergic system (which inhibits the cholinergic system) results in less REM sleep (Hobson, 1988, p193). In dreaming, external input is actively inhibited by the brain and through occlusion, whereby the brain-mind generates such a high level of internal messages and associations that external signals are ignored (Hobson, 1988, p206). To prevent a person acting out their dreams, inhibiting motor-command neurons block motor-output (Hobson, 1988, p207). The brain can then generate PGO waves (P for *pons*, G for [lateral] *geniculate*, and O for *occipital cortex*) from the pons, situated within the brain stem, which trigger the process of dreaming (Hobson, 1988, p207).

The synthesis component of activation-synthesis accounts for dream narrative, as whilst dreams often feature bizarre content, dream reports clearly demonstrate underlying narrative structures, which seems to contradict activation-synthesis' assertion of dreams being a constant flow and interaction of randomly generated content. At the time of working on activation-synthesis, Hobson stated, 'We know far too little about the brain in any of its functional states to hope to account for the narrative aspects of dreaming' (Hobson, 1988, p232) but provided one possible explanation for dream narratives, which he termed as "orientational frame" theory (Hobson, 1988, p276). Hobson suggested the narrative element of a dream is a by-product of the brain-mind receiving only internally generated information stating, 'Might it not, rather, reflect the undistorted efforts of the brain-mind to perform one of its most essential functions: to establish orientational stability?' (Hobson, 1988, p273). 'The simplest explanation [...] is disorientation itself, pure and simple. We need not assume a defensive purpose but only that external orientation cues are absent (because the dreamer is asleep and cut off from the world), and that his own brain compass is spinning (because the brain mechanism serving memory, attention and insight are disabled)' (Hobson, 1988, p275). Using this conceptual model, the usual cues a person would use to orientate themselves are missing. Therefore, due to the stimulus which the brain-mind (internally) receives being disorganised, the information is, 'held together in a narrative frame by their intrinsic associative relations' (Hobson, 1988, p278).

In making these pronouncements, Hobson doesn't explain why a person constructs one specific narrative over another, potentially overlooking that the selected narrative relates to what Freud and Jung would term as unconscious

behaviour. Further, when Hobson provides analysis of sample dreams in his text, he makes subjective judgements relating to dream content including the motivations of dream characters, the relevance of locations and interpretations of over-arching associative themes, such as authority and nurturance (Hobson, 1988, p280). Hobson presents each of his dream interpretations as accurate, sometimes accompanied by an alternative Freudian reading, also made by Hobson, to demonstrate how Freudian theory is incorrect, without clear objective data to validate why interpretations related to Hobson's theory are more accurate. For example, Hobson notes of an analysed dream, 'The contrapuntal play of the themes is characterized by [...] an abnormal fluidity of opposites, resulting in heightened ambivalence that amplifies the ironies of human existence' (Hobson, 1988, p280), stating, 'It is in this sense that we may share with psychoanalysts a fascination with the dream as a mirror of our concerns. But for me the dream mirror reflects its deep structures accurately – and without distortion' (Hobson, 1988, p280). This passage indicates Hobson's interpretations are based on how he personally (subjectively) associates the dream contents with one another. To arrive at his dream interpretation, he processes and assimilates the information (in part unconsciously), often constructing an argument which provides positive bias toward his individual stance on dreams and dreaming.

Since the introduction of activation-synthesis, Hobson has continued to develop and refine his theories, with utilisation of modern technologies such as brain scanning enabling Hobson to construct his AIM hypothesis (Activation / Input-output gating / chemical Modulation), (Hobson, 2009, p808) which provides a three-dimensional model for visualising how the modality of a person's consciousness shifts between the different states of waking, non-rapid eye movement (NREM) and

rapid eye movement (REM). The AIM hypothesis accounts for a variety of modalities including lucid dreaming, which Hobson defines as a hybrid state with features of waking and sleeping (Hobson, 2009, p808), sleep disorders and psychiatric disorders. Thus, for Hobson, dreaming is a state of consciousness defined as different from waking due to differentiated chemical / neurological characteristics and is not considered to be the activity of an unconscious mind.

Hobson and art professor Hellmut Wohl co-wrote *From Angels to Neurons: Art and the New Science of Dreaming* (Hobson, Wohl, 2005) in which he applied his neurological theories to the production of artworks including drawing, painting and film-making, to demonstrate the neurological processes affecting artists and how dreams, as theorised by Hobson, influence creative processes.

In 2009, Hobson introduced his theory of protoconsciousness, which underpins much of his subsequent work. Protoconsciousness proposes that whilst *in utero*, the developing human foetus experiences REM sleep, peaking at 100% around week 30 of gestation (Hobson, 2015, p179). From these observations, Hobson concludes that during REM sleep the developing foetus rehearses and constructs basic templates, for example specific physical movements and other preparational schema, which form the basis of postnatal consciousness. In this way, dreaming, especially during REM sleep, is a kind of virtual reality simulator, allowing the unborn foetus to prepare for real world experience (Hobson, 2015, p113). Throughout a person's life REM sleep maintains this purpose, ultimately promoting a higher chance of fitness (survival and propagation) by consolidating information acquired during waking and rehearsing strategies in a safe, virtual environment.

For the first months of life, a baby experiences approximately eight hours of REM sleep a day (Hobson, 2009, p4). During these months, the infant experiences the world through the brain-mind state of primary consciousness. Hobson notes newborns and lower animals possess primary consciousness in full at birth and that primary consciousness is dependent on the (older in evolutionary terms) lower brain (Hobson, 2015, p109). Thus, primary consciousness focuses on instinctual behaviour and acting 'in the now'. As the child ages, they develop secondary consciousness, concerned with heightened states of brain-mind functioning situated in the upper brain and reciprocally, REM gradually lessens, dropping to approximately one and a half hours per night in adulthood (Hobson, 2009, p4). Hobson notes dreaming is closer to primary consciousness than secondary consciousness, as when dreaming the subject experiences deficiencies in critical thought, self-awareness (including being unaware that one is dreaming) and memory, and heightened emotions (Hobson, 2009, p1), leading Hobson to deduce that dreaming brings a person closest to a state of protoconsciousness (Hobson, 2015, p109).

Hobson has proposed that bizarreness in dreaming can be correlated with movement of the eyes in waking and REM sleep. During waking, a human's eyes make approximately five to twenty movements per second (Hobson, 2015, p18). Hobson hypothesises to process information at such a high rate, the brain-mind must predict what it will see and then matches the actual visual information against the prediction, correcting imperfections in the prediction, moment by moment, to gain a stable image of the world outside of the observer. Thus, whilst the world is 'out there', the picture of the world is formed within the observer's brain-mind. During REM sleep, the brain-mind receives no external input. This means the dreaming

brain-mind uncritically accepts any image it perceives as accurate, as there is no external input to disprove a prediction (particularly when coupled with the activated and deactivated parts of the brain which typify REM sleep, such as lack of critical awareness and memory).

In 2015, Hobson introduced the term 'psychodynamic neurology'. Usually, 'psychodynamic' refers to the interplay of the conscious and unconscious mind, highlighting the importance of underlying influences exerted by the unconscious. Instead, Hobson stresses it is neurological phenomena which underlie and affect conscious behaviour, leading to modulation between the mental states of waking, REM sleep and NREM sleep. Crucially, these phenomena can be empirically measured and quantified (for example, by measuring the presence of neurochemicals during different mental states or by undertaking a spectral analysis of scalp-located electroencephalographic (EEG) brain scans (Voss et al, 2009) to determine brain activity during different states). For Hobson, this quantitative methodology produces a scientific, neurological-based explanation of psychodynamics, as opposed to a psychoanalytic explanation of unconscious influences, stating psychoanalysis is, 'a pseudoscience', more comparable with being a religion than a science, (Hobson, 2015, p104) as 'laughable' (Hobson, 2015, p103), and that after more than a century, has yielded almost nothing which deserves to be scientifically preserved (Hobson, 2015, p5).

Antti Revonsuo (born 1963)

Antti Revonsuo introduced his Threat Simulation Theory (TST) in 2000, partly as a response to the neurocognitivist arguments of theorists such as Hobson

(Revonsuo, 2000, p3). In his paper, Revonsuo presents six propositions to construct his argument that dreaming has a clearly defined function which evolved to increase fitness (survival and procreation) in early humans. Revonsuo states Threat Simulation Theory, 'treats the conscious phenomenal experience of dreaming as a natural biological phenomenon best understood from the combined viewpoints of psychology, evolutionary biology, and cognitive neuroscience' (Revonsuo, 2000, p2). Revonsuo states that dreaming constitutes an organised and selective simulation of the perceptual world (Revonsuo, 2000, p6) to enable the rehearsal of survival strategies, arguing the phenomenon could not have occurred and persisted in humans by chance and therefore must be a biologically selected adaptation.

He argues that the persistence of dreaming in modern humans proves dreaming improved fitness among early humans because those who survived passed on the ability to their off-spring whilst those unable to dream eventually died out (Revonsuo, 2000, p3). Revonsuo notes it is possible to differentiate between dreaming as a by-product (as a nonadaptation, not evolutionarily selected for but retained because some of dreaming's features were coupled with another phenomenon which was selected for), adaptive functioning (whereby dreaming increased fitness in early humans) and invented functioning, such as recounting and interpreting dreams. He states that invented functions can be useful for personal and cultural purposes but are not a result of natural selection, stating it is doubtful early humans self-reflectively analysed their dreams (Revonsuo, 2000, p3). However, there is no one way of explicitly knowing this. For example, an alternative hypothesis would be those who could reflect on their dreams had a better chance to survive by

discussing their experience with others, which would demonstrate benefits to fitness from analysing dream content.

To analyse and quantify threatening content in dreams Revonsuo devised the Dream Threat Scale (DTS) (Revonsuo, 2009, p2). The aim of the Dream Threat Scale, used in a range of studies by researchers, is to produce quantitative data from verbal, qualitative accounts (Revonsuo, 2009, p3) to directly, empirically test whether dreams contain features necessary for threat simulation (Revonsuo, 2009, p2). Utilising the Dream Threat Scale he found a higher percentage of dreams contain threatening, rather than non-threatening, content (Revonsuo, 2009, p6), supporting the threat simulation argument (Revonsuo, 2000, p7) and that people living in dangerous environments are more likely to have dreams with threatening content. As an example, he notes the dreams of traumatised Kurdish children contain six times more threat-related content than non-traumatised Finnish children (Revonsuo, 2009, p8).

Revonsuo states that consciousness is physically located in the brain (Revonsuo, 2001, p4) and arises through the synchronised activity of neurons, an emergent state which Revonsuo terms as neuroconsciousness (Revonsuo, 2001, p7). For Revonsuo, consciousness is triggered via interlinked processes across various regions in the brain and is characterised as either electrophysiological or bioelectrical activity patterns (Revonsuo, 2001, p7). He defines consciousness as the phenomenal level of organisation in the brain and dreaming as a subjective experience realised at the phenomenal level (Revonsuo, 2000, p6).

In a thought experiment, Revonsuo states that if brain-scanning equipment were sufficiently detailed, it might be possible for a group of independent observers

to recognise the brain-activity patterns in dreaming subjects and predict the content of the subjects' dreams. Upon waking, if the predictions of the independent observers correctly matched the content of the subjects' dream reports, it would mean consciousness could be visualised and its phenomenal level of organisation in the brain 'discovered' (Revonsuo, 2001, p9). However, this hypothesis relies on the supposition that every time a person thinks of a specific object, the neuronal patterns in the subject's brain are the same. Even discounting that images in dreams and waking are usually more complex than a single, specific instance, there is also the possibility each visualisation is processed differently by the brain, meaning the activity patterns would be different each time. For example, the first time a person sees a dog would generate one pattern, then recognising / comparing against other animals / dogs on subsequent times, adjusted via positive and negative personal experiences with dogs, in different scenarios, demonstrates how the pattern would continuously evolve. However, aside from these difficulties, Revonsuo's thought experiment clearly shows he considers dreaming to be a state of consciousness, as opposed to the activity of an unconscious mind, as he states being able to correctly, independently identify dream content as successfully 'discovering' consciousness. For this to be true, dreaming must be a state of consciousness (and not some other activity attributable to a different phenomenon such as an unconscious mind).

He notes dreaming can occur at any time during sleep but is optimal during the REM stage (Revonsuo, 2000, p2) and states the primary evolutionary context for threat simulation is the Pleistocene environment, spanning from 2.6 million to 11,700 years ago, (Revonsuo, 2000, p6) from the first cited examples of Homo Erectus through to Anatomically Modern Homo Sapiens (modern humans).

Thus, a core principle of Threat Simulation Theory is that dream content is more consistent with the ancient world than the modern one. To support this claim, Revonsuo notes children's dreams contain a higher proportion of animals than that of adults, theorising that as a person ages, the internal model of the world, which we initially inherit and interact with in our dreams as threat simulation, is modified through actual experience. Thus, as we age our dreams gradually reflect a larger percentage of modern, as opposed to ancient, animal-based, content. Further, he notes that dreams vastly under-represent a wide variety of common activities, citing a study of subjects who spend several hours each day reading, writing or calculating but rarely or never dream of these tasks. From this he deduces because these actions are relatively modern on a human evolutionary timescale, they have not been incorporated into the more ancient threat simulation system.

Exploring how the threat simulation operates, Revonsuo notes dreaming is strongly linked with emotionally charged memories. He states there is a 'hot' amygdala-centred emotional system and a 'cool' hippocampally centred episodic memory system in the brain (Revonsuo, 2000, p10). The 'hot' system triggers behaviours such as fear and defensive responses, and it is this 'hot' system which is shown in brain scans to be activated during REM sleep. He also states traumatic waking experiences are statistically-likely to be incorporated into dreams, as demonstrated in dream reports from subjects suffering from PTSD (Revonsuo, 2000, p11) and cites the repetition of traumatic dreams as an example of threat simulation activity (Revonsuo, 2000, p12). Revonsuo argues the threat simulation system can only be fully activated by real-life threatening events and that early humans, with a life expectancy of 20-25 years (Revonsuo, 2000, p15) were continually exposed to

danger, meaning their threat simulation systems would be fully activated, whereas most modern humans do not live in such circumstances, so their threat simulation systems are only partially activated.

To demonstrate how threat simulation might be at work in all mammals, cats' dreams are cited as examples. When the animals have their locus coeruleus surgically damaged (the area of a cat's brain responsible for muscle relaxation in sleep), during REM sleep the animals act out tasks appearing similar to hunting and stalking (Revonsuo, 2000, p17). Of course, researchers can only infer the content of these dreams or the dreams of mammals genetically closer to humans such as apes, demonstrating how difficult it is to know if or how proto-humans dreamt, and thus to prove that early humans also experienced threat simulation dreams. To demonstrate how modern humans react in their dreams in the same way as when awake, Revonsuo cites research which shows motor activity recorded in brain scans correlates with movements recorded in dream reports and that subjects suffering from REM Sleep Behaviour Disorder (where the inhibitory system which usually blocks movement in sleep doesn't function correctly) often physically act out experiences later recorded in their dream reports (Revonsuo, 2000, p13).

Central to Threat Simulation Theory is that an individual will gain enhanced performance of perceptual and motor skills in real situations even if their dream rehearsals are not explicitly remembered (Revonsuo, 2000, p14). To support this premise, Revonsuo refers to research which showed how the performance of amnesiacs carrying out a set task became faster and more accurate, even if they could not remember doing the activity before (Revonsuo, 2000, p14). Research in other areas, such as overcoming motor impairments and sports science, lends strong

support to this aspect of Threat Simulation Theory. For example, examining explicit and implicit learning in people suffering from motor-related disabilities, Steenbergen et al. note, 'there is now substantial evidence that suggests that implicitly learned motor skills are robust against anxiety [...] and fatigue [...] as compared to explicitly learned motor skills. The greater robustness of implicitly learned skills to disruptions provides a major advantage over explicit learning, retention being one of the primary aims of practice in sports and (paediatric) rehabilitation' (Steenbergen et al, 2010, p2). In a study on the development of soccer skills amongst young footballers, several benefits of implicit learning are listed such as implicitly learned motor skills being more stable than explicitly learned skills, that implicit learning is not related to a learner's intelligence, and implicitly obtained skills are less vulnerable to choking under pressure (Verburgh, 2016, p3). If an individual were in a threatening situation, this body of evidence supports Revonsuo's assertion that implicitly learned survival strategies could be enacted quickly without the need for time-consuming conscious decision-making, and implicit learning would enable an individual to react more efficiently in a stressful situation.

Revonsuo is sceptical that dreams can help solve intellectual or emotional problems, (Revonsuo, 2000, p5) arguing if dreams are supposed to contribute to our well-being in these areas they should contain a higher degree of positive content, especially if a person is currently traumatised, concluding there is no convincing evidence to support dreams functioning in this way (Revonsuo, 2000, p6).

He states that theories derived from cognitive neuroscience regard dreaming as an epiphenomenon caused by other activity in the brain and are therefore at odds with Threat Simulation Theory. He criticises Hobson and McCarley's activation-

synthesis theory for not explaining why the brain should generate images whilst dreaming, and why dreams often have realistic settings and continuous narratives if they are a randomly produced phenomenon (Revonsuo, 2000, p3).

There are several critiques which can be levelled at Revonsuo's theory. For example, Revonsuo states that dreams rarely simulate diseases or natural disasters, as there would be little chance for early humans to survive these kinds of threats (Revonsuo, 2009, p18). This raises several questions. For example, how does a dreaming individual 'decide' which threats are most useful to simulate, such as to rehearse escaping an enemy but to not to rehearse avoiding infecting oneself, or to avoid floods or storms? Can such an ability really be inherited?

Revonsuo claims the high percentage of children's dreams containing animals proves the Threat Simulation Theory dates from an ancient time. However, it is very common for modern humans to teach young children the names of animals from picture books. Many children's toys are of animals, stories and fairy tales contain animals, such as *The Three Little Pigs* and *Aesop's Fables*, and many children's TV shows and films feature animals, for example *Lion King* (Allers, Minkoff, 1994) and *Madagascar* (Darnell, McGrath, 2005). Children are exposed to images of animals acting naturally and anthropomorphised. Perhaps this is the reason so many children's dreams feature animals, and as the child grows older and experiences a wider range of stimuli, the percentage of animal content is less, leading to less animal-related dreams.

When Revonsuo describes how he selects which dreams are classified as containing threatening content, he states, 'dreams where the dream self deliberately harms themselves are not considered threatening, as they do not include material

where the dreamer is rehearsing self-preservation' (Revonsuo, 2009, p3). However, an alternative can be proposed. For example, if the dreamer was suffering from suicidal thoughts during waking, a dream containing self-harm may represent a misfiring of the Threat Simulation Theory, whereby the individual is searching for solutions to escape the pain they are experiencing when awake. By equating the pain of living with a threat, the threat simulation process may be psychically reproducing a similar effect to that of autoimmune diseases, when healthy cells are attacked by one's own immune system.

In dealing with dream content, Revonsuo shows how traumatised people are more likely to have threat simulation dreams. It would be useful for Revonsuo to demonstrate what percentage of the threat simulation dreams accurately replicate the waking threats an individual currently faces versus dreaming of generalised threats mainly consisting of symbolic manifest content. This would demonstrate a stronger link between an individual's dream content and Threat Simulation Theory, aside from those people suffering from PTSD.

Finally, the Dream Threat Scale specifically deals with manifest dream content, excluding the possibility of dreams being produced via latent content. On one hand, Threat Simulation Theory is based around the importance of implicit, unconscious, decision-making and unconscious imaginings, such as a dreamer unconsciously selecting which threats to simulate and the unconscious production of simulation scenarios, to rehearse survival strategies. Yet powerful latent influences, such as repressed or infantile memories, repressed desires, issues of guilt, and anxiety, are not considered as possible factors in the production of dream content.

By what criteria are some unconscious processes deemed scientifically valid to cause dreams and others not?

Revonsuo dismisses the theories of Freud, perhaps to partly distance from issues relating to unconscious content, yet several aspects of Revonsuo's theory are key features in Freud's work, such as the importance Threat Simulation Theory places upon repetition and practice, and Freud's notion of the compulsion to repeat in Freud's *Beyond the Pleasure Principle*. Revonsuo also doesn't discuss links between his theory and Freud's phylogenetic elements of dreaming, and Jung's collective unconscious.

Jacques Lacan (1901 – 1981)

Jacques Lacan was a psychoanalyst, particularly noted for his re-assessment of Freud, developing and re-introducing many of Freud's concepts to a new generation of thinkers. Amongst Lacan's extensive catalogue of work, his concept of the mirror stage is especially relevant to this thesis.

The mirror stage of development occurs when an individual is around six to eighteen months old and first notices their full reflection. Until this point, Lacan states that a child is unaware of their complete being, instead seeing themselves as a set of unconnected, separate parts. The mirror image enables a person to see themselves as a whole; from this image a person forms the conception of their self, of their *I*, the ego (Lacan, 1949, p503). The child realises they have control over the image and thus, control over oneself. However, the image is separate from the subject. Consequently, the ego is formed outside of oneself. This action is a wholly Imaginary act on the part of the child. However, whilst grounded in Lacan's

Imaginary stage of a person's development, the mirror stage is also a pre-cursor to initiation into the Symbolic stage, with the image in the mirror recognised as a signifier of oneself. In this case, as well as seeing oneself in first person, it is possible to objectify oneself, to see one's reflection in the second and third person, perceiving oneself as if they were another.

The mirror stage is the birth and location of an always present tension inside a person, as it occupies a crucial marking point between the self-focused world of the Imaginary and the Symbolic world, as an object constructed for, and interacting with others. This reflected image as signifier may further reify if accompanied with affirming language from a parent (for example, 'Look at you', 'Look what a big girl you are are').

Over time the image in the mirror can change or develop against a person's will, for example by appearing to age or grow unhealthy, which can lead to anxiety and inner-conflict. This disconnection with the ego, whereby a person is themselves (an internal sense of self) whilst also being outside of themselves (the objectified self, as seen in the mirror), relates strongly to dream characters. For example, in dreaming, the dream self (internal, experiencing in first person) meets others (for example friends, a relative, an attacker, perceived as not I), separate from the dreaming self; yet the others one meets and interacts with in dreams, are all constructs of the unconscious self. In this way, others in dreams clearly embody Freud's uncanny, being simultaneously homely and unhomely.

R. D. Laing (1927 – 1989)

Ronald David Laing was a psychiatrist noted for his theories relating to identity, to the impact of the family on the self, and an advocate for alternative treatments for persons diagnosed as schizophrenic. He is noted as a key figure in the anti-psychiatry movement, arguing that people should be encouraged to navigate through mental illness without the use of anti-psychotic drugs. Instead schizoid behaviour should be viewed as a reaction against societal pressures, which if overcome, can lead to profound self-development, similar to Jung's process of individuation.

Laing's theories of the self's interaction with others reveals subtle, important differences between waking and dreaming interactions. Laing noted the distinctions between, and combinations of, experience and behaviour are crucial to understanding how humans interact with one another (Laing, 1990, p15). Laing states, 'One person investigating the experience of another can only be directly aware of his own experience of the other...He cannot see through the other's eyes and cannot hear through the other's ears' (Laing, 1972, p28). Thus, a subject can only know their own experience and can only infer an other's experience by observing the other's behaviour. The behaviour and inferred experience of the other affects the subject's experience, affecting the subject's behaviour. This in turn affects the other's experience, and so on. Laing notes, 'When two (or more) persons are in relation, the behaviour of each towards the other is mediated by the experience by each of the other, and the experience of each is mediated by the behaviour of each other' (Laing, 1990, p22). This phenomenological view of human life positions each person as always separated from others and always uncertain of others' motives and

true nature, leaving each of us isolated and disconnected from the outer world, our experience and consequent behaviour constantly affected by a personally unknowable universe.

In dreams this position differs in important ways. For example, when dreaming:

- the subject unconsciously creates all others. Therefore, unconsciously, the subject fully knows the experience of the other, whilst consciously the subject only infers the other's experience through the other's behaviour, as when waking.
- unconsciously, the subject is aware the other knows the subject's experience and behaviour.
- the other knows the subject's experience. Therefore, the other's experience and behaviour can alter in relation to both the subject's experience and the subject's behaviour, as opposed to during waking, when the other only infers the subject's experience from the subject's behaviour.
- consciously, the subject only processes the other's behaviour. This behaviour may appear unusual, as the other knows both the subject's experience and behaviour, so the other may act or react in unusual or unpredictable ways.

These differences highlight the uncanny qualities of dreaming. Meeting others in dreams consciously appears the same as waking but unconsciously is very different, with inhibited memory and weakened critical thinking contributing to the uncanny experience. Thus, the dream construction produces a loop, as follows:

1. The unconscious mind generates the scenario and the others;

2. the unconscious generates the experience and behaviour, the words and actions, of the others;
3. the unconscious influences the conscious, dreaming perception of the subject;
4. the dreamer's conscious mind, always influenced by their unconscious, perceives the unfolding dream events and interprets the dream.
5. The ongoing dream influences the dreamer's unconscious, for example, by provoking fear or causing repressed memories to activate, further developing the dream.

Applied to the production of filmic dream sequences, the intricate complexity of this process provides a film maker with a vast variety of creative possibilities, especially for revealing internal aspects of on-screen characters and for narrative development which would otherwise prove awkward or clumsy to express.

In chapter two, I will attempt to uncover how films currently depict dreams by comparing the differing film-making techniques utilised in a waking reality sequence and a dream sequence. The findings from chapter two inform chapter three, a wider study of 50 dream sequences, in which I search for additional dream-denoting techniques, and stylistic patterns of dream sequence production.

Chapter Two: A Comparison of Dream and Waking Reality:

The opening sequences of *8 ½* and *Falling Down*

This chapter investigates which elements should be present in a filmic sequence for the audience to perceive that a dream is being depicted, by comparing the opening sequences of *8 ½* and *Falling Down*. It is particularly useful to compare these sequences as both open their respective films. Therefore, the audience has no previous narrative information from which to contextualise the unfolding events. However, although the sequences contain many similarities, the opening of *8 ½* is revealed to be a dream whilst the opening of *Falling Down* depicts waking reality. Additionally, the opening of *Falling Down* is heavily influenced by *8 ½*, as noted by film critic Roger Ebert, 'The director, Joel Schumacher, deliberately shoots this scene as a homage to the famous opening of Fellini's *8 ½* but instead of finding himself floating up into the sky, like Federico Fellini's hero, the man gets out of his car, slams the door, and goes walking alone across Los Angeles' (Ebert, 1993).

In brief, *8 ½* opens with Guido, the protagonist (played by Fellini's frequent collaborator, Marcello Mastroianni), stuck in a traffic jam. Guido becomes trapped inside his car and to escape fumes which are pouring in through the vehicle's ventilation system, he climbs out of the driver's side window and flies away, travelling for some distance through the clouds. Following this he is flown like a kite, before falling from the sky into the sea, finishing with a cut to Guido waking from his dream.

Falling Down opens with the protagonist, William Foster (played by Michael Douglas), stuck in a traffic hold-up, underneath a bridge (as in *8 ½*). Eventually Foster

escapes from his car, leaving his vehicle behind and walking off into the distance. This sequence resembles much of the beginning of *8 ½*, including the initial claustrophobic atmosphere and the overall narrative structure until Guido and Foster leave their respective vehicles. There are also similarities in shot selection and composition, and use of certain sounds, such as an exaggerated loudness of breathing. Throughout the opening of *8 ½* many unusual events occur. In contrast, in *Falling Down's* opening an overwhelming majority of events are depicted naturalistically and are subject to the rules of cause and effect.

Summary of Findings: eight dream-denoting elements

This comparison reveals eight criteria to differentiate between a dream sequence and a waking reality sequence. The criteria which denote the opening sequence of *8 ½* as a dream are:

- 1) The sequence violates the diegetic world's rules of cause and effect / nature / physics.
- 2) Difficult to understand the logic governing how the protagonist and other characters act.
- 3) The manner in which characters react to the protagonist is unusual / motivation for other characters' reaction toward the protagonist is unclear.
- 4) Camera technique to mimic the experience of viewing in real time / to encourage the viewer to imagine from the perspective of the protagonist. Examples include extensive use of point of view (POV) shots and hybrid POV / over the shoulder (OTS) shots, panning, tilting and camera movement to replicate the protagonist's physical movement.

- 5) Filmic technique to shock or surprise the audience. This includes panning to reveal or hide details, freeze-frames, sudden camera movements or zooms and pulls.
- 6) Exclusion / sparse use of diegetic sound.
- 7) Ending the sequence with an action which clearly signifies a dream took place.
- 8) Obscurification / lowering of definition to encourage audience involvement in completing the image.

By making these eight elements dominant, the audience perceives the opening sequence of *8 ½* as depicting a dream. Finally, the dream sequence's content should evoke a sense of the uncanny, as detailed later in this chapter.

Opening sequence of *8 ½*

The opening sequence of *8 ½* is comprised of nineteen shots lasting for three minutes two seconds. The initial four shots, lasting for one minute eight seconds, establish the mood and many of the stylistic elements which follow.

Shot one is a hybrid over the shoulder / point of view shot, revealing the back of a man (Guido). He is wearing a trilby hat, silhouetted, driving a car in the central lane of a traffic jam. Guido's car moves slowly forward, whilst the traffic in the other lanes remains static. The occupants of all surrounding vehicles are obscured. A silhouetted driver and front passenger are in the car immediately in front of Guido's, facing away from the camera. When the vehicles stop, the passenger in the car ahead turns back, looking almost directly into the camera, his gaze focused on Guido. Thus, the opening shot introduces the use of point of view (element four), obscured imagery (element eight) and other characters choosing to gaze at Guido (element three).

The aural content of *8 ½*'s opening sequence uses a minimalist approach, with a limited combination of sounds to create a textured, rhythmic pulse, supporting and enhancing the visual content. As the sequence begins, the only audible sounds are quiet tape hiss (a technical characteristic of the film's soundtrack), and a single, quiet drum, struck once per crotchet beat, played at a tempo of around 56 beats per minute. These soft-sounding drum beats, with volumes which vary slightly throughout, give the impression of a slow heartbeat (although not using the familiar double strike often used in film-making). The muted, persistent drumming sets a tempo for the viewer to lock into, gradually building tension. By opting to omit all but the most basic audio accompaniment, the importance of the drum becomes amplified and its effect on the audience, more pronounced. There are no diegetic sounds employed to confirm the characteristics of the location (element six), such as sounds of people, vehicles' engines or car radios, allowing the audience to easily be aware of the absence of sound, emphasising the unusual qualities of the depicted environment.

The film cuts to a crane-mounted establishing shot, which lifts and pans from screen-right to screen-left over the traffic, revealing five lanes of static vehicles, underneath a bridge; outside it is bright, hot and sunny. Two cars in one of the central lanes move slowly forward and stop behind a bus. The shot finishes with the camera above the car roofs, looking down the central lane of traffic.

Shot three co-ordinates a series of camera and performance movements. The shot opens with a close-up, showing the back of Guido's head, the camera slightly over his right shoulder, producing a second hybrid over the shoulder / point of view shot. Parts of Guido's face and clothing are visible, whilst his hat is still in shadow.

The shot is in shallow focus leaving the vehicles beyond Guido's window blurred, preventing the audience from clearly noting the surroundings. Guido moves his head to the left to view out of the side window and the camera follows his point of view, revealing an old male seated in the adjacent car, his vehicle facing in the opposite direction to Guido's. He is looking at Guido impassively. The camera freezes on the man for approximately one second whilst the sound continues as normal. After the freeze-frame ends the camera resumes panning to the left, the male looking away from Guido, turning his head forwards. As the camera continues left, Guido's head is no longer in shot but his visual perspective implied, revealing a woman driver seated in the front of the adjacent car, dressed in a white summer hat, with neat hair, a necklace, earrings and a white dress. The woman's combination of clothing recurs for many of the female characters in the sequence. She appears stern and is looking forward, at something on her lap. The image freezes on her for approximately one second whilst the sound continues. The camera then pans back to the right, the woman passing out of view. The camera travels past the old male, revealing Guido again, continuing to pan right. The subtle use of freeze-frames (element five, use of filmic technique to shock or surprise) combined with continued use of obscuring details (element eight - the audience still haven't seen Guido's face), the unusual manner which the man and woman in the adjacent car react to Guido (element three), and continued use of point of view / over the shoulder camera work (element four) sustain the style of the opening sequence. The camera movement further intensifies the effect of enabling the audience to see what Guido sees, thus to imagine how things appear from the protagonist's perspective.

As shot three continues, the camera moves behind and past Guido, showing

the front interior of Guido's car. At the same speed as the panning movement, Guido releases his right hand from his steering wheel and places it onto a cloth on the dashboard. He moves this cloth in time with the movement of the camera, wiping the dashboard away to his right, then lifting the cloth and wiping the inside of the windscreen (demonstrating continued use of element four, camera movement encouraging the audience to imagine from the protagonist's perspective).

The panning pauses whilst Guido finishes wiping and then resumes panning right, revealing a static car to the front-right. A male in the front passenger seat is facing Guido. The camera focuses on the person looking at the camera, toward Guido, continuing the theme of characters reacting to the protagonist in an unusual manner (element three). A second male passenger, on the nearside of the back seat is looking forwards, away from the camera. Guido's moving hand is visible in the reflection of the front passenger window of his car. Fumes are visible, rising fast into Guido's car, obscuring the view of those in the vehicle ahead. The camera pans back to the left and tilts slightly downwards, revealing the fumes are coming out of the right-hand side of the dashboard (element one, violating the diegetic world's rules of cause and effect, as it is unclear why fumes should suddenly rush into the car), combined with the sound of air blowing through a vent into Guido's car, reminiscent of a continuous outward breath. The effect of hearing a continual expulsion of air and the claustrophobic visuals encourages a physical urge to breathe in. Three seconds later Fellini introduces the sound of irregular, panicked breathing, possibly timed to co-ordinate with the audience's reaction, to induce an empathetic connection with Guido. The panicked breathing uses very little reverberation, sounding proximally very close, with a different acoustic character to that expected

from being in a car, further encouraging the viewer to feel close to, and empathise with, Guido.

The camera continues to pan across to the left, revealing Guido working switches on his dashboard, attempting to stop the fumes entering his car but there is no diegetic sound synchronised with this action. The camera pans quickly left, tilting upwards, revealing the back of Guido, panicking and continuing to manipulate the switches. Panning further left, Guido's head occupies most of the screen. He strikes at his side window, to try and escape from the vehicle. At this stage the breathing becomes the loudest part of the soundtrack, accompanied by the drum and air vent, along with the sound of Guido's hands banging on glass. The breathing is in time with the striking but is unusually loud. Aurally, the acoustic characteristics of the breathing and banging sounds continue to appear proximally close. The visual addition of fumes and the continuous sound of the air vent combine to create an oppressive atmosphere, supported by the subtle drum rhythm.

Thus, toward the end of shot three, a combination of element one (fumes entering the car, Guido uncertain how to operate his vehicle) and element six (minimal use of diegetic sound), adds tension by emphasising the unusual nature of the circumstances whilst obscuring details (element eight) enhances the claustrophobic atmosphere. Presenting the images in black and white increases the obscurification. Removing detail, through obscuring and desaturation of the images, encourages the audience to actively engage with the on-screen events, promoting greater immersion and emotional involvement, leading the audience to further empathise with the protagonist.

Shot four, a static shot lasting for four seconds, confirms the uncanny quality

of the events. The deep-focus composition unsettles the viewer by drawing the eye equally to three cars occupying the lower half of the screen and a bus positioned behind the cars, filling the screen's upper half, making it unclear which is figure and ground in the image. All the vehicles are stationary. On the bus, none of the occupants' heads are visible; twelve people are standing, their arms dangling loosely out of the windows. The strange position of the bus's occupants encourages a re-evaluation of the car occupants, to make sense of the overall scene, but the shot finishes quickly, making it difficult during real-time viewing to gain a clear understanding of the image. The static camera provides a break from the continuous movement of the opening three shots but shot four's composition doesn't allow for stasis on the part of the audience, the eye tricked into continuously scanning the image's wealth of information.

Shot four clearly utilises element one (violates the diegetic world's rules of cause and effect / nature / physics) featuring passengers dangling their arms out of the bus window and unusual posturing of people in cars leaning forwards and element two (difficult to understand the logic governing how characters act) such as all car occupants except for one male, smiling. Additionally, the sudden cut to shot four from shot three invokes element five (filmic technique to shock or surprise).

Continuing from shots one and three, shot four implies that all the figures are looking at Guido. However, if shots one and three are from Guido's point of view, shot four's perspective is unclear. As Guido is not in this fourth shot, the view seems to have shifted to his third person, with Guido observing the people who are observing him. This unusual effect provides another example of element one, by shifting the protagonist's view to an impossible viewing position whilst revealing

Guido's hidden anxieties and fears of exposure as a failure, enhancing the uncanny qualities of the sequence.

Cessation of sounds and the use of silence adds to the sequence's dynamics. For example, during shot four, Guido's banging on glass stops but the panicked breathing continues. This use of sound reinforces that shot four is from Guido's point of view (momentarily he has stopped trying to escape from his car to observe those who observe him) whilst simultaneously supporting the visual content (shot four is static / contains less energy so the sound also becomes less dense).

Shot five is another complex arrangement, continuing the style and technique of shot three. It opens with Guido striking at his windows, accompanied with the sound of banging. The sense of panic rises as fumes fill his car, along with the sound of scraping as Guido searches for a way to open a window. The camera pans right and freezes for nearly two seconds on a medium close-up of an impassive male observer before panning left, to Guido banging on the glass with both hands, followed by a fast cut to shot six, a two-shot of a male driver and his much younger female passenger (later revealed to be Guido's lover, Carla). The driver leans across and strokes Carla's bare shoulder and arm. She reacts ecstatically as the sounds of the air vent and Guido's banging, scraping and panicked breathing continue. The camera pans right, past two vehicles, one of which contains car occupants depicted in shot four, staring forwards, off-screen right. Finally, the camera arrives with Guido, on his back, his feet pressed against his right-hand side, rear window, as his car fills with more fumes. The barely audible drums re-build to their original volume as Guido lays on his back and kicks the window. However, diegetic sound doesn't accompany Guido's kicks, emphasising the strangeness of the situation and Guido's insular state.

There is a jump cut to shot seven, switching 180 degrees, showing Guido from behind, climbing out of his front passenger window onto the roof of his car, the camera slowly moving toward Guido (element five, filmic technique to shock or surprise, combined with element one, a sudden shift in time) with the sound from shot six continuing.

Shot eight begins with a one second freeze-frame. To the foreground-right, in focus and close-up, is a serious-looking male driver looking off-screen, right. At background-left and out of focus, is a woman in medium shot, smiling slightly, dressed in a white sun hat and white dress. The male driver's right eye moves very slightly to the left, for one frame, and the camera pulls out, tilting upwards, producing a wide shot showing the front of a bus, with no driver present. Thus, the first two seconds of the shot combines elements one (time freezing), two (unclear why the male driver is staring) and five (use of a freeze-frame to shock or surprise). As the camera pulls out the sounds of Guido, the air vent and the drum all stop with a fast, one second fade, with only audible tape hiss remaining (utilising element six, lack of diegetic sound). Stood next to the driver's seat is a male in a white suit and black tie and a woman in a wide brimmed sun hat and light-coloured dress, gazing off-screen right. The camera pans quickly to the right, revealing Guido in a standing position, starting to fly from the roof of his car with his arms stretched out wide, like a bird or crucified figure, providing a second instance within shot eight of combining elements one, two and five. Analysing the conceptual elements of *8 ½* Charles B. Ketcham notes, '*8 ½* is, in fact, a salvation drama, the complex, infrastructured attempt of Guido, i.e. Everyman, to find redemption through vocation, women and the Church. Each fails him; each sends him back to himself; each, negatively,

prepares him for the mystical experience of rebirth, the religious experience of death and resurrection' (Ketcham, 1976, p.60). Considered in isolation, shot eight is a microcosm of *8 ½*'s whole, from Guido's sense of being observed and of being on display, of being judged, to his release and freedom. The complete sequence is a further stage of unfolding, presenting a compressed, metaphorical version of Guido's coming journey.

As shot eight continues, Guido, upright, glides past a bus to his left. Several passengers are poking their heads out of the upper portions of the bus windows, the lower portions reflecting Guido's image. Guido's flight cues the introduction of wind sound which reaches full volume after four seconds, with additional layers of wind gradually added, enhancing the texture and atmosphere. The camera moves with Guido as he flies forwards, eventually leaving the cover of the bridge, flying up into the clouds. Shots nine and ten follow him, first with a close-up shot which tilts up Guido's body and then a wide shot as he continues to fly. Two point of view shots follow, first showing the sun, clouds and a camera flare, the second revealing a large, scaffolding-like structure up ahead (revealed in the finale of *8 ½* as a film set of a rocket ship launch pad). The viewing angle is from below, emphasising the size and height of the building. Thus, shots eight to twelve combine element one (violates the diegetic world's rules of cause and effect / nature / physics), element two (difficult to understand logic of how protagonist and others act), element three (manner in which others react toward protagonist is unusual), element four (camera technique mimics physical movement of protagonist) and element five (filmic technique to shock or surprise).

Shot thirteen opens with a dissolve, to a man riding on horseback across a

beach (later revealed as the agent for Claudia, Guido's ideal woman), travelling from screen-left to screen-right. During the first three seconds of shot thirteen the wind fades to silence, with only tape hiss and dialogue audible. Panning quickly right reveals a man, later identified as Claudia's press agent, lying fully dressed on the beach and a white cord resting on the sand at screen lower-left. The press agent gets up, stating, 'Avvocato, I've caught him', before taking hold of the cord, which appears connected to a flying object (Guido), off-screen upper-left. The press agent pulls on the cord, as if manipulating a kite, whispering, 'Hey. Down. Come on down', whilst the horse-rider, dressed in a cape, waves at the sky, motioning for Guido to descend. Throughout, the beach shots feature no Foley sounds such as horse hooves, sea or bird-calls, further utilising element six (lack of diegetic sound). All the dialogue is ADR (automated dialogue replacement - dialogue recorded after filming and then added to the soundtrack), the mouths of Claudia's press agent and agent out of synchronisation with their utterances, further enhancing the unrealistic elements of the beach shots. Rome-based studio manager Paolo Biondo, notes, 'In the 1960s and 1970s, [...] of Fellini [...] I would say that a hundred percent of the pictures were completely re-voiced afterwards' (Morris, 1992).

Shots fourteen to seventeen last a total of nine seconds and begin with Guido's bird's-eye point of view, his lower left leg, tied by a cord, occupying screen-left. The beach is far below, the press agent holding the cord's other end whilst Claudia's agent, the horse-rider, watches. The image cuts to the press agent holding the cord, before shifting back to Guido's sky-based point of view, his right hand visible, trying to untie his foot and shake it free. Shot seventeen begins in medium close-up, showing the horse-rider wearing a medal strapped to his forehead and

reading from a script reflected in his glasses. The camera zooms into a close-up of the horse-rider's face, revealing the medal features a metal skull, and then cuts to shot eighteen, Guido's point of view, as he falls from the sky with the cord still attached to his left ankle, as Claudia's agent hisses, 'Down for good!' Ketcham notes, 'But now we see that a rope is tied to his ankle; there is to be no escape, no resurrection; he is hauled unceremoniously and precipitously back to earth' (Ketcham, 1976, p.68). The camera view remains in the same elevated position, allowing Guido to fall into view, shot from behind. As he becomes increasingly smaller, falling into the sea, the motif of panicked breathing resumes, crossing over the hissed last word from Claudia's agent, continuing into shot nineteen, an interior medium close-up of a man's arm (Guido) reaching up as he awakes. This final shot is critical for the audience, as it contextualises the preceding sequence by clearly framing the events as depicting a dream.

Comparison of *8 ½* with a waking reality opening sequence: *Falling Down*

The opening sequence of *Falling Down* lasts four and a half minutes and is composed of 60 shots, two of which are complex: shot one (lasting for two minutes) and shot 60 (lasting for 27 seconds), both of which use a range of coordinated camera and actors' movements. Many of the remaining 58 shots appear to be using a static camera and all are much shorter in duration. 47 of these shots last for less than two seconds, with only shot two (six seconds), shot 23 (five seconds) and shot 37 (nine seconds) lasting over four seconds.

The clearest similarities with the opening of *8 ½* are the content of shot one, the framing of images in many of the subsequent faster shots and the overall

narrative arc, completed when the central character, William Foster, manages to escape from his vehicle and runs away, into the distance.

Shot one of *Falling Down* opens with an extreme close-up of a person's (Foster's) teeth, pulling out to an extreme close-up of a mouth, accompanied by slow, careful breathing. The camera then tilts and pans across the face from nose to eyes rimmed with glasses. This movement lasts for eighteen seconds, immediately providing details about Foster's physical appearance, encouraging a voyeuristic relationship between Foster and the audience. In contrast, throughout the opening of *8 ½* Guido's face is never visible, the hybrid over the shoulder / point of view shots encouraging the audience to imagine from the protagonist's perspective. In *Falling Down*, Foster's breathing is exaggeratedly loud but the mouth is visible, establishing the sound is diegetic, confirming a logical connection between the visual and aural components of the image, grounding the depicted events in a realistic universe.

Pulling out, the camera reveals Foster, in the driving seat of his car. In white text, FALLING DOWN is displayed, the opening titles continuing over the visual content until the end of shot one. The combination of text and image hinder immersion in the unfolding narrative whereas *8 ½* displays its titles prior to the opening shot, heightening the audience's sense of immediacy.

The camera pulls out to the exterior of the car, panning to left, around the front of the vehicle, keeping Foster as the central figure. To enhance the atmosphere the moving camera combines with a non-diegetic high woodwind note and a low synthesiser sound, producing background music which is reminiscent of the type used to signify a (concrete) jungle. The camera then dips toward the floor and the screen fades nearly to black. After remaining near black for five seconds the camera

tilts upwards to reveal Foster's point of view, accompanied by the diegetic sound of car engines rattling and an additional non-diegetic wobbling-synth tone. Ahead are several cars, with fumes drifting into view. The sound of car radios and a first car horn is now audible, with a range of English and Spanish-speaking stations mixing together. The diegetic sounds supply a range of information including the ethnicity of the local inhabitants (and by proxy the geographic location, US-based with a large English and Spanish-speaking / Hispanic community) along with the environment existing within a usual world, complete with predictable diegetic sounds. As with *8 ½*, all the vehicles are static. A young girl looks at Foster, through the back window of the car directly in front of his. The camera pans right, past the surrounding vehicles, revealing a woman applying make-up in the reflection of her side-mirror and a toy Garfield the cat, stuck to the interior of a car, appearing to look toward the camera. Thus, the opening shot mimics the images of gazing found in *8 ½* but there is no freeze-frame to accompany the girl and she is already facing through the rear window, gazing in a bored, distracted fashion as opposed to *8 ½*, when the first person to look at Guido chooses to turn and face him in a confrontational manner. The only aggressive figure who seems to gaze directly at Foster is Garfield, a toy. Therefore, the gaze is unmotivated and any intent implied as imagined by Foster. To contrast, it is the combination of characters choosing to gaze at Guido whilst simultaneously appearing impassive which contributes to *8 ½*'s uncanny atmosphere. Focusing Foster's point of view onto a toy emphasises his emotional state and his heightened sensitivity to his surroundings. The toy provides social commentary; coupled with the underlying music, Foster is trapped in an urban jungle inhabited by a threatening but manufactured animal, with consumerism's promise of

utopia seeming far away in the hot, tense traffic jam.

The pan to the right continues, tilting upwards to reveal a school bus filled with noisy children and a USA flag hanging down its side. There is the sound of car horns and children shouting and screaming, supplemented with sounds of children playing in a schoolyard whilst the car horns, rattling engines and deep synthesisers continue. Here Schumacher references the bus from *8 ½'s* shot four but the actions of the occupants realistically match the setting, with bored schoolchildren noisily using up their energy. However, the playground sounds add an atmospheric layer to the sound design, the echoing, distant quality of the schoolyard voices evoking the notion of memories, possibly relating to Foster's past.

Overall, the way aural content interacts with the on-screen image greatly affects whether the audience perceives a sequence as depicting dream or waking reality. The consistent use of diegetic sound in *Falling Down* helps to create and reaffirm a predictable, usual world. Consequently, images such as close-ups of a boy wearing headphones looking out from a bus window, or a girl looking through the back window of her car appear to be happening in normal surroundings. Referring to Bartlett's theory of schemata (a concept relating to how each person forms mental structures and recognises patterns, enabling them to process and understand what they experience), Keith Oatley notes, 'The proposition is that through schemata we not only remember our experiences, but perceive and make sense of experiences in the first place' (Oatley, 1978, p.151). This contrasts greatly with the lack of diegetic sound in *8 ½*, creating an unnatural surrounding which encourages a different interpretation of the characters gazing at Guido.

Continuing to pan right and tilting downwards reveals two men in an open-

top convertible, arguing with someone on a car phone which they pass between themselves, the sound of their voices angry, above the traffic. The camera then completes its panning motion, revealing the shot has shifted from Foster's point of view to arrive at the rear of Foster's car, providing a clear view through his back window, showing Foster in his driving seat and the view of the traffic jam through his front windscreen.

From shot two onwards Schumacher cuts between medium close-ups of Foster and POV shots of his surroundings, such as shouting children, men arguing and road signs flashing. From shot eight, each time the camera returns to Foster, he is framed increasingly closer, emphasising his anxiety. Shots two to five include exhaust fumes which drift in front of his vehicle's front windscreen, leading Foster to feel for air from the ventilation system on his dashboard. Later, in shots 20, 28 and 30, he attempts to operate the ventilation controls and to wind down his driver-side window but the mechanism doesn't work. The fumes emphasise the build-up of heat whilst trapped in the traffic and the pressure and claustrophobia experienced by Foster. To compare, in $8\frac{1}{2}$ the fumes collect inside Guido's car, adding a heightened sense of threat. Furthermore, Foster experiences frustration when his window won't open but Guido is frightened and appears not to know how to use his dashboard controls, scraping at the glass with his hands. Thus, Foster's problems occur within a logical, predictable world as opposed to Guido's fear which stems from events which break the usual rules of cause and effect (element one, there is no explanation why fumes enter Guido's car or why he cannot operate his ventilation system).

Schumacher occasionally introduces some uncertainty to the viewer, such as shot fourteen, showing Foster's POV of a driver with mirrored sunglasses who seems to

turn and look back at him. This shot exercises some artistic license, referring to 8 ½ by including a seemingly motivated choice from a character to directly look Foster, forcing the viewer to question why this man is looking, momentarily encouraging the viewer to imagine from the perspective of the protagonist.

An important conflict which develops from shot two is between Foster and a fly, also trapped in his car. The fly torments Foster until he falls into the back of his vehicle attempting to kill the creature with a folded-up paper. This tongue-in-cheek mini-confrontation finally resolves on shot 39, just after Foster has sat back up, trying to regain his composure, when buzzing resumes, confirming he was unable to kill the fly, reflecting his ineffectiveness and building his frustration. The diegetic sound of the insect coupled with the naturalistic movements of Foster and the mundanity of battling with a fly trapped in a car, contrasts with the threats endured by Guido.

From shot 40 to shot 43, lasting seven seconds in total, Schumacher switches to a shaky, hand held camera style, closing in during each shot, emphasising how Foster's stress is affecting his perception of events. A crashing non-diegetic rock guitar chord sounds along with Foster's point of view of a girl looking at him, to Foster, to a point of view shot of Garfield the cat, to an extreme close-up of Foster's eyes. Following this, shots 44 to 59 features a series of increasingly fast shots, lasting a total of thirteen seconds, often consisting of static close-ups and extreme close-ups. The images include children playing, Foster looking, pumping exhaust fumes, and bumper stickers stating, 'FREEDOM' and 'HE DIED FOR OUR SINS', emphasising Foster's mental state and the modern society he feels isolated from. Throughout this section of the sequence, the diegetic sound and audience's already-formed view of *Falling Down's* natural world are strong enough for the events to be perceived as

occurring within the cinema trope of 'character on the verge of a nervous breakdown'.

Finally, in shot 60, Foster escapes from his car, abandoning it, stating to an angry driver he is, 'Going home' before running into the distance. Thus, both the opening sequences of *8 ½* and *Falling Down* are examples of *mise-en-abîme* (Elsaesser, 2002, p47), providing condensed versions of each film's narrative arc. Guido is suffocated and must escape the scrutinisation of others, and Foster, suffering from a psychological breakdown, embarks on an obstacle-laden, ill-fated journey. However, throughout *Falling Down's* sequence, Foster's actions are naturalistic. Even though Foster's door handle is broken he manages to escape through the door whereas Guido climbs through his window, and where Foster walks from his car, Guido flies away, subsequently crashing into the sea and abruptly waking up.

Compared with the opening of *8 ½*, which gives little information about its protagonist, *Falling Down's* opening sequence provides the audience enough information to quickly form a detailed outline of the central character, enabling Foster to be read as a realistic and plausible person, affected by the usual cause-and-effect logic of a natural world. By the end of *Falling Down's* opening sequence, the audience has already formed many ideas about Foster relating to his psychological state (following Foster's actions inside his car, and his lack of spatial awareness when he wanders around, seemingly disorientated, after leaving his vehicle), his physical state and whether he fits the criteria of a physically powerful person (a potential hero), his inadequacy, signalling a possible flawed anti-hero or villain (demonstrated by Foster losing his battle with the fly, his inability to escape from the car and his

overall physique and demeanour once he leaves the vehicle) and subtle signs which entice the audience to want to discover more (why is Foster in this psychological state, why does a 'normal' man have the personalised number plate, D-FENS?).

Stylistically, in *8 ½*, twelve of nineteen shots (63%) are point of view or hybrid point of view / over the shoulder shots (element four, shots which mimic the protagonist's perspective and movement) and nine of the shots (47%) use element five, filmic technique to shock or surprise the audience. In *Falling Down*, cinematic effects using editing and camerawork are produced differently. In the opening sequence of 60 shots, 35 are point of view (element four, 58%) but only the opening shot mimics the protagonist's physical movement (1.7%). To shock or surprise the audience (element five), *8 ½* often uses panning (for example, shot three) or pulling shots (for example, shot eight) to reveal new information, whereas *Falling Down* often uses cutting and juxtaposition of shots instead. Schumacher opts to use a combination of accelerated metric montage, in which the duration of shots gradually become shorter, and analytical montage, whereby the audience construct an understanding of the narrative by mentally synthesising a series of presented images, to build tension and excitement. Comparing the rate of cuts in the two opening sequences, *8 ½*'s nineteen shots last three minutes two seconds, giving an average shot length of 9.6 seconds whereas *Falling Down*'s 60 shots total four minutes 30 seconds, giving a much shorter duration of 4.3 seconds per shot. Excluding the opening and closing shots from each sequence emphasises the difference: *8 ½*'s seventeen central shots last an average of 8.8 seconds each, compared to *Falling Down*'s central 58 shots lasting an average of only 1.9 seconds each. For *8 ½*'s opening dream sequence, audience immersion and seeing from the perspective of

the protagonist is crucial, achieved by combining camera movement with point of view shots. *Falling Down* aims to provide the audience with plot elements related to Foster's character whilst building toward a mini-climax; combining point of view shots with increasingly faster cutting achieves this effect.

Another recurring motif is of occupants in the surrounding vehicles looking at Guido, often depicted from his point of view. This contributes toward producing an uncanny, claustrophobic environment, as the gaze of those around Guido reduces and penetrates his personal space. At other times, characters frequently gaze off-screen right, creating uncertainty as to their focus and in shot four, bus occupants behave in an unusual manner, dangling their arms through the windows, their posture seeming to show they too are gazing off-screen right.

In Freud's 1919 essay *The Uncanny*, he provides several definitions for the term and notes that many of these meanings appear contradictory. His conclusion was, 'the uncanny is that species of the frightening that goes back to what was once well known and had long been familiar' (Freud, 2003, p124). In Fellini's opening he creates an uncanny atmosphere by combining seemingly common occurrences into new, unusual forms. Thus, the normal setting of a traffic jam becomes a place of emotional and physical torment as a range of unusual threats emanating around the protagonist synthesise to create a suffocating environment. When Guido eventually escapes and begins an exhilarating flight he becomes trapped again, this time caught on a rope, and comes crashing back toward the earth. The uncanny gaze wielded by other characters conjures a strange combination of impassivity and invasiveness, creating a panic within Guido, as he feels exposed and threatened. Another example of subtle uncanny imagery is the costuming of female figures. In *Falling Down*,

characters dress in a variety of clothing whereas in *8 ½* most female characters wear a white summer dress and white sun hat, initially seeming natural but becoming noticeably unusual as the sequence progresses.

The opening of *8 ½* uses several complex shots involving the coordination of panning, tilting and moving camera positions (whether on a crane, a dolly or a fixed to a vehicle), with the blocked movement of Guido and other characters. By utilising long duration shots containing a range of point of view camera movements, Fellini reproduces how an able-bodied person might visually experience such an event. Shots such as one, three, five and eight (lasting 17, 36, 22 and 7 seconds respectively) partially fulfil Andre Bazin's theory of cinematic realism by using camera movement to maintain continuous time and space, 'the continuum of reality', (Bazin, 1967, p37) as opposed to using cuts which cause fragmentation of the narrative events, contributing to the immersive quality of the sequence. Throughout both sequences time is continuous except for the jump cut from shot six to shot seven in *8 ½*, when Guido climbs out of his car window, providing a combination of element one (violates the diegetic world's rules of cause and effect / nature / physics) and five (filmic technique to shock or surprise). Juxtaposing long duration shots with abrupt cuts and freeze-frames disorientates the viewer, forcing them to switch between emotional and intellectual engagement, fantasy and realism, creating a subtle confusion and adding to the uncanny qualities of the sequence.

The confrontational method of repeatedly featuring characters looking directly at Guido invokes an alienation effect, further emphasised by using four freeze-frames, prior to Guido flying away. Each freeze-frame makes the audience aware of the film-making process and initially suggests there may be a technical fault

within the film. The viewer may notice the sound hasn't stopped and become aware that the freeze-frame is intentional. In both cases, the viewer intellectualises the situation, disturbing their emotional involvement. The freeze-frames provide short interruptions to immersion and are reminiscent of lucid moments which may occur in a dream, or brief moments of waking occurring between dreams, termed by Hobson as 'flip-flop states' (Hobson, 2015, p39), the sudden awareness of the film-making process drawing parallels with briefly becoming self-aware before entering into the next stage of one's dreams.

Summary

This chapter has revealed a range of criteria to differentiate between a waking reality and dream-depicting sequence. Building on these findings, in chapter three I analyse a further 49 filmic dream sequences (see appendix 2 for list of selected dream sequences), from a range of genres and eras, to discover to what extent the eight dream-denoting elements are universal, and if there are additional dream-denoting techniques not found in *8 ½* but commonly used in other filmic dream sequences. As part of my practice-based research, I use the eight dream-denoting elements in the production of my own dream sequences, discussed in detail in chapters five and six.

Chapter Three: 50 Sequence Analyses

Introduction

Chapter two identified a combination of eight elements which signify the opening of *8 ½* depicts a dream. These are:

- 1) The sequence violates the diegetic world's rules of cause and effect / nature / physics.
- 2) Difficult to understand the logic governing how the protagonist and other characters act.
- 3) The manner in which characters react to the protagonist is unusual / motivation for other characters' reaction toward the protagonist is unclear.
- 4) Camera technique to mimic the experience of viewing in real time / to encourage the viewer to imagine from the perspective of the protagonist.
- 5) Filmic technique to shock or surprise the audience.
- 6) Exclusion / sparse use of diegetic sound.
- 7) Ending the sequence with an action which clearly signifies a dream took place.
- 8) Obscurification / lowering of definition to encourage audience involvement in completing the image.

It is possible that *8 ½*'s opening sequence is constructed using unique techniques not found in other films. Therefore, this chapter analyses additional dream sequences, to discover if *8 ½*'s eight dream-denoting elements are common to all dream sequences and if there are other elements, not contained within the opening of *8 ½*, used by film-makers to denote a dream.

Notable examples of previous works that have analysed and categorised type and content of film include Sergei Eisenstein's analysis of film components, *The Film Sense*, originally published in 1942, the semiotic analysis of Christian Metz' *Film Language: A Semiotics of the Cinema*, first published in 1974 and *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960*, originally published in 1985. The authors of *The Classical Hollywood Cinema* proposed the question, 'How does the typical Hollywood film use the techniques and storytelling forms of the film medium?' (Bordwell et al, 2010). To answer this, the writers must decide their criteria, for example: which and how many techniques? How many films to analyse? How to select films, for example, by genre, gross income, director, star or location? Taking account of these types of issues and the amount of available time and resources, I feel 50 sequences is an adequate sample size to generate robust, testable data and decipher patterns of production, delivering findings which enable future researchers and film-makers to analyse and produce additional dream sequences.

I used quantitative data where possible. For example, counting the number of shots in a dream sequence, duration of the sequence, if a sequence begins or ends with an action clearly signifying a dream took place, alteration of colour, and use of slow motion. In other circumstances, the data is partially qualitative as some degree of subjectivity was necessary, such as deciding if a shot contains details which violate cause and effect / nature / physics or if a shot is point of view / over the shoulder. For qualitative data, it was important to maintain a consistent approach and to view each sequence's content in the context of the film they are a part of. For example, when considering element five (filmic technique to shock or surprise) in *An American*

Werewolf in London shocks are often violent and fast, such as protagonist, David (played by David Naughton), having his throat cut open, or a nurse being stabbed by a Nazi zombie, whereas in *Nostalgia* (Andrei Tarkovsky, 1983), a shock or surprise occurs when Andrey (played by Oleg Yankovsky) closes a wardrobe door and sees a reflection of another man, Domenico, in the wardrobe's mirror. Here, the effect in *Nostalgia* is much subtler than in *An American Werewolf in London* but in the context of each film both shots are intended to produce a similar effect.

In this chapter I answer the following questions:

- a) Which, if any, of the eight identified elements are common to other dream sequences?
- b) Are there additional dream-denoting elements, not employed in the opening sequence of *8 ½*, which are common amongst other filmic dream sequences?
- c) Are there different styles of dream sequence, produced by utilising different combinations of dream-denoting elements?

Selecting the dream sequences

I used the following criteria to select dream sequences:

- 1) A sequence should explicitly represent a dream. I rejected sequences interpretable as a hallucination, day-dream or waking fantasy such as *Papillon* (Franklin J. Schaffner, 1973) and *American Beauty* (1999, Sam Mendes). For example, in *Papillon*, whilst the protagonist, a convicted criminal named Henri Charriere (played by Steve McQueen), is locked in darkness in solitary confinement, he is depicted being driven through a street procession, applauded by an adoring crowd and subsequently meeting his dead friends in an abandoned street. At the end of sequence, the film

cuts to Charriere with his eyes open, leaving the audience unclear as to whether the sequence was a dream or a hallucination. Similarly, in *American Beauty* it is unclear whether Lester Burnham (played by Kevin Spacey), a disenchanted advertising executive, dreams or has a waking fantasy about his teenage daughter's friend, Angela Hayes, lying naked in a bathtub filled with red rose petals.

2) All sequences are live-action centred. Thus, I excluded sequences from animated films such as *Dumbo* (Ben Sharpsteen, 1941) or *Shrek The Third* (Raman Hui / Chris Miller, 2007) but selected *Vertigo* (Alfred Hitchcock, 1958), a live action film containing a dream sequence in which animated flowers surround the protagonist, John "Scottie" Ferguson (played by James Stewart).

3) The chapter analyses how film-makers depict a dream within a film which mainly consists of waking content. Therefore, films such as *The Wizard of Oz* or *The Woman in the Window* wherein a film's majority of content is a dream, were not analysed in this study.

4) To discover if there is consistency in dream-denoting techniques amongst film-makers, the sequences cover a wide cross-section of films, from Hollywood blockbusters to European arthouse and world cinema, of a variety of durations, genres and eras.

5) To aid selection, I consulted lists of famous and critically-acclaimed dream sequences published on film-related websites to find possible source material.

48% of the films analysed were US productions, 16% were collaborations between US companies and non-US companies, and 36% were non-US productions, reflecting the dominance of the US film industry in comparison with other countries'

output. Women directed or co-directed 16% of the analysed sequences, reflecting the overall low percentage of female film directors.

To produce the data, I analysed each of the 49 additional sequences shot-by-shot to discover whether any of the eight elements played an important aspect in the composition. If an element featured in a shot, I recorded the data in a table (see appendices 15 and 16, example film analyses tables). After completing each sequence analysis, I entered the information into a database I created. During each analysis, I noted any other dream-denoting techniques not featured in 8 ½ and discovered four additional, frequently occurring elements: 9) Alteration of colour, 10) Use of slow motion, 11) Protagonist is isolated / alone or with only one or two other individuals in a usually highly-populated setting, 12) The location resembles a path or corridor. I re-analysed each sequence for the additional four elements and recorded the data in the appropriate tables and the database.

I plotted the percentage of shots in each sequence featuring each of the twelve elements onto a series of bar graphs (see appendices 3 to 14). From the bar graphs, it was possible to ascertain which films used a high or low percentage of each element. The value which determined a high or low percentage differed, depending on each element. For example, in 31 sequences, element one (violates the diegetic world's rules of cause and effect / nature / physics) occurs in 40% or more shots and in the other nineteen sequences at 33% or lower. Therefore, for element one I classed a high percentage as 40% or higher and a low percentage as under 40%.

Whereas, for element three (characters react to the protagonist in an unusual way), the values were lower overall. Element three featured in 25% or more shots for sixteen sequences, in nineteen sequences of between 10% and 24% of shots, and

fifteen sequences of 9% or under. In this case, I classed a high percentage as 25% and over. Splitting the data in this way made it possible to recognise generalised patterns and served as a starting point for deeper analysis of individual sequences.

I examined the data to search for different styles of filmic dream sequences, depending on which combination of elements sequences shared or lacked. Analysing the data in this way enabled separation of the sequences into groups, providing an objective way to begin classifying dream sequences.

The more elements a sequence contains, the less shared instances occurred. For example, thirteen sequences combine a high percentage of element four (30% or more shots mimic the protagonist's visual perspective) and element five (40% or more shots use filmic technique to shock or surprise). By also including a high percentage of element ten (over 30% of shots using slow motion), the combination gives only three sequences. Grouping this way enabled the discovery of very broad and very specific combinations of elements.

In total, there are 781 combinations of two or more elements. To be certain each sequence depicts a dream, element seven (sequence begins or ends with an action which signifies a dream took place) must be present, reducing the total possible configurations of elements to 231. To discuss the findings in chapter three I use three overall categories to encompass the multitude of configurations: psychological / emotional, physical / spatial and realness / dream bizarreness.

Additional elements: 9) Alteration of colour to signify a change in the depicted state of consciousness, from waking reality to dreaming

In 24 sequences, altering colour of the on-screen image denoted a dream sequence with 23 sequences using altered colour for 40% or more shots. Changing the overall colour palette allows the audience to quickly perceive there may be something new or unusual about the images. As nearly half the sequences use this technique it is likely audiences are accustomed to this trope, enabling fast recognition that a sequence with altered colour might depict a dream.

The method of colour alteration varies, depending upon the effect required. In *An American Werewolf in London*, the colour palette for protagonist David's nightmare switches from balanced colour to a highly saturated, TV look, initially designed to replicate a typical, light-hearted US sitcom or family drama, featuring a relaxed, perfect family whose home is brutally attacked by Nazi zombies. The fact there is no reference to Nazis or zombies at any point before or after David's nightmare, coupled with the heightened colour, adds to the shock and visceral bombardment of violence whilst retaining the darkly comic underbelly of the film. The dream sequences in *Before I Go to Sleep* (Rowan Joffe, 2014), *Dreamscape* (Joseph Ruben, 1984) and *One Hour Photo* (Mark Romanek, 2002) all increase the saturation and intensity of the colour to clearly demonstrate the events being depicted are not actual or realistic. By signifying the events as unreal, the audience are aware that anything could happen, replicating a dream's lack of predictability and heightening tension. The contents of each of these dreams is intended to frighten the viewer, depicting a violent attempt to murder the protagonist (*Before I Go to Sleep*), the protagonist (played by Eddie Albert) witnessing his wife fleeing and being

annihilated by the expanding fire of a nuclear attack (*Dreamscape*), and a sudden, explosive fountain of blood spraying from the protagonist's eyes (*One Hour Photo*). In each sequence, the film-maker creates the maximum intensity, uncertainty and fear by boosting saturation and exaggerating colour to overload the sensory (visual) field.

Perhaps surprisingly, black and white dream sequences can also feature altered colour. Though not as instantly obvious as modifications in colour films, there is a chance the audience will perceive a change in the images, signifying the depiction of an altered state of consciousness. In *Wild Strawberries*, contrast is noticeably intensified, with highly defined blacks and whites, when Dr Isak Borg (played by Victor Sjöström) dreams he is walking along a deserted street. The dream contains a great deal of anxiety-based content. At the sequence's climax, Borg encounters a runaway horse-drawn hearse and is attacked by his double, a corpse, spilled from its coffin onto the empty street. The increased contrast achieves a similar effect to colour films which boost the level of saturation. Another example of altering the contrast and textural look in black and white film occurs in Salvador Dalí's famous dream sequence from *Spellbound*. When compared with the other footage in *Spellbound*, Dalí's sequence is noticeably different in its tonal character. The overall look and contrast are softer, the blacks less deep, the image warmer but less sharp. This is most noticeable when the film cuts from John Ballantyne (played by Gregory Peck) recounting his dream in a psychiatrist's office, to dream content, and then back to Ballantyne. Although it is already clear that Dalí's contribution is depicting a dream, the subtle difference between the two types of monochrome image helps to further separate reality from dream, the softer, warmer character of Dalí's images reflecting the less definite, malleable characteristics of dream content.

Another method is to alter colour by reducing the colour content. Herbert Zettl, a professor of video production and media aesthetics notes, 'when we render the scene more low-definition through desaturation of colour...the event becomes more transparent and invites the audience to apply psychological closure, that is, to fill in the missing elements of the low-definition images' (Zettl, 1999, p69). Thus, lowering the amount of colour encourages the audience to engage with the on-screen images to imaginatively fill in missing information, thereby encouraging audience immersion. In Tarkovsky's *The Sacrifice*, the protagonist, Alexander (played by Erland Josephson), prays to God to save the world. As Alexander falls into sleep and begins to dream, Tarkovsky gradually reduces the colour content until, just under a quarter into the sequence, the image is completely monochrome. The reduction of colour symbolises the emotional and existential journey undertaken by Alexander as he struggles to come to terms with issues such as the fate of humanity (particularly in relation to nuclear weapons), Alexander's pessimism concerning his existential position in the universe, Alexander's familial relationships (particularly with his young son) and his relationship with God. Throughout *The Sacrifice*, up to the point of the dream, the colour has been gradually fading, eventually turning to black and white in the dream, representing the culmination of a process. From Alexander's waking, colour proceeds to return throughout the rest of the film. To contrast, in *Nostalgia*, when Andrey, the protagonist, lays down, the image switches directly from full colour when awake, to sepia tinged black and white when dreaming and *The Passion of Anna*, plays in full colour throughout, except for Anna's black and white dream, recounted through narration by her lover Andreas.

In each of these sequences, there are central themes of introspection, deep emotion and feelings of uncertainty. By reducing the colour, the detail becomes more ambiguous, prompting the audience to engage with the dreaming characters, to discover why the colour has altered and to resolve the uncertainty in each sequence, encouraging audience investment in the protagonist.

10) Use of slow motion

In a waking reality sequence, using slow motion highlights and prolongs key moments, allowing audiences time to analyse and reflect, often producing emotional outcomes. For example, during the climatic gunfight of *The Wild Bunch* (Sam Peckinpah, 1969), protagonist Pike Bishop (played by William Holden) and his gang die violently in slow motion, and in *Raging Bull* (Martin Scorsese, 1980) the blows suffered by boxer Jake LaMotta (played by Robert De Niro) occur in lingering slow motion.

Used within a dream sequence, slow motion enables audiences to perceive details which could go unnoticed during real-time viewing. This altered perception provides the opportunity for heightened engagement with on-screen events, potentially encouraging audience immersion, by mimicking the immersive qualities of dreaming. 22 of the sequences incorporate slow motion, with 17 sequences using slow motion for 25% or more shots.

In *Terminator 2: Judgment Day* (James Cameron, 1991), Sarah Connor (played by Linda Hamilton), the film's principle female character, has a dramatic dream detailing the moment of a nuclear strike. The blast destroys buildings, incinerates a playground full of children and adults and culminates with Connor setting on fire and

being torn apart, the slow motion encouraging a mixture of horror and abject fascination. From the beginning of the sequence, when Connor walks up to a fence which surrounds a children's playground overlooking a city, slow motion consistently signifies the sequence is different from the film's previous content. Using slow motion throughout the sequence allows Cameron to attune the audience to the slowed imagery (31 of the sequence's 40 shots are in slow motion) and to settle into a contemplative, relaxed mood. Thus, when the explosion occurs the effect is to enhance the drama, horror and voyeuristic nature of the ultra-violence of the nuclear detonation.

Dream sequences in *Dreamscape* and *Spellbound* use slow motion as a figure runs from a threat. In *Dreamscape* the US president's wife runs from a nuclear explosion whilst in *Spellbound* a giant bird, shaped like Dalí's moustache, chases Ballantyne across a desert and down a large, pyramid-like structure. Here, slow motion evokes a sense of anxiety around the pursued person, emphasising an inability to escape, with legs moving impossibly slow as an attacker looms.

Alternatively, in *A Lizard in a Woman's Skin* (Lucio Fulci, 1971), protagonist Carol (played by Florinda Bolkan) runs naked through an empty corridor, evading an invisible threat, reflecting her feelings of guilt for fantasising about murdering a female neighbour. To contrast, in *The Sacrifice*, Alexander's dream utilises slow motion to allow the audience time to analyse and reflect on cryptic images of Alexander's daughter, his contemplation inside a ruined house and his search for coins in the muddy ground outside.

Using slow motion can potentially reduce audience immersion, by drawing attention to a film's production processes (by noticing the slow motion as an effect

produced outside of the film's diegetic world). In this case, slowly or carefully introducing slow motion, as in *Terminator 2: Judgment Day* and *The Sacrifice*, demonstrates one method to minimise an audience's awareness of the film-making process.

11) The protagonist is isolated / alone or with only one or two other individuals in a usually highly-populated setting

Element eleven occurs in twelve sequences and could be considered as a sub-category of element one as it is the unnatural setting which contributes to the dream-like effect. However, affecting the location this way produces a specific look and feel, enabling the film-maker to invoke an uncanny atmosphere, the dreamer often in a familiar place but the isolated or lonely setting seeming strange and unhomely. This is particularly clear in Buñuel's *The Discreet Charm of the Bourgeoisie* (Luis Buñuel, 1972), when a soldier (played by Maxence Mailfort) recounts his dream of walking down a central street in a town and meeting his deceased friends and mother. There is the sound of a busy street, of people chattering, but the street is deserted and resembles a painted stage backdrop. Buñuel notes how this sequence was his attempt to recreate an actual dream: 'for instance, the dream about my cousin Rafael: macabre, of course, yet not without its bittersweet aspects. (I reproduced this dream almost exactly in *The Discreet Charm of the Bourgeoisie*)...I had this dream for the first time when I was about seventy, and since then it's continued to affect me deeply' (Buñuel, 2003, p94-95).

Element eleven is effective within the horror genre, allowing the protagonist to be separated from their peers and placed under threat. For example, in A

Nightmare on Elm Street, as Nancy (played by Heather Langenkamp), a college student, falls asleep in class, she sees her friend Tina, inside a transparent body bag. Nancy leaves the classroom to follow the blood trail left by her dead classmate, tracking Tina through empty college corridors, the sense of danger building until the sequence's climax when the monster, Freddy Krueger, chases Nancy around an abandoned basement boiler room. To contrast, in the romantic-comedy *Ruby Sparks* (Jonathan Dayton, Valerie Faris, 2012) the effect is subtle. Calvin (played by Paul Dano), a young novelist suffering from writer's block, dreams of meeting his ideal girl, Ruby, in a park on a summer's day. They sit and talk whilst Ruby draws Calvin's dog, with no other people visible. The effect is to make the open space the couple share seem intimate, the empty park only subliminally registering as unusual.

12) The location resembles a path or corridor

The use of a path or corridor features in nineteen sequences, with seven sequences using this type of location for 33% or more shots. Several other dream sequences use variations, for example in *Vertigo*, a kaleidoscopic tunnel appears to move quickly behind a close-up of the protagonist, Scottie, and in *The Wolverine* (James Mangold, 2013), the protagonist (played by Hugh Jackman) stands at the bottom of a deep shaft.

Often selected for symbolic connotations, a path or corridor can represent a choice or journey for the protagonist. Jung terms such locations as archetypes of transformation, in which a place, rather than a figure, represents a manifestation of the collective unconscious (Jung, 1975, p38). Jung often speaks of paths in relation to spiritual development (Jung, 1970, p217). Alternatively, from a Freudian perspective,

a tunnel can be read as phallic, referring to sexual intercourse with a female (Freud, 2010, p848), as a reference to anxiety and fear of castration, or as an overall desire to return to the safety of the mother. For example, Freud notes that dreams featuring the subject passing through narrow spaces are birth dreams (Freud, 2010, p856).

In the giallo film (an Italian mystery-thriller with supernatural overtones), *A Lizard in a Woman's Skin*, the protagonist, Carol, has a nightmare after witnessing her husband meeting his mistress. The first five shots of the sequence feature Carol, dressed in a fur coat, pushing past naked men and woman, along a narrow corridor on a train. Later, after fantasising about killing her free-loving neighbour, Julia, there is a series of ten short-duration shots, edited as jump cuts, lasting a total of four seconds, as Carol runs naked along a grey, stone corridor toward the camera, before a final shot in which Carol falls out of view. The sequence illustrates the sexual conflict experienced by the protagonist and her anger toward promiscuous women, whilst simultaneously positioning Carol as a potential suspect when Julia is found soon afterwards, murdered in her apartment.

Director David Lynch has a long-established practice of incorporating dream and fantasy-related imagery into his work, including the frequent use of symbolic representations. *The Elephant Man* (David Lynch, 1980), tells the biographical story of John Merrick (played by John Hurt), a person suffering from an extreme form of disfigurement. In a dream sequence using point of view for nine of the seventeen shots, Merrick moves through dark corridors, to an oppressive, industrial weaving shed where manual labourers are working under intensive conditions. As the nightmare progresses, Merrick peers through a hole in a wall. In a long duration,

twenty second shot, a group of laughing factory workers walk down a narrow corridor toward the camera and the lead worker holds up a mirror, revealing Merrick's deformed face in the reflection. In this instance, the corridors form a maze which Merrick cannot escape from. Wherever he turns or tries to hide Merrick is persecuted, the claustrophobic atmosphere reflecting how his freedom is restricted by people classifying him as less than human.

Combining the dream-denoting elements to create specific effects

Having identified twelve dream-denoting elements used within the selected sequences, I analysed how the sequences combine the dream-denoting elements, to answer the question:

Are there different styles of dream sequence, produced by utilising different combinations of the twelve dream-denoting elements?

Through analysis of the selected sequences' content, three broad groupings emerged, consisting of sequences which foreground the following aspects: (1) psychological / emotional, (2) physical / spatial, (3) realness and dream bizarreness.

Psychological / Emotional

Sequences that combine a high percentage of element two (difficult to understand the logic governing how the protagonist and other characters act) and three (manner in which characters react to the protagonist is unusual) place importance on the psychological state of the protagonist. Incorporating element

eight (obscurification of image) forces the viewer to engage with, and complete, the on-screen image, encouraging the audience to imagine from the perspective of, and empathise with, the protagonist. Thus, combining these three elements can produce a dual-effect of delivering psychological and emotional narrative content whilst simultaneously having a powerful effect on the psychological / emotional state of the audience.

Elements two and three account for the internal motivations of the on-screen characters, often reflecting ambiguous actions which occur during a dream. Element two is common to many of the sequences, demonstrated by the mysterious actions of Alexander in *The Sacrifice* through to the intensity and pain of Seymour's (played by Robin Williams) nightmare in *One Hour Photo*. Combining elements two and three can briefly destabilise the narrative, creating a state of uncertainty in the audience. *The Passion of Anna's* dream sequence clearly demonstrates this atmospheric effect. Initially, people ignore and rebuke Anna (played by Liv Ullmann). Later, as Anna travels across a barren land, women attack her, encouraging the audience to feel sympathy for Anna whilst simultaneously to contemplate if Anna's past actions justify the aggressive treatment she receives.

In *Nostalgia*, Andrey, a Russian writer, leaves his pregnant wife at home to travel to Italy with his beautiful assistant Eugenia, to research the life of the eighteenth-century composer, Pavel Sosnovsky. When Andrey dreams about his wife and Eugenia there seems to be an emotional connection between the women. The pair embrace each other, yet during waking reality, Andrey is unsure whether to have an affair with Eugenia or go back to his wife. The dream hints at the complexity

of love within adult relationships but its meaning is ambiguous and leaves the audience unsure of each character's true feelings.

Adding element eight can subtly invoke physical audience engagement, encouraging a shift in viewing position, to clearly see the presented image. Vivian Sobchack notes, 'We see and comprehend and feel films with our entire bodily being' (Sobchack, 2004, p63), emphasising how the whole body of the spectator is involved when experiencing a film and it is too limited to consider film as only experienced through visual and auditory senses. Reflecting on her sensual experience of watching the opening point-of-view shot of *The Piano* (Jane Campion, 1993), in which the protagonist Ada (played by Holly Hunter) watches light pass between her outstretched fingers, Sobchack notes how her fingers 'comprehended that image' (Sobchack, 2004, p63), to illustrate how the cognitive (visual and aural) aspects of film experiencing are inextricably linked with bodily perception. This aspect of film-viewing can have a strong subliminal effect on the viewer, as somatic and haptic sensations from the body and skin unconsciously influence the spectator's visual and auditory perception, potentially enhancing empathy they feel for the protagonist.

For example, *The Sacrifice* obscures the image several times, utilising curtains and shadows, blocking with trees, or only showing part of an image, such as a hand digging amongst dirt, or a boot sinking in mud. In *Batman v Superman: Dawn of Justice*, the intention is for the audience to physically jump when Bruce Wayne (played by Ben Affleck) dreams of being attacked by the Manbat. Nancy's dream in *A Nightmare on Elm Street* features several events intended to invoke this startle effect, producing a visceral, jump reaction. Dream sequences such as these clearly encourage the audience to experience and imagine from the protagonist's

perspective, somatically as well as through visual and auditory means, encouraging greater identification with, and empathy for, the protagonist.

Physical / Spatial

Elements four (camera shots to mimic the protagonist's perspective) and five (filmic technique to shock or surprise) foreground a sequence's physical and spatial aspects. A high percentage of point of view shots enables the viewer to see and imagine from the perspective of the dreamer. Panning and dollying can enhance the sense of seeing what the protagonist sees, encouraging somatic responses and emphasising embodied engagement with the image. Thus, combining element four with element five can produce a dynamic first-person experience, encouraging the audience to imagine from the protagonist's perspective.

The Fly (David Cronenberg, 1986) provides a dramatic example, where point of view shots allow the viewer to see from the perspective of Veronica (played by Geena Davis), as she dreams of giving birth in a busy hospital delivery room, and to experience shock when a giant maggot is revealed, whereas a mixture of surrealism, humour and drama is achieved in *The Phantom of Liberty* (Luis Buñuel, 1974), when the protagonist lies in bed and point of view and over the shoulder shots are used as he dreams various visitors enter and leave his bedroom. In *Le Grand Amour* (English trans. *The Great Love*) (Pierre Étaix, 1969), the protagonist Pierre (played by Pierre Étaix), bored of his office job, fantasises about having an affair with his beautiful, young secretary. Pierre dreams his single bed rolls out of the bedroom and drives like a car, along sunny country lanes, passing other characters dressed in pyjamas or nightshirts. He offers a lift to his scantily-dressed secretary and they travel together,

cuddled up under the bedcovers, witnessing many unusual scenes, the surrealistic tendencies accentuated by the screenplay's writer, Jean-Claude Carriere, a frequent collaborator with Luis Buñuel. Eight of the sequence's 28 shots are point of view, from Pierre's perspective, lying in his bed. A typical example (shots thirteen and fourteen) feature Pierre and his secretary riding down a country lane, with Pierre glancing off-screen left at the end of the shot. There is a cut, the equivalent of setting up a punchline in a joke, followed by a shot of a man lying on a bed which moves like a tractor, dragging a huge sofa filled with manure. The kinetic camerawork and editing style enhance the sequence's visual humour, with Étaix's background as a professional clown greatly influencing the film-making style.

Realness and dream bizarreness

A common feature of dreaming is termed by Hobson as 'dream bizarreness' (Hobson, 1988, p257). In dream sequences this phenomenon can take many forms, appearing as events which contradict the expected rules of cause and effect, physics, and nature, which occur in waking reality. Examples of dream bizarreness include being able to fly in *8 ½* and *The Science of Sleep* (Michel Gondry, 2006), dead people talking in *Dreams* (Akira Kurosawa, 1990) and *The Discreet Charm of the Bourgeoisie* and the protagonist carried through an abandoned city centre on a crucifix in *Bananas* (Woody Allen, 1971). In 31 sequences, over 40% of the shots include element one (violates diegetic world's rules of cause and effect / nature / physics) in some way, with all 50 sequences featuring element one at some point. It is also possible to slowly introduce element one, as demonstrated in *8 ½*, to gradually reveal the unfolding events are not waking reality.

One of the most common techniques to express dream bizarreness is partially or completely removing diegetic sound (element six) with 37 sequences using element six for 40% or more shots and 26 sequences for 70% or more shots.

Referring to the structure and mechanics of language, Ferdinand de Saussure noted the importance of, 'the functioning of linguistic oppositions' (Saussure, 1959, p122). By this, Saussure is saying that the meaning of each sign is determined through its difference from all other signs, stating, 'in language there are only differences' (Saussure, 1959, p120). Applied to reading a film, whilst waking reality sequences tend to use diegetic sound, omitting diegetic sound signifies there has been a change of context. Thus, the sudden removal of diegetic sound can quickly be read as potentially depicting a dream, especially when combined with element seven (beginning / ending the sequence with an action which clearly depicts a dream took place). For example, in *Nayak* (Satyajit Ray, 1966), as protagonist Arindam (played by Uttam Kumar) sits in a train and places his head against the window, closing his eyes, diegetic sound is removed, the image cutting to Arindam walking in slow motion across mounds of money. Alternatively, diegetic sound can be subtly removed. As Nancy begins her dream in *A Nightmare on Elm Street*, she struggles to stay awake in class, slipping in and out of wakefulness. Initially, diegetic sounds of the classroom are audible. The diegetic sound is gradually stripped back, leaving the speech of a bored student reading aloud at the front of class. Finally, all diegetic sound is removed as Nancy notices her friend Tina, sealed inside a transparent, bloodied body bag.

As a variation, *The Artist*, made in the style of a 1920s silent film, uses diegetic sound during its nightmare sequence, reversing the pre-sound style of its waking

reality sequences to shock the audience. It is also possible that removing diegetic sound places more work onto the audience as they try to understand the nature of the situation, encouraging them to empathise with the dreamer.

27 sequences combine a high use of element one with element six (over 40% of shots for both elements). This common combination provides visual and aural information that an event is unusual. Audiences may quickly recognise this common trope and understand they are watching a dream.

In *The Science of Sleep*, Stephane (played by Gael Garcia Bernal), a young graphic designer, dreams of taking revenge on his over-bearing boss. Of the sequence's 63 shots, 52 shots (83%) utilise element one (violates the diegetic world's rules of cause and effect / nature / physics) and 49 shots (78%) use element six (exclusion / sparse use of diegetic sound), producing a sequence containing high levels of dream bizarreness, in which Stephane fries a photograph of his manager, grows giant hands and attacks his work colleagues. Later, Stephane's electric razor turns into an insect, shaving Stephane's boss and turning him into a tramp. The sequence culminates with Stephane having sex with Martine, a secretary, on top of a photocopier and then swimming / flying away, above a cardboard city. During the sequence's opening seven shots, the volume of diegetic sound is often exaggerated, such as Stephane rustling paper or the sizzling of photographs. In the opening part of the sequence, dialogue is intentionally out of synchronisation, adding to the bizarre setting. Later, from shots ten to 57 the music soundtrack is loud and energetic, with most diegetic sound removed, before switching to sounds of minimalistic synthetic music and water, accompanied by the repeated phrase, 'Come in action 2, can you

complete the mission', spoken through a distorted loud-hailer, for the remaining five shots, before Stephane awakes.

Other sequences featuring very high levels of elements one and six include *Nayak* (94% of shots combine both elements) and *Bananas* (90% of shots combine both elements). In *Nayak*, Arindam, a famous actor travelling by train to collect an award, dreams of happily wandering, in slow motion, across a landscape consisting of mounds of money. The mood switches, with skeletal hands reaching through the ground, as Arindam is tormented and left to drown in the money by his mentor. *Bananas* depicts Mellish (played by Woody Allen), a lazy political activist, carried by monks on a crucifix through a deserted street to the sound of intense choral music. As the monks begin to reverse park the crucifix by the roadside, a second group of monks try to take the parking space. After an argument, the monks place the crucifixes on the ground and fight each other, the music switching to middle eastern string instruments and hand percussion. In Arindam's dream, there is no diegetic sound during the positive section and only sparsely features in the second half, using wind and a ringing telephone whilst in *Bananas*, there is no diegetic sound of the cityscape and no verbal or action-related sound during the argument and fighting, both sequences exemplifying the effect of combining high percentages of element one and six.

An alternative strategy is to gradually introduce element one (violates diegetic world's rules of cause and effect / nature / physics) whilst continuing with diegetic sound. Using this method, it is possible to slowly destabilise the narrative or alternatively deliver a quick shock to frighten the viewer. For example, in *The Fly*,

director David Cronenberg develops a theme through a series of three sequences; first, using two sequences depicting reality and then a third depicting a dream.

In the first sequence, Stathis, a jealous rival of the scientist Brundle, watches a low-fidelity video of the deformed Brundle reporting his experiences of becoming genetically spliced with an insect, his features appearing diseased and inhuman. As the camera closes in, Brundle explains how he must eat like a fly and vomits onto his food, causing Stathis to recoil with disgust. In the following sequence, Stathis follows Veronica to her bathroom where she reveals she is pregnant with Brundle's child, the implication being that her child might inherit Brundle's damaged genetics. The third sequence begins with a car pulling up outside a hospital, from which Veronica and Stathis get out. Veronica's pregnancy seems to develop quickly but the use of diegetic sound combined with realistic surroundings doesn't signify to the audience they are witnessing a dream. Possibly as a strategy to disguise the jump in time, the action in the third sequence develops quickly. Veronica is pushed in a wheelchair along a hospital corridor, accompanied by Stathis and a doctor and then restrained by stirrups in the delivery room, surrounded by medical staff and equipment. There is a moment of calm until the lead doctor begins to enable the birth. At this point, element one (violates the diegetic world's rules of cause and effect / nature / physics) is introduced. Several point of view shots are used, from Veronica's perspective. One by one, the medical staff's shocked expressions are revealed, their actions unusual, as hospital workers should remain calm in stressful situations. At this point, non-diegetic music begins, growing in volume, whilst diegetic sound persists, gradually building uncertainty and tension in the audience. Finally, there is a

cut to the lead doctor holding a huge maggot covered in blood, wriggling awkwardly in his hands, followed by a cut to Veronica waking up, gasping for breath.

In this sequence, the audience initially perceive a dream as waking reality, the diegetic sound critical to ensure a misreading of the images. The director slowly increases element one (violates the diegetic world's rules of cause and effect / nature / physics) before abruptly cutting to a shot which unleashes a shock (element five, using filmic technique to shock or surprise), ending on element seven (begins / ends sequence with a shot confirming the protagonist was dreaming), with Veronica waking up, confirming the character was dreaming, thus relieving the viewer of any anxiety (it was only a dream) whilst at the same time planting doubt and anticipation of why the dream was shown and how the dream's contents might relate to future events in the film.

Additional notable combinations and techniques

Cutting to a new, strange location instantly signifies a change of context. Combining elements eleven (protagonist alone in a usually busy environment) and twelve (location resembles a path or corridor) can intensify this effect and is central to the soldier's dream sequence in *The Discreet Charm of the Bourgeoisie* and Borg's dream in *Wild Strawberries*. In both cases, the sequence begins with the protagonist announcing they will explain a recent, personal dream, before cutting to a shot of the soldier and Borg, respectively, on a deserted street. In *One Hour Photo*, the dreamer is alone in the centre of a corridor of supermarket shelves accompanied with altered colour and sound for further dramatic effect. *Enemy* (Denis Villeneuve, 2013) combines element eleven (alone in a usually busy setting) and twelve (the location

resembles a path or corridor) with element ten (use of slow motion), slowly revealing an approaching figure, walking upside-down along a shadowy corridor. Observed voyeuristically from the male protagonist's point of view, slow motion amplifies the sensual movements of the approaching naked female figure, seducing the viewer whilst intensifying and prolonging the impending sense of threat and claustrophobia, as it becomes clear the woman will pass closely by, and she has the head of a spider.

Elements eight (obscurification) and nine (alteration of colour) deal with control and presentation of the screen image. Combining these elements in high energy sequences can generate excitement and tension. The technique frequently occurs during David's nightmare in *An American Werewolf in London*, showing close-ups of David's eyes and of a knife to his throat, whilst leaving the audience unsure as to what is happening in the off-screen space. *Before I Go to Sleep* employs a similar method, during the attack on the protagonist, Christine Lucas (played by Nicole Kidman). By not showing the exact location of Lucas's attacker, the audience is able to imagine, or experience, fear from the victim's perspective, uncertain where the next blow will come from.

The superhero genre often reverses element one (violates the diegetic world's rules of cause and effect / nature / physics) to denote dreaming. In *8 ½*, the audience know Guido is dreaming because he flies but for a superhero, it is the protagonist's inability to perform fantastic actions which signifies a potential dream sequence. For example, in *Wolverine*, Wolverine dreams he cannot control his blades and accidentally kills his true love, Jean Grey. In *Watchmen* (Zack Snyder, 2009), Nite Owl (played by Patrick Wilson) and Spectre don't use any powers to escape from a nuclear blast and are annihilated. In *Batman v Superman: Dawn of Justice*, Batman

cannot fight and defeat the Manbat and in *Iron Man 3* (Shane Black, 2013), Iron Man's suit attacks his partner, Pepper, and the protagonist, Tony Stark (played by Robert Downey Jr.), cannot call off the attack.

Low percentage use of an element

Using an element sparingly can produce a dramatic effect. For example, in *Wild Strawberries*, Bergman carefully uses element one (violates diegetic world's rules of cause and effect / nature / physics) to produce a sense of uncertainty and threat. Initially Borg is in a strange street. As the viewer becomes accustomed to the setting, there is an image from Borg's point of view of a clock with no hands, suggesting the abandoned street conceals an unusual world. Later, Borg approaches a distant figure. When the figure turns, he is revealed as faceless, before falling into the street and melting away. Amongst the sequence's 69 shots, 28 utilise element one. The other shots provide spaces for the audience to prepare for what may happen next, allowing insecurity to build as the images become increasingly unpredictable, providing a set-up for the shocking climax, when Borg is attacked by his double.

In *The Passion of Anna*, for the first 28 of 33 shots, Anna's dream features mainly diegetic sound whilst the final five shots use no diegetic sound, the sequence climaxing when Anna sees her dead husband and child, victims of the car crash for which she was the driver. The final shot in the sequence is a close-up of Anna's face. She shouts, the film completely silent, the camera slowly zooming into an extreme close-up of Anna's screaming mouth. Typically, the sound of Anna's voice would gain in volume. Reversing the usual dynamics produces an uncanny effect, generating a

powerful shock. Additionally, in a cinema setting, the audience may become self-conscious and uncomfortable, pressing the audience to intellectually engage with the images.

In *Stranger on the 3rd Floor*, director Boris Ingster skilfully paces the nightmare of lead character Mike Ward (played by John McGuire). At seven minutes twelve seconds, the sequence comprises of 63 shots and lasts over 10% of the film's total running time. Ingster uses element four (camera shots to mimic the protagonist's perspective), to provide peaks in the sequence's dynamic structure. After using Ward's point of view for shot two, as Ward dreams of being accused of murder, the next point of view shot doesn't occur until a courtroom scene, over two minutes later. The courtroom images include eighteen, often upward-tilted point of view shots, emphasising the power of Ward's accusers. Later, toward the end of sequence, there is a point of view shot of Briggs, a prisoner wrongly convicted due to Ward's selfishness, mocking the protagonist. At the sequence's climax, shot 61 shows Ward's point of view of the murder victim entering the execution chamber as a guard straps Ward to the electric chair.

Ingster's dream sequence works as a standalone film within the main feature, presenting an alternative narrative direction which the protagonist must avoid if he is to survive. Using element four as the dynamic hook for the sequence encourages empathy with Ward, deepening audience engagement with the protagonist.

Similarities in narrative events

Across the sequences there are recurring techniques and themes, sometimes demonstrating influence and cross-fertilisation, and in other instances, how the

demands of the narrative, across different genres, leads film-makers to find similar solutions. For example, *8 ½* deals with the inner character of Guido, a celebrated film director whilst *Nayak*, released three years later, focuses on similar issues affecting Arindam, a successful film star. Both protagonists have doubts about their professional abilities and are questioning the importance of their careers and both feature dream sequences which contain sparse diegetic sound and characters acting negatively toward the protagonist. At the end of the sequences, in *8 ½*, Guido is pulled into the sea whilst in *Nayak*, Arindam is left to drown in a pile of money by his old acting teacher.

Lost Highway (David Lynch, 1997) and *The Exorcist* (William Friedkin, 1973) both use a static, disembodied demonic face, frozen in a stare, to shock the audience and *Before I Go to Sleep*, *Caché* (Michael Haneke, 2005), *The Exorcist* and *Lost Highway* all use flashes of blacked-out screen, to create an abrupt, staccato editing effect. At the end of *Nostalgia's* cathedral dream, there is a long duration wide shot of a feather floating from the sky, eventually landing on water; the climax of *The Artist's* dream sequence is also a long duration, wide shot of a feather gently falling to the ground, the difference being a loud explosion as the feather lands in *The Artist*, causing the protagonist (played by Jean Dujardin) to wake from his nightmare. In *The Science of Sleep*, protagonist Stephane swims through the air and flies away, mimicking *8 ½*, with Guido flying away from a traffic jam.

Unexpected, fast cuts can shock the audience, such as flashing a demon onto the screen in *The Exorcist* or the Manbat bursting from a tomb and attacking Batman in *Batman v Superman: Dawn of Justice*. In preparation for a shock there is often a moment of calm. For example, a slow, rolling drip of blood occurs in *Batman v*

Superman: Dawn of Justice (down the side of a tomb) and *One Hour Photo* (down the protagonist's face) before bursting into violence. Alternatively, film-makers can use a dream-within-a-dream to build a false ending before surprising the audience with a second dream. This occurs in *The Wolverine*, when Wolverine wakes up and stabs ex-lover Jean Grey with his blades, *An American Werewolf in London* when David wakes up and a nazi zombie stabs a nurse, *Lost Highway*, when Bill (played by Bill Pullman) turns and sees the Mystery Man, and *The Discreet Charm of the Bourgeoisie*, when a dream of eating on a theatre stage switches to a dream in which a priest and a military officer have a duel.

Finally, several sequences feature the protagonist recounting their dream; to a psychoanalyst in *Bananas*, *Lizard in a Woman's skin* and *Spellbound*, to a doctor in *Phantom of Liberty*, to guests and soldiers in *The Discreet Charm of the Bourgeoisie*, to a wife in *Lost Highway*, and narrating to the audience in *Wild Strawberries* and *The Passion of Anna*.

Similarities in sound design and music

Additional to removing diegetic sound, there are several other audio techniques which audiences might recognise as denoting a potential dream sequence. Exaggerating volume levels for aspects of the diegetic soundscape can produce intimacy or alternatively can create a sense of menace, particularly when applied to a seemingly mundane object. In *8 ½*, the pronounced volume of Guido's breathing, coupled with a lack of reverb, makes the sound appear much closer, proximally, to the audience than in a usual waking sequence. Similarly, Father Karras' (played by Jason Miller) disturbed breathing is clearly audible as he dreams of his

mother and a demon in *The Exorcist*, and panicked breathing increases in volume toward the climax of Georges' (played by Daniel Auteuil) dream in *Caché* as he dreams of being hit with an axe by his adopted sibling and childhood rival, Majid. This technique produces a claustrophobic atmosphere whilst hinting to the audience there might be a dreamer, acting outside of the visible dream setting. Additionally, aurally placing the viewer close to the protagonist can encourage empathy.

Caché raises the sound level of flapping wings and thudding as a chicken is decapitated, creating an intense atmosphere which simultaneously reflects the panic of the bird, along with the emotions of the protagonist, Georges, and his feelings of guilt and fear toward Majid. The sound fulfils a range of criteria, the beating wings objective and external but as a memory and dream component, the sound is equally subjective and internal. Placing the focus on a specific sound emphasises the importance of the memory and of the on-screen image. Within a sound-field context, the effect fulfils the maxim commonly known as 'Hitchcock's rule' (Hardy, 2015), that the more important an object is, the larger it should be in the frame. Thus, the louder a sound, the greater its significance to *Caché's* narrative. Variations of this technique are utilised for puncturing sounds in *A Lizard in a Woman's Skin* when Carol dreams of stabbing her perceived rival, Julia, and protagonist Fred's dream in *Lost Highway* when boosted sound levels accompany a point of view shot of an open fireplace, producing an uncanny, tense effect from a seemingly mundane image.

Non-diegetic, atmospheric sound can enhance visual details presented in dream sequences, such as the use of synthetically generated sound to support the image of an expanding nuclear blast in *Watchmen* or to subtly enhance the movement of Bruce Wayne placing flowers into a vase next to his mother's tomb in

Batman v Superman: Dawn of Justice. Alternatively, music and images can be synchronised, such as shots of characters falling over in *The Science of Sleep* edited to match drum strikes within rock music, or synthesiser sounds scored to emphasise the protagonist, Nancy, running into a girl in a school hallway in *A Nightmare on Elm Street*.

Music in dream sequences varies from orchestrated instruments arranged in a major or minor key and set to a time signature, as featured in *Spellbound*, using modern music styles such as rock (*The Science of Sleep*, *A Lizard in a Woman's Skin*) or electronic / synthesised (*A Nightmare on Elm Street*) through to sound design with pitched, musical characteristics, such as the synthetic atmospherics of *Dreamscape* or distant church bells in *The Discreet Charm of the Bourgeoisie*. *The Exorcist*, *One Hour Photo*, *Terminator 2* and *Watchmen* all employ music featuring intense, dissonant strings rising and falling in pitch, combined with haunting choral vocals, reminiscent of the composer Gyorgy Ligeti, famously used by Stanley Kubrick for the stargate sequence of *2001: A Space Odyssey* (Stanley Kubrick, 1968), whilst *Batman v Superman: Dawn of Justice* employs a similar Ligeti-like string sound midway through its sequence.

Music can also feature as a central component of a dream sequence's structure. For example, in *Nayak*, the sound of chimes and bowed strings accompany the first half of Arindam's dream, when money is falling from the sky but when the dream becomes threatening, the music stops, replaced by the sound of wind and a constantly ringing telephone.

Atmospheric sound design, often software-based, features heavily in the dream sequences of productions such as *The Wolverine*, *Watchmen* and *Batman v*

Superman: Dawn of Justice, with attention paid to creating immersive, surround sound and creating audio with enhanced low frequencies, to produce a somatic response from the viewer. David Lynch also emphasises sub-bass sound in *The Elephant Man*, using low rumbles as Merrick moves through corridors and when dark clouds gather in the sky to suggest threat and provoke tension.

Summary

The twelve elements allow for efficient analysis, categorisation and comparison of filmic dream sequences, to discover overarching styles and trends, encompassing film styles from surrealist to mainstream blockbuster. When applied to films outside the study, the elements have proved comprehensive, with no further elements discovered. Every sequence uses element seven (starting / ending with an action which clearly signifies a dream took place), enabling the audience to correctly contextualise the information. All sequences use element one (violates the diegetic world's rules of cause and effect / nature / physics), 30 containing the element in 40% or more shots and 37 sequences feature element six (exclusion or only sparse diegetic sound) in at least 40% of shots. Therefore, it is likely that film audiences will be familiar with such techniques, allowing for a dream to be either quickly communicated or alternatively subverted as in films such as *The Fly*, as a method to shock and excite. Some elements are less common such as slow motion or use of a deserted location. When featured, these techniques instantly stylise a sequence, so will not suit all film narratives.

The twelve elements provide film-makers with a comprehensive set of tools to produce original dream sequences. Alternatively, if a film-maker wishes to

emulate an existing work they can analyse a dream sequence to determine which combination of elements has been utilised and then repeat the combination in their own work.

The findings have significantly contributed to my film-making practice. For example, experimenting with combinations of the dream-denoting elements allows new creative possibilities and analysing the work of other film-makers has revealed opportunities to produce work with original content, for example by explicitly representing latent content within a sequence.

In the following chapter, I analyse the selected dream sequences to discover if they correlate with the dream theories of Freud, Jung, Hobson and Revonsuo, and to ascertain if any of the sequences explicitly represent latent content.

Chapter Four: Correlation between dream theories and analysed sequences

In this chapter I discuss which dream theories the selected sequences most closely embody and if any of the sequences explicitly incorporate the representation of latent content. The chapter answers the following questions:

- Do the analysed filmic dream sequences display features which correlate with the dream theories of Freud, Jung, Revonsuo or Hobson?
- Is latent content ever explicitly represented within the analysed dream sequences?

When analysing the sequences for correlation with the four selected dream theories, it is important to note how each dream sequence supports the film's narrative. Typically, in classical Hollywood cinema, a film's content consistently drives narrative forwards. Bordwell, quoting a screenwriting manual, notes, 'Each scene should make a definite impression, accomplish one thing, and advance the narrative a step nearer the climax' (Bordwell, 1988, p17). Therefore, a dream sequence should develop the narrative and provide crucial information difficult to convincingly deliver in a waking reality sequence, without complicating or confusing the narrative arc.

A dream can reveal hidden details pertaining to the protagonist, allowing deeper understanding of a character's background, and psychological and emotional state. Examples include *Spellbound*, in which Ballantyne describes his mysterious, clue-laden dream to two psychiatrists, or when Christine Lucas dreams in *Before I Go to Sleep*, her violent, repressed memories enabling the audience to share in Lucas's confusion and fear, whilst simultaneously introducing specific details of Lucas's past

and how she subsequently lost her memory. In both examples, memory loss is a significant plot device, the dream sequences enabling narrative development whilst still retaining mystery. In *Before I Go to Sleep*, Lucas's dream introduces a dual plot-line, revealing details the protagonist cannot consciously recall, driving the narrative forward, whilst providing a plausible reason why the character doesn't know the vital information. Dual plot-lines can build suspense, as audience members wait for the relevance of the dream information to be revealed, often at a climax (for example, when Lucas discovers she is living with the man who attacked her and that he is posing as her husband).

Hobson

Taking these points regarding narrative into consideration, activation-synthesis correlates with the fewest sequences, with activation-synthesis characteristics partially featuring in ten of the analysed sequences. This theory states a dream is a random collection of data which the dreaming brain-mind tries to make sense of, and there is no unconscious 'meaning of a dream' in the Freudian sense, stating there is no distinction between manifest and latent content (Hobson, 1977, p214) and 'I now propose that Freud's view of the implicit unconscious was wrong...' (Hobson, 2015, p169). In a typical mainstream film, where each event should drive the narrative forwards, there is usually no place for a dream containing partially irrelevant or meaningless information, as this would destabilise a film's direction and defocus the plotline, confusing the audience and breaking the story's flow. Buñuel's *The Phantom of Liberty* most clearly features aspects of activation-synthesis, as one of the film's central plot points is chance. As Buñuel stated in his autobiography,

'Chance governs all things...If I have a soft spot for any one of my movies it would be for *The Phantom of Liberty*, because it tries to work out just this theme' (Buñuel, 2003, p171). Buñuel incorporates chance into *The Phantom of Liberty's* structure and content in both waking reality and dream sequences, emphasising his surrealist sensibilities, demonstrated since his earliest film work in *Un Chien Andalou* and *L'Age d'Or* (Luis Buñuel, 1930). Buñuel's use of chance partially mimics the assertion of activation-synthesis, that dream content is randomly activated and only afterwards synthesised to produce seemingly meaningful dream narratives.

Nine other dream sequences display some properties of activation-synthesis. In *The Exorcist*, Father Karras has a troubling dream which features disconnected images that the audience is required to comprehend, roughly approximating the effect of the brain-mind attempting to make sense of randomly triggered images during sleep. The first five shots in the sequence last for a total of seven seconds and jump from a medallion falling in slow motion, to a large dog running toward camera, to a frightened old lady (Karras' mother), to three frames of black screen, to a silver pendulum swinging in a clock. However, the sequence differs from activation-synthesis because all the images have an underlying, specific meaning, consciously constructed by the film-maker, which relates to *The Exorcist's* overarching narrative. To compare, in *Lost Highway*, the action is motivated more clearly, as protagonist Bill describes a recent dream to his wife, Renee, in which he cautiously walks through his house to find Renee sleeping in bed. Yet some images seem unusual, such as a prolonged shot of the front room fireplace, or smoke rising into the room, the sequence leaving small gaps in the narrative which the audience must try to complete.

Additionally, the *Lost Highway* and *The Exorcist* sequences use an unexplained static shot of a disembodied face to frighten the viewer. In *Lost Highway*, Bill is lying in bed with Renee. He turns away and then back toward her, at which point a static white face of the Mystery Man appears, superimposed over Renee's face, causing Bill to panic and grasp for the bedside lamp. In *The Exorcist* sequence, shots ten to fourteen, lasting a total of one quarter of a second, consists of black screen for two frames, a demon's face for one frame, white screen for two frames, demon's face for one frame, and black screen for two frames. The flashed image used in *The Exorcist* comes close to bypassing conscious perception, the aim being to strike irrational, non-conscious fear in the viewer. Researchers investigating the threshold of conscious perception discovered negative information is perceived faster than positive information, possibly reflecting survival benefits of quickly identifying potential threats, with subjects confidently perceiving negative words in 33 milliseconds, 77% of the time (Nasrallah et al, 2009). As a single film frame lasts for 41.6 milliseconds, most audience members should consciously notice the negatively-charged image of a demon. However, as the shot's duration is on the edge of human perceptive capabilities, when combined with atmospheric sound, there is a strong chance the image will induce uncertainty, enhancing audience fear.

Hobson's recent concept of protoconsciousness shares some characteristics with Threat Simulation Theory. For example, protoconsciousness theory states the dreaming foetus prepares for life after birth by simulating important activities such as sucking and other physical actions. Once born, a person continues to use dreaming as a type of virtual-reality simulator, running through various procedures to enhance performance during waking. Thus, many of the analysed dream sequences which

correlate with threat simulation, equally correlate with protoconsciousness theory. However, Hobson's protoconsciousness differs from Revonsuo's threat simulation as it doesn't solely focus on simulating threats (Hobson, 2015, p146), meaning any preparatory behaviour displayed in a dream sequence, and any dream which reinforces our sense of self (Hobson, 2015, p20) (for example, *Le Grand Amour*, when Pierre practices courtship with his secretary, or *Rushmore* (Wes Anderson, 1998), when Max Fischer (played by Jason Schwartzman) solves a complex mathematical problem and takes praise from his classmates) correlates with protoconsciousness theory.

Freud

Twelve sequences strongly feature Freudian traits and a further 33 partially feature Freudian traits. Both Buñuel sequences (from *The Discreet Charm of the Bourgeoisie* and *The Phantom of Liberty*) contain references to Freudian concepts, which is common of surrealist film-making. Buñuel comments, '...my discovery of Freud, and particularly his theory of the unconscious, was crucial to me' (Buñuel, 2003, p229). Similarly, the narrative of *Spellbound* and the Dalí-produced dream sequence, borrow heavily from Freud. For example, Ballantyne's amnesia is a symptom of his unconscious sense of guilt developed during childhood and psychoanalysis solves the murder at *Spellbound's* centre. Freud notes, 'The battle with the obstacle of an unconscious sense of guilt is not made easy for the analyst' (Freud, 2010, p4004), highlighting the difficulties faced by the two psychiatrists, Doctor Constance Peterson and Doctor Alex Brulov, attempting to discover the truth about Ballantyne. Ballantyne's dream utilises the Freudian concept of the

unconscious, metaphorically gaining insight into Ballantyne's mind with symbolic representations of disembodied eyes, and a faceless man hidden behind a chimney, dropping a misshapen wheel which slides down a roof. Later, the audience learn that the faceless man is the real killer. The sliding wheel alludes to Ballantyne witnessing the murder victim ski over a precipice, linking to Ballantyne's childhood-based sense of guilt after accidentally sliding into his younger brother and knocking him to his death, triggering amnesia to repress the painful memory. Between Ballantyne narrating his dream, there are cuts to the psychiatrist's office, at which point the two psychiatrists discuss his account, using a simplified version of Freud's theories. For example, when Ballantyne describes an event from his dream in which a woman who looks like Constance wanders around kissing people, Brulov comments, 'This is plain, ordinary, wishful dreaming'.

Wild Strawberries contains strong references to mortality, heavily invoking Freud's death drive. Analysing this concept, Joanne Faulkner notes, 'The death drive is opposed to the *life drive* — libido, or Eros...the death drive tends toward bodily disintegration, and in due course will return the organism back to an *ultimate* equilibrium...It causes a build-up of tension that will lead to great psychic distress if it is not harnessed and redirected by the ego' (Faulkner, 2005). This concept is central to *Wild Strawberries'* narrative and most graphically depicted early in the film, when the elderly protagonist Borg dreams he is strangled by his malevolent double, who emerges from a coffin spilled from a horse-drawn hearse.

In *The Sacrifice*, Tarkovsky invests heavily in symbolic manifest content, sometimes of a sexual nature (for example, Alexander's seductive, naked daughter) and at other times more perplexing and vague (Alexander digging in mud for coins

linked by a cord or Alexander lost amongst leafless trees). Each can link to Freudian theory (for example the coins could be a wish fulfilment, the cord could be umbilical, the trees could relate to the loss of life and fear of death). In *Enemy*, fetishistic images of spiders are seen by the protagonist Adam Bell / Anthony Claire (played by Jake Gyllenhaal) at key moments, representing his repressed desire. *Enemy's* narrative never explains how Bell / Claire came to fetishise spiders, suggesting the protagonist himself might be unaware of the origin. Freud noted it is usual for those with a fetish to repress the originating experience, stating, 'it is as though the last impression before the uncanny and traumatic one is retained as a fetish' (Freud, 2010, p4537). For example, early in the film, Bell attends a sex club and watches a female erotic dancer in stiletto shoes pierce and crush a large tarantula with her high heel shoe. Additionally, the whole film revolves around the idea of a double, which Freud addresses in detail in *The Uncanny*.

Jung

Jungian traits feature strongly in thirteen sequences and partially in a further 35 sequences. Many of the sequences include characters identifiable as archetypes, such as the various visitors to the dreamer's bedroom in *The Phantom of Liberty*, a vengeful teacher in *Nayak* and the violent double (Jung's shadow archetype) in *Wild Strawberries*. From a Jungian perspective, these archetypal figures commonly rise in our dreams as signifiers of the collective unconscious, often representing our deepest human fears and greatest personal challenges.

In *The Phantom of Liberty*, Harry Foucauld (played by Jean-Claude Brialy) seems to be depressed, complaining he is feeling tired and cannot sleep properly.

Foucauld's dream frequently uses point of view shots from the perspective of Foucauld lying in his bed. Four figures consecutively enter the bedroom: a cockerel, a secretive woman dressed as a spy carrying a candle and a pocket watch, a postman delivering a letter, and an emu. From a Jungian perspective, these visitors are archetypes, representing aspects of Foucauld's unconscious whilst also reflecting the inner-state of Buñuel the surrealist, and his view of the character, Foucauld. In Jung and his peers' writings, birds are noted as important archetypes which have emerged within many civilisations, from Palaeolithic prehistory to contemporary society, evidenced through many examples including the cave paintings of Lascaux, to shaman of Siberia (Henderson, 1978, p147) and the white dove as a symbol of a freed spirit (Jung, 1968, p341). Jung notes in his book *Aion* that in modern dreams the self is often represented by an animal and 'white and black birds' are amongst the most common manifestations (Jung, 1978, p226). In *The Phantom of Liberty*, the cockerel could refer to Foucauld's reawakened sexual desire after looking at arousing pictures with his wife before going to bed; Jung comments that a cockerel can denote concupiscence (strong sexual desire, lust) (Jung, 1974, p96). The emu could represent Foucauld's lack of direction and frustration (as it pecks and wanders about the bedroom) and lack of energy or self-perceived inability to excite his wife (the emu's inability to fly). The female spy seems to bring a secretive message to Foucauld. She could also refer to Foucauld's lust as she carries a phallic symbol (a lit candle) which she then blows out (perhaps signifying Foucauld as impotent). Another messenger, the postman, delivers a letter. Jung notes that birds such as an eagle and a raven commonly represent Hermes, the Greek god and messenger (Jung, 1974, p65-66). Thus, the four visitors whom initially seemed disconnected, when viewed

from a Jungian perspective, become tightly knitted together, bringing a message to Foucauld regarding the conflict between his reignited sexual desire and his current lack of energy and weakened masculinity.

Several sequences feature male protagonists dreaming of strong female characters, such as the soldier's dream in *The Discreet Charm of the Bourgeoisie*, or Lieutenant Scott Burnett's (played by Robert Ryan) dream in *The Woman on the Beach* (Jean Renoir, 1947) of escaping a sinking ship and pursuing a beautiful woman at the bottom of the sea. Likewise, films such as *Blue Steel* and *The Babadook* feature female protagonists dreaming of influential male characters. In each instance, these sequences can be viewed as dreams focusing on the anima (latent female characteristics of a man) and animus (late male characteristics in a woman). Beneath the manifest content, each dream can provide deeper insight into each protagonist's psyche. For example, in *Blue Steel*, Megan Turner (played by Jamie Lee Curtis) is struggling for respect as a police officer in a male-dominated workplace. Consequently, whilst Turner's premonitory dream of being killed by her new boyfriend provides clues relating to the film's central narrative, viewed as an animus, the vicious boyfriend could represent Turner's need to be more masculine and aggressive, if she is to survive in her current job.

Jung's archetypes of transformation often occur in the sampled sequences. Jung states, 'They are not personalities, but are typical situations, places, ways and means, that symbolize the kind of transformation in question' (Jung, 1975, p38). Symbolic locations, often representing key transitional stages in a person's life, occur in many of the sequences, such as empty streets in *The Discreet Charm of the Bourgeoisie* and *Wild Strawberries*, mountains of money in *Nayak*, and a ruined

cathedral in *Nostalgia*. Even in *8 ½*, the car that Guido escapes acts as such an archetype, with Guido encased in the trappings of materialism and modernity, desperately trying to escape suffocating pressures so he can be free to live his own life.

Revonsuo

Revonsuo's Threat Simulation Theory, strongly featuring in 27 sequences and partially in a further seventeen, is the most prominent of the selected dream theories. Revonsuo notes, 'The hypothesis I am putting forward states that dream consciousness is essentially a mechanism for simulating threat perception and rehearsing threat-avoidance responses and behaviors' (Revonsuo, 2000, p6). Threat simulation dictates that a dream has a specific purpose, which is to rehearse possible strategies in a safe, virtual environment, to improve the chances of survival in waking reality. Consequently, Revonsuo's theory fits neatly with mainstream film narratives, as the content of a threat simulation dream is explicit and goal-orientated, as opposed to a Freudian or Jungian dream, where the true (latent) meaning is disguised and must be deduced from the manifest content.

Many of the selected sequences feature situations which illustrate the effects of an inner conflict. Utilising threat simulation enables the presentation of a character's current anxieties and psychological state in a plausible context (a character under stress dreaming about facing, and trying to overcome, their worries), encouraging emotional investment in the protagonist.

Seventeen sequences implicitly relate to threat simulation. In these cases, the dreamer often fails to react or otherwise blunders through scenarios without

achieving success. Both *Nostalgia* dreams present Andrey with cryptic situations he fails to resolve, either leaving his pregnant wife lying on her bed or Andrey walking alone through a ruined monastery, unable to hear the voice of God discussing his sense of instability and disconnection. These situations allude to internal issues which present the dreamer with subtle but deep existential threats. In *Sex & Drugs & Rock & Roll* (Mat Whitecross, 2010), rock musician Ian Dury (played by Andy Serkis) dreams of his dead father, the sequence revealing a complex mixture of grief, guilt and the loss of a hero figure. The dream doesn't present answers, instead revealing Dury's ongoing attempts to overcome personal trauma.

Many sequences place the dreamer in a tense situation where resolving a threat is barely possible, often revealing important background information about the protagonist. For example, in *Interstellar* (Christopher Nolan, 2014), the threat is explicitly presented, as protagonist Cooper (played by Matthew McConaughey) struggles with the controls of his aircraft as it plummets toward the ground whilst in *The Elephant Man*, John Merrick must survive a beating from a vicious gang of bullies.

Nineteen sequences are either wholly composed of, or otherwise conclude with, an insurmountable threat simulation, with a traumatic outcome. Each scenario reveals the protagonist's greatest fear or anxiety, their helplessness often emphasised by the way events unfold in front of them. In *An American Werewolf in London*, David is held captive at knifepoint whilst his family and then he is murdered by Nazi zombies; when he awakes the nurse who cares for him is also killed, revealing a dream within a dream. In *Dreamscape*, the president watches as a nuclear explosion disintegrates both his city and his fleeing wife whilst in *Vertigo*,

Scottie's dream contains obscure clues relating to solving a case combined with a catastrophic ending, as he falls from the sky to his death. These are threat simulations gone wrong, the dreamer unable to prevent the nightmare outcome, provoking tension and anticipation as to how the events will factor into the film. Fifteen of these sequences contain aspects of premonition, revealing a possible (traumatic) future for the dreamer. From a narrative perspective, each sequence sets a clearly defined goal for the protagonist to avoid the fate depicted in the dream (Bordwell et al, 1988, p17), coupled with a limited amount of time to fulfil the objective, two of the central components of a classical Hollywood narrative (Bordwell et al, 1988, p44).

Clearly, presenting a dream sequence as a threat simulation is a common and useful technique across many film genres. A threat simulation dream places less pressure on the audience to work, minimising the kind of misunderstandings which might occur using symbolic representations, ensuring the narrative remains focused.

Is latent content ever explicitly represented within the analysed dream sequences?

Three overarching types of latent content feature in the analysed sequences: premonitory dreams, physical causes and psychological causes. Each contribute in some way to the film's narrative either by suggesting possible outcomes to develop the narrative (premonitory) or providing important information about a character's back-story or current predicament (physical or psychological cause). Significantly, in the selected sequences latent content is only implied and always subordinate to the explicit depiction of the manifest content.

Premonitory Dreams

Premonitory dreams simultaneously provide insights into the protagonist's psyche along with details relating to future narrative events. This method allows for many possibilities including plot twists (such as the dream being misread by providing incomplete information or the dream revealing an outcome which must be avoided by the protagonist), audience pleasure (when the viewer works out the meaning of a dream), and overarching themes such as mystery and the supernatural.

Sixteen sequences strongly place emphasis on premonition, with a further nineteen partially including premonitory characteristics. In many examples, the foretold events are very negative. For example, the dreamer is sentenced to death (*Stranger on the Third Floor*) or there will be nuclear devastation (*Terminator 2: Judgment Day*, *Dreamscape*, *Watchmen*). However, in each case there is a plot twist and the outcome more positive, the predicted danger either completely avoided or otherwise subverted. In *Stranger on the Third Floor*, after his dream of being executed, protagonist Michael Ward is declared innocent and survives, and in *Terminator 2: Judgment Day*, Sarah Connor helps to prevent the end of humanity. In *The Artist*, a modern film made in a silent style mimicking 1920s Hollywood, George Valentin is a movie star, based on the real-life star Douglas Fairbanks, his career threatened by the advent of sound. In Valentin's nightmare he cannot speak but noise surrounds him, his dog barking, the telephone ringing, and dancing girls laughing. Valentin's secret is that he is French and cannot convincingly speak English. However, at the film's climax, Valentin regains his star status by becoming a dancing sensation. Thus, sound destroys his old career but music provides his rebirth and future success. Alternatively, when the premonition is positive, there is a positive

outcome but with a twist. In *Oblivion* (Joseph Kosinski, 2013) Jack Harper (played by Tom Cruise) dreams of a woman he once loved and lost but might meet again. At the film's end, Harper is revealed to be a clone with implanted memories; the original Harper is lost and it is the clone who gets the girl and their love which survives.

A further, complex variation of premonitory dreaming occurs in *A Girl Walks Home Alone at Night* (Ana Lily Amirpour, 2014), which features a single dream sequence spilt into two halves, separated by over twenty minutes of film time. Central to the story is a romance between The Girl, a vampire (played by Sheila Vand) and Arash, a young Persian man wanting to leave his hard life for something new. The first half of the sequence features The Girl dreaming of a distant silhouetted figure walking into a dark corridor. Between the two dream halves, The Girl kills Arash's father and feeds on him, and Arash sees his father's abandoned body lying in the street. Later, the second half of the dream features a closer view of the figure in the corridor, confirming it is Arash. Thus, the second half of the sequence confirms the dream is a premonition that Arash would come and find The Girl, so they can leave for a new life together.

Physical Causes

There are two sequences (*The Fly* and *An American Werewolf in London*) which reveal definite physiological changes not outwardly visible. In both cases the dreams are also premonitory. This method reveals potentially traumatic, hidden, physical changes to the protagonist and audience simultaneously, using manifest content to suggest frightening latent causes.

In *The Fly*, Veronica's fear she is pregnant with Brundle's child, accompanied by internal bodily changes, is the basis for her nightmare. A key aspect of this dream is the powerlessness which Veronica experiences, of an irreversible physical process. In *An American Werewolf in London*, although David is conscious when attacked by a wild creature it is unclear how much knowledge he has of his assailant. Probably, David would consider the attack to be from a natural, rather than supernatural, beast. Therefore, much of the information about his impending fate (that he will become a werewolf) is unknown to him. The alteration of David's body chemistry reveals itself through a combination of the day's residue (the memory of being attacked by a wild beast) serving as a basis to deliver the latent content relating to a violent, losing battle taking place internally between his and the werewolf's genetics. David's nightmare also introduces a dual plotline by providing the audience with a taste of the impending violence the film promises to deliver, whilst simultaneously demonstrating the supernatural implications of the dream, both of which David is not consciously aware. These two films fall within film theorist Linda Williams' categorisation of body genres (films which evoke involuntary audience responses that mimic on-screen action) (Williams, 1991, p4). Williams states horror films are sadomasochistic (Williams, 1991, p9), as exemplified by the audience's pleasure and involvement in the fear and pain suffered by Veronica and David.

Arguably, the years of production for the two films (1986 and 1981 respectively) embody a response to an underlying fear of AIDS (first clinically observed as a specific medical condition in 1981) and later HIV (the virus identified in 1986) existing in the population at large. The repressed, latent fears of the audience occur as a manifest on-screen experience, a form of group therapy and release of

tension shared between the film characters and audience. As noted by film theorist Linda Badley, '...the scientist-turned-monster in David Cronenberg's 1986 remake of *The Fly* is often read as a metaphor for the body infected by the AIDS virus' (Sibielski, 2013, p126).

Aliens (James Cameron, 1986) begins with a dream sequence closely related to Veronica's in *The Fly*, in which female protagonist Ripley (played by Sigourney Weaver) has a nightmare of being impregnated by the alien, much like her male co-astronaut Kane from *Alien* (Ridley Scott, 1979). However, whereas Ripley has a general fear she may have been impregnated while in hyper sleep, Veronica knows she is pregnant by the genetically-damaged Brundle. Five other sequences incorporate a partial physical influence. For example, in *Wild Strawberries* Isak Borg fights against his weakening body and the prospect of death and in the Ian Dury biopic *Sex & Drugs & Rock & Roll*, the rock star's dream includes images depicting his battle with polio.

Psychological causes

There are a range of psychological causes for protagonists' dreams falling under the categories of anxiety, guilt, schizophrenia, PTSD, repressed memories, and desire, each specifically triggered by current events.

Anxiety in cinematic dream sequences commonly stems from problems in waking reality which the dreamer feels are out of their control. When anxiety is the cause of a dream, the sequence often develops into a nightmare. For example, in *Carrie* (Brian De Palma, 1976), Sue (played by Amy Irving), a survivor of a prom night massacre in which Carrie kills students and tutors using telekinetic powers, dreams of

taking a bouquet of flowers to Carrie's grave. However, when Sue places the flowers at the foot of the white wooden cross marking the grave, Carrie's hand, covered in blood, shoots out of the grave and grabs Sue's arm, causing Sue to scream and struggle to break free.

In *Nostalgia*, Andrey dreams of Domenico, a man he made a solemn promise to but did not keep. When awake, Andrey masks his emotions but Andrey's dreams reveal the guilt which is slowly eating away at his soul. Tarkovsky's comments on his final film, '*The Sacrifice* is in the same vein, fundamentally, as my earlier films, but with the difference that I have deliberately laid poetic emphasis on the dramatic development' (Tarkovsky, 1989, p222). In *The Sacrifice*, by including Alexander's dream, Tarkovsky brings additional layers of detail into play, to add greater emotional and spiritual complexity to the narrative. Alexander feels guilty for striking his son and then, due to impending nuclear war, realises it might be the last day they spend together. Instead of presenting explicit details, the dream evokes a feeling of awe and allows a sense of space to evolve around Alexander, to express how nature and reality can sometimes only be understood through sensation and (mystical) experience, rather than through cold, human logic; ultimately it is an act of faith, Alexander's prayer and sacrifice, which saves the world, even though only he knows it.

One Hour Photo features the only dream sequence which specifically deals with schizophrenia, though others such as *The Science of Sleep* and *Lost Highway* elliptically tackle types of the disorder. The film focuses on Sy Parrish, a sensitive photo-lab technician, who becomes increasingly obsessed with a young family, after he develops photographs of them in the store where he works. Parrish longs for love

but struggles to form emotional relationships with other people. His internal problems are externalised in a ten second nightmare sequence which opens with a wide shot of Sy, dressed in white, isolated in the centre of a pristine white, empty supermarket aisle, accompanied by choir-like voices singing a single chord. After two seconds, the camera cuts to an extreme close-up of Seymour's face, the jump in perspective delivering a mild shock. As the sound builds in volume, Seymour's eyes remain closed for five seconds and then open, filled with blood, the pupils visible. Blood begins to roll from Seymour's right eye, down his cheek, and the soundtrack becomes silent. There is a cut for six frames to a medium shot of Seymour, followed by a jump cut to a one-second medium close-up in which Seymour presses his hands to his face and blood gushes from Seymour's eyes, spraying between his fingers, accompanied by a distorted scream before cutting to Seymour in bed, waking and shouting, looking at his hands. Here, paralysis afflicts Parrish. The isolation and mental pressure Seymour experiences in his dream greatly contradicts his calm and controlled actions in waking life. The intensity and violence of the sequence shock the audience and greatly destabilise the mood, inducing a strong sense of foreboding and threat, which is then utilised as a powerful undercurrent throughout the rest of the film.

Four other dream sequences contain weaker references to schizophrenic-related disorders. The protagonists of *Batman v Superman: Dawn of Justice*, *Enemy*, *Lost Highway* and *The Science of Sleep* all suffer from pronounced splits in their personalities. Batman lives as a troubled superhero and billionaire. In *Enemy*, Adam Bell / Daniel Saint Claire has two identities, one as a college tutor struggling with work and relationships, the other as a bit-part actor struggling with sexual

perversions. In *Lost Highway*, the composite character Fred Madison / Pete Dayton is played by two different actors, one a jazz musician and the other a young mechanic. In their respective dreams, the dualistic problems are played out. For example, Batman battles the Man-Bat, Bell voyeuristically watches a figure that is part woman, part spider, and Fred the jazz musician sees his wife's face transform into the Mystery Man. In *The Science of Sleep*, Stephane's frenetic dream of fighting his work colleagues, humiliating his boss, and having sex with a female co-worker presents Stephane as a talented, positive person, trying to get ahead in life. However, the quirky playfulness of the sequence subtly demonstrates that Stephane's mental health is fragile, leading the film to a tragic conclusion as Stephane eventually regresses into a childlike state.

Two unconscious influences which may exhibit similar outcomes in a waking subject but often produce very different outcomes when dreaming are repressed memories and PTSD. A key characteristic of PTSD dreams is that they are usually exact replays of an event whereas a repressed memory might cause a dreamer to have similar experiences which vary in content (for example, a person chased by a human in waking, might transform to pursuit by an animal in an anxiety-related dream). In a study to determine how people develop PTSD, Ernest Hartmann compared the dream experiences of Vietnam War veterans stating, 'in a few of these individuals the traumatic scene, or a variant of it, recurs in nightmares over and over – often for many years; these repetitive post-traumatic nightmares are a hallmark of Post-Traumatic Stress Disorder' (Hartmann, 2001, p100-101). Therefore, only *Interstellar* clearly presents as a PTSD dream, opening with a realistic reliving of an aeroplane crash, with Cooper unable to control his vehicle.

Seven sequences blur the line between repressed memories and PTSD. For example, protagonist Christine Lucas' nightmare in *Before I Go to Sleep* features her being brutally beaten in a hotel corridor, accurately reliving many details in her nightmare (PTSD) but Lucas doesn't remember the identity of her attacker (a possible repressed memory) whilst in *The Passion of Anna*, Anna initially dreams of walking across a mysterious land (guilt and anxiety related dream, featuring distortion of the actual event) before discovering her dead family (PTSD, exact reliving). Examples of repressed memories refer to a range of subjects from sexual perversion (*Enemy*) to the loss of loved ones (*The Discreet Charm of the Bourgeoisie*). A difference occurs in *Oblivion*, whereby an external agency represses the protagonist's memory (the organisation which created Harper, a clone) and provides Harper with his principle goal, to discover his true self.

Desire features as a strong characteristic of twelve sequences, and partially in an additional eleven sequences, with sexual desire playing a strong role in several sequences. For example, in *Watchmen*, Nite Owl dreams of kissing Silk Spectre II, the wife of his friend and fellow superhero Dr. Manhattan, and in *Le Grand Amour*, Pierre dreams of cuddling in bed with his secretary. In other sequences, the protagonist's desire is focused on love, such as in *Ruby Sparks*, where Calvin dreams of talking in the park with his fantasy girl.

In *We Need to Talk About Kevin* (Lynne Ramsay, 2011), Eva (played by Tilda Swinton), the mother of a convicted murderer, desires freedom away from her painful life. Other desires include admiration and acceptance from peers (student Max in *Rushmore*, dreaming of being a genius and solving an impossible maths

problem), the safety of their children (Alexander's cryptic dream in *The Sacrifice*) or for time with their deceased father (Ian Dury's dream in *Sex & Drugs & Rock & Roll*).

Summary

Searching for evidence of the selected dream theories provides an additional method for dream sequence analysis, aside from focusing on film-making techniques. Of the selected dream theories, Revonsuo's correlates strongly with the greatest amount of sequences due to its explicit content fitting neatly with the need for film-makers to develop clear, focused narratives. Conversely, activation-synthesis correlates with least sequences due to the unpredictable dream content and Hobson stating, in relation to activation-synthesis, that dreams have no specific, focused meaning. However, utilising the activation-synthesis theory to inform dream sequence production can lead to valuable unexpected results, which can aid film-makers wishing to explore narrative possibilities or introduce chance into their creative process. Examples include editing and merging shots in *Mira Dream* and the development of sound design techniques in *Mira Dream* and *Night Walker*. Combining aspects of the different dream theories has enabled greater detail in my work, for example through combining Freud and Jung's theories in *Forest Dream*, and through considering Freud, Jung and Revonsuo's theories when producing the latent content for *Dream Three*.

Aspects of the three categories of underlying content (psychological, physical, premonitory) are often combined, offering many narrative possibilities. For example, in *The Babadook*, Amelia Vanek's (played by Essie Davis) dream of her husband's fatal car crash suggests feelings of anxiety, guilt, PTSD and repressed memories. In

Blue Steel, Megan Turner, a New York police officer, dreams she is flying with her successful boyfriend Eugene Hunt, in his helicopter above the city at night. In the dream, she falls out of the helicopter and after grabbing her hand, Hunt releases his grip, letting her fall. Thus, Turner's dream combines premonition (Hunt is secretly a murderer and later attempts to kill Turner) with her feelings of anxiety and sexual desire.

In the following chapter I discuss the application of my findings in chapters one to four to my own film-making practice. This includes explicitly incorporating representations of latent content, as most of the analysed sequences only implicitly incorporate Freudian or Jungian latent content.

Chapter Five: Practice Research

This chapter details the process of combining the dream theories outlined in chapter one with the research findings from chapters two to four, to inform the production of a series of filmic dream sequences through experimentation with digital film-making technologies. For each dream sequence, I provide a detailed analysis of the three stages of production (pre-production, production and post-production) including the development of each film's conceptual framework, along with a summary of each work. I aim for methodology and working processes repeatable by other filmmakers wishing to test and build on the findings. The principle focus of each dream sequence is threefold:

- explore how incorporating the dream theories of Freud, Jung, Hobson and Revonsuo affects the production of dream sequences, and compare how the application of each theory leads to producing different filmic outputs,
- research how utilising a variety of combinations of the twelve dream-denoting elements produces different cinematic effects,
- incorporate explicit representations of latent dream content, as this is an under-explored aspect of dream sequences.

Forest Dream initially utilises Freud's theory of dreaming with the intention to recreate the manifest (stage one of *Forest Dream*) and latent (stage two) components of a dream using the medium of film. I use automatic drawing to produce the storyboard, which I film and edit to complete stage one. The manifest layer of *Forest Dream* features elements which relate to Freud's notion of the uncanny, including the appearance of a double, and a location which seems both homely and unhomely. I analyse this stage of *Forest Dream*, imagining the filmic

images are the visualisation of a dream, and use Freud and Jung's theories of dreaming to discover potential latent content. I then produce stage two, filming images and creating sound which represents latent content, combining both stages to create the final film.

Mira Dream utilises Hobson and McCarley's dream theory of activation-synthesis. The source for dream content is a collection of video images, serving as representations of randomly triggered memories. A computer randomly selects images and I develop a narrative from the selected material, manipulating sound from the selected footage to produce the soundtrack.

There is a rich tradition of filmmakers incorporating recollected dreams into their work. Notable examples include Dalí and Buñuel's collaboration *Un Chien Andalou* and sequences from this study including the soldier's dream in *The Discreet Charm of the Bourgeoisie* and the tunnel dream from *Dreams*. *Dream Three* replicates a dream report. After filmically recreating the report as closely as possible, I analyse the sequence using Freud, Jung and Revonsuo's theories, revealing latent elements, which I incorporate into *Dream Three's* soundtrack. The person who produced the dream report contributes to the film-making process at each stage of production as a consultant (to check for image accuracy), an interviewee (when deciphering possible latent content) and a technical assistant (during filming).

The questions addressed in this chapter are:

- What different types of dream sequence are produced through using different combinations of the selected dream theories and twelve dream-denoting elements?

- How does including representations of latent content in the dream sequence affect the visual and audio content of the film?
- How does incorporating different dream theories affect the three production phases of pre-production, production and post-production?

Film One: *Forest Dream*

Forest Dream is a dream sequence depicting a man struggling to resolve an internal, psychic conflict. In his dream, the man fights his double in the middle of a forest. During the dream, the man's mother appears several times, anxiously looking and calling for the man. Midway through *Forest Dream*, the film shifts to representations of the collective unconscious, before moving back to the man fighting himself, ending on the man closing his eyes, signifying the dream is ended.

Forest Dream is comprised of two layers. The first layer depicts manifest dream content (the man fighting his double in a forest). I produced this layer by filming a storyboard which I created using the surrealist technique of automatic drawing. To produce the second layer, representing the latent content of the dream, I imagined the first layer as a visualisation of manifest dream content, and that the dreamer was the man stood in the forest. From this perspective, I analysed *Forest Dream*, to decipher the dream sequence's latent content. To incorporate representations of the latent content I manipulated the first layer (for example, by altering the colour of the man's clothing and using effects such as mirroring and rays), included new footage of the mother and cogs, and created the soundtrack.

I used my own experiences to inform the analysis. For example, in *Forest Dream*, the man wears a woollen hat. I drew from my personal past to deduce the

hat might relate to the dreamer's mother or grandmother (outlined below). Drawing on autobiographical details added extra depth and complexity to the dream sequence.

Thus, the dreamer is a fictional person (the man in the forest) but some elements of the analysis relate to me, the artist. This is understandable, as I produced the storyboard. From a surrealist and psychoanalytic perspective, the storyboard is comprised of automatic images from my unconscious, meaning the dream sequence, and its manifest content, are a personal, autobiographical product. However, during the dream analysis and filmic production of the latent content, I tried to remain objective and to view the dream sequence as the product of a different, fictional person (the man in the forest).

The dream-denoting elements are utilised throughout *Forest Dream*, with dream-denoting element one (violates diegetic world's rules of cause and effect / nature / physics) central. For example, the man appears lost in the centre of a forest with no explanation of how he arrived there, the man fights his double, the man's mother appears and disappears, the mother is the same age as the man (her son) and the film switches to unusual images representing the collective unconscious.

Element six (exclusion / sparse use of diegetic sound) occurs throughout the manifest content portion of the film. Element three (manner in which characters react toward the protagonist is unusual) plays an important role as the double attacks the man, and the mother acts anxiously toward the man, calling after him. The film utilises element four (point-of-view shots) during the forest and fight shots and element five (filmic technique to shock or surprise) when the film cuts to the double attacking. Element eight (low definition / obscured image) occurs when light

rays shine through trees and close-ups of the man's face block the background. Element ten (use of slow motion) features frequently, particularly during the fight sequence, all images of the man looking, and whenever showing the mother. A variation of element nine (alteration of colour) occurs when the sequence switches between manifest content and representations of the collective unconscious and a variation of element eleven (protagonist is isolated / alone in usually highly-populated setting) as the man is alone in the forest, except for his double and mother. Finally, *Forest Dream* concludes with a variation of element seven (ending the sequence with an action which signifies a dream took place) through an extreme close-up of the man closing his eyes in slow motion as the dream ends.

Pre-production: the storyboard

I initially intended to construct *Forest Dream* using Freud's dream theories and his notion of the uncanny. As the work developed, I incorporated Jung's concepts of archetypes (the mother and the shadow), archetypes of transformation (the forest) and the collective unconscious.

Reasoning that the art movement most associated with Freud's dream theories is surrealism, I selected automatic drawing as the method to construct the storyboard, as several artists associated with surrealism practiced automatic drawing including André Masson and Joan Miró. Masson once claimed, 'I begin without an image or plan in mind, but just draw or paint rapidly according to my impulses. Gradually, in the marks I make, I see suggestions of figures or objects. I encourage these to emerge, trying to bring out their implications even as I now consciously try to give order to the composition' (Ades, 1974, p37). Masson attempted to

unconsciously generate images, which subsequently become shaped from an increasingly conscious perspective. His technique allows artists to express themselves without initially having conscious control over their work. This process approximates Freud's theory of dreaming, whereby dynamic unconscious content causes the production of manifest images in the mind of the dreamer.

To adapt automatic drawing to film-making, it is possible to film a storyboard consisting of automatic images, with each subsequent stage of post-production requiring greater conscious control. The filmmaker can analyse the film's content, along with the storyboard of automatic images, as a simulation of a dream's manifest content, leading to the uncovering of latent content.

Masson's method embodies the following definition of surrealism, proposed by André Breton, one of the founding members of the surrealist movement:

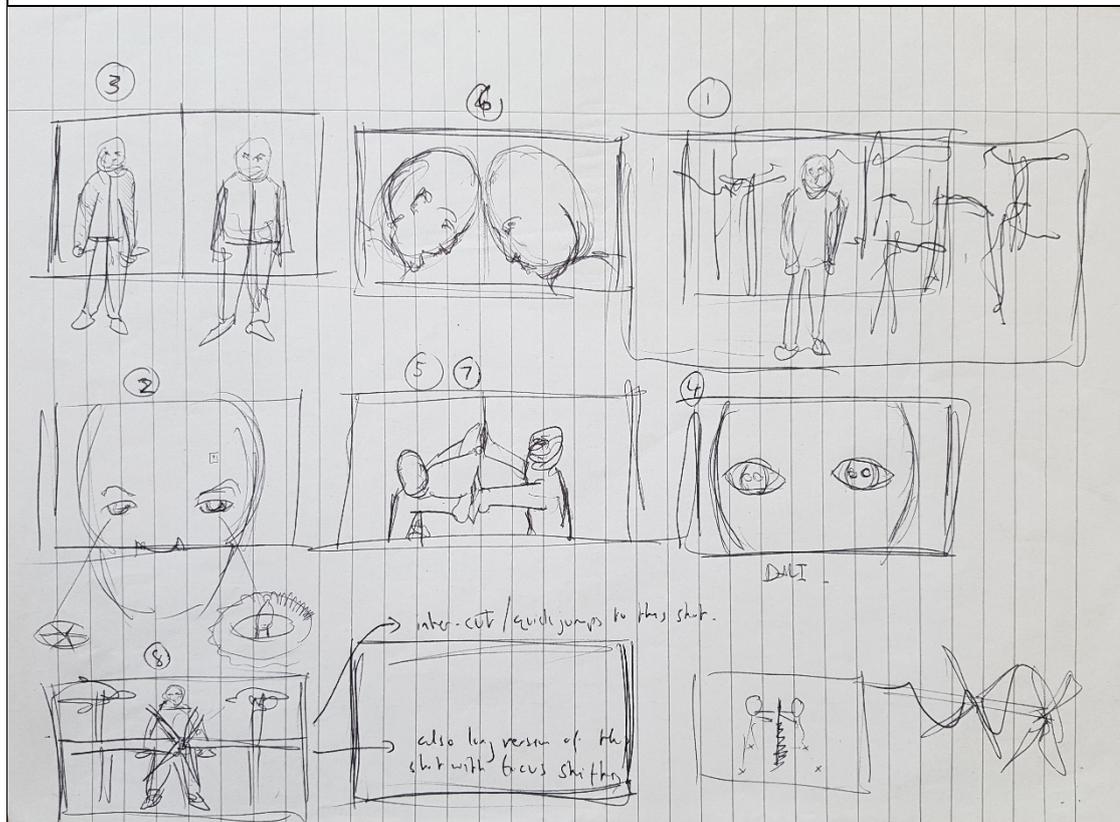
Surrealism, n., Pure psychic automatism, by which one proposes to express – verbally, by means of the written word, or in any other manner – the actual functioning of thought, in the absence of any control exercised by reason, exempt from any aesthetic or moral concern (Bradley, 1997, p21).

Breton's description confirms the similarities between surrealism's use of automatic drawing and Freud's theory of dreaming, further supporting the decision to use this method to generate *Forest Dream's* storyboard.

To produce the storyboard, I worked in a quiet location, completing one panel at a time. After producing a basic image, I brought out figures or shapes which

the markings suggested to me. Additionally, as I moved from frame to frame, each image influenced the subsequent pictures (see Fig. 1).

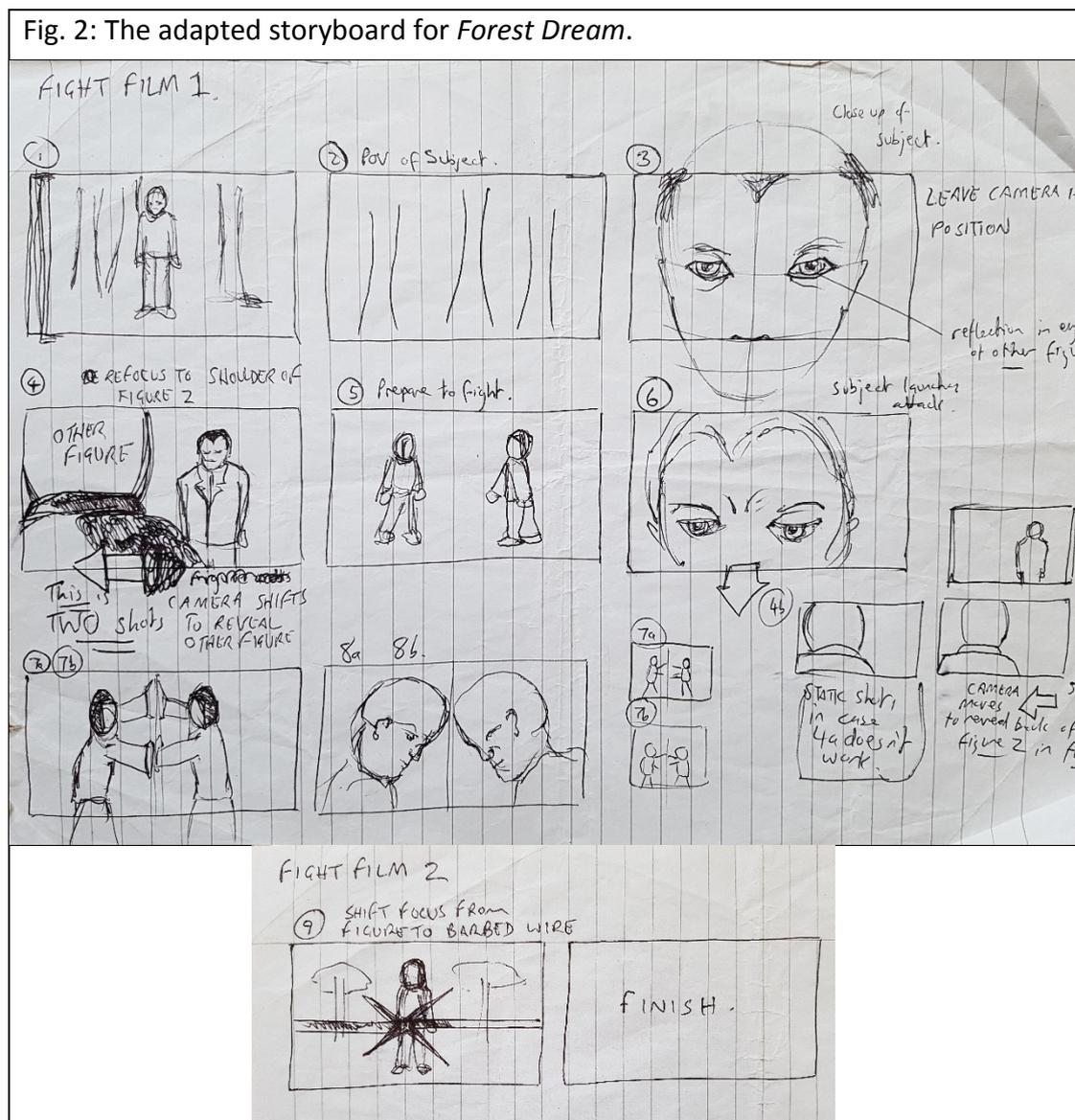
Fig. 1: Original storyboard for *Forest Dream*.



Commenting on automatic drawing, Miró wrote, 'I begin painting, and as I paint the picture begins to assert itself, or suggest itself, under my brush. The form becomes a sign for a woman or a bird as I work. The first stage is free, unconscious', adding, 'the second stage is carefully calculated' (Ades, 1974, p40). Miró's analysis has much in common with the film-making method I employed, as after creating the initial automatic images, it was necessary to carefully finalise and shoot the storyboard, and in post-production to organise the film footage and embark on the slow and meticulous process of editing.

Prior to filming, I adapted the storyboard (see Fig. 2) to include cross-cutting between shots, to build tension, replicating the surge in emotion which is common to

REM dreaming (Revonsuo, 2000, p881). Shifting on-screen content between man and environment enables the audience to sense the connection between the man and the space he inhabits. The storyboard's extreme close-ups encourage the psychologisation of the man by obscuring the background with the protagonist's face, forcing the audience to read the actor's expressions for context, incorporating dream-denoting element eight (low definition / obscured image).



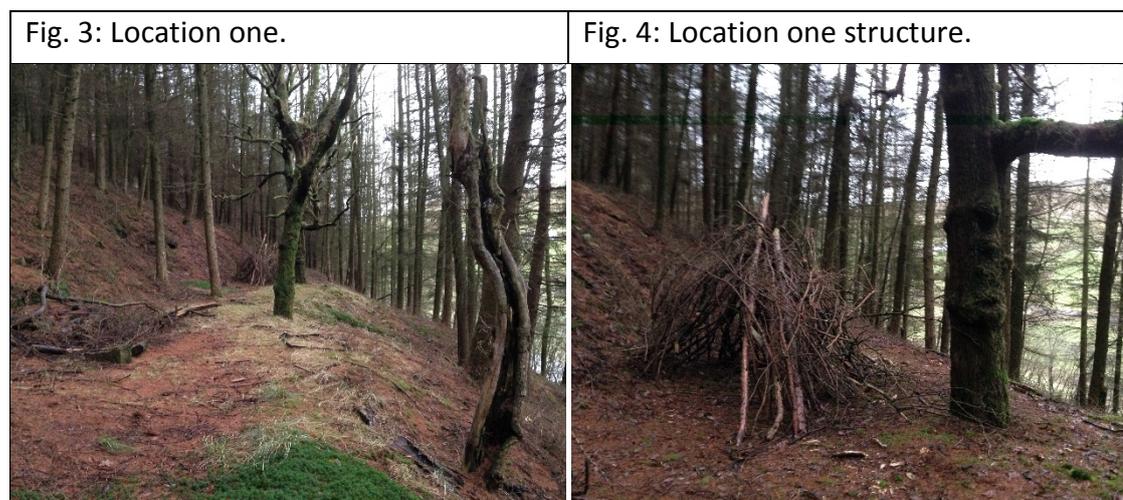
The man, initially alone in the forest, has an inquisitive expression and during the fight takes a passive, defensive role. In contrast, the attacking double wears an

aggressive expression and is the predator, moving faster. By using close-ups of both figures' faces, staying longer on the passive figure looking and using fast, short close-ups of the aggressive double, I intend for the audience to search for meaning and context in the two faces of the man.

Production

I hired actor Bill Rofe to play the man, as his appearance and mannerisms evoked the drawn character. For location, the images resembled a pine forest on the Yorkshire / Lancashire border, so I selected this location as the preferred choice. Due to budgeting and time constraints, it was important to select an uninhabited forest in the local area.

The recce took place on January 7th 2015. I narrowed the shoot down to two locations within the forest. I took still photographs and filmed test footage using my daughter as a stand-in actor, and noted the time of sunset, adding two minutes per day up to the date of filming.



Location one was a small, flat plateau in the middle of the forest and location two, with a barbed wire fence, was nearby, at the forest's edge (see Fig. 3). At location one I discovered a small wooden structure which I incorporated as an additional visual feature (see Fig. 4). Taking account of available daylight, filming took place on 11th January 2015 from 1.30pm to 3.30pm.

Fight sequence

The fight sequence required three shots per composition, using a static, tripod-mounted camera. Shot one featured Bill and I pushing against one another, with Bill on the left and I on the right (see Fig. 5). In shot two, we swapped sides (see Fig. 6). Shot three was of the background, with no actor present (see Fig. 7). I asked Bill to act aggressively when positioned on the left and defensively on the right. To ensure Bill's hand and body positions were at the same height, I created a board to press against, with markings for the actors' hand positions on both sides. I hoped this low-budget method would withstand the shoot and enable accurate editing in post-production. For close-ups when the man moves fast, I blocked the movement before each take, to ensure Bill moved into focus.

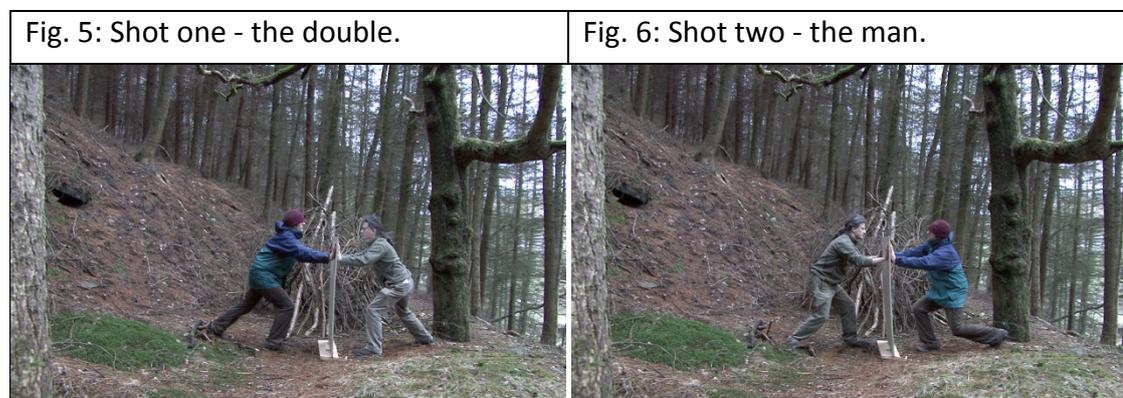


Fig. 7: Shot three - blank location.



Fig. 8: Final composited shot.



The shot at location two was of a barbed wire fence, with the man in the distance. To make the shot visually interesting I used a focus shift combined with a slow zoom out, shifting from a close-up of the barbed wire (see Fig. 9) to a wide shot of the man (see Fig. 10 and Fig. 11). I removed this shot from the final edit, opting to finish on an extreme close-up of the man's eyes closing, to imply the man is sleeping and his dream of the forest has come to an end (see Fig. 12). I used the close-up of barbed wire for a strong opening shot, to immediately create tension and suggest the theme of the film.

Fig. 9: Barbed wire opening shot.



Fig. 10: Original barbed wire mid-shot.



Fig. 11: Original ending wide-shot.



Fig. 12: Replacement final shot.



Woolly hat

The woollen hat worn by Bill was unplanned. Bill asked if he should remove it but I felt the chance element of the hat suggested creative options for post-production. For example, dreaming of a mundane detail can imply displacement has occurred (Freud, 1997, p80), in which a traumatic memory is replaced with an associated memory or idea. In *Forest Dream*, Bill is playing the dreamer and he selected the hat, so this decision incorporated Bill's intentions, outside of the role of actor, into the process.

Post-production and editing

Using the storyboard, I created a rough edit, placing the best take for each shot into the video project. With the footage positioned, I used Adobe After Effects to compile the images of Bill fighting himself. These After Effects compositions eventually replaced the rough images in the finished film.

Once there was a working edit matching the storyboard, I applied an overall colour correction to mute particularly bright colours and added a subtle vignette to focus the viewer's attention toward the centre of the frame. As well as bringing the footage together, creating a unified look, the colour correction and the vignette utilise element eight (low definition / obscured image) and element nine (alteration of colour). Slightly lowering the overall definition encourages the audience to imagine from the perspective of the dreamer and engage emotionally with the images. The reduced clarity draws the audience toward the image, physically and psychologically, causing the viewer to provide closure, as opposed to high definition, whereby the audience will stay distanced, to observe and intellectualise the content.

Thus, lowering the definition supports my intention of emotionally engaging the audience with *Forest Dream*.

After combining the two layers of *Forest Dream*, representing manifest and latent content, a further stage of post-production was necessary, to ensure balance and cohesion of the film's overall structure. I wanted the colours of the man's clothing to blend with those of the forest, so he felt connected to, and part of, the environment. The main colours of the forest were earthy browns punctuated with greens whilst the colour of Bill's clothing, particularly his hat and jacket, were too bright and dominant, separating him from the background. To balance the colour, I created animated masks for the hat and jacket and applied secondary colour correction to mute their colour intensity, altering their hue from claret and blue to brown-tinged tones. When *Forest Dream* shifts from manifest to latent content (see Figs. 13 to 16 below), I animated the colours to reveal their original bright tone, before moving back to the muted colours for the final part of the film. This form of altering the colour provides a variation of element nine (alteration of colour). In *Forest Dream*, the colour changes signify a shift in the mode of dream consciousness (from personal unconscious to collective unconscious), as opposed to depicting a shift from waking to dreaming. The colour alteration supports the unity and underlying logic of *Forest Dream* by following the same ABA structure as the sound.

Fig. 13: Muted colours - personal unconscious.	Fig. 14: Colour becoming unmuted and light rays - shifting to representing latent content.
	
Fig. 15: Colour unmuted and image clear, representing latent content.	Fig. 16: Colour bright and sharp, representing the collective unconscious.
	

Soundtrack

I constructed *Forest Dream's* sound from three main elements: piano, synthesisers and audio samples of machinery. I used audio editing software to stretch and re-sample a recording of piano playing at different pitches and speeds to create a slowly evolving musical texture, containing some elements of harmony and melody but with the rhythm disrupted and irregular. This represents a sound held and released from within the dreamer's personal unconscious, remnants of an early childhood memory, before awareness of musical structure. Thus, the piano sound isn't organised and categorised in the same way an older child or adult would recall a musical memory. Neuro-development specialist Dr Patricia Bauer describes this theory as, '...adults lack memories from early in life because no memories were formed or memories were formed, but later became inaccessible as a result of

cognitive changes, for example (e.g., the onset of language)' (Bauer, 2004). By lacking knowledge and experience of musical language such as rhythm, time and key, I propose the young child wouldn't accurately remember the specific elements of the piano music but instead recall the general character and texture of the sound.

Slow, sustained synthesised sounds are combined with the proximally close sound of the dreaming man's breathing, creating an underlying atmosphere of tension. The enhanced sound of breathing is shared by dream sequences such as Guido in *8 ½*, Father Karras in *The Exorcist*, Georges in *Caché* and John Merrick in *The Elephant Man*, implying the images are being generated by a figure outside of the depicted diegetic space. The synthesised sounds occupy the sub-bass frequencies, complementing the higher-pitched drifting acoustic piano and encourage thoughts of a mechanical, industrial landscape. Using element six (exclusion / sparse use of diegetic sound) to juxtapose synthetic sounds with the natural imagery of a forest emphasises the uncanniness of the scenario.

During the sequence featuring fluid, high-resolution images of mirrored machinery, I added audio samples of machines to complement the images and highlight the change in dream content. This shifting of the sound design subtly emphasises *Forest Dream's* underlying ABA structure, from manifest, to latent, to manifest content, at which point the man closes his eyes, concluding the dream. The intention of combining synthesiser, machinery sound and images of fluid machine movement is to provoke the audience to consider the construction of the human mind, to question if there is an underlying similarity between all human thought (Jung's collective unconscious) which belies one's perception as a unique individual.

Interpreting the manifest content

I analysed the completed first stage of *Forest Dream*, imagining the dreamer was the man in the forest. For the initial analysis I used Freud's theories of dreaming to decipher potential latent content, paying specific attention to Freud's definition of dreaming: 'A dream is a (disguised) fulfilment of a (suppressed or repressed) wish' (Freud, 2010, p653) and is, 'The fulfilment of a wish dating from earliest childhood' (Freud, 2010, p699). I noted each important detail and theme of the sequence, discovering six defining points contained in the dream sequence's manifest content, listed below. Leading from the initial analysis, I incorporated aspects of Jung's theories to arrive at a final interpretation.

- (a) The forest surrounds / envelops the man.
- (b) The man acts within the confines of the forest.
- (c) The man is stalked, then attacked, by his double.
- (d) The man wears a woollen hat, which provides him with warmth and protection.
- (e) The images feature warm, naturalistic, earthy colours.
- (f) Other than clothing, the only non-natural materials are barbed wire and the hut.

The forest is an all-encompassing environment. This can be interpreted as signifying a protective figure which surrounds the man. A forest can represent nature, nurturing and growth. It is also an archetype of transformation, a symbolic representation of transformation for the dreamer (Jung, 1975, p38). I interpreted point (a) as a parental figure often associated with nurturing, the mother, who surrounds (hugs in her arms) the man. As an archetype of transformation, the forest

signifies a potential for change whilst simultaneously a site which surrounds and dominates the man. Thus, the man is at the centre of a conflict (an internal, personal conflict, as the whole event is played out as a dream), of whether to stay within, or break away from the protective figure. Jung notes, 'the violence of the separation is proportionate to the strength of the bond uniting the son with the mother' (Jung, 1976, p357).

(b) In keeping with Freud's theories, I interpreted that the dream stems from an early childhood memory, when the man only functions close to, or within the arms of, the parental figure, signified by being contained within the forest.

(c) There is an inner conflict within the man, which is symbolised in the sequence by the man fighting himself and by the way he seems lost and not in control of his environment. One interpretation of this situation is that the man faces an inner, psychic conflict but is struggling to face (the double resembling a mirror) or take responsibility to resolve the issue. This leads him to yearn for the protective arms of the mother figure, as when the man was a child, the mother would seem to solve all his problems, leaving him feeling safe and content. The woollen hat (d) may recall a persistent memory of the protective figure. For example, the mother may have worn woollen clothing when she held the man, as a child, causing the smell and feel of the wool to represent safety and protection.

The colours in the film (e) confirm the dream represents an earthy, natural environment (the mother). The warm colour palette symbolises the warmth of being close to the mother.

The barbed wire (f) is a barrier. It threatens the man and separates him from safety and the warmth of his mother. The barbed wire may represent technology and

associated phenomena such as work, control, separation, fear of growth and the pain of facing the world as an adult, away from the mother's protection. The barbed wire may also signify the inhuman and unnatural, and that which is unknown to the man, generating fear and insecurity. At the sequence's end, the barbed wire confines the man within the forest. Here the man realises that everything outside of he and his mother confines and oppresses them. This forces the man to return to the mother, seeking safety. Ultimately, his fear of separation from the mother and his inability, or unwillingness, to face the problem is what traps him. Commenting on the archetypal mother's power over her son Jung states, 'there is no doubt at all that nothing in the world ever embraces us so completely as the mother' (Jung, 1976, p459).

The small wooden house he stands next to (which he may be protecting) at the beginning of the film might represent the problem which he will not face (it is dark inside there), which he owns but which is outside of him (he cannot admit it is a part of him). Alternatively, the structure may represent the safety of the mother's womb, which he is outside but to which he wishes to return.

After this stage of analysis was complete, I looked at the overall dream interpretation to see if other themes or elements might enhance the analysis. I felt the timeless quality of the forest hinted at a deeper, more mysterious level of protection for the man. To gain further insight, I viewed the film as if it were my dream, and at this point the hat's presence felt significant to me, even though it came to the project by chance. For example, the wool reminded me of my grandmother and the crocheted blankets and throws she used throughout her house. Therefore, I decided the man's parental figure in the dream could include his

grandmother, along with his mother, utilising Freud's theory of condensation. The hat's texture and memories it evoked suggested themes I wanted to explore within the latent content of the film.

Several aspects of the sequence's manifest content allude to Freud's notion of the uncanny. The forest provides an atmosphere of calm, one which is perhaps 'heimlich / homely' (Freud, 1919, p2) whilst at the same time unsettling 'unheimlich / uneasy, eerie' (Freud, 1919, p3). The man pursued by, and eventually fighting against himself, is central to *Forest Dream*. In defining the uncanny, Freud devotes a considerable amount of energy analysing Otto Rank's notion of 'the double'. Introducing this concept, Freud notes, '[Rank] has gone into the connections the "double" has with reflections in mirrors, with shadows, guardian spirits, with the belief in the soul and the fear of death' (Freud, 1919, p9). Freud speculates that man initially conceived the double as a positive reflection of himself, an early affirmation of the immortality of the soul. However, over time the familiar figure of the double has come to represent death, the reflection in the mirror a constant reminder of the mortality of man. To this end, Freud notes, 'The quality of uncanniness can only come from the circumstance of the "double" being a creation dating back to a very early mental stage, long since left behind, and one, no doubt, in which it wore a more friendly aspect. The "double" has become a vision of terror, just as after the fall of their religion the gods took on daemonic shapes' (Freud, 1919, p10).

Thus, it is possible the double is born during the mirror-stage, between the first six and eighteen months of a child's development, as posited by Jacques Lacan (Lacan, 2003, p2). In this case, the double forms during the imaginary stage of a child's development. The figure in the mirror moves as the young child does,

mimicking their actions, without explanation. As the child becomes self-aware, the mirror image moves from being imaginary to being categorised symbolically as an image of their self. After attaining this symbolic knowledge, the child realises they have complete control over the image in the mirror. However, as the child grows into an adult several experiences may occur which reinforce the negative, frightening, 'unheimlich' notions of the double. For example, the image in the mirror is the complete reverse of how others see them. The reflection is a whole, unified figure, whereas a person can only view themselves as fractured; for example, by looking at their hands or body, and can never directly view their own face. Thus, the reflection appears perfect and complete, whilst the self appears incomplete. The perfection of the mirror image versus the inability to see oneself exemplifies the sense of the uncanny.

As noted by R.D. Laing, when a person views an Other, they can never know the Other's thoughts (Laing, 1972, p35). The mirror image may invoke the feeling of not knowing what thoughts and feelings are inside an Other. In this case the image is of the self, therefore producing insecurity in the subject. Finally, the reflection confirms the person is ageing and therefore mortal, confirming the loss of any ability to control the self-image, initially perceived as a small child. Therefore, the subject may deny or reject the mirror image, splitting the subject from their mirrored reflection, creating an externalised, negatively charged double.

Meeting an Other in a dream, as in *Forest Dream*, when the protagonist meets his double amongst the trees, embodies these effects. Laing states, 'It is difficult to understand the self-being of the other. I cannot experience it directly. I must rely on the other's actions and testimony to infer how he experiences himself'

(Laing, 1972, p35). The double invokes this effect as he looks exactly like the dreamer but his intentions are unknown and malign, acting through the unconscious of the dreamer. Freud notes an uncanny effect occurs when there is doubt, 'whether a particular figure is a real person or an automaton' (Freud, 2003, p135), caused by a person seeming to act automatically, exemplified by the actions of the attacker in *Forest Dream*, who acts without reason and with only one goal, to hurt the dreamer.

Several artists associated with surrealism have created uncanny effects in their artwork. Fiona Bradley, commenting on Giorgio de Chirico's 1913 painting, *The Uncertainty of the Poet*, notes, 'The world of such paintings is, like that of dreams, at once familiar and unfamiliar. Familiar because of de Chirico's minutely realist painting style which allows the viewer to recognise objects, unfamiliar because of the strange, dream-like contexts into which he paints them. The objects in de Chirico's paintings exist in an uneasy juxtaposition; the space in which they are placed is one of quiet, forbidding uncertainty' (Bradley, 1997, p34-35).

Bradley's interpretation of de Chirico's work emphasises the link between surrealism, dreams and the concept of the uncanny. Incorporating uncanny aspects into an artwork stimulates the audience into experiencing an artwork as dualistic, presenting both real, and surreal, elements, invoking a sense of dreaming in the viewer.

Latent content: representing the personal and collective unconscious

I rejected several options for how to present the latent content due to cliché. For example, faded photographs could represent memory of the mother but this technique is very common in film-making. I hired an actor, Carly Tarrett, to play the

mother, and used the mother's presence to add dynamics to the sequence's structure. Fifteen seconds into the film I subtly introduce the mother, fading her into a wide shot, positioning her alongside the man in the forest. Following this, the mother's face emerges, blends with, and then disappears from a close-up of the man's face. These initial shots hint the mother is under the surface of the dreamer's conscious awareness, breaking through and then submerging. Shortly afterwards the mother shouts for her son and then walks alongside him, an extreme upward angle suggesting the man's point-of-view as a young boy. These shots emphasise the mother's powerful influence and implies the forest might be a place they used to spend time together. After the man fights his double, the mother shouts for her son and fades as the sequence sinks deeper into the personal unconscious toward images associated with the collective unconscious. Finally, as the dreamer emerges back from his deepest state, the mother reappears, calling for her son, bringing him from deep unconsciousness, back into his forest dream.

Aside from images relating to the dreamer's memory, I wanted to consider the unconscious as a constantly moving, influencing and interacting phenomenon, a kind of underlying clockwork. This led to the idea of ancient-looking machinery, incorporating components resembling the internal workings of clocks to represent time. I felt there were two main ways to incorporate this concept. Either footage of large machinery to represent power and unstoppable force, or footage of small cogs in watches and clocks, representing tiny, almost invisible detail, constantly running in the background.

I took a short black and white information film explaining the fundamentals of gear mechanisms, *Car Transmissions & Synchromesh_ Spinning Levers* (US Auto

Industry, 2012) and experimented with different ways to manipulate the images, before settling on a combination of light rays, mirrors and adding colour. I wanted the cogs to appear as a combination of mechanistic / automatic and alive / evolving, to suggest a dualistic nature of human collective unconscious processes. Using mirrors enabled the images of machine movement to appear almost organic, as the images are fluid and systematic, with the machines' original functions disguised. Conceptually, mirrors can symbolise the conscious mind as a reflection of the unconscious. Symmetry and mirrored images are also common features of mandalas, which are central to visualisations of conscious and unconscious interactions, for example in Carl Jung's *A Study in the Process of Individuation* (Jung, 1975, p292-354).

I used light rays to represent the unconscious breaking through gaps in the conscious structures of the mind and provide a contrasting type of movement to that of the mirrored-machinery. Finally, adding colouration enhances emotional impact and thematically ensures the machinery relates to the manifest content, which is in colour throughout. Using a different colour for each type of cog enables each one to symbolise a different facet of the unconscious. The grainy quality of the footage reflects how time can degrade memory and the temporally distant experiences of childhood.

To represent the power and influence of the unconscious, I decided to incorporate highly defined images of machinery. I also wanted unique footage and a wider range of source material as *Car Transmissions & Synchromesh_ Spinning Levers* only had fifteen seconds of usable clips. To obtain new material I sought permission to film at the Bradford Industrial Museum. I shot a range of machinery and captured audio samples for the soundtrack. Through experimentation, I incorporated several

images of the Bradford machines into the latent content of *Forest Dream*. Due to the higher resolution and the machines' smooth, oiled movement it was possible to produce images which suggest a powerful combination of organic and mechanical processes.

Experiments with smaller cogs were less successful, as images of clockwork mechanisms seemed clichéd and therefore less inspiring. They also lacked the power, smoothness and complexity of movement so prominent in the footage from Bradford Industrial Museum.

Developing the idea of reflection and mirroring from the manifest content, I created a disembodied version of the man, appearing as a floating head, to represent an image of his self, looking both inward, toward the collective unconscious, and outward, toward consciousness. This image appears before the dream-film switches to the latent, machine-imagery, and then again at the end of the film, being broken apart by piercing rays of light.

Forest Dream and Jung

Although I originally intended to only use Freudian theories to represent the unconscious, during post-production many of my ideas for representing latent content suggested Jungian dream theory. The strongest visual example was the similarity between the footage of mirrored machinery and mandalas, as Jung writes in detail about mandalas in the chapters, 'A Study in the Process of Individuation' and 'Concerning Mandala Symbolism' in *The Archetypes and the Collective Unconscious* (Jung 1975, originally published 1959).

Many of *Forest Dream's* concepts relate directly to Jung's comments on mirrors and the inner-psyche. Jung notes, 'True, whoever looks into the mirror of the water will see first his own face. Whoever goes to himself risks a confrontation with himself. The mirror does not flatter, it faithfully shows whatever looks into it; namely, the face we never show to the world because we cover it with the *persona*, the mask of the actor. But the mirror lies behind the mask and shows the true face' (Jung, 1975, p20). Here, Jung's comments illustrate the challenge of facing (and acknowledging) one's repressed characteristics and memories. For the man in the forest, he must face and overcome the latent source of his dream to move forward in his personal process of individuation. Filmically, the manifest content of *Forest Dream* symbolically visualises the man's internal, personal conflict whilst the soundtrack and incorporation of the mother relate to the latent, true face of the man.

Jung continues, 'This confrontation is the first test of courage on the inner way, a test sufficient to frighten off most people, for the meeting with ourselves belongs to the more unpleasant things that can be avoided so long as we can project everything negative into the environment' (ibid.). Here, Jung refers to the difficulty of facing up to one's negative characteristics, typically experienced in dreams as the shadow archetype. Of all Jung's archetypes, the shadow most accurately defines the aggressive double in the forest. The shadow is the mirror image, which follows the man wherever he goes. It embodies all the elements of the man's self he avoids confronting. Until faced, the shadow will always constrict or limit a person (the double, the barbed wire), leading to a continual seeking for refuge (in their mother's arms, the forest). Thus, if one represses elements of the self they (consciously or

unconsciously) consider negative and unfaceable, eventually, (especially when dreaming) the shadow archetype will materialise. 'When a situation occurs which corresponds to a given archetype, that archetype becomes activated and a compulsiveness appears, which, like an instinctual drive, gains its way against all reason and will, or else produces a conflict of pathological dimensions, that is to say, a neurosis' (Jung, 1975, p99). However, in *Forest Dream*, there is some hope, as the man is starting to confront his shadow and unconsciously perceives the trap he has constructed around himself.

The forest setting embodies two Jungian archetypes. Firstly, the forest can be interpreted as the mother archetype. Jung notes that incarnations of the mother archetype include, 'Many things arousing devotion or feelings of awe as for instance the Church, university, city or country, heaven, earth, the woods, the sea...can be mother-symbols. The archetype is often associated with things and places standing for fertility and fruitfulness: the cornucopia, a ploughed field, a garden. It can be attached to a rock, a cave, a tree...' (Jung, 1975, p81). This interpretation of the manifest content in the dream-film would help to justify the analysis, placing the mother at the heart of the film's narrative. Alternatively, the forest can be an archetype in its own right; 'In the course of this process [the unconscious becoming revealed] involves another class of archetypes which one could call the *archetypes of transformation*. They are not personalities, but are typical situations, places, ways and means, that symbolise the kind of transformation in question' (Jung, 1975, p80). In his 1976 book *The Uses of Enchantment*, psychologist Bruno Bettelheim states a forest can denote the need to '...find our own way to become ourselves' (Bettelheim, 1991, p94). Jung and Bettelheim's interpretations both signify that the man needs to

overcome a challenge or conflict, with Jung's interpretation clearly noting the influence of the mother figure.

As the Jungian nature of the dream-film's latent content became more pronounced, I decided to incorporate links with Jung's theory of the collective unconscious. This occurs in *Forest Dream* when the man's face fades into moving machinery, with moving cogs resembling traditional African masks. This produces an effect where the man merges into two guises at once. In one form, a modern man links to an ancient, tribal self, whilst at the same time he metamorphoses into a machine, as a set of cogs within part of a larger system, transporting his present self toward a restricted, fixed in space, trans-human future. Jung's statement, 'The unconscious is not only immensely old, it is also capable of growing into an equally remote future' (Jung, 1975, p287) inspired the construction of this shot.

Summary

In *Forest Dream*, I have experimented with a range of film-making techniques. Through utilising the automatic-drawing methods pioneered by surrealist artists, I have created a dream sequence of manifest content and, after analysis, incorporated representations of latent content in a second stage of film-making.

By remaining flexible regarding which dream theory to interpret the manifest content, rather than committing to only Freud throughout, it was possible to observe how interaction of the different theories affected the development of *Forest Dream's* content. This was particularly apparent during production of the latent content. Thus, combining elements of Freud and Jung's theories allowed *Forest Dream* to develop a richer level of detail.

Film Two: *Mira Dream*

Mira Dream begins with a girl playing in a field, before she merges with live plants and a dead animal, and finally floats across an abandoned factory interior. The film uses a non-linear narrative and condenses images of the girl, daffodils, wild flowers and an unidentified dead animal, using video effects including chroma key, mirrors and slow motion.

To find 'meaning' in *Mira Dream*, the audience must consider the overall effect of the sound-images, allowing extraction of implicit meaning through reflection. The soundtrack functions as a kind of glue, holding the sequence together by using diegetic sound which is manipulated through effects including pitch-shifting, stretching and reversing. Thus, the soundscape is constructed from objective-external diegetic sound, to produce an internal-subjective effect. The dreamer isn't clearly defined (for example, the dreamer could be the girl, or one of the condensed creatures) but is implied to be outside of the film, looking in. From this perspective, the audience is positioned as protagonist, with much of the film's gaze point-of-view.

Mira Dream uses all the dream-denoting elements, often in combinations and subverting them in some way. For example, every shot combines element ten (use of slow motion) and all shots can be interpreted as point-of-view, incorporating element four (camera technique mimics protagonist perspective), potentially positioning the viewer as protagonist, encouraging audience immersion. Additionally, throughout *Mira Dream* the sound is subjective / internal / non-diegetic, although it is constructed solely from manipulated diegetic sound, producing an uncanny effect, with usual 'homely' sounds presented as unusual and 'unhomely'. Combining these three elements enhances the uncanny effect and dream-like qualities of the

sequence. Examples include juxtaposing a girl and flowers with close-ups of a decaying animal and merging these images to create imaginary, condensed creatures, using slow motion to allow hyper-realistic viewing of details, and subjective sound encouraging the audience to experience the film from an emotional perspective.

Element one (violates the diegetic world's rules of cause and effect / nature / physics) occurs in several forms including unreal creatures, produced through condensation of the girl and daffodil, and girl and dead animal, the girl floating and abrupt shifting between locations. Cutting between locations uses element five (filmic technique to shock or surprise) to engage the audience. Interpreting all shots as point-of-view introduces a variation of element three (manner in which characters react to the protagonist is unusual), as the condensed creatures and girl gaze at the camera and incorporates a variation of element two (difficult to understand the logic of the protagonist and other characters), the film's ambiguity causing uncertainty in the viewer / protagonist.

Mira Dream uses a variation of element seven (beginning / ending with an action signifying a dream took place) by fading up on a girl at the sequence's start and fading down on the girl at the sequence's end, imitating the dreamer's eyes opening and closing as the dream begins and ends, implicitly emphasising the positioning of viewer as protagonist. The fade-up and fade-down incorporate element eight (obscurification / lowering of definition) to encourage audience immersion. Lowered definition is also partially used in shots of mirrored creatures and a ruined factory interior and combined with element nine (alteration of colour) to mark out different sections of the dream sequence. For example, the ruined

factory interior and insect shots emphasise brown tones, shots of the mirrored daffodil creature and flowers emphasise yellows, whilst the floating girl features dark shadows and blues. If interpreting all shots as point-of-view, *Mira Dream* includes a variation of element eleven (protagonist alone in a usually highly-populated setting) with images of an abandoned factory interior.

Mira Dream utilises the activation-synthesis dream theory. This theory proposes that dreaming is a physiological occurrence and shifting from a waking to dreaming state of consciousness is caused by specific changes in neurochemicals. The theory discounts any form of unconscious mind in the Freudian or Jungian sense.

To produce *Mira Dream*, I used a computer to randomly select material from folders of personally shot video clips, as representations of personal memories. I pieced together the computer-selected footage using a process based on the principles of activation-synthesis. Importantly, this included developing a sense of narrative, as this is a common feature of many dreams. To account for dream narratives, Hobson suggested an orientational frame theory (Hobson, 1988, p276), whereby the dreamer attempts to make sense of randomly generated material by linking it into a meaningful narrative, enabling the dreamer to orientate themselves. In the post-production phase of *Mira Dream* I emulated this process by linking video and sound from the randomly selected video clips to create a fluid, experimental narrative.

Methodology: Pre-production

Mira Dream consists of several stages of development. An early consideration was to ensure the production process was clear and repeatable for future dream

sequences. Initially I selected video footage shot with my smartphone as I often use it to record material from personally important moments through to improvised points of interest such as cloud formations, nature videography and train journeys. Hobson notes in his research, 'recall is intensified within dreaming' and 'The dreaming mind can be said to be *hypermnesic*' (Hobson, 1998, p7). Thus, the smartphone footage is a collection of recorded memories, sharing with dreams the ability to recall detailed events, from the deeply personal to the mundane.

I arranged the smartphone footage into a series of folders and allotted a percentage chance for the selection of each folder, using an online random number generator to select each value (random.org, 2015). I gave folders containing recently shot footage a higher percentage chance of selection (see table 1 below), to reflect the incorporation of recent waking events into the following night's dreams, a phenomenon termed by Freud as the day's residue (Freud, 1997, p393). Dream researchers Nielsen and Powell note, 'dreams are about twice as likely to incorporate events that occurred the day before the dream (65-70%) as they are to incorporate events that occurred two days before the dream (30-35%)' (Nielsen, Powell, 1992, p70).

Once a folder is selected, the computer randomly selects a clip from each folder, with each clip allotted an equal chance of selection, and a random duration from one to 120 frames (1/30 second to four seconds). The first three films produced with this method each consisted of 60 clips, arranged consecutively, in the order of selection. This method produced a final film of between two seconds (60 frames) and four minutes (7200 frames). On average, each film is approximately two minutes in length.

Table 1: iphone footage organised for selection in *Hobson McCarley Dream Three* (Glew, 2015), produced on 9th April 2015, compiled from 183 source videos which were recorded between October 2014 and 8th April 2015.

Folder no.	Dates covered	No. selection	No. of files in folder	% chance of folder selection
Folder 1	8 th April 2015	01-50	49	50
Folder 2	6 th April 2015	51-65	53	15
Folder 3	2 nd April 2015	66-80	14	15
Folder 4	March 2015	81-85	8	5
Folder 5	February 2015	86-90	5	5
Folder 6	January 2015	91-95	27	5
Folder 7	Oct to Dec 2014	96-100	26	5

For the fourth film I created higher quality images, using a Canon 550d dslr, to check which camera ‘look’ to go ahead with for the final film, iphone or 550d.

Overall, the control (for example, shutter speed, ISO and interchangeable lenses) and higher definition of the 550d provided stronger, more malleable footage, with clearer results when projected onto a large screen. Additionally, if masking or chroma keying, the images were sharper and colour information better than when using a smartphone.

Narrative structure and editing

After analysing the first three films, I found playing randomly selected clips in series caused a break in concentration and immersion, as I, the viewer, tried to interpret each new shot. There also seemed to be an internal mental process of trying to narratively link or make a connected sense of the stream of images, in film often referred to as the Kuleshov effect. The first three films, composed of random, sequential images, invoke this phenomenon of montage editing, which filmmaker and theorist Sergei Eisenstein termed as the, ‘unifying principle’ (Eisenstein, 1968,

p18) wherein 'a third something' (ibid, p19) emerges through the juxtaposition of two or more shots. For example, following an image of a prisoner behind bars with a shot of a bird flying might lead the audience to connote the ideas of freedom or regret. However, in Eisenstein's work he carefully constructed the third meaning to ensure an entire audience read a film's text uniformly whereas randomly selected shots create an unstructured collision of images, with no guarantee of a definitive interpretation. This is especially noticeable when a clip only lasts for a short duration.

When watching juxtaposed images, audiences familiar with narrative-based material such as films, television shows and news reports, may try to determine an overall context, to enable understanding. For example, David Bordwell argues in *Poetics of Cinema* that a film's narrative consists of three elements, which are story (the actual chronological order that events occur within the diegetic story world), plot (the minute-by-minute order that events are revealed to the audience) and narration (the method the film-maker uses to reveal information). Bordwell argues for an inferential model (Bordwell, 2007, p9), whereby the viewer mentally constructs the overarching story as each plot point occurs, developing possible scenarios from the revealed information, favouring some narratives and discounting others.

Research into the Kuleshov effect has demonstrated that context affects how the brain processes information in a top-down fashion, whereby, 'According to theorists, context acts to alter our perceptions through expectations, presumably in a top-down manner' (Mobbs, Weiskopf, Lau, Featherstone, Dolan, Frith, 2006). From the perspective of Hobson's orientational frame theory, the dreaming process invokes a similar effect. The conscious mind is exposed to a range of randomly

generated stimuli, with the conscious part of the dreaming brain-mind trying to make the best sense of the information it is presented with. As the brain-mind determines the context of a dream, the perception of further stimuli is influenced to fit with the currently perceived events; the consciously interpreted dream may in turn trigger unconsciously held memories or thoughts, further strengthening the context of the dream.

To make a more immersive activation-synthesis dream sequence, for the fourth film I incorporated a new rule. To introduce narrative elements, I decided a film clip could combine with the shot directly preceding or following it, to simulate how memories or thoughts in dreaming can combine and create new, imaginative scenarios. For example, if the computer randomly selects a clip of a person and then a ruined farmhouse, the two images could combine so the person appears to be inside the building. Blending images provides the viewer with ready-made connections and suggests a pre-determined narrative. Placing less demand on the viewer to connect the images allows greater space for emotional immersion, as the film's content seems to follow a recognisable, narrative-based structure (see example Figs. 17 to 20).



Fig. 19: Girl and smoke.



Fig. 20: Extreme close-up of television screen and factory.



In the case of *Mira Dream*, there isn't a singular, overarching narrative, with each instance of a juxtaposed image generating further inconclusive possibilities. Thus, combining shots one and two generates a third meaning, which combined with shot three, spirals toward further possible interpretations, without ever providing a definitive outcome or closure. The viewer must either accept the sequence as a unified filmic work, as an analytical sequential montage, whereby an event is condensed into its key developmental elements and 'its major theme is frequently implied but not shown or made otherwise explicit' (Zettl, 1999, p293-p294) or otherwise become frustrated by a lack of clear resolution.

Production of *Mira Dream*

For the principle shoot of *Mira Dream*, I took my daughter for a countryside walk when there was bright external light. When filming with the 550d, strong sunlight is extremely beneficial as this allows shooting at a high shutter speed, providing sharp images along with noise-free, vibrant colour reproduction.

Whilst filming my daughter and various flowers and plants, I discovered a dead animal a few metres from our location. I made multiple shots of the animal, mainly using macro lens attachments enabling the camera to focus within just a few

centimetres of the subject. This technique provided extreme close-ups of details such as insects, bone and fur. This unplanned element of the shoot added potential for interesting footage, if selected by the computer's random number generator.

I experimented with *Mira Dream* by increasing the maximum possible shot duration to eight seconds, as longer clips give more flexibility when combining images, aiding narrative development. Initially I produced two sets of footage, each consisting of 30 clip sequences (maintaining a maximum length of four minutes, with an average length of two minutes), intending to develop one set into the final film. I played the two sequences to get a feel for the images and search for possible underlying narratives.

I realised there was potential to produce a dream sequence with a stronger underlying narrative if I used the original rules of production as guidelines rather than a strict, unbending methodology and decided to blend the two 30 clip films together. The beginning of the first film flowed effectively whilst the middle of film two included strong images, specifically shots of bushes and yellow flowers. The ending of the film took elements from both films including images of daffodils, a mill interior and animal fur from film one, and from film two shots of Mira playing, and shots of bone and fur. This combination led to the final structure of *Mira Dream*. Even though I intervened in *Mira Dream's* structure, due to randomly selecting the initial shots as opposed to scripting and story-boarding, an unpredictable element is still heavily present, which is key to the sequence providing a faithful interpretation of the activation-synthesis theory.

In post-production, I experimented with combining and effecting the selected footage. Rather than playing the clips strictly in series, I introduced crosscutting, to

develop the narrative and enhance atmosphere and tension. This method of editing implies links between shots and can produce a sense of anticipation in the viewer. Film editor and theorist Karel Reisz notes, 'The use of cross-cutting gives the director a unique instrument with which to suggest physical conflict on the screen. By alternately cutting from the man chasing to the man being chased [...] the illusion of a continuous scene is preserved' (Reisz, Millar, 1991, p69). For example, in *Mira Dream*, I cross-cut from flowers to close-ups of insects crawling on animal bones, implying links and introducing tension between the images.

Where the computer selected several clips of a similar shot, sometimes I just used one and to adjust *Mira Dream's* rhythm, I altered clip lengths where necessary. I started to introduce the use of extreme slow motion (element 10). Slow motion counter-balanced the choppy switching between different images and combined with crosscutting, formed the basis for *Mira Dream's* structure. Slow motion enabled small details to be noticeable by allowing more time to observe the images.

To ensure the film was visually engaging, I searched for the strongest shots. For example, when the computer randomly selected a shot of bushes and yellow flowers, I looked through all the other footage of bushes and yellow flowers to see if a stronger image existed in terms of composition, colour or sharpness of focus. Often, I substituted the stronger clips for the originals, or used them in combination with the original selection.

As the film developed, I removed some clips to keep the film duration concise, allowing more time to develop and focus on the strongest images. For example, I removed shots of spider webs, broken glass in a window frame and of myself walking in a mill interior. Selecting clips in this way reflects the top-down,

context-based theory of thinking referred to by Mobbs et al, imitating the formation of an activation-synthesis dream.

Post-production

Many of the figures we meet in our dreams have not been experienced in our waking lives. Freud provides one explanation, termed as condensation, commenting, 'For the purposes of dream-condensation I may construct a *composite person* in yet another fashion, by combining the actual features of two or more persons in a single dream-image' (Freud, 1997, p180-181). On the same phenomenon, Hobson states, 'There may be fusions: impossible combinations of people, places, times' (Hobson, 1988, p212). However, for Hobson dream bizarreness is the outcome of internally generated information and the brain-mind's attempt to orientate itself and find meaning from the disorganised data, rather than through the unconscious mind, stating, 'despite the intense bizarreness of these hallucinoid experiences, we accept them as real. The changed mode of the synthetic analytic system, may, I think, account for this marked loss of insight' (Hobson, 1988, p213).

In *Mira Dream*, I combined pieces of footage to produce new, original creatures, to replicate how the dreaming brain-mind, receiving randomly generated images and memories, might synthesise uncoordinated information during an activation-synthesis dream. Fragmenting and rebuilding an image in this way provides one example of how the dreaming brain-mind might produce strange monsters which a dreamer has never seen in waking life.

Production of Creature One

I used chroma keying to remove parts of images, to reveal or produce new details. For example, the dead animal lay in green grass (Fig. 21). I experimented with mirror positioning (Fig. 22) and keying to remove green from the image, revealing details of the animal's fur, displayed against a black background (Fig. 23). The remaining angular strips of fur and pieces of dried grass suggested the further use of mirrors, creating new images, which in turn suggested the addition of eyes to complete the creature, through an apparent reflection in each of the large black ovals (Fig. 24). Using After Effects enabled stabilisation of the girl's eye positions (Fig. 25). I removed the girl's face using masking, allowing the eyes to be isolated (Fig. 26). I added the eyes to the creature, mapping their motion to the contracting and expanding creature's face, producing the final composition of Creature One. With the eyes enlarged, the cameraman (myself) is visible, reflected in the pupils (Fig. 27).

Fig. 21: Extreme close-up of animal.



Fig. 22: Mirroring right side of Fig. 21.



Fig. 23: Chroma-key to remove greens.



Fig. 24: Mirroring the top half of Fig. 23.



Fig. 25: Stabilising footage of girl.

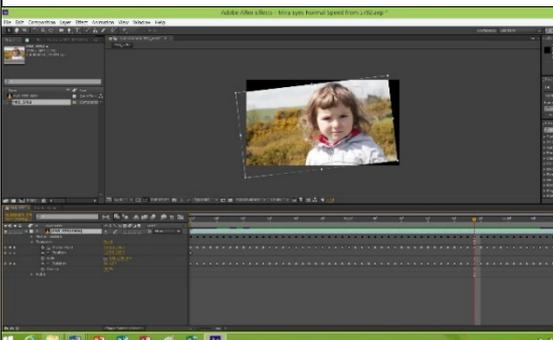


Fig. 26: Isolating and masking girl's eyes.

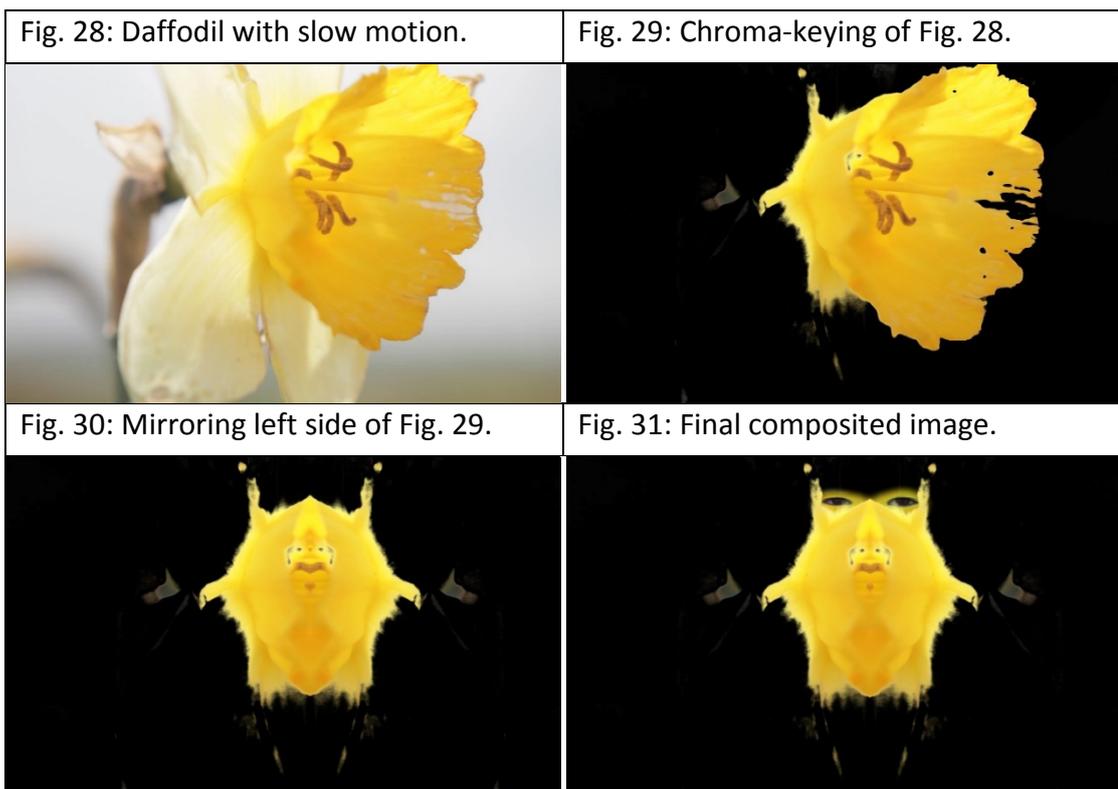


Fig. 27: Final composited image.



Production of Daffodil Face

To produce Daffodil Face, I applied slow motion to an extreme close-up of a daffodil (Fig. 28). For the next stage, a series of chroma keying operations removed all colour except for the rich yellows (Fig. 29). I applied mirrors, searching for the most interesting composition. At this stage, an eyeless human face appeared from one combination (Fig. 30). Next, I added the girl's eyes, isolated through masking, to the image. Finally, I applied colour correction to tint them yellow and automated movement to match the contraction and expansion of the mirrored daffodil (Fig. 31). The construction method is very similar as used for creature one, providing a theme which runs through several of the images.



Soundtrack

For *Mira Dream*, sound plays an important role in maintaining continuity. I constructed *Mira Dream's* soundtrack using audio from the randomly selected

footage, such as aircraft passing by overhead, the girl singing, movement of plants blown by wind and birds singing. To produce a range of textural sounds, I manipulated the sampled audio by altering pitch, time-stretching, reversing, applying reverb, and using EQ during the mixing process. Therefore, the sound is partially visualised (the audience can see the source) (Chion, 1994, p72) objective-external and diegetic, connecting the visuals and audio. The altered (non-diegetic) qualities of the soundtrack reflect the subjective-internal (Chion, 1994, p76) state of the dreamer whilst the continuous soundtrack (as opposed to cutting the sound with each shot) maintains a consistency, emphasising *Mira Dream* as a cohesive dream experience. The sound mix introduces an uncanny element, as *Mira Dream* implies the viewer is the dreamer, but reverb makes sound appear proximally far away, creating an unusual spatial relationship between the viewer and film.

Summary

To create an activation-synthesis dream sequence requires several folders of video footage, ideally shot at high resolution and with good quality sound, to allow manipulation in post-production. Approximately six to eight folders of footage are recommended, as this amount allows diverse images to be selected but with some continuity in terms of overall visual content. The final methodology for producing an activation-synthesis dream sequence is:

- 1: Randomly select a folder containing video clips, with a higher percentage chance of selection allotted to folders containing the most recent footage.
- 2: Randomly select a clip from the selected folder, with an equal chance of selection for each clip.

- 3: Randomly select a starting position from the chosen clip. For example, if a clip is 20 seconds long, it consists of 600 frames (at 30 frames per second). The maximum length of a selected clip is eight seconds (240 frames) so set the random generator from 1-360. The selected number is the frame the clip runs from.
- 4: Randomly select a clip length, from 1-240 frames.
- 5: Place the selected clip into the timeline.
- 6: The suggested film duration is 30 clips.
- 7: Post-production: A clip may combine with that which precedes or follows it.
- 8: Post-production: Delete a clip from the timeline if it aids narrative development.
- 9: Post-production: A clip of similar content may replace the original clip if the replacement is stronger and / or aids narrative development.
- 10: Post-production: A clip may be lengthened or shortened in duration.
- 11: Post-production: Crosscutting may be introduced to enhance the narrative development.
- 12: Post-production: The dream-film's sound should be created only from the selected clips. Any kind of manipulation or combining of sounds taken from the clips is permitted.

I build on the findings of *Mira Dream* in the dream sequence *Three Screens: Night Walker* and discuss the outcomes of this work in chapter 6, including producing an activation-synthesis dream sequence as part of a larger conceptual piece, further use of smartphone technology, and developing immersive, uncanny sound design.

Film Three: *Dream Three*

Dream Three filmically reproduces a dream report, in which a dreamer verbally recounted a remembered dream to me and I recorded the details. Once completed, I viewed the film and decided which of the four selected dream theories to utilise for the second, latent-representation stage of film-making (eventually selecting Freud and Jung as the primary sources). To contrast, I generated the source material for *Forest Dream* and *Mira Dream* by combining selected dream theories (Freud and Jung, Hobson) with conceptually related methods of film production (automatic drawing, random selection). Thus, *Dream Three's* production process is close to a reverse of the process for the first two films.

Dream Three features a solitary male figure standing in a large, dark space, slowly wrapping himself in newspaper. The report describes the figure's mood as melancholy, resigned to his task of wrapping. His physical appearance is white-ish and translucent, as if glowing slightly from within, with no hair and no clearly defined facial features. The figure is described as slightly crouched and moving in an almost artistic style, similar to dancing slowly, perhaps in an Asian or far eastern style of dancing. A gloopy material such as ectoplasm or wallpaper paste covers the newspaper strips which the figure takes from the air.

The dreamer states they walked in on the figure and the figure acted like a factory worker, oblivious to the observer's presence. This description bears similarities to John Merrick's dream in *The Elephant Man*, in which point-of-view shots from Merrick's perspective reveals factory workers operating a heavy weaving loom in repressive conditions, the workers not moving or reacting to Merrick entering their space. The report estimates the dream's duration as approximately

two minutes, but the figure had been undergoing the wrapping from the beginning, to the end of time. The figure is described as unquestioning, like an angel, fulfilling its servitude, enacting its task. The film foregrounds a combination of three dream-denoting elements:

- element one (violates the diegetic world's rules of cause and effect / nature / physics) in which the figure moves unnaturally slowly, catching material which floats upwards toward them.
- element four (point-of-view / over-the-shoulder shots, replicating the protagonist's physical movement) as *Dream Three* is comprised of a single point-of-view shot, from the dreamer's perspective, the figure is slowly rotated to replicate the dreamer's movement of walking around the figure.
- element ten (slow motion) is used throughout, emphasising the movement of the figure and floating material, enabling detailed contemplation of the figure.

Importantly, the film uses variations of seven other elements. One of the most significant is element three (manner in which characters react to the protagonist is unusual) as in *Dream Three*, the viewer is explicitly positioned as the protagonist (as opposed to *Mira Dream*, where this is open to interpretation) and the figure doesn't react when the dreamer enters the figure's space. Thus, *Dream Three* differs from the 50 analysed dream sequences, as the dreamer is the audience member, outside of the film's diegetic space.

As a variation of element seven (start / end with an action signifying a dream took place), the sequence begins with a fade up from black, representing the

dreamer's eyes opening, and fades to black at the ending, signifying the dreamer's eyes closing as the dream ends. This opening and closing implies a dream occurs without explicitly displaying the dreamer, as the audience is positioned as protagonist. Furthermore, when a person dreams their eyes are closed but in *Dream Three* the dream occurs as their eyes open. This is a metaphorical opening and closing of the eyes as the dream begins and ends. Alternatively, from a cognitive perspective, the fading up and down of the image could simulate the dreamer's consciousness shifting from a state of NREM, to REM, to NREM sleep. For element six (exclusion / sparse use of diegetic sound), the sound design appears partially diegetic, comprising of externally perceptible sound, reflecting the space inhabited by the figure (by using reverb to simulate the acoustics of a large open space). However, the sound design is also internal and subjective (using sounds of a foetal heartbeat and distorted hospital corridors), representing the unconscious state of the dreamer.

Ethical considerations

Re-producing a dream gives rise to important ethical issues when using a volunteer's dream as source material. Initially, when working with the manifest content of a dream report, the ethical considerations are minimal as the dreamer is familiar with the imagery, enabling an objective decision on whether they are comfortable with reproduction of the dream. However, when representing latent dream content, the process becomes more problematic. Issues to consider include the recording of interviews with the subject, where the content of such interviews may contain personal or embarrassing information, which the participant did not

expect to arise. The filmmaker must make subjective decisions on which latent imagery to represent and the context and method of how to represent unconscious imagery, as this could be upsetting for the volunteer if the work is insensitive. It is therefore vital to explain the whole process to the subject before the research begins and to remain sensitive to the participant throughout the project to ensure the completed work results in a positive outcome for all parties.

On completing *Dream Three*, I feel there is scope for producing dream sequences as a form of therapeutic film-making. In this project, the dreamer was involved at each stage of production: in pre-production as interviewee, during production as a technician and during post-production as an assistant when experimenting with ideas for representing latent content in the film. Regularly meeting in different contexts also provided an on-going opportunity to discuss with the dreamer how it felt for them to be part of the creative process.

Methodology: Pre-production

To produce *Dream Three* I kept a record of my own dreams, listened to the dream accounts of others and accessed dream accounts across a range of sources from publications by Freud and Hobson to dream-related websites. There were two central criteria for selection of the source dream: it must be technically possible to recreate the dream with my available resources and the dream should have some inspiring, creative potential in terms of the recounted manifest content.

Eventually I used a friend's dream as the basis for the production. Positives of selecting this dream were

- the central content consists of a technically reproducible, single, focused idea,

- there were interesting technical challenges such as rotating a person and filming a person wrapping themselves in paper-like material,
- visually, the principle image was strong,
- direct access to the dreamer, including detailed discussion of the dream content, enabling an accurate reproduction of the remembered dream,
- the opportunity to directly discuss the manifest content as a method for revealing possible latent content.

After recounting the dream, I asked the dreamer to provide specific details relating to colour, facial expression and eye-line of the figure, mood and emotion of the dreamer, the dreamer's perception of the figure's emotions, posture, the speed of the figure's physical movement, and descriptions of the environment.

The dream occurred independently of any film-making considerations, leading to several technical problems, listed below along with solutions:

1. The dreamer noted many subtle details in the report which I wanted to recreate as closely as possible. Therefore, I shot in high resolution at a fast frame rate so that playback could be in clear, super slow motion, enabling the audience to notice subtle visual details.
2. The dreamer slowly walks around the figure. To represent this experience, I slowly rotated the figure to imitate the motion of the dreamer walking around him.
3. The figure slowly wraps themselves in newspaper. To produce this effect, the figure began the shot fully wrapped and unwrapped during filming with a powerful fan used to blow the material away. In post-production, I reversed

the footage. I hired a costume designer to find a lightweight material resembling newspaper, to assist with the costume design, and to make the figure's costume.

4. The figure is very still apart from the wrapping movement. The actor needed excellent balance, especially as they would be rotating during the shot.

Therefore, I hired a dancer.

5. The figure is in a large, dark open space. To replicate this, I shot in a studio space with heavy black curtains.

6. The figure seems to glow or be translucent. To reproduce this effect and allow for additional post-production effects, I used warm lighting with the spread of light evenly distributed across the whole figure, with minimal fall-off. To ensure retention of detail there were no burnt-out highlights (over-bright) or overly dark shadows. This enabled video effects to respond correctly to the costume and lighting during post-production.

7. The figure has smooth, undefined facial features and no hair. The dancer was clean-shaven and had a shaved head. Using flat lighting reduced the shadows on the performer's face, limiting the definition of his facial features.

Initially I asked the dreamer to position an artist's mannequin in the basic position of the figure in the dream (Fig. 32). Photographs of the mannequin served as an aid when communicating between the dreamer and myself, and with the costume designer and performer.

Fig. 32: Figure's pose set by dreamer.



Fig. 33: Final processed image of the figure in *Dream Three*.



The costume designer and I selected newspaper-printed fabric which appears rigid and paper-like when filmed. For the wrapping strips, the fabric design was screen printed onto lightweight material. The costume designer and I carried out tests to ensure that after printing ink onto the material it would still be light enough to float correctly (see Fig. 34 and Fig. 35).

Fig. 34: Testing weight of material 1.



Fig. 35: Testing material 2.



With a limited production budget, it was important to keep crew numbers small. I hired a camera operator with their own Sony FS7, as the FS7 allows shooting of high-resolution HD images at 180 frames per second. I designed a rotating platform, utilising a heavy-duty lazy Susan turntable (see Fig. 36) combined with

mainly pre-owned materials including wooden boards and an old bicycle taken from a skip. I manually revolved the platform out of shot, with the turning wheel allowing accurate control of the speed (Fig. 37). During the design phase, it was important to use the correct gears from the deconstructed bicycle so a single turn from the operator would rotate the actor the correct amount of degrees (Fig. 38). I built the machine to turn in the opposite direction to the dreamer's reported movement around the figure, so that when the footage was reversed, the image would match the dreamer's account.

Fig. 36: Lazy Susan fitted to board.



Fig. 37: Turning wheel set into frame.



Fig. 38: Chain attached to correct gears.



Fig. 39: Completed revolving platform.



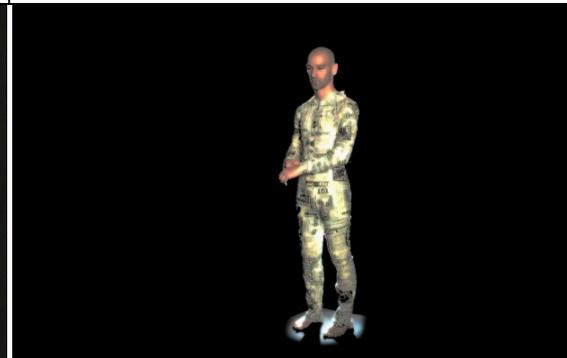
Production

At the shoot, the crew consisted of camera operator, costume designer, technician (the dreamer), performer and myself (director, lighting and platform operator). As the performer rotated, the technician held an electric fan, slowly altering position throughout filming, to ensure the material moved consistently throughout the performance (Fig. 40). We rehearsed the shot several times to synchronise the movements of the revolving platform, dancer, floating material and fan. During rehearsals, we let the camera run, to check lighting and camera focus. I told everyone on set we were aiming for three good takes and then the session would be finished. This provided a common goal and helped ensure the session was focused and supportive.

Fig. 40: Image with equipment and crew.



Fig. 41: The same image as Fig. 40 in the finished production.



Post-Production

Once filmed, I converted the footage from high quality MXF files of 80 mbps (80 megabits per second) into two file types, a high quality MOV (approximately 80 mbps) and a lower quality MP4 proxy file (approximately 25 mbps), using the proxy files for experimenting with effects, automating masking and image manipulation.

When the final edit was completed, I substituted the high definition MOV files for the proxy files.

I experimented with masking to isolate the figure and the floating material. Eventually I created four automated masks (see Fig. 43 and Fig. 44), enabling tight control of the overall image. The image then underwent four processes: luma key to control unwanted bright areas around the image (Fig. 45), a glow effect (Fig. 46), brightness and contrast to enhance the image, and finally sharpening (Fig. 47). I automated the luma key and glow effect for the floating materials as their position from the light source varied throughout the sequence.

Fig. 42: Original image.

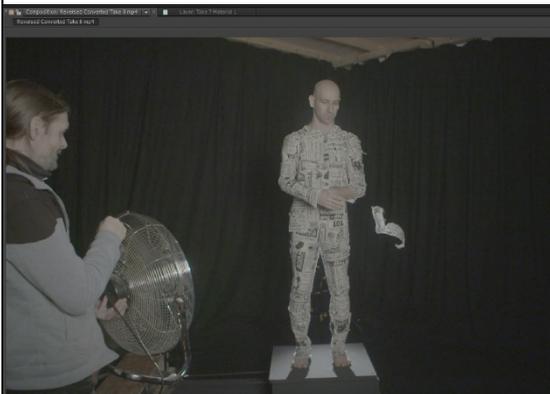


Fig. 43: Add masks between legs and around figure.

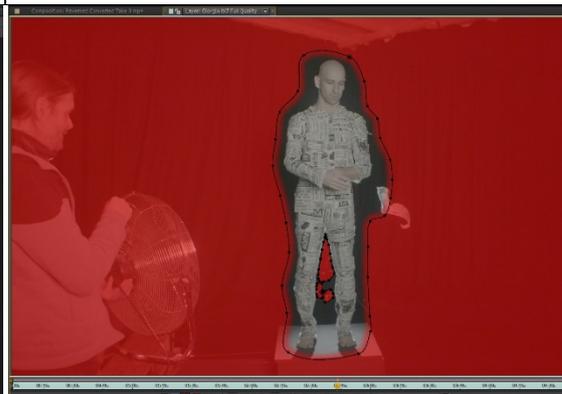


Fig. 44: Masks applied.

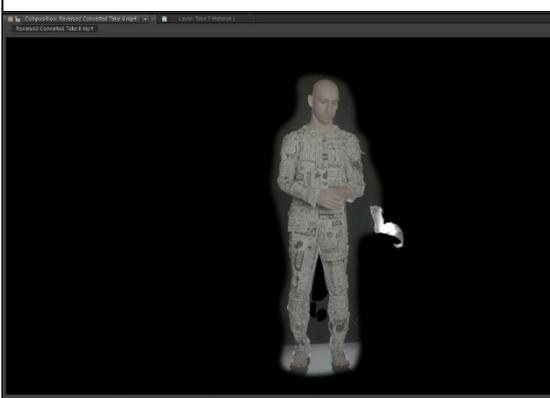
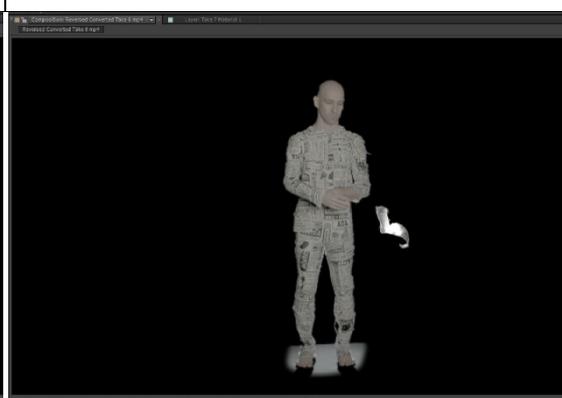
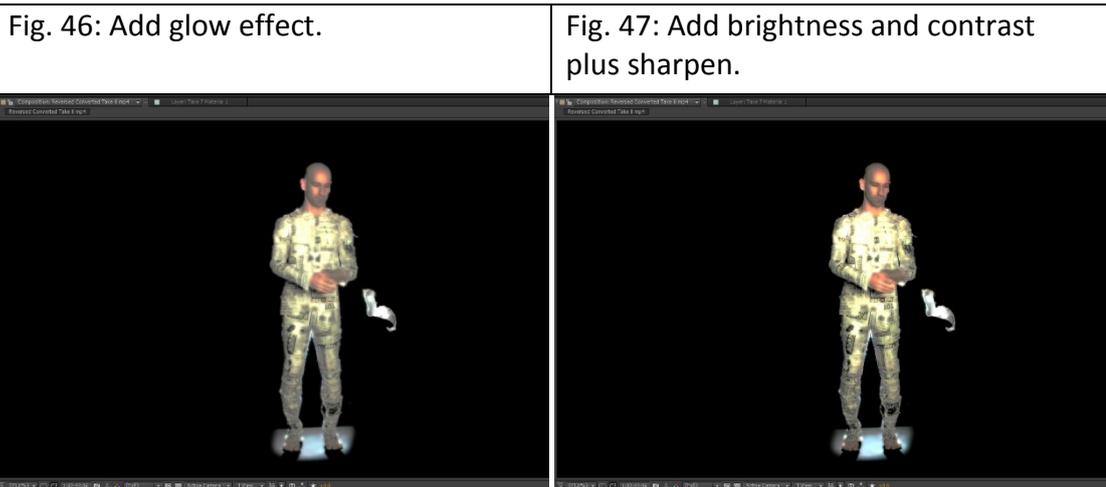


Fig. 45: Add luma key.





The two key features for selecting the dream account were the initial simplicity of a single, focused idea coupled with a very detailed description of the dream event. The dream account contained considerable detail of the figure's physical and psychological disposition. To simulate this experience, I utilised dream-denoting element ten (use of slow motion), as this provides the opportunity to take notice of small visual details, enabling the audience to speculate in real-time what the psychological state of the figure might be. Using a single wide-shot of the figure enables the viewer to shift from face to body and emphasises the inter-connected, holistic nature of the figure's state whilst emulating as faithfully as possible the recounted dream.

Using a camera with a high frame-rate (180 frames per second) meant the original shot contained all the necessary information of the figure's movement. Alternatively, if filming at 25 frames per second, slow motion software could create additional footage, by predicting the movement of each on-screen pixel and drawing new frames between those already shot. However, this can lead to glitches and anomalies, producing visual results dissimilar to the dreamer's actual account.

Therefore, a correctly exposed high-frame rate image offered a higher probability of accurately recreating the recounted dream.

Dream analysis and representation of latent content

The initial stage of producing *Dream Three* consisted of accurately recreating a dream report. The second stage was to develop the work, especially in relation to representing latent content. I also wanted to imitate the immersive qualities of dreaming. The second stage of production consisted of adding sound, representing latent content, and exhibition considerations.

A striking aspect of the manifest content is the figure slowly covering himself in newspaper. After discussion with the dreamer, it became clear this might symbolise an attempt to protect oneself from emotional pain through knowledge, by retreating into learning and trying to intellectualise why emotionally traumatic events occur (creating armour from the written text). Here, the acquisition of knowledge is positive as it protects the dreamer, by providing insight and enabling understanding. However, the knowledge also creates a barrier, cutting the dreamer off from others (as the dreamer isolates themselves through study) and from painful memories (intellectualising the problems as a way of distancing themselves from raw emotion). Thus, the figure never directly interacts with others, and never directly confronts difficult past experiences.

The dreamer noted that the figure's actions seemed to be ongoing for eternity, which could relate to the dreamer needing to be self-sufficient and steadily keep going. The continuous task of wrapping could also represent reading and knowledge as a distraction, where stopping the task would mean the figure needing

to look up and engage with others. Thus, the manifest content shows the dreamer isolates themselves from others, perhaps to prevent potential pain by allowing themselves to become closely connected with others that might hurt them in the future.

I decided to use audio to represent latent content, as the sound plays alongside the visual content and can be clearly experienced whilst ensuring the manifest content (the figure) occupies the central focus of the audience, emulating how the dreamer was focused on the manifest content.

The soundtrack for *Dream Three* is composed of three types of audio samples: wind, foetal heartbeats and a hospital corridor. To develop the spatial and physical elements of the image, I combined various recordings of wind to evoke an empty, imaginable three-dimensional space in which the figure is positioned. Developing the spatial characteristics of *Dream Three* can aid audience immersion. Commenting on spatial orientation in dreams, dream researcher and theorist Jennifer Windt states, 'I suggest that the crucial factor that distinguishes dreaming from non-dreaming sleep experiences is precisely the sense of spatial and temporal presence in the dream. In a very basic sense, there is a hallucinatory scene that is organized around an internal, spatiotemporal first-person perspective (1PP) as well as a sense of spatiotemporal self-location, i.e., the sense of occupying a space (even a point will be extended in a minimal sense), plus an experienced "now" and the experience of duration' (Windt, 2010, p11).

Whilst in the original account there was no mention of sound, adding samples of wind is one method to address technical issue 5: 'The figure is in a large, dark open space.' Commenting on how to build spatial audio environments, sound designer

David Sonnenschein notes, 'A pitch black space can be made to feel like a giant hall, a sewer, or an interstellar space void depending on the ambience and reverb used' (Sonnenschein, 2001, p160). Adding atmospheric audio provides information relating to the space the figure inhabits. Using sounds of wind also helps to build a believable world, by indexically suggesting the presence of a physical force causing the floating material to drift up to the figure. Discussing the work of ethnographic documentary film-making, Bill Nichols notes, 'Also central to the impression of being there, while remaining separate from the reality represented, are the indexical film image and synchronous location sound. These qualities of the realist image certify the authenticity of what is seen and heard as lifelike even though they may represent lives conducted differently from their own' (Nichols, 1994, p68). One of the central aims of *Dream Three* was to reproduce a reported dream with the hope that viewers might empathise with the dreamer's experience and using sound to suggest the environment aids audience immersion.

The heartbeats and hospital sounds reveal the dreamer's internal physical and unconscious experience and emphasises the emotional, latent qualities of the work. The foetal heartbeat fulfils several functions within the film. The sound connotes the interior of the dreamer's body, drawing attention to objective internal processes whilst emphasising the physical state of the dreamer. Conceptually, using a foetal heartbeat suggests regression and that the manifest image relates to an earlier time in the dreamer's life. As with the drumbeat in *8 ½*, the tempo of the heartbeat introduces rhythm, pace and tension, especially when combined with long, sweeping sounds of wind. Other internal sounds of movement from the foetal audio add to the atmosphere. The sounds of the womb's interior can potentially evoke a range of

physical and emotional responses in audience members, encouraging further contemplation of the film image.

After discussing the dream's manifest content with the dreamer, it became clear a childhood memory of the dreamer's mother returning from hospital was a topic which resonated particularly strongly. Therefore, I subtly introduced sounds from a hospital corridor to suggest possible latent motivations for the dream. I reversed samples of echoing footsteps and rattling trolleys moving along corridors to imitate how memories alter and distort over time. The sounds of intentional human movement and technology contrast, and create tension, with the unmotivated sounds of wind and foetal heartbeats, enhancing the uncanny aspects of the film.

Summary

On completion, I played *Dream Three* on a range of screen sizes, to determine the optimal presentation method. I discovered the figure's arm and material appear to move faster when projected onto a large screen, as opposed to a smartphone or computer monitor. For example, at a large scale, the figure's hand moves at least one metre in distance, whereas on a smartphone the hand moves only one centimetre. Therefore, the ideal exhibition space for *Dream Three* is a large darkened space such as an empty hall, with the height of the figure at least four metres. Due to the slow pace of the film, the larger image was much more dynamic. Conceptually, the larger image is closer to the dream report, as the audience can clearly see small details, encouraging immersion in the work. The large figure also emphasises the importance of the figure, emulating the dreamer's captivation by the image.

I found re-creating *Dream Three's* single detailed image was a time-consuming process. *Dream Three* required hiring and coordinating several skilled personnel, meaning it was quite expensive to complete. By contrast, using sound to represent latent content was time and cost efficient. For future projects using dream reports, I can save time by having more materials (such as a green screen, for recreating spaces other than black backgrounds). Having my own camera would allow more time to set up in advance and free up finances to pay technicians to build props, such as the revolving platform, saving more time. Recreating one of my own dream reports will be beneficial when representing latent content, as there should be less ethical considerations and I can analyse the manifest content at any time, instead of booking times to interview the dreamer. Finally, I will use sound to incorporate parts of the latent content, due to the speed and cost-effectiveness, and creative possibilities of combining sound with images.

To develop the immersive qualities of *Dream Three*, I would like to experiment with using a VR display and ambisonic sound (a 360 degree soundscape which responds to the viewer's movement). I also hope to incorporate other senses such as smell and tactile effects, either through sound, via low frequencies producing somatic responses, or by positioning the viewer on a moving platform.

Chapter 6: *Three Screens*

In this chapter, I provide a detailed account of the concept and production of my fourth piece, *Three Screens*. I then analyse the manifest and latent themes of the completed work.

Three Screens combines my theoretical findings from chapters one to four with the practice-based findings from *Forest Dream*, *Mira Dream* and *Dream Three*. The principle aim of *Three Screens* is to allow a close, objective comparison of outputs when using different combinations of dream theories (Freud, Jung, Hobson, Revonsuo) and film production methods. Many of the film-making techniques of *Three Screens* are complex, developed variations of techniques used in the first three films.

Three Screens simultaneously plays three looped films in a triptych format. To begin, each screen plays an identical waking reality sequence, followed by a different dream sequence on each screen. Screen one plays the dream sequence *Three Screens: Soviet Soup*. This sequence reproduces a personal dream in which I carry a bowl of soup across an urban post-Soviet landscape. Upon arriving at a large hotel, a chef takes the soup and for the remainder of the dream I search for the lost food. To determine latent content, I principally analyse the film using Revonsuo's Threat Simulation Theory, incorporating the content through the soundtrack and subtle images not featuring in the original (manifest content) dream. I based screen two's *Three Screens: Night Walker* on Hobson and McCarley's activation-synthesis theory, building on techniques developed in *Mira Dream*. A computer randomly selects footage from a collection of shots I made leading up to the night of the Soviet Soup dream. I then combine the clips into an oneiric narrative. In the analysis of *Night*

Walker, I discuss the implications of applying Hobson's most recent dream theory of protoconsciousness to the production of dream sequences.

The third screen plays *Three Screens: The Shadow*, which develops the production techniques of *Forest Dream*. Immediately after waking from my Soviet Soup dream, I produced a series of nine automatic drawings, forming *The Shadow's* storyboard. The first edit of *The Shadow* combines primary, original and secondary, stock footage. I analyse the storyboard and first edit of *The Shadow* using Jungian and Freudian dream theory, imagining the images to be visualisations of manifest content of a personal dream. From the analysis results, I incorporate visual and auditory representations of latent content into the final version of the film.

To produce *Three Screens*, each morning from 9th August 2017 to September 4th 2017, on awaking, I made a series of automatic drawings and produced dream reports of the previous night's dreams. Each day I filmed different events on my Samsung S7 smartphone. On the night of September 3rd 2017 I had a dream which I believed to be reproducible, which I called *Three Screens: Soviet Soup*. I took the series of nine automatic drawings produced on the morning of September 4th as the source material for the dream sequence *Three Screens: The Shadow* and used footage shot up to the night of September 3rd as source material for *Three Screens: Night Walker*. Thus, the core source material for each film was produced within the same time-frame window, ensuring each dream sequence drew as closely as possible from the same set of experiences and memories.

As a film event, *Three Screens* consists of a waking reality sequence, featuring my actions from the day of September 3rd, leading up to the Soviet Soup dream, which is duplicated and played simultaneously on three screens. At the end of the

waking sequence, the protagonist falls asleep and begins to dream. At this point, each of the three screens displays a different dream sequence. Screen one displays *Soviet Soup*, screen two displays *Night Walker* and screen three plays *The Shadow*. When each dream sequence ends the protagonist wakes up. Each screen fades to black and begins again, leading the screens to slowly run out of synchronisation. On the opposite wall, an additional screen loop-plays the three dream sequences, for viewers who have already viewed, or don't want to view, the waking reality sequence. Sound in the room plays from the fourth screen, with screens one to three using headphones.

***Three Screens'* production reports**

Three Screens consists of four films: three dream sequences and one waking sequence. Each film was created using a different production methodology, outlined below. The final part of the process, incorporating representations of latent content into the dream sequences, is discussed in detail in the second half of this chapter.

Three Screens: Soviet Soup

The manifest content of *Soviet Soup* was produced using similar methodology to *Dream Three* but consisted of many images, leading to much greater complexity. First, I storyboarded the dream report and problem-solved how to make each shot.

Soviet Soup features six general locations: a post-Soviet landscape, the exterior of a large building, a kitchen, a series of hotel corridors, an office, and a post-Soviet office reception. I shot the building exterior, kitchen and office at Lancaster University, gaining any necessary permissions. I shot the corridor interiors

guerrilla-style inside a hotel. The most technical locations to create were the post-Soviet landscape (consisting of government buildings, concrete tower blocks and weeds growing through paving) (see Figs. 48 to 51) and office reception (see Figs. 52 to 55). I produced the landscape background in post-production by combining a still image of Skrunda, an abandoned Latvian town, with video footage of sky for the background. To replicate my dream, I created and overlaid video footage of plants, to bring the Skrunda still to life. I added a tree and hills in the distance, to ensure there was movement in each plane of the image, adding sky and the actors to complete the shot. At each stage of production, the central focus was creating images which replicated the memory of my dream as closely as possible.

Building a post-Soviet landscape	
<p>Fig. 48: Still of abandoned Latvian town Skrunda. The building outline was cut out using Adobe Photoshop.</p> 	<p>Fig. 49: Plants filmed around Todmorden, England, shot against plain backgrounds such as concrete or blue sky, chroma-keyed using Adobe After Effects leaving only the plants.</p> 
<p>Fig. 50: Building and plants, combined with cut out hills from Todmorden and sky footage.</p> 	<p>Fig. 51: Final shot using green screen / chroma-key to insert actors.</p> 

For the post-Soviet reception, I added a reflective table and overlaid light from a candle flame to soften the image and introduce additional movement. My dream was immersive, and including subtle details came closer to replicating my experience.

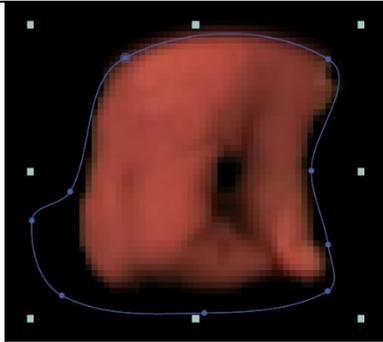
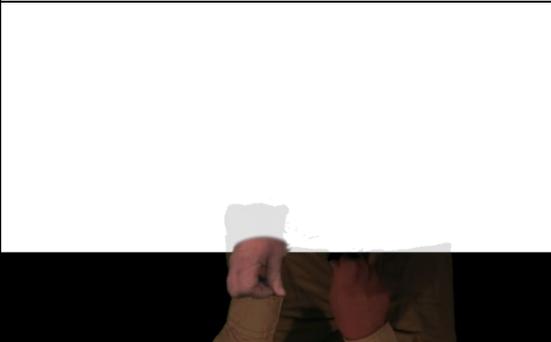
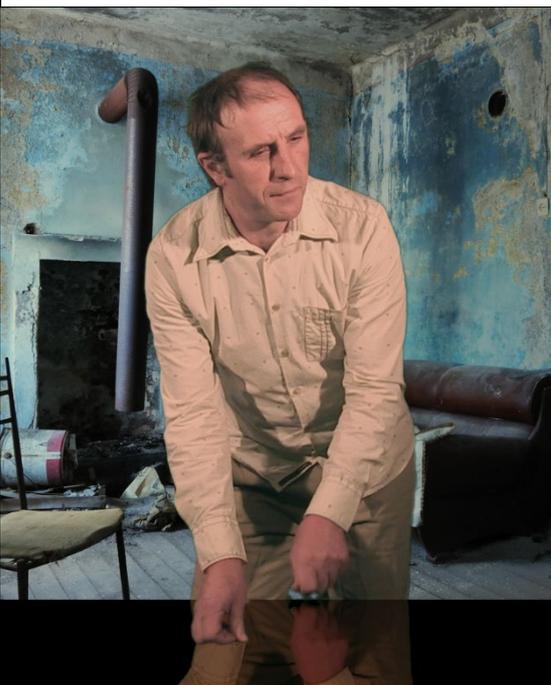
Post-Soviet office reception	
Fig. 52: Still for office interior.	Fig. 53: Actor / receptionist chroma-keyed with light wrap-around to place her more believably into the space and reflective table created in After Effects.
	
Fig. 54: Horizontal candle flame, overlaid to replicate moving light source from window.	Fig. 55: Final image.
	

Post-production problem-solving

Soviet Soup features 31 shots, as opposed to the single shot of *Dream Three*. Most shots of actors involved use of chroma-key, either shot in my own studio or using stock chroma footage for passers-by. One of the biggest problems was getting the main actors to feel as if they were in the space rather than sitting on top of a background. To achieve this, I found a specialised chroma-key tool Primatte Keyer by Red Giant, which allows a light wrap to be placed around the actor. The light wrap

creates spill onto the actor and can be colour-matched to the light in the location. This subtle detail helps the actor to be situated within the image. Finally, I overlaid candlelight as this affected the whole image (actor and background), softening harsh edges and unifying the shot.

The other main issue was chroma-keying details such as hair, shadows in clothing, and reflections of green light onto the soup bowl. To resolve this, I used a combination of masking separate body parts and chroma-keying (see Figs. 56 to 59).

Chroma-key plus masking example: Shot 29a	
Fig. 56: Masking left hand.	Fig. 57: Combining left hand and reflective table.
	
Fig. 58: Actor chroma-keyed with noise around hands.	Fig. 59: Composite shot of actor, left hand and reflective table.
	

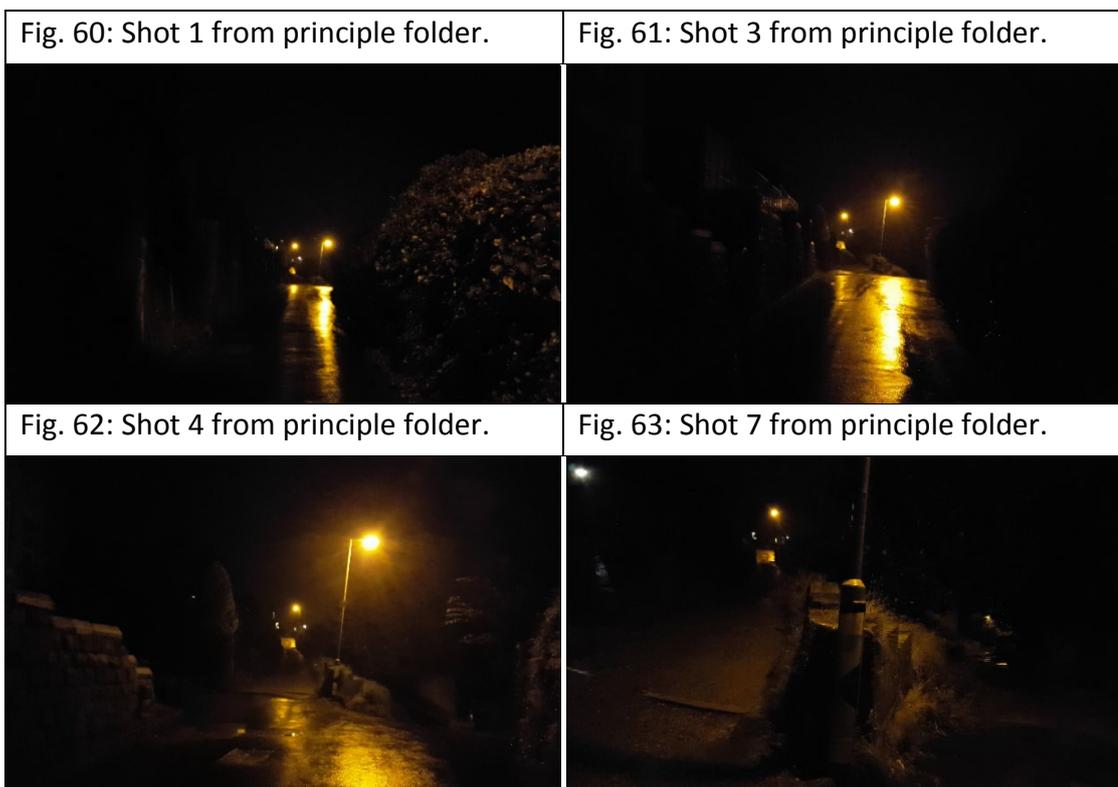
Three Screens: Night Walker

Night Walker builds on the production methodology of *Mira Dream*, using source footage of randomly selected video shot up to the night of my Soviet Soup dream. Due to developments of camera technology, all *Night Walker* footage was shot using a Samsung S7 smartphone. There were several advantages of using the S7 over *Mira Dream*'s Canon 550d. For example, the S7 is much more portable and I always carry the S7, meaning a wider range of footage was shot. The S7 shoots in 4k as opposed to HD, enabling zooming into / re-framing of shots in post-production. In low light, the S7 has better colour performance. Weaknesses include a fixed lens, no optical zoom and the S7 usually needs to be static or panned very slowly, as movement often produces a jello-effect (image wobble and distortion). Prior to my Soviet Soup dream I shot footage from August 9th to September 3rd and shot regularly before these dates, ensuring I had a large amount of source material for the computer to select from. Table 2 below records the percentage chance for each folder of shots to be selected, the shooting dates of footage held in each folder, the number of separate shots in each folder, and the final number of shots selected from each folder. For the dates 09/08/17 to 28/08/17 footage was shot on fourteen different days, contained in fourteen separate folders, and for the dates 19/02/17 to 08/08/17 footage was contained within ten different folders.

Table 2: Footage shot between 19/02/17 and 03/09/17. 30 clips were randomly selected, using an online random number generator (random.org).

% chance of selection	Shooting dates for each folder	No. of shots in folder	No. of shots selected for final film
01-40 (40%)	03/09/17	7	11
41-60 (20%)	02/09/17	15	5
61-70 (10%)	01/09/17	34	3
71-75 (5%)	29/08/17	24	2
76-95 (20%, 1.4% per folder)	09/08/17 - 28/08/17 14 folders	218 / average 16 per folder	5
96-100 (5%, 0.5% per folder)	19/02/17 - 08/08/17 10 folders	1199 / average 120 per folder	4

From a film-making perspective, I initially thought having a reproducible dream on the night of September 1st would have been preferable as I had shot a large amount of varied footage that day. However, on reflection the limited number of shots made on September 3rd lead to a film with a core consistency which is difficult to achieve using random selection techniques. Furthermore, the similarity of footage (see example Figs. 60 to 63) forced me to work imaginatively and provided a contrast to shots selected from outside of the principle 03/09/17 folder.



A shot of one of my daughters receiving a birthday cake was randomly selected by the computer twice. Statistically this was a very unlikely occurrence, so I decided to make the clip an important element of the film, initially as a slow-motion superimposition over the shot in Fig. 61 (see Fig. 64) and later merging with slow motion footage of a waterfront in Aalborg, Denmark (see Fig. 65).

Birthday cake footage	
Fig. 64: Birthday footage superimposition.	Fig. 65: Birthday merged with waterfront.
	

The computer randomly produced some excellent edits which would be difficult to consciously conceive. These include an edit from clip eight to clip nine, when the camera quickly tilts upwards from a country lane to the sky before cutting to a tracking shot moving through a park, and the final edit cutting from the night shot in Fig. 62 to a bird's eye shot of a shimmering puddle.

I combined several adjacent shots selected by the computer to develop connections between images. For example, a tracking shot from Todmorden park and a close-up of grass (see Fig. 70 below, a composite of shots nine and eleven, shot ten was a blank screen), shots twelve and thirteen of a birthday and a waterfront (see Fig. 65 above), and shots 23 and 24 of trees, merged using chroma-key and mirror effects (see Fig. 71 below).

Merging of randomly selected adjacent shots	
Fig. 66: Shot nine of Todmorden park.	Fig. 67: Shot eleven, close-up of grass.
	
Fig. 68: Shot 23 of tree in park.	Fig. 69: Shot 24 of tree trunk on path.
	
Fig. 70: Shot nine and eleven combined.	Fig. 71: Composite of shots 23 and 24.
	

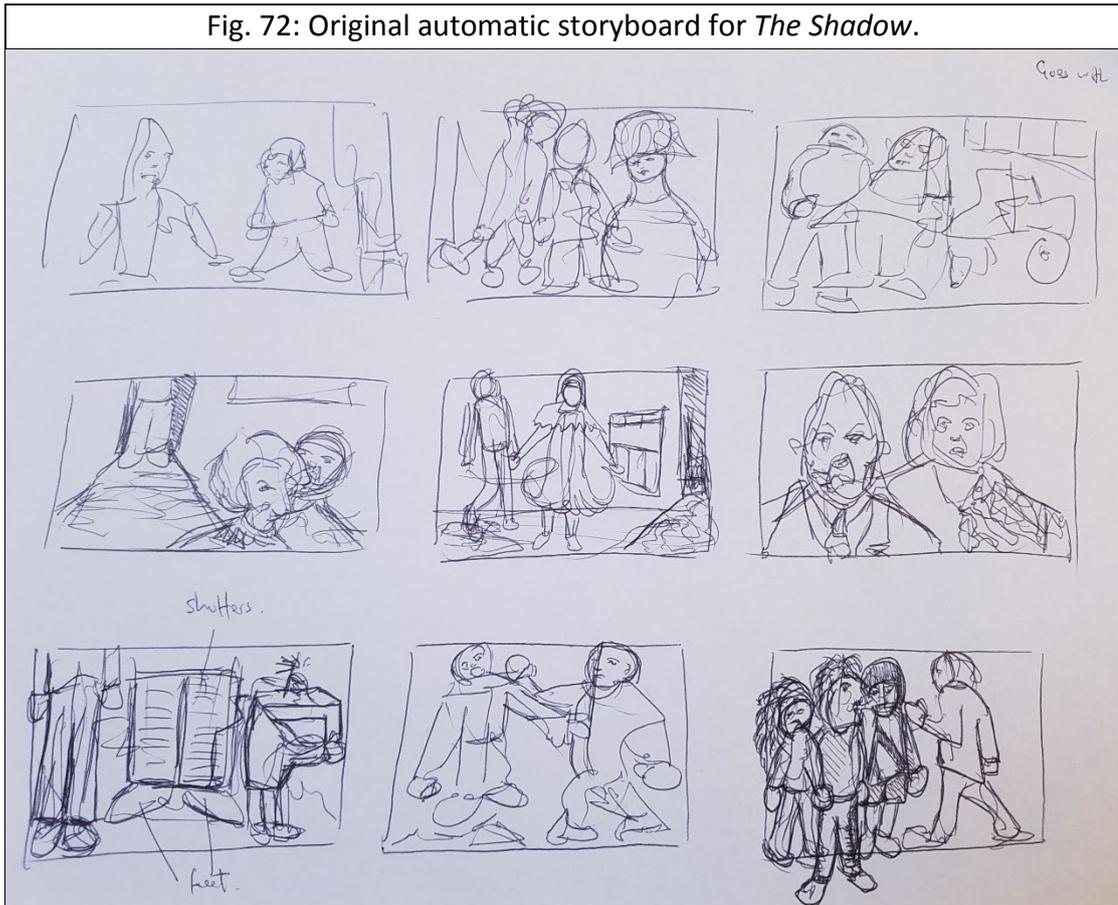
The sound in *Night Walker* was produced by developing audio techniques devised for *Mira Dream*. All audio used to produce *Night Walker's* soundscape was taken from the original footage, meaning the sound is initially diegetic. However, the audio samples were often manipulated, for example using time-stretching, pitch shifting and reversing. Mixing the sound in this way alters its qualities from being objective-external toward subjective, non-realistic characteristics, which can reflect the internal, emotional processes of the dreamer. Next, the sound mix was sent to a range of reverb effects, creating a sense of distance, pushing the proximity of the

audio away, further enhancing the internal-subjective, non-diegetic quality of the sound. Finally, I switched off all the original, manipulated sound, leaving only the reverberated audio. This last step produces a subtle soundtrack in which the audio components bleed together and feel distant and unfocused, conceptually supporting the images which blend and interact in unusual, unpredictable ways.

Three Screens: The Shadow

The Shadow builds on the methodology of *Forest Dream*, using a storyboard generated through automatic drawing, created as soon as I awoke from my Soviet Soup dream (see Fig. 72 below). Of the four *Three Screens* films, *The Shadow* was the most technically demanding in terms of creating the manifest content, taking several months to eventually finalise. Whilst *Soviet Soup* and the waking reality sequence were produced by replicating a definite set of pre-determined images (a detailed dream report and re-enacting a series of specific events) and the source material of *Night Walker* was determined by a computer, *The Shadow* began as a set of nine roughly drawn images which were open to a wide range of interpretations. For *Forest Dream*, the set of automatically-drawn storyboard images were closely related and relatively straightforward to organise into a narrative. However, the storyboard for *The Shadow* was extremely complicated, with many of the images seemingly disconnected.

Fig. 72: Original automatic storyboard for *The Shadow*.



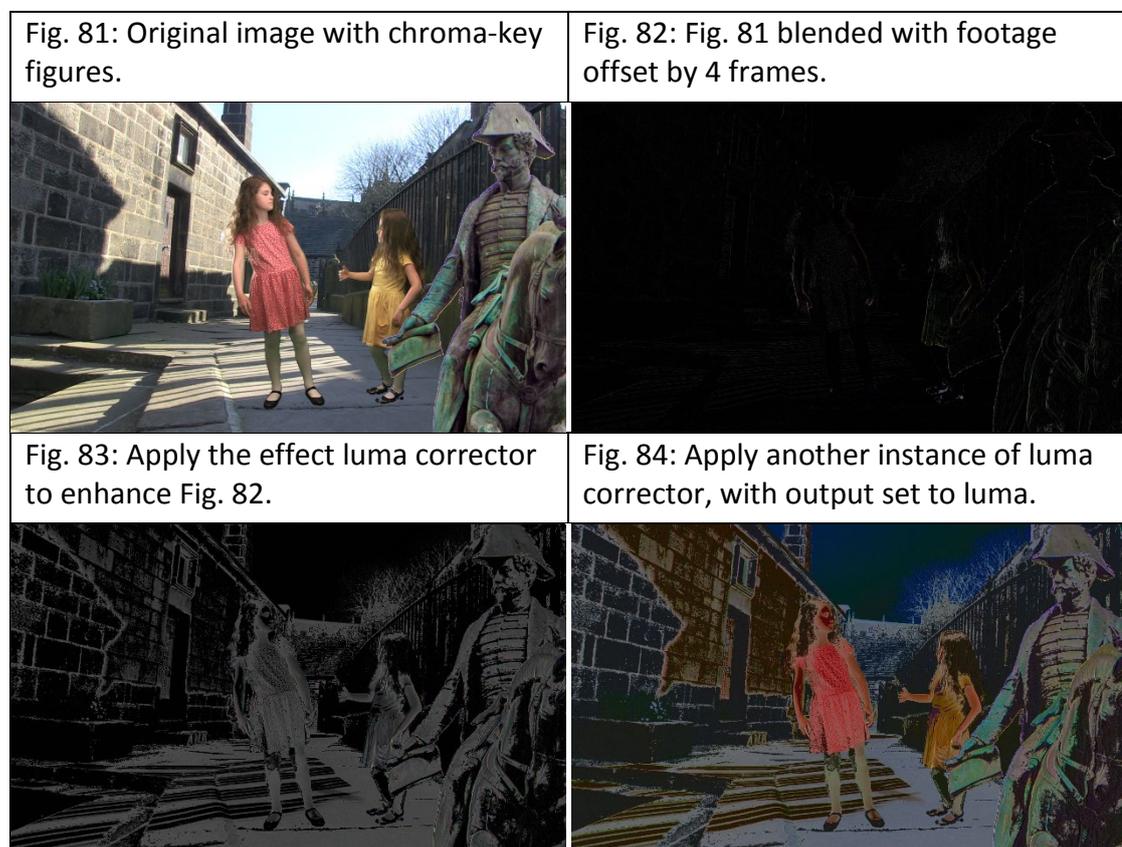
To produce the manifest layer of the dream sequence, I analysed the content of each individual automatic image and deciphered what the filmic content should be. I decided to shoot most of the visual content of panels one, two, three and five, as I reasoned I had the resources such as actors and locations, to make these shots. I used stock footage as the main component for the remaining panels, as I thought this would be a time-efficient, less costly method of production. I also wanted to experiment constructing a dream sequence using stock footage as a dry-run for future work, such as recreating others' dream reports. In practice, this process was time-consuming, taking several months to find suitable stock footage, such as for panels seven (see Fig.78) and panel nine (see Fig. 80). After the nine panels are

visualised, *The Shadow* continues with imagery focusing on representing latent content and latent links between the images.

Film interpretations of the nine automatic images: shots one to eight of <i>The Shadow</i>	
Fig. 73: Panel one. 	Fig. 74: Panel two and three combined. 
Fig. 75: Panel four. 	Fig. 76: Panel five. 
Fig. 77: Panel six. 	Fig. 78: Panel seven. 
Fig. 79: Panel eight. 	Fig. 80: Panel nine. 

To search for connections between the nine panels, I analysed the images from Jungian and Freudian perspectives, eventually finding links using Jung’s archetypes of the shadow and anima. Settling on the shadow as a central focus, I slowly organised the footage to create a unified piece.

All the manifest images in *The Shadow* use a combination of chroma-key and masking. All images except for panel six include slow motion and several images use layering and blended layers. For example, panel one is created by rendering the film and then blending two layers of the same footage, offset by four frames (see Figs. 81 to 84). The computer only leaves parts of the image which are different, meaning much of the image is deleted. This technique links conceptually with dreaming and the difficulty of recalling dream details, leaving a hazy, lossy recollection of the original image. To further alter details and degrade the image, I applied luma and colour correction processing.



The soundtrack of *The Shadow* combines location sound from footage shot for panels one, two, three and five, in Heptonstall, England, with internal body sounds from a sound library. The soundtrack supports the arc of the dream sequence, beginning with external-objective sound (diegetic sound of Heptonstall, matching the location depicted in panel one), followed by internal, objective sound (naturalistic sound of internal organs and body processes), and finally internal, subjective sound when representing latent, archetypal images (by mixing and manipulating the location and body sound sources).

***Waking Reality* sequence**

To produce the sequence *Waking Reality*, I kept a note of the main tasks I carried out each day. Having my Soviet Soup dream on the night of September 3rd meant reproducing my daytime September 3rd actions. I hired an actor (Bill Rofe) to play myself. For consistency, this meant Bill also agreed to play my role in *Soviet Soup*.

I produced a shot list and we agreed a shooting schedule split across two days. Day one consisted of all daytime shooting. As the film is chronological, the day two shoot was organised to begin as daylight began fading and I entered my studio to prepare a guitar lesson. I timed the shoot so that my guitar student from September 3rd could attend, to ensure the control room shots featured no daylight, and that we could finish the filming around 10pm, with Bill undertaking a night time dog walk. Between filming footage of Bill mixing music and locking up, I filmed Bill going to sleep and waking up by creating a makeshift bed in the studio control room from duvet covers and pillows.

In terms of performance, it was very important for Bill to depict my actions as accurately as possible. For example, when filming Bill making a cup of tea, I went through each action and Bill copied using the same hand, foot movement and order of actions. When an action was successfully choreographed, we filmed. Sometimes this meant breaking an action into micro-actions, for example, placing a teaspoon on a table, unscrewing a carton of milk or placing a lead on a dog. Many mundane daily actions are carried out without much conscious attention and it was important for Bill to perform very naturally if the waking sequence was to appear convincing. Whenever Bill over-acted we re-shot (for example, when eating Alpen he initially motioned as if he was enjoying the food, whereas when I eat cereal I am usually thinking about something else).

I made most shots using a static, tripod-based camera, with occasional use of panning, such as Bill moving toward the kitchen door, as I wanted an invisible style, to disguise the film-making process.

For sake of authenticity, all scenes were shot in the same location they occurred on September 3rd and as close to the original time as possible. Natural light was used for all shots except the interior music studio shots which were enhanced with red head film lights. I asked Bill to bring light clothing and footwear as I wanted him to wear the same clothes in the waking sequence and *Soviet Soup* and knew that light clothes would be effective for the green screen shooting of *Soviet Soup*.

The soundtrack is mostly created through Foley and ADR (automated dialogue replacement). The only original sound is Bill closing the studio lift doors, as the Foley sound didn't provide additional quality. My intention of recreating all the audio was to enable a hyper-realistic style for the sound. For example, I exaggerated

the volume level and crispness of water being poured onto a teabag and of keys unlocking doors. I intend that using very detailed sound, mixed to seem proximally close, will engage and immerse the listener in my daily activities and help them to empathise with, and imagine from the perspective of, the on-screen version of myself, to set them up for experiencing the dream sequence which will follow.

Analysis of *Three Screens*

In the second half of this chapter I analyse *Three Screens*, to determine in which ways the individual parts of the triptych interlock to form a completed piece. To fulfil this task, I answer the following questions to provide a framework for the analysis:

- Is it necessary to thematically link all *Three Screens*' content?
- Are there manifest or latent themes linking all *Three Screens*' content?
- Can any of the four selected dream theories link *Three Screens*' dream sequences?

Is it necessary to thematically link all *Three Screens*' content?

Structurally, *Three Screens*' films share the same form consisting of waking reality sequence, dream sequence, and protagonist waking. Additionally, the raw materials for the dream sequences *Soviet Soup*, *Night Walker* and *The Shadow* were finalised across the same night. Thus, superficially, the content is unified. Below, I analyse the finished works, to search for deeper thematic links between each of the films. Clarifying potential underlying themes will strengthen my understanding of the final work, enabling concise communication of my findings to others such as researchers, filmmakers and the public.

Are there manifest or latent themes linking all *Three Screens'* content?

Soviet Soup replicates a personal dream report, combined with Revonsuo's Threat Simulation Theory to incorporate representations of latent content. Revonsuo states each dream is a simulation, enabling the dreamer a higher chance of fitness during waking. *Soviet Soup's* themes loosely fall into three rehearsal categories: physical, intellectual and emotional.

Physically I must balance the soup and carry it through a foreign environment. Later, I move quickly around a maze of corridors and rooms. Intellectually, I must problem-solve how to enter a building and once inside, must navigate corridors which all look the same. Upon seeing the kitchen and waiters I need to be cautious, realising I could cause offence by delivering food into the hotel. After failing to protect the soup, I problem-solve how to retrieve it. I negotiate the foreign environment using my knowledge of similar buildings such as the St. Petersburg hotel in Kiev, Ukraine (which I stayed in during my wedding) and Travelodge hotels (which I have often stayed in alone and with my family). I also practice Russian language skills, acting, and persuasion, when meeting the receptionist. Emotionally I must remain calm and avoid panicking or becoming angry throughout the sequence, particularly when attempting to enter the building, searching for the soup, communicating with the receptionist and finally meeting the chef. The dream concludes with a degree of success when a chef appears and says 'Yes!'.

At a manifest level, the *Soviet Soup* dream could enhance my general waking fitness, by rehearsing activities such as successfully walking and balancing, problem-solving mazes and difficulties in communication, and remaining calm in potentially

stressful situations. Additionally, taking place in unique environments, composed of several partly-familiar locations, rehearses adaptability (for example, how to apply knowledge of previous locations to survive in new environments) and links different skill sets (such as balancing, solving mazes, communicating and remaining calm) in preparation for future, as-yet unknown scenarios.

None of *Soviet Soup*'s manifest content explicitly occurs in *Waking Reality*. However, *Waking Reality*'s day's residue can be implicitly linked to content in *Soviet Soup*. For example, the soup bowl resembles the *Waking Reality* cereal bowl. Walking is a feature of *Waking Reality* and *Soviet Soup*, and my studio is situated inside a large mill, linking to the large hotel in my dream. In total, 25 of *Soviet Soup*'s 31 shots implicitly relate to *Waking Reality*: ten shots of carrying soup (linked to eating cereal and walking), two shots of moving through corridors (linked to walking along paths), two shots of looking down corridors (linked to looking along paths) and eleven shots of trying to explain something to a receptionist (linked to explaining to the guitar student).

In terms of potential latent content, the dream occurred whilst my wife and children were on holiday in central Ukraine, mostly staying in the industrial city of Kremenchug. The exterior landscape in *Soviet Soup* closely resembles Kremenchug. For example, the opening street of my dream is, in waking reality, a quiet street close to my wife's parents' apartment, where my family were staying, and the buildings closely resembled Kremenchug's post-Soviet apartment blocks. The dreamt hotel interior resembles the interior of St. Petersburg Hotel, Kiev, which I stayed in whilst getting married. When in Ukraine I frequently eat borsht, a red-coloured beetroot soup, similar in appearance to the pink soup in my dream. Finally, the receptionist in

my dream had a similar look, nationality and age of my wife (though in my dream I didn't know the receptionist). Therefore, the latent content of the dream could relate to my anxiety of being separated from my family and the fear of them being hurt whilst away from me. Perhaps I am trying to provide sustenance as a metaphor for trying to protect my family, and at the same time am searching for them, to be reunited with them.

I incorporated images into the final *Soviet Soup* dream sequence to represent this potential latent content. I added an image of one of my daughters holding flowers, reflected in glass as I enter the hotel. I superimposed an image of my two youngest daughters dancing in their grandparents' Kremenchug apartment over the hotel corridor as I search for the soup. I included audio samples I recorded in Kremenchug, including sounds taken from the opening street of the dream. I superimposed a shot of the train corridor, filmed on a journey from Kremenchug to Kiev, and included the interior sound of the train in the soundtrack.

Night Walker's source footage is randomly selected by a computer, with images shot closer to the date of my *Soviet Soup* dream allotted a higher chance of selection, simulating the effect of the day's residue on dream content (that recent experiences are statistically more likely to be incorporated into dreams). Twelve of *Night Walker's* eighteen shots contain images directly linked to my *Waking Reality* actions: six shots featured the rough track I dog-walked in the day time, five shots feature the road I dog-walked at night, and one features mixing music in my studio. An additional four shots are closely linked to my September 3rd activities featuring paths I walk (three shots) and a puddle on the rough track (one shot). *Night Walker's* source material consists of images which haven't undergone any form of secondary

revision, explicitly displaying actions which relate to *Waking Reality*. By comparison, the images of *Soviet Soup* are open to interpretation and only subjectively linked to *Waking Reality*.

To shape the raw material of *Night Walker* into a cohesive dream sequence, I searched the selected clips for potential themes. Every image of *Night Walker* is filmed point of view, shot from my perspective. Therefore, I am present off-screen in every shot but never visible. This high frequency of point of view shots, with no visibility of any personal body parts such as limbs, hands or feet, produces an uncanny effect, always placing the viewer in the position of an intensified gaze, with no signification of the physical self in the field of vision. Simultaneously, *Night Walker's* soundtrack consists entirely of the reverberations of manipulated diegetic sound, producing a distancing effect between the audience and the on-screen images. Coupled with the intensified point of view, the total effect is uncanny, the viewer placed visually central and close to the action, with sound implying distance and separation.

Most of *Night Walker's* footage features locations close to my home, emphasising the inter-connected, personal nature of the content. The computer twice selected a shot of my wife carrying my daughter's birthday cake (a statistically low 0.16% chance of occurring) and a shot of dog-walking with my two youngest daughters in the same location as *Waking Reality*. The appearance of my wife and children at different points in *Night Walker* suggested they could be central to the latent content of the dream sequence. Occasionally in *Night Walker* I am actively engaged with the depicted activity, such as navigating country paths. At other times, I observe from a distance, such as static shots of a rough path, a waterway in Aalborg

and a carried birthday cake, emphasising memory, fading and separated from my direct experience.

I produced *The Shadow's* source images (a storyboard composed of nine automatic drawings) immediately after waking from the Soviet Soup dream. Therefore, *The Shadow's* images are temporally closely associated to *Soviet Soup*, potentially linking their content. Freud noted, 'The contents of all dreams that occur during the same night forms part of the same whole' (Freud, 2010, p803). Thus, as I created *The Shadow's* storyboard in a partial hypnopompic state, potentially my unconscious Soviet Soup dream thoughts could be linked with unconscious thoughts underlying the production of *The Shadow's* storyboard.

The first half of *The Shadow* (the eight opening shots, lasting 51 seconds, filmically recreating the storyboard) contains no images explicitly linked with *Waking Reality*. Implicitly, at least seven of the eight shots depicting *The Shadow's* storyboard can be associated with *Waking Reality*. For example, four images feature people walking, four images contain paths, one image contains a corridor filmed in Ukraine, one image depicts a person isolated from a group (in *Waking Reality* I often carry out solitary tasks) and two images depict people carrying out continual tasks (the old people walking, the boxer punching and dodging).

The second half of *The Shadow*, beginning with two girls (my daughters) dancing and spinning at 52 seconds, consists of eight shots and focuses on representing latent content (see Figs. 85 to 92 below). Three shots in this section of the film explicitly link to *Waking Reality*: shots thirteen and fourteen of myself situated amongst trees and shot sixteen incorporates trees where I walk. Implicitly, three shots from *The Shadow's* second half link with *Waking Reality*: shots fifteen

and sixteen contain images of a woman (my wife) walking along a path and shot twelve features a boxer continually moving. Additionally, *The Shadow's* sixteen shots can all be interpreted as point of view, with nine shots featuring figures directly gazing at the viewer.

Representations of latent content: the second half of *The Shadow*, shots nine to sixteen

Fig. 85: Shot nine.



Fig. 86: Shot ten.



Fig. 87: Shot eleven.



Fig. 88: Shot twelve.



Fig. 89: Shot thirteen.



Fig. 90: Shot fourteen.



Fig. 91: Shot fifteen.



Fig. 92: Shot sixteen.



Analysing *The Shadow*'s visual content reveals potential latent themes encompassing Jung's shadow and anima archetypes. Jung notes, the shadow

coincides with the personal unconscious (Jung, p284, 1991) and 'The shadow personifies everything that the subject refuses to acknowledge about himself and yet is always thrusting itself upon him directly or indirectly' (Jung, p284-285, 1991).

Four of *The Shadow's* images feature one or both of my youngest daughters. In the first two instances (shots one and two), the girls are depicted in saturated colour. Later, in shot nine, the girls dance but their colour is removed, appearing as dancing ghostly apparitions. In shot eleven only one girl remains, in silhouette and filled with fire, trees and stars. She is merged with a shadow figure, made from smoke. As she begins to dance, both she and the shadow figure fade away. Thus, these sections of the dream sequence can relate to the importance I attach to the girls, my anxiety for them leaving, and the future they contain (as seen in shot eleven, with the girl containing stars and trees, depicting her potential for the future and connection with the distant, collective past).

Shots three to five can be interpreted as reflecting on aging and death. Shot three features two figures, an old woman and middle-aged man, walking through a corridor in an abandoned Ukrainian building. Shot five consists of an old couple fading away as they gaze directly at the viewer. Between shots three and five, shot four features a masked woman moving through a graveyard, gazing directly at the viewer, as an image of myself looks on. In shot four I am positioned as an observer, outside of death, which could reflect an unwillingness to consider myself as a potential victim of infirmity. Perhaps the direct gaze of the masked woman implicates the viewer (me) in the dream sequence, forcing contemplation of the images. Additionally, a common feature of *The Shadow* is figures moving or fading away, suggesting the impermanence of people and relationships, such as the fading

old couple in shot five, and the woman walking away and finally disappearing into a dark forest in shots fifteen and sixteen.

Shots three and five prominently depict an older female figure, which could relate to my grandmother and her persistent health issues prior to her death. They could also depict my young daughters in the future, reflecting their youth and impending old age within the same sequence. Each of the female figures, such as the masked woman in shot four, and the hooded woman in shots fifteen and sixteen, can be interpreted as depictions of Jung's anima archetype, emphasising the mystery and power of an unknown female figure. Jung notes that gaining knowledge and understanding of one's shadow, and anima or animus, are important steps toward individuation. The overall frequency of female figures throughout *The Shadow*, illustrates the influence of the anima and its permeation of my thought processes.

Shadows and low light feature throughout *The Shadow*. Faces are often hidden, either in silhouette or heavy shadow, masked, fading away, or hooded and facing away. In shot six, only a figure's feet are depicted. These characteristics reflect the difficulty of uncovering and maintaining awareness of one's shadow.

The shots of a boxer combined with dogs fighting (shots seven and twelve) most openly depict the violence inside the dreamer, which must be locked away in a civilised society. These images suggest a fear of, and preparation for, being attacked. Alternatively, the boxer represents anger, fighting back, protection of territory or wilful damage to others. Symbolically, the violence could depict the frustration at not being able to control aspects of one's life. Examples include anger and sadness felt when losing loved ones, desperation for the future when others leave, and frustration caused by questions of faith and the uncertainty of death.

To support the overall concept of *The Shadow*, smoke and fire occur in all images which intentionally represent aspects of myself (subtly in shot four, then openly in shots eleven, thirteen and fourteen).

Summary of latent links in *Three Screens*

To summarise, the theme of separation connects all the films including *Waking Reality*, as most of the depicted day I am alone. After incorporating representations of latent content, the three dream sequences become more closely linked. For example, my wife and two youngest daughters are in all the dream sequences, yet in *Waking Reality* they are noticeably absent, such as when I am in the house. Furthermore, each dream sequences' soundtrack emphasises a sense of distancing. These factors confirm separation from family is a central point of *Three Screens*.

Analysing more deeply, each dream sequence can be interpreted as relating to death, reflected through separation from family. This is exemplified through using point of view shots which feature no physical body within the image, reflecting separation from the physical self.

Additionally, walking along paths and trees occurs in all four films. Symbolically, a path can represent the journey of life or a spiritual path, linking with Jung's theory of individuation. Trees can symbolise personal growth and family. Collectively, as a forest, trees become an archetype of transformation or a representation of the mother archetype.

Conclusion of *Three Screens*' findings: Can any of the four selected dream theories link *Three Screens*' dream sequences?

Viewed purely from a manifest perspective, Freud and Jung's dream theories most closely link with *Three Screens*' dream sequences. All three sequences contain images readable at face value and symbolically, leading to the interpretation of latent content, which is central to both Freud and Jung's work. *The Shadow* and *Night Walker* strongly link with Hobson's activation-synthesis theory, as both feature seemingly disconnected images which are synthesised into a whole. *Soviet Soup* closely links to Hobson's protoconsciousness theory, as a virtual reality simulation of an event. *Soviet Soup* also links with Revonsuo's Threat Simulation Theory, if success in each task of *Soviet Soup* enhances survival prospects during waking.

Considering the summarised latent content, each of the theorists' work can be applied to *Three Screens*' dream sequences. As Revonsuo-based threat simulations, or using Hobson's protoconsciousness theory, in each sequence the dreamer attempts to deal with the difficult topics of separation from family and death. From a Jungian perspective, each dream sequence can be interpreted as containing multiple archetypal images and the sequences' latent content themes are covered in detail within Jung's writings. From a Freudian perspective, the latent content of dreams is central to *The Interpretation of Dreams*, and later works such as *Beyond the Pleasure Principle* add further analysis to the topic of death. However, as Hobson and Revonsuo discount the meaningfulness of interpreting latent content, if using the theories strictly, only Freud and Jung's theories can be related to this deeper level of analysis, and the topics of separation, family and death. Importantly,

only Jung incorporates religion and discussions of a spiritual afterlife as significant aspects of dream interpretation.

Conclusion

Through practice-research, this thesis demonstrates how the dream theories of Freud, Jung, Hobson and Revonsuo, when incorporated into film-making practice, affect the production of filmic dream sequences. To achieve this overall aim, I worked through five objectives.

Initially, my research identifies and compares the core principles of Freud, Jung, Hobson and Revonsuo's dream theories, including analysis of how each theory incorporates or rejects the importance of latent dream thoughts. Studying the intricacies of Freud, Jung, Hobson and Revonsuo's dream theories was vital, to understand how to translate each theory into a basis for film production. Close analysis revealed differences and importantly, similarities, between the theories. For example, Revonsuo states dreaming originates in early man, Hobson notes that protoconsciousness is an epigenetic phenomenon (Hobson, 2015, p99), the collective unconscious is central to Jung's theories, and Freud refers to the powerful influence of phylogenetic inheritance, demonstrating clear theoretical links obscured through terminology.

Analysing and comparing the opening sequences of *8 ½* (depicting a dream) and *Falling Down* (depicting waking reality) revealed eight dream-denoting elements. I used this comparison as a basis for analysing a further 49 dream sequences, producing the answer for the first half of my research question, of which techniques denote a film sequence as depicting a dream. The findings confirm all dream sequences are produced using an overarching group of twelve dream-denoting elements, regardless of any type of film classification including year of production,

nationality, budget or genre. Additionally, I found common combinations of the dream-denoting elements which produce different styles of dream sequence.

To answer the second part of my research question, I analysed the selected sequences for any correlations with Freud, Jung, Hobson or Revonsuo's dream theories. Revonsuo's Threat Simulation Theory features most often in the selected sequences, as threat simulations contain no latent content, ensuring audiences uniformly interpret the dream sequence, maintaining a focused narrative. Additionally, the simulated threat is often premonitory, providing the protagonist with a deadly outcome which must be avoided (such as nuclear annihilation in *Terminator 2: Judgment Day*) and can introduce a dual plotline (for example, when the protagonist is unaware her boyfriend is a killer in *Blue Steel*).

Correlation with Freud's and Jung's dream theories usually occurs in a diluted form due to the complexity of undertaking detailed dream analyses. For example, in *Spellbound*, featuring a dream sequence noted for its links with Freudian theory, the dream's symbolism is only partially explained (for example, there is no explanation why a man with scissors cuts through images of eyes) and in *The Discreet Charm of the Bourgeoisie*, the soldier's dream implies Oedipal desire but doesn't investigate the latent content in any detail. Several sequences contain figures identifiable as Jungian archetypes (the shadow in *Wild Strawberries*, the anima in *Enemy*) or archetypes of transformation (the traffic jam in *8 ½*) but there is no explicit reference to Jungian theories in the sequences. Hobson and McCarley's activation-synthesis is the least common occurring of the selected theories due to the difficulty of effectively incorporating randomly generated dreams into a film without destabilising the central narrative. However, Hobson's protoconsciousness theory,

which highlights dreams as preparations for activity in waking, occurs in all films simulating threats and additionally, those depicting preparation for non-threatening tasks (such as Max in *Rushmore* solving a genius-level mathematics problem in front of his peers and becoming a hero).

Dream sequences related to PTSD most closely represent latent content, as PTSD dreams tend to exactly replay traumatic events, meaning latent and manifest content in these dreams can be considered the same (such as Lucas under attack in *Before I Go to Sleep* and Cooper crashing in *Interstellar*). However, latent content in a Freudian or Jungian sense is only ever implied (for example, in *Spellbound*, the latent causes for Ballantyne's dream are revealed to him when he is awake, and not explicitly represented in his dream).

Using the twelve dream-denoting elements provided a strong foundation for producing my own dream sequences. As my dream sequences developed, this included combining different dream-denoting elements and manipulating the elements' characteristics. For example, *Dream Three* consists of one point of view shot which places the viewer as protagonist (a variation of element four, camera technique to mimic the experience of viewing in real time) and *Forest Dream* uses a variation of element nine (alteration of colour) to represent shifts between states of dreaming consciousness. In *Night Walker*, I manipulated diegetic sound to produce internal, subjective sound (a variation of element six, exclusion / sparse use of diegetic sound) and combined this with element four (camera technique to mimic the experience of viewing in real time) to position the viewer as protagonist, creating an uncanny combination of visual close-proximity with aural distancing.

Undertaking shot-by-shot analyses of sequences by other film makers greatly informed my own practice, as dissecting each sequence revealed techniques often disguised in finished productions. Such techniques include single frame cutting used in *The Exorcist*, the shocking combination of sound and image used in *One Hour Photo*, reversing footage (used at the beginning of the original *Carrie* dream sequence) and use of uncanny imagery (for example, shot four of *8 ½*'s opening dream sequence, as some passengers smile while others hang their arms, lifeless).

As practice-based research, I have produced four works. *Forest Dream*, *Mira Dream* and *Dream Three* are dream sequences. The final piece, *Three Screens*, is a triptych with each screen featuring a waking sequence, followed by a dream sequence, concluding with a short waking sequence. Each film incorporates one or more of the selected dream theories as a central component. Combining aspects of different dream theories demonstrates the creative potential of avoiding strict adherence to a single dream theory. Selecting different dream theories and theory combinations provides film-makers with a starting point for creative exploration as opposed to restricting oneself to using a single theory in all narrative circumstances.

Through my practice I gained deeper understanding of the selected dream theories, by problem-solving how to incorporate the selected dream theories into each stage of production theoretically (so each film conceptually relates to the theory it embodies and how to incorporate representations of latent content) and practically (such as obtaining source images for each sequence using a method which emulates the selected dream theory). These findings fed back into chapters one and four.

Using the twelve dream-denoting elements to create my films enabled first-hand understanding of how the different elements interact with one another and to observe the effects of altering one or more components in a dream sequence. For example, in *Mira Dream*, I experimented with different speeds of slow motion and with playing images in series versus blending shots (such as superimposing a girl floating in an abandoned factory). Making films also developed my understanding of practical, as opposed to artistic or theoretical, reasons for constructing specific shots. For example, due to budget and logistical considerations, in *The Shadow* I used stock footage for some images, such as a statue of a man wearing a tricorn hat and a gang of male figures. This introduced elements of compromise and chance, as each image was not exactly as originally envisaged, leading to unexpected outcomes, such as altering the image's colour palette to match the statue's weathered-greens (Figs. 93 and 94) or positioning and rebalancing the composition of images in the frame (Figs. 95 and 96).

Fig. 93: Original storyboard image.



Fig. 94: Final image.



Fig. 95: Original storyboard uses full figures.



Fig. 96: medium shot of front figure in final film.



My research reveals the implications of different dream sequence production methodologies, such as problem-solving to reproduce images from dream reports in *Soviet Soup* and developing rough automatic drawings into detailed filmic images in *The Shadow*. An unexpected result included the difficulty of translating automatic storyboards into filmic dream sequences, highlighting the issue of balancing financial cost and production time.

In my practice-research I devise film-making techniques for my first three films and refine them for *Three Screens*. For example, the sound design and audio mixing techniques of *Mira Dream* developed into using only reflected sounds of reverberation for *Night Walker*. Through my film-making practice-research I developed a stronger understanding of how the 50 analysed sequences were produced, informing chapters two and three.

Thesis limitations and areas for future development

This thesis incorporates the work of four male, western dream theorists to investigate dream sequence production. Further studies could broaden the research context by focusing on female dream theorists such as Ursula Voss and Jennifer Windt. The research could also examine different cultures in which other dream theories are prominent, for example, Australian aborigines' Dreaming, and could analyse religious concepts of dreaming, such as Joseph's interpretation of the Pharaoh's dreams in the Book of Genesis.

Analyses beyond the scope of this thesis include dream sequences blurring the line between dreaming and waking reality, which I term as *waking dreams*. Examples of waking dreams include the final section of *Hour of the Wolf* (Ingmar Bergman, 1968) in which protagonist Johan Borg (played by Max von Sydow), an angst-ridden painter suffering from sleep deprivation, undergoes a surreal ceremony preparing him for burial and sequences from *Videodrome* (David Cronenberg, 1983) including protagonist Max Renn (played by James Woods), an ambitious television producer, inserting a video tape into his stomach. In an infamous nightmare sequence in *Rosemary's Baby* (Roman Polanski, 1968), Rosemary (played by Mia Farrow) suffers a drug-induced dream but part way through realises she is awake and being raped by the devil, stating, 'This is no dream! This is really happening!'

This thesis' dream sequence analyses could investigate additional stylistic links and influences. For example, in *Ruby Sparks*, Calvin dreams of Ruby. When Calvin awakes, he discovers Ruby has become real and lives in his house whilst Ruby isn't aware of being imagined into existence. In the science fiction film *Solaris* (Andrei Tarkovsky, 1972), the protagonist, Kris (played by Donatas Banionis), goes on a

mission to investigate a mysterious world which brings memories and fantasises to life. During the mission, Kris contemplates about his dead wife, Hari, and she comes into existence, unaware of how she came to be. As with *Ruby Sparks*, Hari resists the protagonist's control, becoming violent and suicidal. Similarly, in *Inception* (Christopher Nolan, 2010), protagonist, Cobb (played by Leonardo Di Caprio), cannot forget about his deceased wife and constructs a dream world in which they can live together. Cobb's wife is a mental construction, is suicidal and violent, and objects to Cobb keeping her alive. Use of element nine (altered colour) is utilised in a similar way in *Ruby Sparks* and *Solaris*, switching from locations of sterile, cold whites to warmer tones when Calvin meets Ruby and Kris meets Hari. Additionally, a key plot point in *Inception* is a small spinning top which shows Cobb if he is awake or dreaming; in *Solaris*, there is a rocking bottle top producing a similar effect.

Other future areas of theoretical study include researching whether the use of specific dream-denoting elements differs by genre or era, or by the director's gender or nationality; analysis of films which consist mainly of dream content such as *The Wizard of Oz* and *The Woman in the Window*; and dream sequences in animated film. Additionally, a comparison of dream sequences featuring male and female protagonists could reveal gendered differences in narrative content and the use of dream-denoting elements.

Further research could focus specifically on sound within dream sequences, allowing finer-grained analysis of element six (exclusion / sparse use of diegetic sound). This could include comparing the music of waking reality and dream sequences, analysing and categorising which types of diegetic sound are retained in

dream sequences, and further analysis of the use of non-diegetic sound, particularly as an emotional signifier.

Related works could research the influence of surrealist films on dream sequences such as *Un Chien Andalou*, *The Seashell and the Clergyman* and *The Blood of a Poet* (Jean Cocteau, 1930) and newer works such as *Eraserhead* (David Lynch, 1977). In experimental film, this thesis' methodologies could inform the work of practitioners wishing to research the relationship between film and dreaming.

In my own practice-research, I plan to produce dream sequences using immersive 360 audio-visual technology such as virtual-reality headsets and ambisonic sound, and installation-based works, to investigate how different methods of exhibition affect audience experience. An area of related practice-research is the analysis of other altered states of consciousness such as hallucinations and visions, to discover denoting elements in existing sequences and combine with selected psychological and neurodynamic theories, to produce a series of films.

There is definite scope for research into the production of dream sequences as a form of art therapy. This thesis' findings, particularly in relation to the production methodology of *Dream Three* and *Soviet Soup*, could form the basis for collaboration between film-makers and practitioners working in the fields of mental health, social work, and memory (for example, recovery from head trauma, recovering coma patients, Alzheimer patients, and working with senior citizens as a method for exercising memory). The research could initially use *Dream Three's* methodology, in which the patient provides a dream report and is encouraged to contribute to each stage of film-making.

I hope that my completed thesis will benefit others including researchers, film-makers and recipients of the work such as audience members and those receiving art therapy.

Bibliography

- Ades D. (1974) *Dada and Surrealism* London: Thames and Hudson
- Allen W. (1971) *Bananas* [Motion Picture]. USA: Jack Rollins & Charles H. Joffe Productions
- Allers R. & Minkoff R. (1994) *The Lion King* [Motion Picture]. USA: Walt Disney Pictures
- Amirpour A.L. (2014) *A Girl Walks Home Alone at Night* [Motion Picture]. USA: Say Ahh Productions, SpectreVision, Logan Pictures, Black Light District
- Anderson W. (1998) *Rushmore* [Motion Picture]. USA: American Empirical Pictures, Touchstone Pictures
- Atkin, A. Summer 2013 Edition. "Peirce's Theory of Signs", *The Stanford Encyclopedia of Philosophy* Edward N. Zalta (ed.), Stanford, Stanford University Available from: <http://plato.stanford.edu/archives/sum2013/entries/peirce-semiotics/> [Date accessed 30 10 13].
- Barrett D. (Ed.) (2001) *Trauma and Dreams* Massachusetts: Harvard University Press
- Barthes R. (1977) *Image Music Text* London: Fontana Press
- Bauer P. (2004) Oh Where Oh Where Have Those Early Memories Gone? A Developmental Perspective on Childhood Amnesia. *American Psychological Association*. Retrieved from: <http://www.apa.org/science/about/psa/2004/12/bauer.aspx> [Date accessed 15 7 15]
- Bazin A. (1967) *What is Cinema?* Berkeley: University of California Press
- Bergman I. (1969) *The Passion of Anna* [Motion Picture]. Sweden: Cinematograph AB, Svensk Filmindustri (SF)
- Bergman I. (1957) *Wild Strawberries* [Motion Picture]. Sweden: Svensk Filmindustri (SF)
- Bergman I. (1968) *Hour of the Wolf* [Motion Picture]. Sweden: Svensk Filmindustri (SF)
- Bettelheim B. (1991) *The Uses of Enchantment* London: Penguin Books
- Bigelow K. (1990) *Blue Steel* [Motion Picture]. USA: Lightning Pictures, Precision Films, Mack-Taylor Productions, Vestron Pictures

- Black S. (2013) *Iron Man 3* [Motion Picture]. USA: Marvel Studios, Paramount Pictures, DMG Entertainment, Illusion Entertainment, Taurus Studios
- Bordwell D. (1979) *The Art Cinema as a Mode of Film Practice*. Retrieved from: <http://academic.uprm.edu/mleonard/theorydocs/readings/Bordwell.pdf> [Date accessed 17 3 15]
- Bordwell D. (2010) *The Classical Hollywood Cinema Twenty-Five Years Along*. davidbordwell.net, University of Wisconsin-Madison
Available at: <http://www.davidbordwell.net/essays/classical.php>
[Date accessed 19 3 16]
- Bordwell D., Steiger J., & Thompson K. (1988) *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960* London: Routledge
- Bordwell D. (1991) *Making Meaning: Inference and Rhetoric in the Interpretation of Cinema* Massachusetts: Harvard University Press
- Bosnak R. (2001) Integration and Ambivalence in Patients. In: Barrett D., ed. *Trauma and Dreams* pp.217 – 230 Massachusetts: Harvard University Press
- Botz-Bornstein T. (2008) *Films and Dreams* Maryland: Lexington Books
- Bradley F. (1997) *Surrealism* Cambridge: Cambridge University Press
- Branigan E. R. (1984) *Point of View in the Cinema* Berlin: Mouton Publishers
- Breton A. (1924) *Manifesto of Surrealism*. Available at: <https://www.tcf.ua.edu/Classes/Jbutler/T340/SurManifesto/ManifestoOfSurrealism.htm> [Date accessed 6 / 5 / 19]
- Buñuel L. (1967) *Belle De Jour* [Motion Picture]. France / Italy: Paris Film Productions, Five Film
- Buñuel L. (1978) Poetry and Cinema. In: Mellen J., ed. *World of Luis Buñuel* pp. 105-110 New York: Oxford University Press
- Buñuel L. (1983) *My Last Sigh* Minnesota: University of Minnesota Press
- Buñuel L. (1930) *L'age D'or* [Motion Picture]. France: Vicomte de Noailles
- Buñuel L. (1972) *The Discreet Charm of the Bourgeoisie* [Motion Picture]. France: Studiocanal
- Buñuel L. (1974) *The Phantom of Liberty* [Motion Picture]. Italy / France: Euro International Film (EIA), Greenwich Film Productions

- Buñuel L. (1929) *Un Chien Andalou* [Motion Picture]. France: Les Grands Films Classiques
- Buscombe E. (1985) Some Visual Motifs of Film Noir. In: Nichols B., ed. *Movies and Methods Volume II* pp. 83-91 California: University of California Press
- Campion J. (1993) *The Piano* [Motion Picture]. New Zealand / Australia / France: CiBy 2000, Jan Chapman Productions, The Australian Film Commission, New South Wales Film & Television Office
- Cameron J. (1986) *Aliens* [Motion Picture]. USA, UK: Twentieth Century Fox, Brandywine Productions, SLM Production Group
- Cameron J. (1991) *Terminator 2: Judgment Day* [Motion Picture]. USA / France: Carolco Pictures, Pacific Western, Lightstorm Entertainment, Canal+, T2 Productions
- Carriere J-C. (1970) The Buñuel Mystery. In: Mellen J. (Ed.) *World of Luis Buñuel* pp. 90-102 New York: Oxford University Press
- Chapman, D., Ramage, M. 2013. *Introduction: The Difference That Makes a Difference* Milton Keynes, Open University Available from: <http://www.triple-c.at/index.php/tripleC/article/view/453> [Date accessed 19 11 13].
- Chen C., Chen Y. () *Visual Perception Survey Project – Perceiving Motion and Events* [pdf] Available at: http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKewjzzZ2zpojQAhXDBsAKHfmhBAMQFgggMAA&url=http%3A%2F%2Fwww.ics.uci.edu%2F~majumder%2Fvispercep%2Fpaper08%2FPerceiving_Motion_and_Events.pdf&usg=AFQjCNFgyCwDsbTkUFe3Uy2ZxXRMdQG_1g&bvm=bv.137132246,d.d24 [Date accessed 1 / 11 / 16]
- Chion M. (1994) *Audio-Vision Sound on Screen* New York: Columbia University Press
- Cocteau J. (1932) *The Blood of a Poet* [Motion Picture]. France: Vicomte de Noailles
- Coombs N. (2008) *Studying Surrealist and Fantasy Cinema* Leighton Buzzard: Auteur
- Craven W. (1984) *A Nightmare on Elm Street* [Motion Picture]. USA: New Line Cinema, Media Home Entertainment, Smart Egg Pictures, The Elm Street Venture
- Cronenberg D. (1986) *The Fly* [Motion Picture]. USA / UK / Canada: SLM Production Group, Brookfilms
- Cronenberg D. (1983) *Videodrome* [Motion Picture]. Canada: Filmplan International, Guardian Trust Company, Canadian Film Development Corporation (CFDC), Famous Players Limited
- Currie G. (2008) *Image and Mind* Cambridge: Cambridge University Press

- Darnell E. & McGrath T. (2005) *Madagascar* [Motion Picture]. USA: Dreamworks Animation, Pacific Data Images (PDI)
- Dayton J. & Faris V. (2012) *Ruby Sparks* [Motion Picture]. USA: Fox Searchlight Pictures, Bona Fide Productions, DragonCove Studios
- Denis C. (2009) *White Material* [Motion Picture]. France / Cameroon: Why Not Productions, Wild Bunch, France 3 Cinema
- De Palma B. (1976) *Carrie* [Motion Picture]. USA: Red Bank Films
- Deren M. (1944) *At Land* [Motion Picture]. USA: Maya Deren
- Deren M. (1943) *Meshes of the Afternoon* [Motion Picture]. USA: Maya Deren
- Domhoff W.G. (2016) *The "Purpose" of Dreams* University of California, Santa Cruz Available from: <http://www2.ucsc.edu/dreams/Articles/purpose.html> [Date accessed 1 / 11 / 16]
- Dulac G. (1928) *La Coquille et le Clergyman* [Motion Picture]. France: Delia Film
- Ebert R. (1993) *Falling Down* Available at: <http://www.rogerebert.com/reviews/falling-down-1993> [Date accessed 17 3 15]
- Eisenstein S. (1968) *The Film Sense* London: Faber and Faber
- Elsaesser T. & Buckland W. (2002) *Studying Contemporary American Film: A Guide to Movie Analysis* London: Arnold
- Étaix P. (1969) *Le Grand Amour* [Motion Picture]. France: C.A.P.A.C., Les Productions de la Guéville, Madeleine Films
- Everaert-Desmedt, N. 2011. *Peirce's Semiotics* Louis Hebert (dir.), Rimouski (Quebec), Brussels, University Saint-Louis, Brussels Available from: <http://www.signosemio.com/peirce/semiotics.asp> [Date accessed 4 1 14].
- Faulkner J. (2005) *Freud's Concept of the Death Drive and its Relation to the Superego* Minerva - An Internet Journal of Philosophy Vol. 9 2005 Available at: <http://www.minerva.mic.ul.ie/vol9/Freud.html> [Date accessed 19 3 16]
- Fellini F. (1963) *8½* [Motion Picture]. Italy / France: Cineriz, Francinex
- Fleming V. (1939) *The Wizard of Oz* [Motion Picture]. USA: Metro-Goldwyn-Mayer

(MGM)

Figgis M. (2007) *Digital Film-Making* London: Faber and Faber

Frager R. & Fadiman J. (1998) *Personality & Personal Growth (4th Edition)* New York: Longman

Friedkin W. (1973) *The Exorcist* [Motion Picture]. USA: Warner Bros., Hoya Productions

Freud S. (1971) *Beyond The Pleasure Principle* London: The Hogarth Press

Freud S. (1913) *The Interpretation of Dreams* New York: The MacMillan Company

Freud S. (1997) *The Interpretation of Dreams* Ware: Wordsworth Editions Limited

Freud S. (2003) *The Uncanny* London: Penguin Books

Freud S. (1919) *The "Uncanny"*. MIT, Massachusetts Available from:
<http://web.mit.edu/allanmc/www/freud1.pdf>
[Date accessed 17 3 15]

Freud S. (2003) Screen Memories In: *The Uncanny* pp. 1 – 22 London: Penguin Books

Freud S. (2010) Civilisation and Its Discontents. In: *The Complete Works* Available at:
https://www.google.co.uk/?gws_rd=ssl#q=freud+complete+works&spf=78
[Date accessed 3 3 17] pp.4483 - 4553

Freud S. (2010) Remarks on the Theory and Practice of Dream Interpretation. In: *The Complete Works* Available at:
https://www.google.co.uk/?gws_rd=ssl#q=freud+complete+works&spf=78
[Date accessed 3 3 17] pp.4049 - 4062

Freud S. (2010) The Ego and the Id. In: *The Complete Works* Available at:
https://www.google.co.uk/?gws_rd=ssl#q=freud+complete+works&spf=78
[Date accessed 3 3 17] pp.3965 - 4012

Freud S. (2010) The Future of an Illusion. In: *The Complete Works* Available at:
https://www.google.co.uk/?gws_rd=ssl#q=freud+complete+works&spf=78
[Date accessed 3 3 17] pp.4436 - 4482

Freud S. (2010) The History Of An Infantile Neurosis. In: *The Complete Works* Available at:
https://www.google.co.uk/?gws_rd=ssl#q=freud+complete+works&spf=78
[Date accessed 3 3 17] pp.3518 - 3615

Freud S. (2010) *The Complete Works* Retrieved from https://www.valas.fr/IMG/pdf/Freud_Complete_Works.pdf

Fulci L. (1971) *A Lizard in a Woman's Skin* [Motion Picture]. Italy / Spain / France: International Apollo Films, Les Films Corona, Atlántida Films

Gilbert D. T. & Wilson T. D. (2007) Prospection: Experiencing the Future *American Association for the Advancement of Science AAAS Vol. 317*, 1351-1354. doi: DOI: 10.1126/science.1144161 Available at: <http://science.sciencemag.org/content/317/5843/1351> [Date accessed 19 4 17]

Glew B. (2015) *Forest Dream* [Film]. UK: Robinwood Studios

Glew B. (2015) *Hobson McCarley Dream Three* [Film]. UK: Robinwood Studios

Glew B. (2015) *Mira Dream* [Film]. UK: Robinwood Studios

Glew B. (2016) *Dream Three* [Film]. UK: Robinwood Studios

Glew B. (2018) *Night Walker* [Film]. UK: Robinwood Studios

Glew B. (2018) *Waking Reality* [Film]. UK: Robinwood Studios

Glew B. (2018) *Soviet Soup* [Film]. UK: Robinwood Studios

Glew B. (2019) *The Shadow* [Film]. UK: Robinwood Studios

Glew B. (2019) *Three Screens* [Film]. UK: Robinwood Studios

Gondry M. (2006) *The Science of Sleep* [Motion Picture]. France / Italy: Partizan Films, Gaumont, France 3 Cinéma, Canal+, TPS Star, Mikado Film

Haneke M. (2005) *Caché* [Motion Picture]. France / Austria / Germany / Italy: Les Films du Losange, Wega Film, Bavaria Film, BIM Distribuzione

Has W. (1965) *The Saragossa Manuscript* [Motion Picture]. Poland: Kamera Film Unit

Hartmann E. (2001) Who Develops PTSD Nightmares and Who Doesn't. In: Barrett D., ed. *Trauma and Dreams* pp.100-113 Massachusetts: Harvard University Press
Hazanavicius M. (2011) *The Artist* [Motion Picture]. France / Belgium / USA: Studio 37, La Petite Reine, La Classe Américaine, JD Prod, France 3 Cinéma, Jouror Productions, uFilm

Heeger D. (2006) *Perception Lecture Notes: Visual Motion Perception* New York University, New York, Available at:

<http://www.cns.nyu.edu/~david/courses/perception/lecturenotes/motion/motion.html>

[Date accessed 1 / 11 / 16]

Hewitson O. (2017) *What Does Lacan Say About... Desire?* Available at:
<http://www.lacanonline.com/index/2010/05/what-does-lacan-say-about-desire/>

[Date accessed 5 5 17]

Hitchcock A. (1945) *Spellbound* [Motion Picture]. USA: Selznick International Pictures, Vanguard Films

Hitchcock A. (1958) *Vertigo* [Motion Picture]. USA: Alfred J. Hitchcock Productions

Hobson A. (2015) *Psychodynamic Neurology* Florida: CRC Press

Hobson J. A. & Wohl H. (2005) *Angels to Neurons: Art and the New Science of Dreaming* Parma: Mattioli 1885

Hobson J. A. (2009) REM sleep and dreaming: towards a theory of protoconsciousness *Nature Reviews Neuroscience Vol. 10*. doi:10.1038/nrn2716
Available from: http://www.culturacientifica.org/textosudc/sueno_01.pdf

[Date accessed 21 1 15]

Hobson J. A. (1988) *The Dreaming Brain* New York: Basic Book Inc.

Hobson P. & Yakely J. (2017) *Evidence base of Psychoanalytic Psychotherapy* The Institute of Psychoanalysis, London Available from:

<http://psychoanalysis.org.uk/resources/evidence-base-of-psychoanalytic-psychotherapy>

[Date accessed 9 5 17]

Hui R. & Miller C. (2007) *Shrek The Third* [Motion Picture]. USA: DreamWorks Animation, Pacific Data Images (PDI)

Ingster B. (1940) *Stranger on the 3rd Floor* [Motion Picture]. USA: RKO Radio Pictures

Joffe R. (2014) *Before I Go to Sleep* [Motion Picture]. UK / USA / France / Sweden: Scott Free Productions, Millennium Films, Film Vast, Filmgate Films, StudioCanal

Johnston J. (2001) *Jurassic Park 3* [Motion Picture]. USA: Universal Pictures, Amblin Entertainment

Juan Jr, E. San, 2004. *CHARLES SANDERS PEIRCE'S THEORY OF SIGNS, MEANING, AND LITERARY INTERPRETATION* New York City, St John's University

Available at: <http://facpub.stjohns.edu/~ganterg/sjureview/vol2-2/06Juan-Knowledge.htm> [Date accessed 14 11 13].

- Jung C. G. (1975) *The Archetypes and the Collective Unconscious* London: Routledge and Kegan Paul
- Jung C. G. (1991) *The Archetypes and the Collective Unconscious* London: Routledge
- Jung C. G. (1970) *Freud and Psychoanalysis* London: Routledge and Kegan Paul
- Jung C. G. (1961) *Modern Man in Search of a Soul* London: Routledge and Kegan Paul Ltd
- Jung C. G. (1979) *Part II: Aion: Researches into the Phenomenology of the Self* New York: Princeton University Press
- Jung C.G. (1970) *Aion Researches into the Phenomenology of the Self: Second Edition* Princeton: Princeton University Press
- Jung C. G. (1976) *Symbols of Transformation* New York: Princeton University Press
- Keaton B. (1924) *Sherlock Junior* [Motion Picture]. USA: Buster Keaton Productions
- Keller S. (2012) Introduction In: Keller S., Paul J.N., ed. *Jean Epstein Critical Essays and New Translations* Amsterdam pp. 23-50 University Press: Amsterdam
- Ketcham C. (1976) *Federico Fellini The Search for a New Mythology* New York: Paulist Press
- Kent J. (2014) *The Babadook* [Motion Picture]. Australia, Canada: Screen Australia, Causeway Films, The South Australian Film Corporation, Smoking Gun Productions, Entertainment One
- King J. & Sheehan J. (2001) The Use of Dreams with Incest Survivors. In: Barrett D., ed. *Trauma and Dreams* pp.56 - 67 Massachusetts: Harvard University Press
- Kosinski J. (2013) *Oblivion* [Motion Picture]. USA: Universal Pictures, Relativity Media, Monolith Pictures (III), Chernin Entertainment, Radical Studios
- Kubrick S. (1968) *2001: A Space Odyssey* [Motion Picture]. UK / USA: Metro-Goldwyn-Mayer (MGM), Stanley Kubrick Productions
- Kubrick S. (1999) *Eyes Wide Shut* [Motion Picture]. UK / USA: Warner Bros., Stanley Kubrick Productions, Hobby Films, Pole Star
- Kurosawa A. (1990) *Dreams* [Motion Picture]. Japan / USA: Warner Bros., Akira Kurosawa USA
- Kurosawa A. (1980) *Kagemusha* [Motion Picture]. Japan / USA: Kurosawa Production Co., Toho Company, Twentieth Century Fox, Zoetrope Studios

- Lacan J. (2003) *Écrits: a selection* London: Routledge
- Lacan, J. (1977) The Mirror Stage as Formative of the Function of the I as revealed in Psychoanalytic Experience. *Écrits: a Selection*. Trans. Alan Sheridan. London: Tavistock
- Laing R. D. (1970) *The Divided Self* Middlesex: Penguin
- Laing R. D. (1972) *Self and Others* Middlesex: Penguin
- Laing R. D. (1990) *The Politics of Experience and The Bird of Paradise* London: Penguin Books
- Lambert M. (1989) *Pet Semetary* [Motion Picture]. USA: Paramount Pictures, Laurel Productions
- Landis J. (1981) *An American Werewolf in London* [Motion Picture]. UK / USA: PolyGram Filmed Entertainment, Lycanthrope Films
- Lang F. (1944) *The Woman in the Window* [Motion Picture]. USA: Christie Corporation, International Pictures (I)
- Lynch D. (1980) *The Elephant Man* [Motion Picture]. USA / UK: Brookfilms
- Lynch D. (1977) *Eraserhead* [Motion Picture]. USA: American Film Institute (AFI), Libra Films
- Lynch D. (1997) *Lost Highway* [Motion Picture]. France / USA: CiBy 2000, Asymmetrical Productions, Lost Highway Productions LLC
- Malle L. (1974) *A Human Condition* [Documentary Film]. France: Nouvelles Editions de Films
- Mangold J. (2013) *The Wolverine* [Motion Picture]. USA, UK: Twentieth Century Fox, Marvel Entertainment, Donners' Company, TSG Entertainment, Ingenious Media, Big Screen Productions
- Mansfield N. (2000) *Subjectivity* New York: New York University Press
- Martinez-Conde S., Macknik S.L., Hubel D.H. (2004) *The Role of Fixational Eye Movements in Visual Perception* Barrow Neurological Institute, Arizona
Available from:
<http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKewikuePzpljQAhXKL8AKHUveApkQFgggMAA&url=http%3A%2F%2Fhubel.med.harvard.edu%2Fpapers%2FHubelMartinez->

[condeetal2004NationReviewNeuroscience.pdf&usg=AFQjCNGQYpnm86aDMesf3DIS6hdmBmA4A](#)

[Date accessed 1 / 11 / 16]

McLuhan M. (2004) *Understanding Media* London: Routledge Classics

Méliès (1898) *The Astronomer's Dream* [Motion Picture]. France: George Méliès, Star-Film

Mendes S. (1999) *American Beauty* [Motion Picture]. USA: DreamWorks, Jinks/Cohen Company

Mercado G. (2011) *The Filmmaker's Eye* Oxford: Focal Press

Mobbs D., Weiskopf N., Lau H.C., Featherstone E., Dolan R.J., Frith C.D. (2006) *The Kuleshov Effect: the influence of contextual framing on emotional attributions* National Center for Biotechnology Information, Bethesda

Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1810228/#B54>

[Date accessed 1 / 11 / 16]

Morris R. (1992) *How Italian Cinema came to be Dominated by the Dubbers* Available at: <http://www.roderickconwaymorris.com/Articles/338.html> [Date accessed 17 3 15]

Murch W. (2001) *In the Blink of an Eye* California: Silman-James Press

Nichols B. (1994) *Blurred Boundaries* Indiana: Indiana University Press

Nielsen T. A., Russell, R.A. (1992) *The Day-Residue and Dream-Lag Effects: A Literature Review and Limited Replication of Two Temporal Effects in Dream Formation* [pdf] Human Sciences Press Inc., New York

Available at: https://www.researchgate.net/publication/254735193_The_Day-Residue_and_Dream-

[Date accessed 1 / 11 / 16]

Nir Y., Tononi G. (2010) Dreaming and the brain: from phenomenology to neurophysiology *Trends Cogn Sci.* 14(2): pp. 88-100 doi: 10.1016/j.tics.2009.12.001

Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2814941/>

[Date accessed 14 / 1 / 18]

Nolan (2010) *Inception* [Motion Picture]. USA: Warner Bros., Legendary Pictures, Syncopy

Nolan C. (2014) *Interstellar* [Motion Picture]. USA: Paramount Pictures, Warner Bros., Legendary Pictures, Lynda Obst Productions, Syncopy

Oatley K. (1978) *Perceptions and Representations the theoretical bases of brain*

research and psychology London: University Paperbacks

Orpen V. (2003) *Film Editing The Art of the Expressive* London: Wallflower

Peckinpah S. (1969) *The Wild Bunch* [Motion Picture]. USA, Mexico: Warner Brothers/Seven Arts

Peirce K. (2013) *Carrie* [Motion Picture]. USA: Metro-Goldwyn-Mayer (MGM), Screen Gems, Misher Films

Persson P. (2003) *Understanding Cinema* Cambridge: Cambridge University Press

Place J.A., Peterson L.S. (1976) Some Visual Motifs of Film Noir. In: Nichols B., ed. *Movies and Methods Volume 1* pp. 325-338 California: University of California Press

Polanski R. (1968) *Rosemary's Baby* [Motion Picture]. USA: William Castle Productions

Porfirio R. (2002) Billy Wilder Interviewed by Robert Porfirio In: Porfirio R., Silver A., Ursini J., ed. *Film Noir Reader 3* pp. 101-119 New York: Limelight Editions

Ramsay L. (2011) *We Need to Talk About Kevin* [Motion Picture]. UK / USA: BBC Films, UK Film Council, Footprint Investment Fund, Lipsync Productions

Random.org (2016) *True Random Number Generator* RANDOM.ORG Available at: <https://www.random.org/>
[Date accessed 1 / 11 / 16]

Ray M. (1927) *Emak-Bakia* [Motion Picture]. France: Man Ray

Ray M. (1928) *L'étoile de mer* [Motion Picture]. France: Man Ray

Ray S. (1966) *Nayak* [Motion Picture]. India: R.D.Banshal & Co.

Revonsuo, A. (2001) Can functional brain imaging discover consciousness in the brain? *Journal of Consciousness Studies* Volume 8, No.3 pp. 3-23 Thorverton: Imprint Academic

Revonsuo A. (2000) The reinterpretation of dreams: An evolutionary hypothesis of the function of dreaming *Behavioural and Brain Sciences Vol.23*, 793-1121. Retrieved from http://www.unil.ch/files/live/sites/ln/files/shared/Revonsuo_1.pdf
[Date accessed 19 3 16]

Reisz K., Millar G. (1991) *The Technique of Film Editing* Surrey: Focal Press

Renoir J. (1947) *The Woman on the Beach* [Motion Picture]. USA: RKO Radio Pictures

- Richter H. (1947) *Dreams That Money Can Buy* [Motion Picture]. USA: Art of This Century Films
- Romanek M. (2002) *One Hour Photo* [Motion Picture]. USA: Fox Searchlight Pictures, Catch 23 Entertainment, Killer Films, Laughlin Park Pictures, Madjak Films
- Ruben J. (1984) *Dreamscape* [Motion Picture]. USA: Zupnik-Curtis Enterprises, Bella Productions, Chevy Chase Films, Weintraub Entertainment Group
- Rushton R. & Bettinson G. (2010) *What is Film Theory?* Berkshire: Open University Press
- Saussure F. de. (1959) *Course in General Linguistics* New York: Philosophical Library
- Schumacher J. (1992) *Falling Down* [Motion Picture]. France / USA / UK: Alcor Films, Canal+, Regency Enterprises, Warner Bros.
- Schaffner F. J. (1973) *Papillon* [Motion Picture]. France / USA: Allied Artists Pictures, Corona-General, Solar Productions
- Scorsese M. (1980) *Raging Bull* [Motion Picture]. USA: Chartoff-Winkler Productions
- Sharpsteen B. (1941) *Dumbo* [Motion Picture]. USA: Walt Disney Productions
- Sibielski (2014) Gendering the Monster Within: Biological Essentialism, Sexual Difference, and Changing Symbolic Functions of the Monster in Popular Werewolf Texts. In: Levina M., Bui M., ed. *Monster Culture in the 21st Century A Reader* pp. 115-129 New York: Bloomsbury
- Snyder Z. (2016) *Batman v Superman: Dawn of Justice* [Motion Picture]. USA: Warner Bros., Atlas Entertainment, Cruel & Unusual Films, DC Comics, DC Entertainment, RatPac-Dune Entertainment, Zak Productions
- Snyder Z. (2009) *Watchmen* [Motion Picture]. USA: Warner Bros., Paramount Pictures, Legendary Entertainment, Lawrence Gordon Productions, DC Comics
- Sobchack V. (2004) *Carnal Thoughts: Embodiment and Moving Image Culture* California: University of California Press
- Sonnenschein D. (2001) *Sound Design* Michigan: Michael Wiese Productions
- Steenbergen B., van der Kamp J., Verneau M., Jongbloed-Pereboom M., & Master RS. (2010) Implicit and explicit learning: applications from basic research to sports for individuals with impaired movement dynamics *Disability and Rehabilitation Vol. 32(18)*, 1509–1516. doi: 10.3109/09638288.2010.497035. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/20575752>
[Date accessed 26 4 17]

Stoddard F. J. et al (2001) Dreams and Nightmares of Burned Children. In: Barrett D., ed. *Trauma and Dreams* pp.25 - 45 Massachusetts: Harvard University Press

Tarkovsky A. (1983) *Nostalgia* [Motion Picture]. Italy / USSR: Opera Film Produzione, Rai 2, Sovinfilm

Tarkovsky A. (1989) *Sculpting In Time* Internet Archive, San Francisco
Available from: https://archive.org/details/Andrei_Tarkovsky_Sculpting_In_Time
[Date accessed 19 3 16]

Tarkovsky A. (1989) *Sculpting in Time* Austin: University of Texas Press

Tarkovsky A. (1972) *Solaris* [Motion Picture]. USSR: Mosfilm, Chetvyortoe Tvorcheskoe Obedinenie

Tarkovsky A. (1986) *The Sacrifice* [Motion Picture]. Sweden / UK / France: Svenska Filminstitutet (SFI), Argos Films, Film Four International, Josephson & Nykvist HB, Sveriges Television (SVT), Sandrews

Thornton S. P. (2017) *Sigmund Freud (1856 – 1939)* Internet Encyclopaedia of Philosophy
Retrieved from <http://www.iep.utm.edu/freud/> [Date accessed 9 5 17]

Turano K.A., Heidenreich S.M. (1999) *Eye movements affect the perceived speed of visual motion* [pdf] University of San Francisco, San Francisco
Available at: <http://www.sciencedirect.com/science/article/pii/S0042698998001746>
[Date accessed 1 / 11 / 16]

US Auto Industry (2012) *Spinning Levers – How a Transmission Works (1936)*
Available at: <https://www.youtube.com/watch?v=JOLtS4VUcvQ>
[Date accessed 8 / 7 / 16]

Valli K. & Revonsuo A. (2009) The threat simulation theory in light of recent empirical evidence: A review *American Journal of Psychology Spring 2009, Vol. 122, 17–38*
Available at: <https://www.ncbi.nlm.nih.gov/pubmed/19353929> [Date accessed 5 4 17]

Van Sijll J. (2005) *Cinematic Storytelling* California: Michael Wiese Productions

Verburgh L., Scherder EJ., van Lange PA., & Oosterlaan J. (2016) The key to success in elite athletes? Explicit and implicit motor learning in youth elite and non-elite soccer players *Journal of Sports Sciences, 34 (18), 1782-90*. doi. 10.1080/02640414.2015.1137344.
<https://www.ncbi.nlm.nih.gov/pubmed/26788666>
[Date accessed 26 4 17]

- Villeneuve D. (2013) *Enemy* [Motion Picture]. Canada / Spain / France: Pathe International, Entertainment One, Rhombus Media, Roxbury, micro_scope, Mecanismo Films
- Vogler C. (2007) *The Writer's Journey* Michigan: Michael Wiese Productions
- Voss U., Holzmann R., Tuin I., Hobson A. (2009) Lucid dreaming: a state of consciousness with features of both waking and non-lucid dreaming. *SLEEP* 32(9): pp. 1191 - 1200
- Whitecross M. (2010) *Sex & Drugs & Rock & Roll* [Motion Picture]. UK: Aegis Film Fund, DJ Films, Hindsight Media, Lipsync Productions, UK Film Council
- Willett J., ed. (1967) *Brecht On Theatre* London: Methuen Drama
- Williams L. (1991) Film Bodies: Gender, Genre, and Excess *Film Quarterly* pp. 2-13 Vol. 44, No. 4 (Summer, 1991) California: University of California Press
Available at:
http://www.composingdigitalmedia.org/mca_f14/MCA_reads/williams,linda_film_bodies.pdf [Date accessed 5 / 7 / 19]
- Wilmer H. A. (2001) The Healing Nightmare: War Dreams of Vietnam Veterans. In: Barrett D., ed. *Trauma and Dreams* pp.85 - 99 Massachusetts: Harvard University Press
- Wilson T.D. (2002) *Strangers to Ourselves Discovering the Adaptive Unconscious* Massachusetts: Harvard University Press
- Wilson T. D. & Bar-Anan Y. (2008) The Unseen Mind *American Association for the Advancement of Science AAAS* Vol. 321, 1046-1047. doi: 10.1126/science.1163029
Available at: <http://science.sciencemag.org/content/321/5892/1046>
[Date accessed 19 4 17]
- Windt J.M. (2013) Reporting dream experience: Why (not) to be skeptical about dream reports. *Front. Hum. NeuroSci.* 7:708 doi: 10.3389/fnhum.2013.00708
- Windt J.M. (2010) *The Immersive Spatiotemporal Hallucination Model of Dreaming* [pdf] Australia: Monash University
Available from:
https://www.researchgate.net/publication/225753597_The_Immersive_Spatiotemporal_Hallucination_Model_of_Dreaming
[Date accessed 1 / 11 / 16]
- Wollen P. (1970) *Signs and Meaning in the Cinema* London: Thames & Hudson
- Zettl H. (1999) *Sight Sound Motion* California: Wadsworth Publishing Company
- Zizek S. (2006) *How to Read Lacan* London: Granta Book

Appendix 1: The twelve dream-denoting elements

1) The sequence violates the diegetic world's rules of cause and effect / nature / physics.

Examples include: dead characters appearing as alive (*The Discreet Charm of the Bourgeoisie, Dreams*), an electric razor causing facial hair to grow (*The Science of Sleep*), a woman with a spider's head (*Enemy*), a zombie Nazi attack (*An American Werewolf in London*), the protagonist flying (8 ½), movement in slow motion (*A Girl Walks Home Alone at Night, Terminator 2: Judgment Day*).

2) Difficult to understand the logic governing how the protagonist and other characters act.

Examples include: the protagonist is carried, tied to a cross, by a group of monks (*Bananas*), the protagonist and other characters act mysteriously (*The Sacrifice, Nostalgia*), protagonist and partner ignore a nuclear explosion (*Watchmen*).

3) The manner in which characters react to the protagonist is unusual / motivation for other characters' reaction toward the protagonist is unclear.

Examples include: characters gazing at the protagonist without reason (8 ½), the protagonist is attacked for no reason (*The Passion of Anna, An American Werewolf in London*), medical staff recoil in horror at the protagonist (*The Fly*).

4) Camera technique to mimic the experience of viewing in real time / to encourage the viewer to imagine from the perspective of the protagonist.

Examples include: extensive use of point of view (POV) shots (*Elephant Man*), hybrid POV / over the shoulder shots (*Wolverine, Interstellar*), panning, tilting and camera movement to replicate the protagonist's physical movement (8 ½).

5) Filmic technique to shock or surprise.

Examples include: panning to reveal or hide details (*Kagemusha*), freeze-frames (8 ½), sudden camera movements or zooms and pulls (*An American Werewolf in London*), editing to abruptly change image and / or introduce new characters (*The Exorcist, Lost Highway*).

6) Exclusion / sparse use of diegetic sound.

Examples include: removing all exterior natural sound (*Dreamscape, Brian De Palma's Carrie*), removing spot sounds such as footsteps and character movement (*Nayak*), removing all diegetic sound (*Bananas, Vertigo*).

7) Starting / ending the sequence with an action which clearly signifies a dream took place.

Examples include: protagonist waking fast, in a panic (*One Hour Photo*, *The Fly*) or waking up and looking pensive / thoughtful (*The Artist*), protagonist recounting a dream (*Spellbound*), narrator recounting protagonist's dream (*The Passion of Anna*), dream discussed by psychoanalyst (*A Lizard in a Woman's Skin*).

8) Obscurification / lowering of definition to encourage audience involvement in completing the image.

Examples include: using protagonist body to block parts of image ($8\frac{1}{2}$), using close-ups to hide other action off-screen (*An American Werewolf in London*), using shadows and distance to obscure antagonist (*Enemy*).

9) Alteration of colour to signify a change in the depicted state of consciousness, from waking reality to dreaming.

Examples include: altered contrast of black and white (*Wild Strawberries*) or softer black and white (*Spellbound*), intensified colour saturation (*Before I Go to Sleep*), alteration to warmer colour palette (*Ruby Sparks*), using colour for waking and monochrome for dreaming (*Oblivion*).

10) Use of slow motion.

Examples include: extensive use of slow motion to differentiate from previous waking sequences (*Terminator 2 Judgment Day*, *Kagemusha*), slow motion to heighten emotion (*Dreamscape*), slow motion to emphasise visual information (*Enemy*).

11) The protagonist is isolated / alone or with only one or two other individuals in a usually highly-populated setting.

Examples include: an almost empty high school (*A Nightmare on Elm Street*), empty city streets (*Wild Strawberries*, *The Discreet Charm of the Bourgeoisie*), an empty supermarket (*One Hour Photo*).

12) The location resembles a path or corridor.

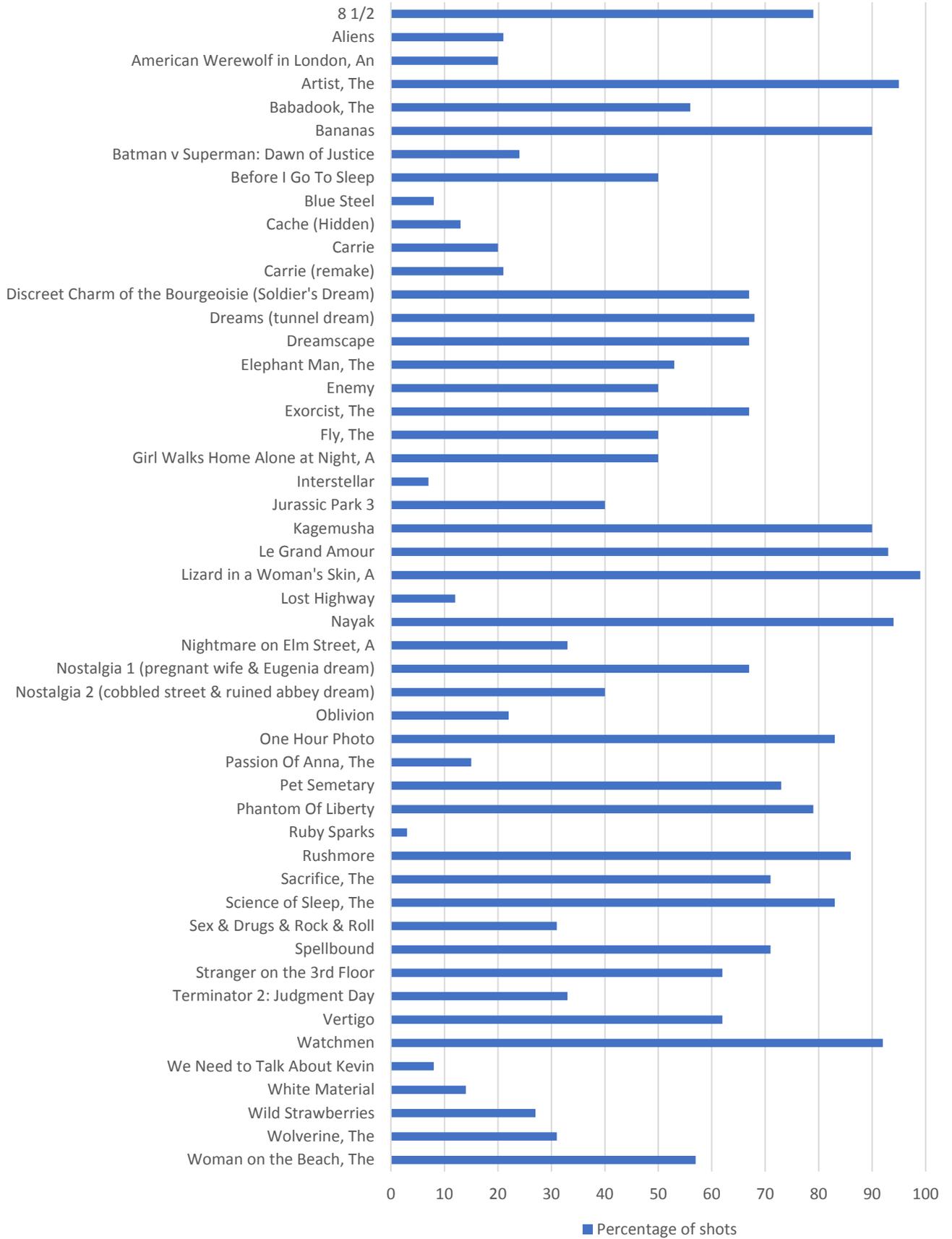
Examples include: the protagonist is in a hotel corridor (*Before I Go to Sleep*), the protagonist is in a tunnel (*Dreams*), the protagonist dreams of a figure running through a passageway (*A Girl Walks Home Alone at Night*).

Appendix 2 – The 50 Selected Dream Sequences

	Film	Country	Year	Director
1	<i>8 ½</i>	Italy / France	1963	Federico Fellini
2	<i>Aliens</i>	USA	1986	James Cameron
3	<i>American Werewolf in London, An</i>	USA / UK	1981	John Landis
4	<i>Artist, The</i>	France / USA / Belgium	2011	Michel Hazanavicius
5	<i>Babadook, The</i>	Australia / Canada	2014	Jennifer Kent
6	<i>Bananas</i>	USA	1971	Woody Allen
7	<i>Batman v Superman: Dawn of Justice</i>	USA	2016	Zack Snyder
8	<i>Before I Go to Sleep</i>	UK / USA / France / Sweden	2014	Rowan Joffé
9	<i>Blue Steel</i>	USA	1990	Kathryn Bigelow
10	<i>Caché</i>	France / Austria / Germany / Italy	2005	Michael Haneke
11	<i>Carrie</i>	USA	1976	Brian De Palma
12	<i>Carrie (remake)</i>	USA	2013	Kimberley Peirce
13	<i>Discreet Charm of the Bourgeoisie, The</i>	France / Italy / Spain	1972	Luis Buñuel
14	<i>Dreams</i>	Japan / USA	1990	Akira Kurosawa
15	<i>Dreamscape</i>	USA	1984	Joseph Ruben
16	<i>Elephant Man, The</i>	USA	1980	David Lynch
17	<i>Enemy</i>	Canada / Spain	2013	Denis Villeneuve
18	<i>Exorcist, The</i>	USA	1973	William Friedkin
19	<i>Fly, The</i>	USA	1986	David Cronenberg
20	<i>Girl Walks Home Alone at Night, A</i>	USA	2014	Ana Lily Amirpour
21	<i>Grand Amour, Le (The Great Love)</i>	France	1969	Pierre Étaix
22	<i>Interstellar</i>	USA / UK	2014	Christopher Nolan
23	<i>Jurassic Park 3</i>	USA	2001	Joe Johnston
24	<i>Kagemusha</i>	Japan / USA	1980	Akira Kurosawa
25	<i>Lizard in a Woman's Skin, A</i>	Italy / France / Spain	1971	Lucio Fulci
26	<i>Lost Highway</i>	USA / France	1997	David Lynch
27	<i>Nayak</i>	India	1966	Satyajit Ray
28	<i>Nightmare on Elm Street, A</i>	USA	1984	Wes Craven
29	<i>Nostalgia (dream 1)</i>	USSR / Italy	1983	Andrey Tarkovsky
30	<i>Nostalgia (dream 2)</i>	USSR / Italy	1983	Andrey Tarkovsky
31	<i>Oblivion</i>	USA	2013	Joseph Kosinski
32	<i>One Hour Photo</i>	USA	2002	Mark Romanek
33	<i>Passion of Anna, The</i>	Sweden	1969	Ingmar Bergman
34	<i>Pet Sematary</i>	USA	1989	Mary Lambert
35	<i>Phantom of Liberty, The</i>	France / Italy	1974	Luis Buñuel
36	<i>Ruby Sparks</i>	USA	2012	Jonathan Dayton / Valerie Kazan
37	<i>Rushmore</i>	USA	1998	Wes Anderson
38	<i>Sacrifice, The</i>	Sweden / UK / France	1986	Andrey Tarkovsky
39	<i>Science of Sleep, The</i>	France / Italy	2006	Michel Gondry
40	<i>Sex & Drugs & Rock & Roll</i>	UK	2010	Mat Whitecross
41	<i>Spellbound</i>	USA	1945	Alfred Hitchcock
42	<i>Stranger on the 3rd Floor</i>	USA	1940	Boris Ingster
43	<i>Terminator 2: Judgment Day</i>	USA	1991	James Cameron
44	<i>Vertigo</i>	USA	1958	Alfred Hitchcock
45	<i>Watchmen</i>	USA	2009	Zack Snyder
46	<i>We Need to Talk About Kevin</i>	USA	2011	Lynne Ramsay
47	<i>White Material</i>	France / Cameroon	2009	Claire Denis
48	<i>Wild Strawberries</i>	Sweden	1957	Ingmar Bergman
49	<i>Wolverine, The</i>	USA / UK	2013	James Mangold
50	<i>Woman on the Beach, The</i>	USA	1947	Jean Renoir

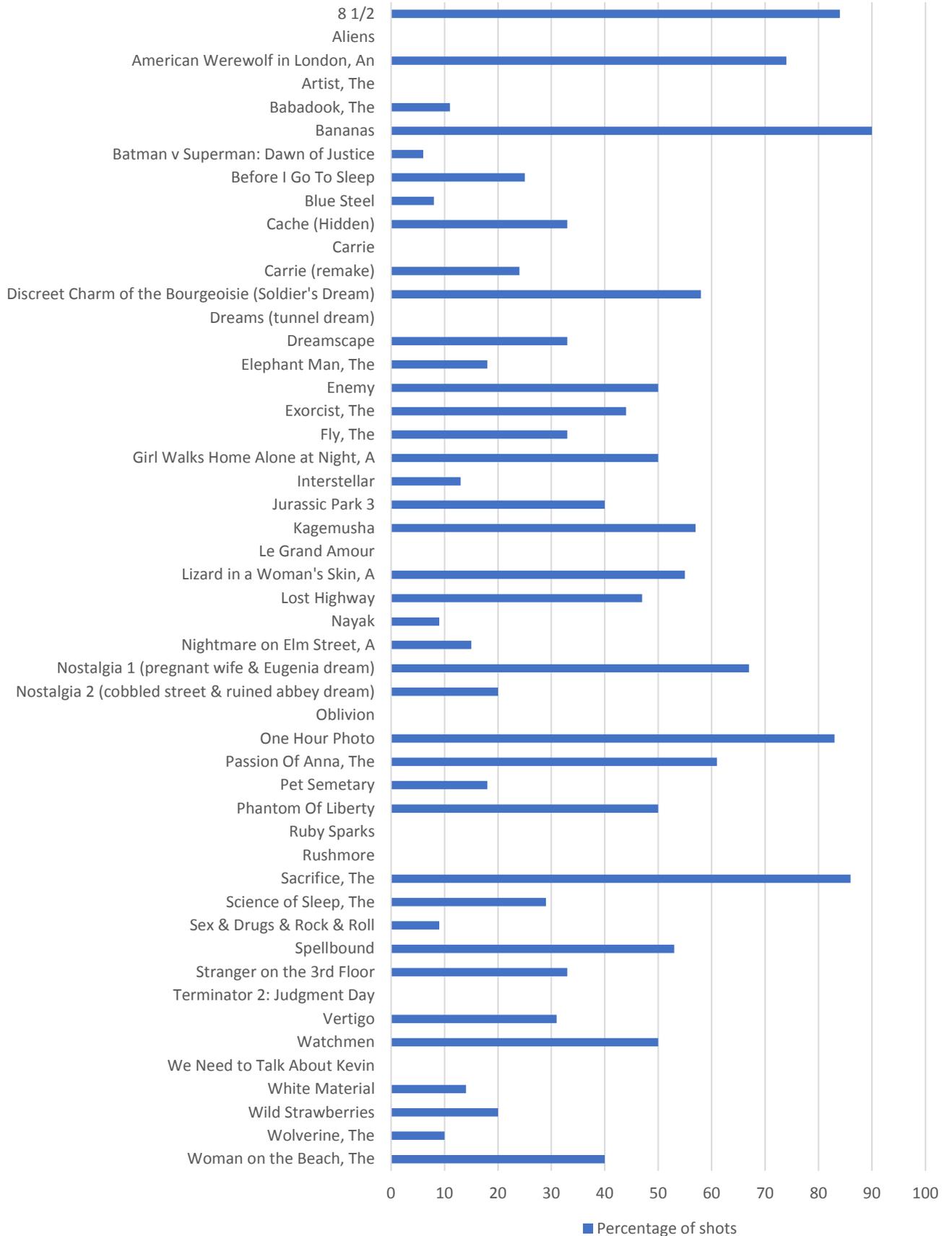
Appendix 3

Element One: Violates the diegetic world's rules of cause and effect / nature / physics



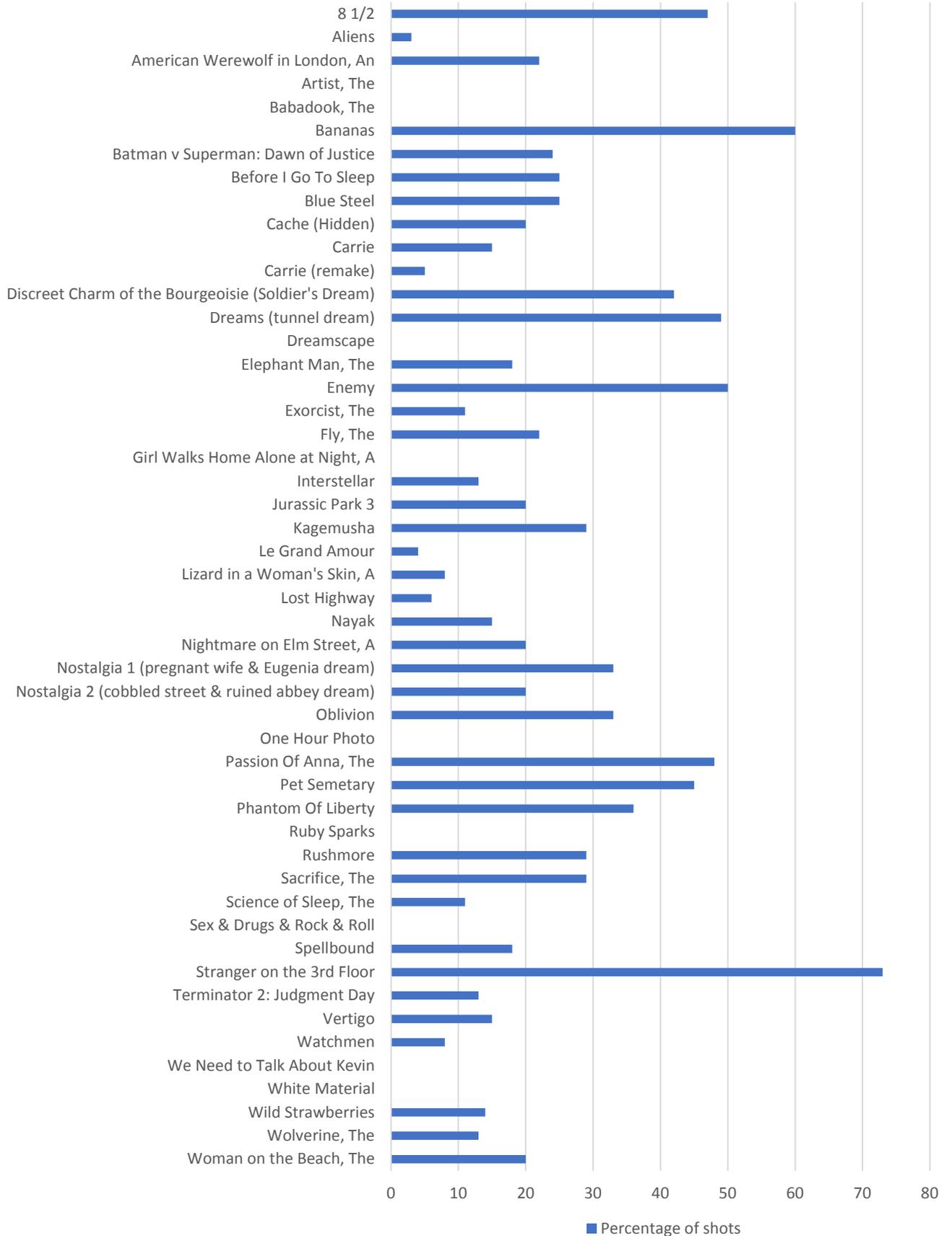
Appendix 4

Element Two: Difficult to understand the logic governing how the protagonist and other characters act



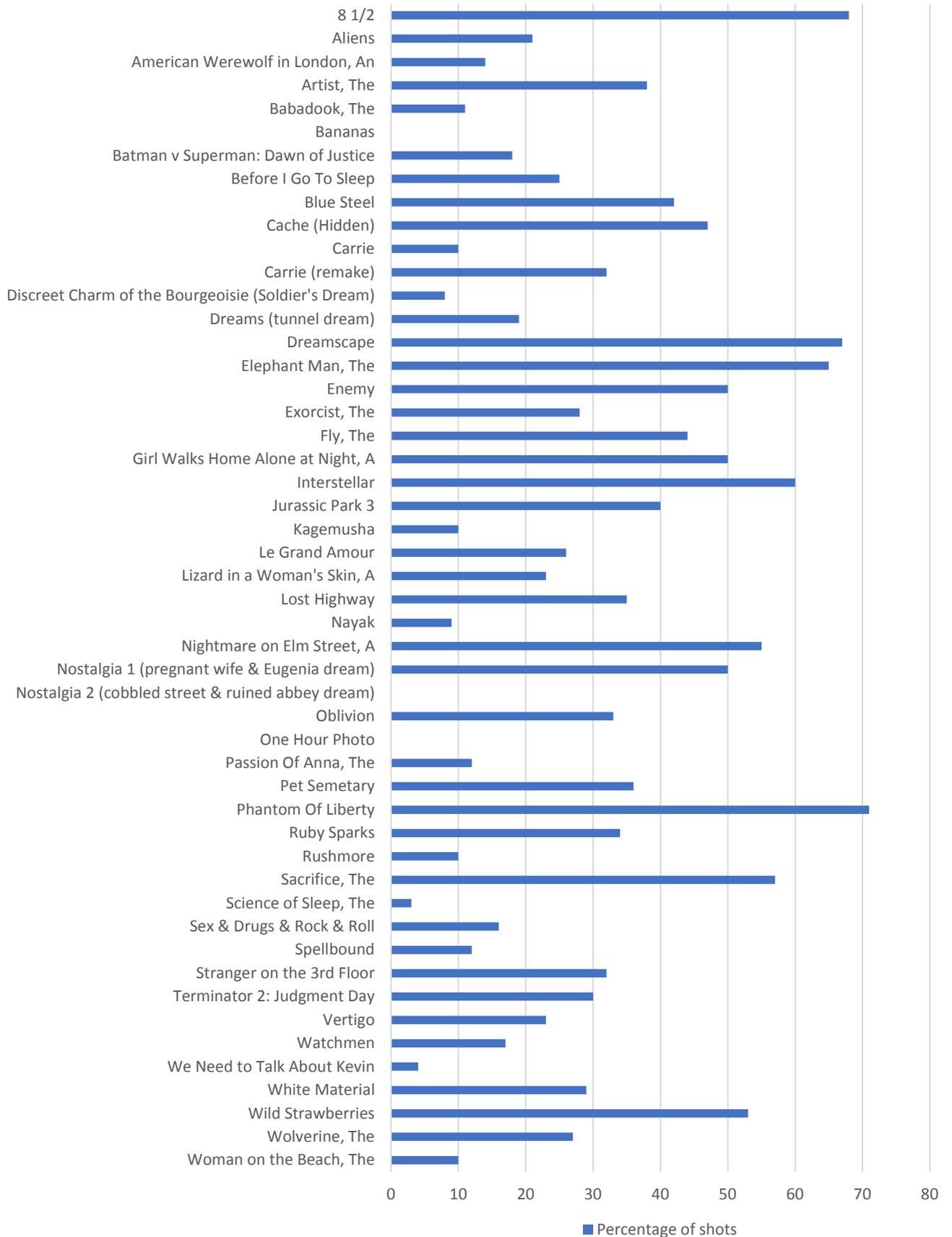
Appendix 5

Element Three: The manner in which characters react to the protagonist is unusual / motivation for characters' reactions toward protagonist are unclear



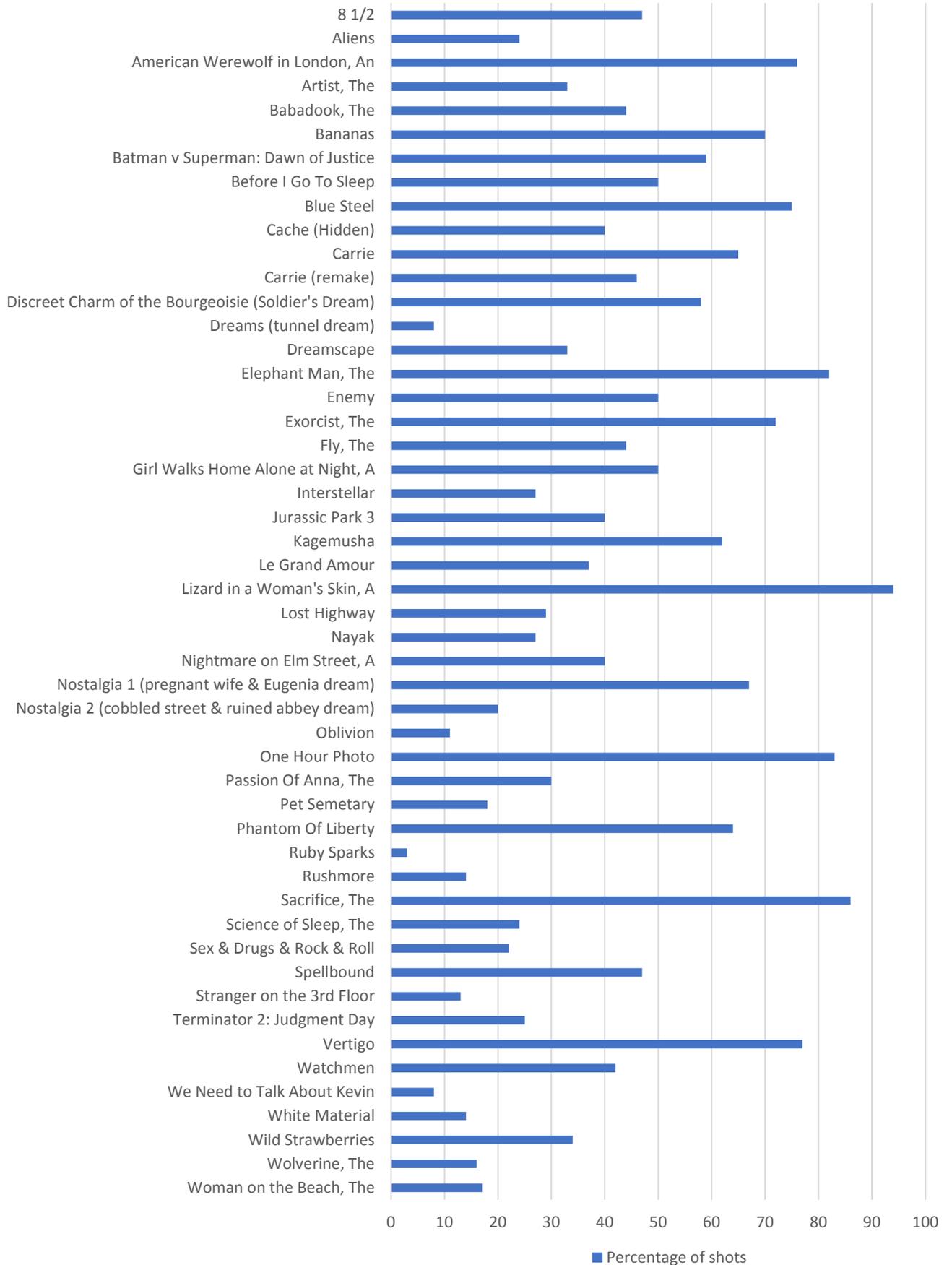
Appendix 6

Element Four: Camera technique to mimic the experience of viewing in real time / to encourage viewer to imagine from perspective of protagonist



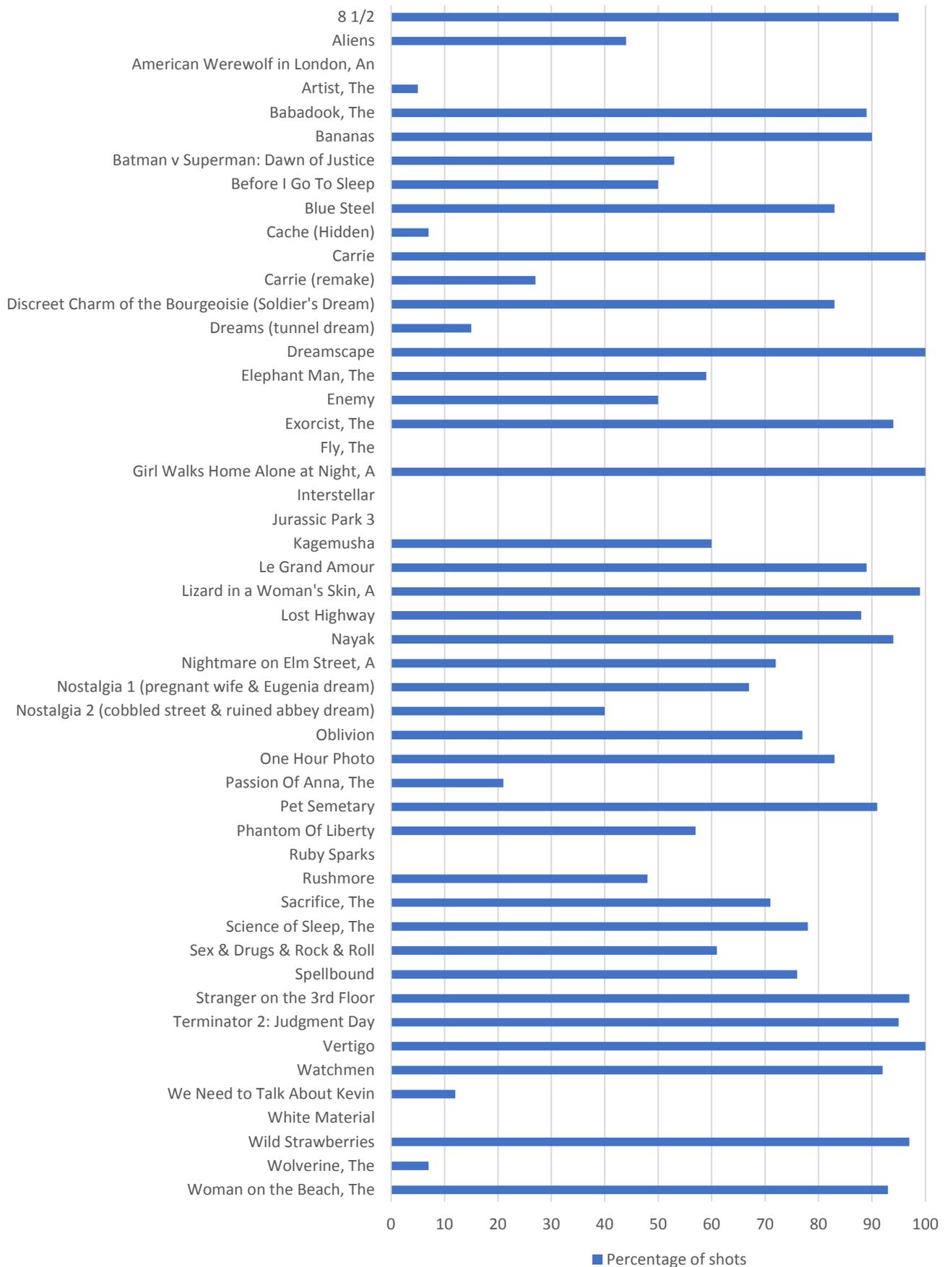
Appendix 7

Element Five: Filmic technique to shock or surprise



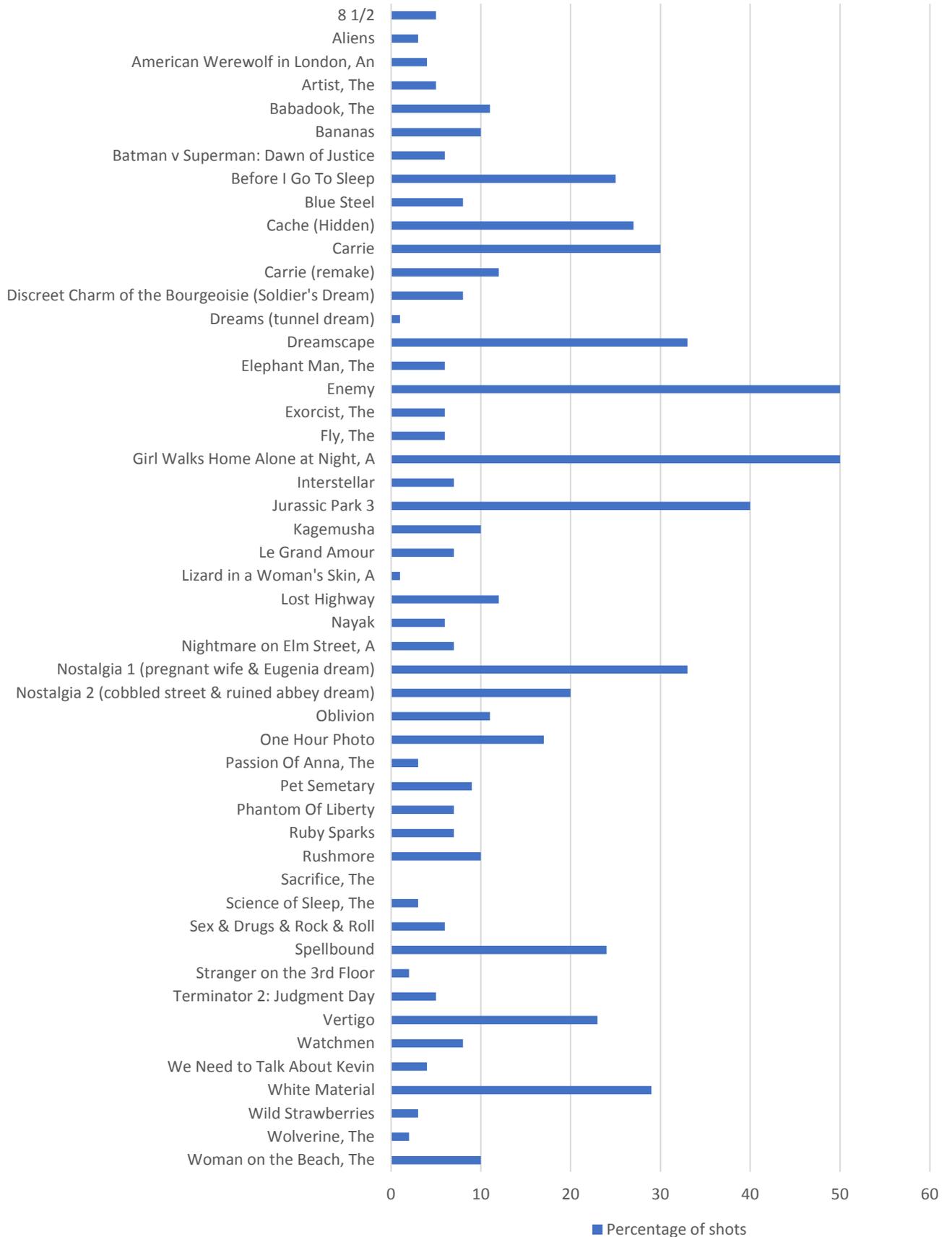
Appendix 8

Element Six: Exclusion / sparse use of diegetic sound



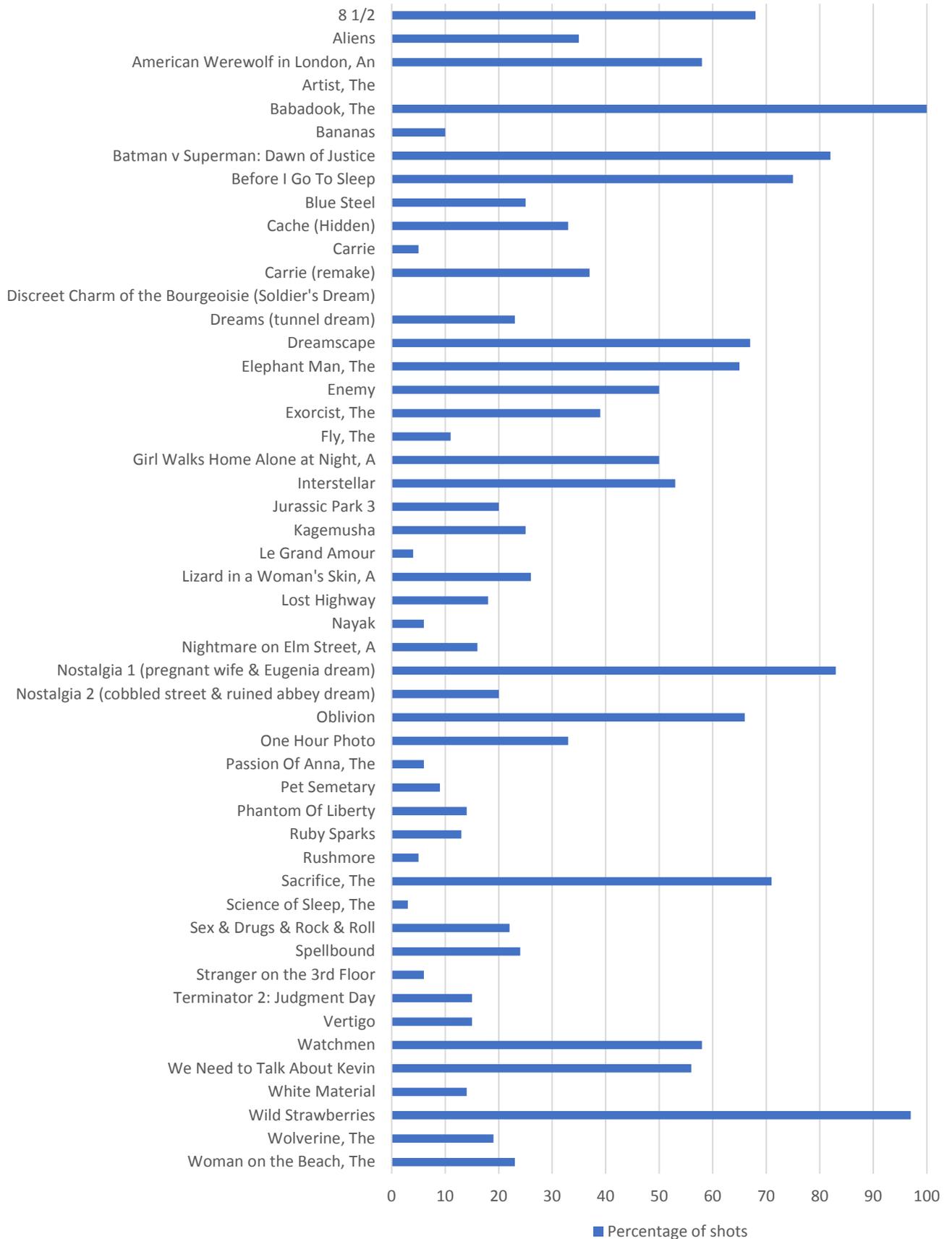
Appendix 9

Element Seven: Starting / ending with an action which clearly signifies a dream took place



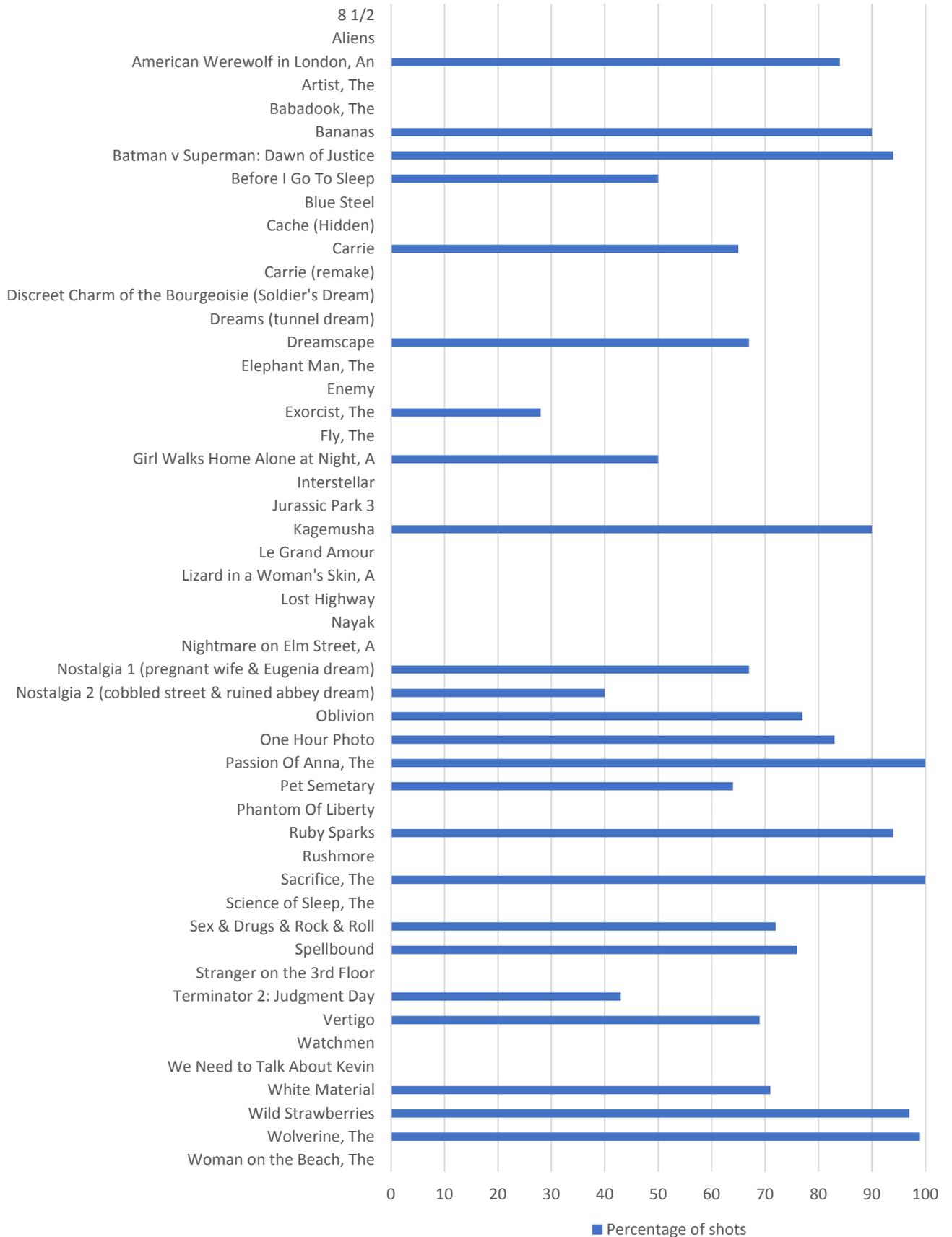
Appendix 10

Element Eight: Obscurification / lowering of definition to encourage audience involvement in completing the image

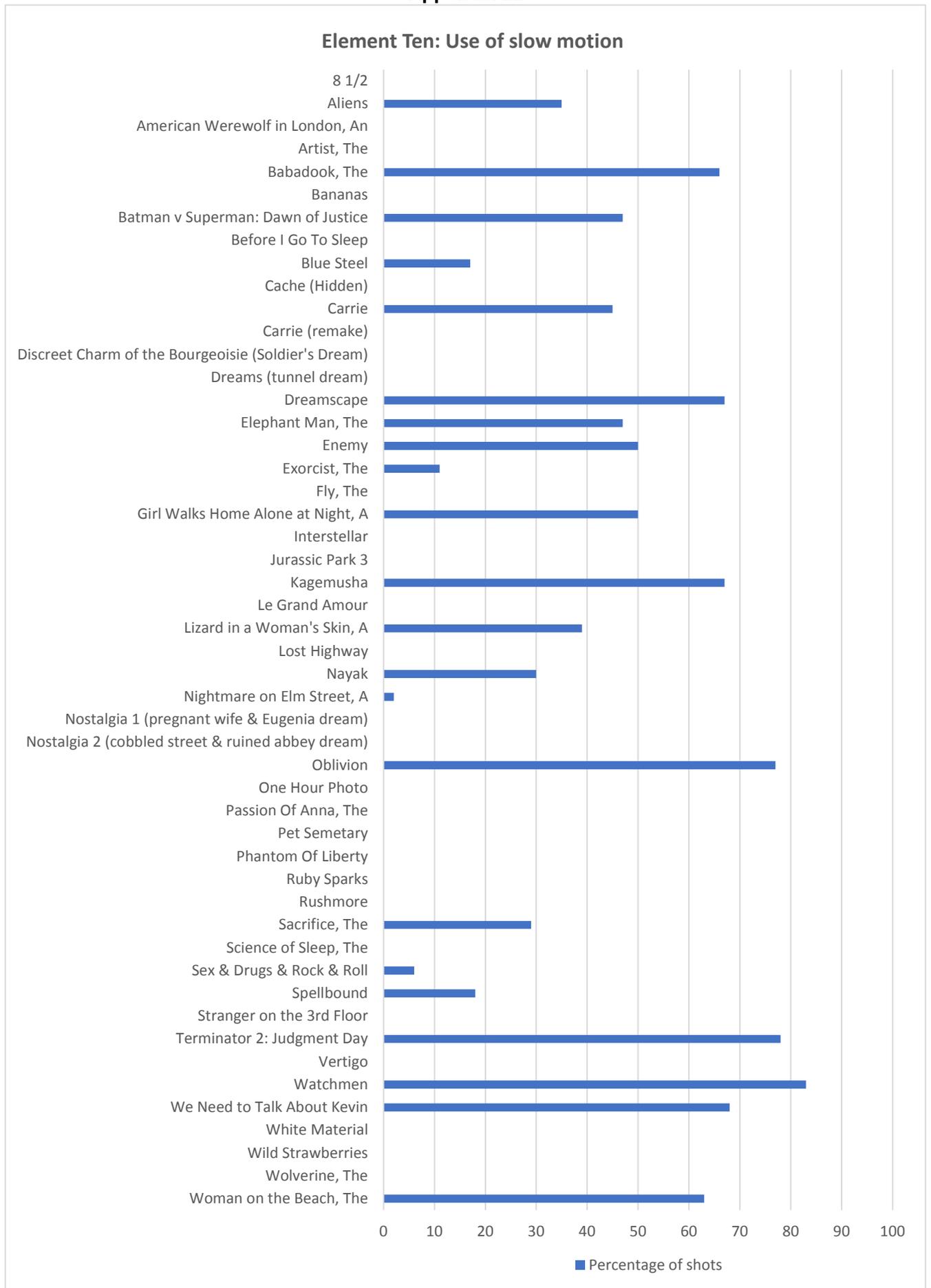


Appendix 11

Element Nine: Alteration of colour to signify a change in the depicted state of consciousness, from waking reality to dreaming

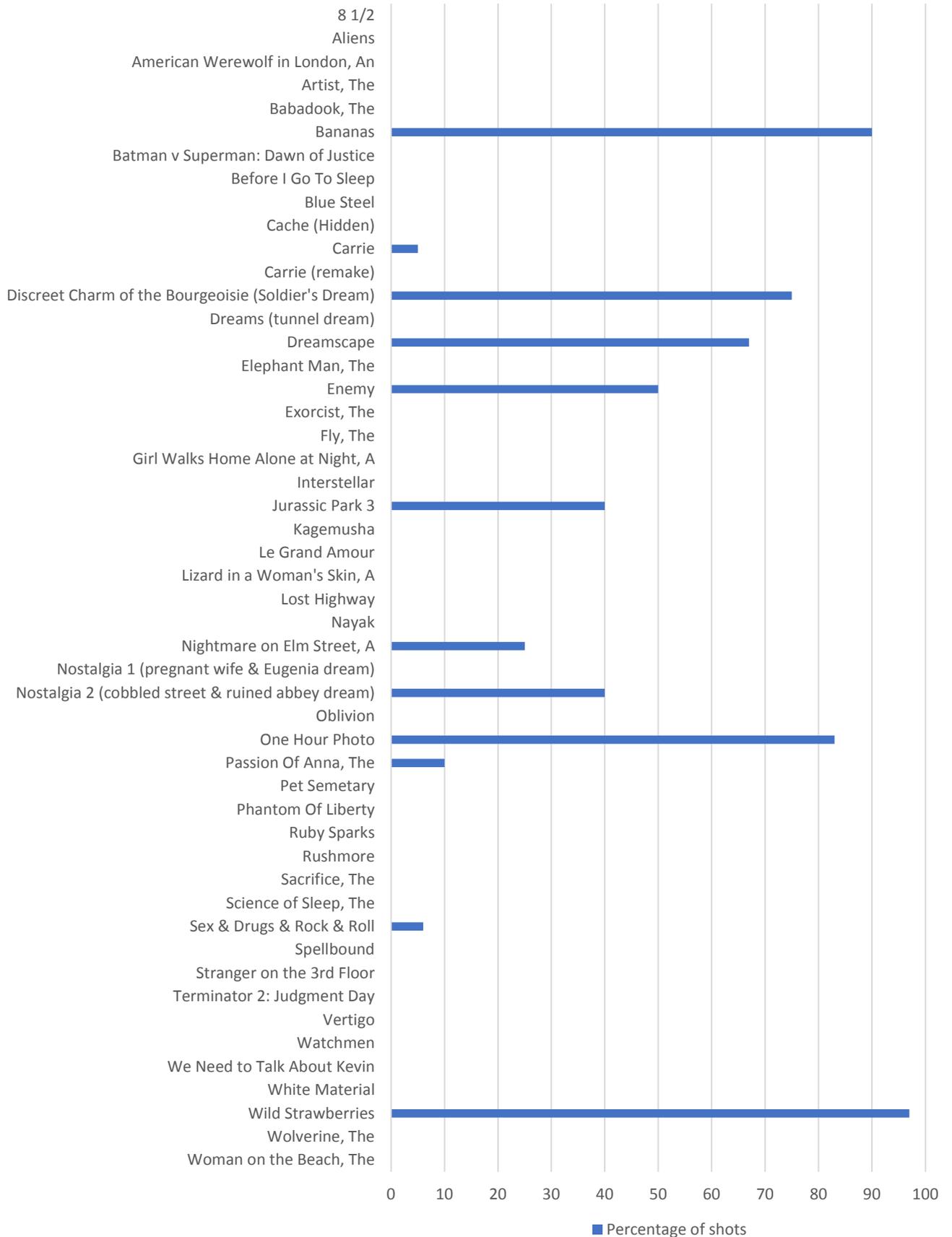


Appendix 12



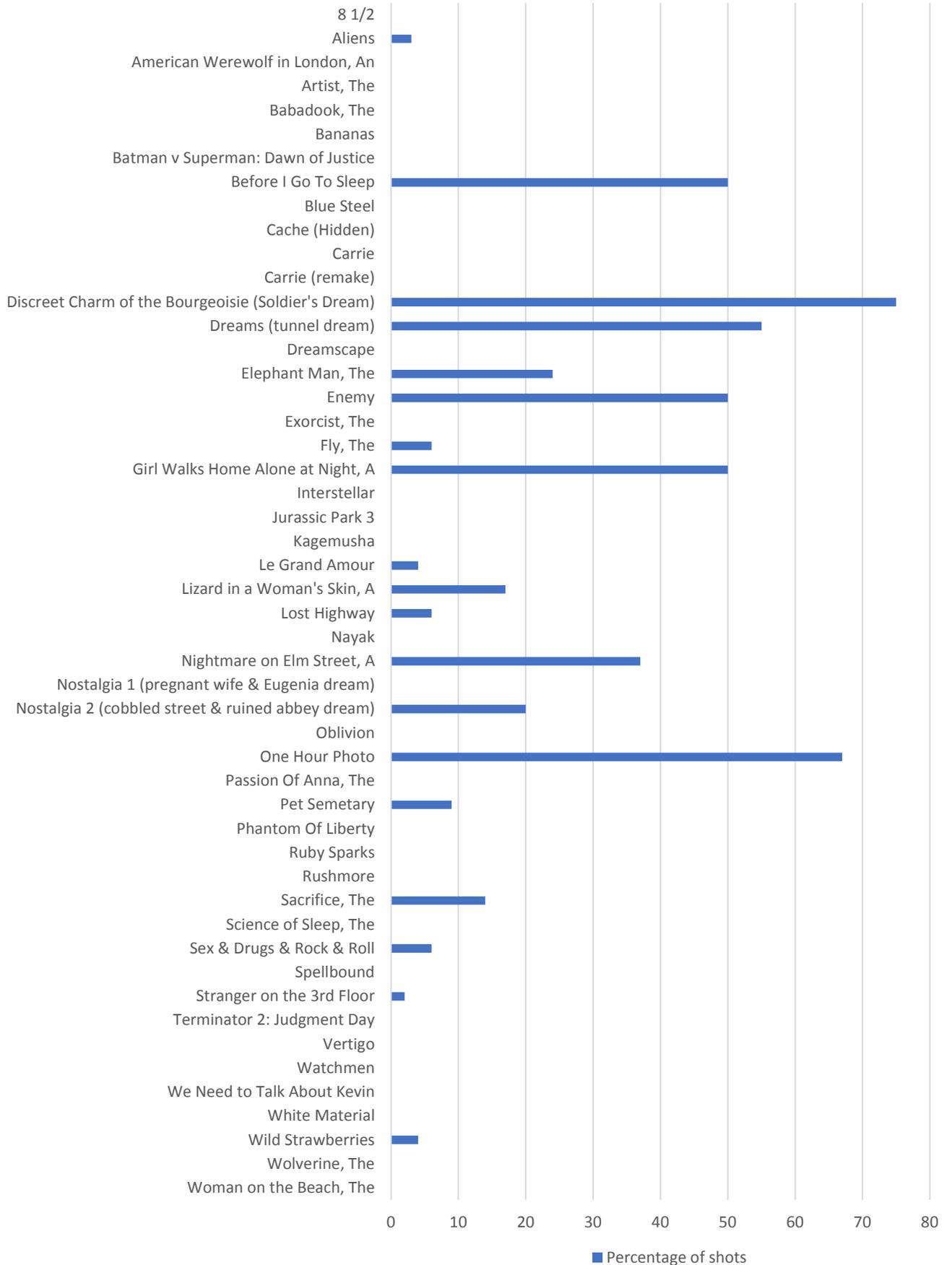
Appendix 13

Element Eleven: The protagonist is isolated / alone or with only one or two other individuals in a usually highly-populated setting



Appendix 14

Element Twelve: The location resembles a path or corridor



Appendix 15: Example dream sequence analysis 1

Film: *Le Grand Amour (The Great Love)* (1969) Pierre Etiax

Dream: Pierre dreams of riding around country roads in his bed, driving past other people in beds, and of being romantic with his young female secretary.

Time: 0.36.32 to 0.42.27 Total length of sequence: 5 min: 55 sec Total No of Shots: 27

Shot types: **xws, ws, ms, mcu, cu, xcu**
2 shot, 3 shot, POV, OTS, pan, tilt, crane **eg pan lr = pans left to right, pan cr = pans centre to right**

- 1: Violate rules of diegetic world's cause and effect / nature / physics.
- 2: Difficult / impossible to understand logic of main protagonist and other characters.
- 3: Manner that characters react toward the main protagonist.
- 4: POV shots / OTS shots, panning, tilting, camera movement to replicating main protagonist's physical movement.
- 5: Filmic technique to shock or surprise e.g. panning to reveal or hide details, freeze-frames, sudden camera movements or zooms and pulls.
- 6: Exclusion of diegetic sound. Sparse use of sound.
- 7: Starting / ending the sequence with action that signifies a dream took place.
- 8: Low definition / obscured image.
- 9: Alteration of colour.
- 10: Slow motion.
- 11: Character is alone / only one or two others in usually busy setting.
- 12: Corridor-like location.

Shot no.	Shot type	Time (hr/min/sec)	4 POV / OTS, pan / tilt / crane	6 Diegetic / sparse sound - *denotes irregular.	Notes	1	2	3	4	5	6	7	8	9	1	1	1
D	ws	0.36.25	Static.	Diegetic sound – clock ticking, similar sound to clock sound in <i>Phantom of Liberty</i> (co-written by Jean-Claude Carriere).	Pierre and his wife in separate single beds, his wife sat up reading and Pierre lying down, looking upwards.												
1	ms	0.36.32	Static, then pans left, following the bed.	Diegetic sound – wife and Pierre speaking, clock ticking.	Wife speaking to Pierre. Pierre isn't very interested in what she says. As Pierre's wife goes back to reading her book, Pierre closes his eyes and his bed	/						/	/				

17	Xws to ws	0.40.05	At first possible Pierre POV. Dollies backwards and pans right as ambulance-bed over takes, revealing Pierre and secretary in bed. Dollies toward Pierre and secretary at end of shot.	Music continues. No other sound.	A bed covered in a white sheet is driving along the road, in the distance, toward the camera. This ambulance-bed has a male patient onboard with a broken leg in plaster, elevated, held by a cord and white pole. As ambulance-bed over takes the patient, and Pierre and the secretary, exchange glances.	/	/	/	/								
18	Ws to ms	0.40.29	Pierre POV. Dollies forwards. Pans left as passes bed and couple.	Music continues. No other sound.	A white bed is parked at the left side of the road. Passing the bed reveals a couple sat on chairs. Two men, one dressed in a female night shirt eating a cake, the other in a male night shirt with a big moustache and bare legs, pouring wine from a bottle, with a piece of bread on his lap. They both look at the camera / Pierre as Pierre drives past.	/	/	/	/								
19	Xws to ms	0.40.34	Dollies backwards, then stops and bed comes closer, then zooms in.	Music continues. No other sound.	Pierre and the secretary, driving on their bed, in the distance, driving toward the camera. At end of shot, Pierre's bed stops, with the couple clearly visible. Pierre and secretary both look forwards.	/	/	/	/								
20	ws	0.40.47	Pierre / secretary POV. Static,	Music continues. No other sound.	A traffic jam of beds is up ahead on the road. A green bed drives into shot, into the traffic jam. A man in striped pyjamas jumps out of his bed and looks ahead at the traffic jam, remonstrating to another person also stuck in the traffic jam.	/	/	/	/								
21	ms	0.41.02	Static.	Music continues. No other sound.	Continues from shot 19 but is a different shot – slightly closer in, and secretary has neat hair (her hair was untidy at the end of shot 19). Pierre and secretary in bed, looking forwards, a golden light shines onto their faces from off-screen right, then they cuddle, smile, and look off-screen right.	/	/	/	/								
22	Ws	0.41.12	At start seems like Pierre / secretary POV. Static. Then pans right following bed.	Music continues. No other sound.	Grass and trees. At first appears to be POV of Pierre and secretary. Then Pierre's bed drives into shot from off-screen left, along the grass, and down toward a lake (car exhaust fumes are visible coming from behind bed at the end of this shot). The bad parks next to the lake.	/	/	/	/								

23	ms	0.41.37	Static.	Music continues. No other sound.	Pierre and the secretary lying in bed, facing off-screen left, with lake, river, grass and trees in background. Secretary and then Pierre sit up and look around. Bed reverses out of shot, off-screen right.	/														
24	Ws to ms to ws.	0.41.49	Static and then pans right, following bed. At end of shot, static, then pans slightly right as bed reverses again, then static again.	Music continues. No other sound.	Lake and trees. Pierre and secretary on bed, driving into shot from off-screen left. Panning right reveals a grove of over-hanging trees, which the bed reverses into. Secretary and Pierre sit up and look around, then cuddle and lie down. The bed reverses almost out of sight, deeper into the trees, toward off-screen right.	/														
25	Ms to ws.	0.42.05	Pans right, following bed. Static at end of shot.	Music continues. Music fades slightly at end of shot. Clock ticking fades up.	Starts in near darkness. Bed reverses back into the bedroom, Pierre and secretary with eyes closed, cuddling in the bed. Bed reverses back into original position in bedroom. Wife is still reading her book.	/														
26	ms	0.42.15	Static.	Music completely faded out by 0.05.53. Diegetic sound – clock ticking, wife turning page in book.	Wife in bed, reading her book, Jane Eyre. She turns to look off-screen right, toward Pierre.															
27	ms	0.42.21 - 0.42.27	Static. Wife POV.		Pierre asleep, eyes closed, smiling (no secretary). His arms are possibly positioned as if they might be cuddling someone.															/

SHOTS: 27												
Element	1	2	3	4	5	6	7	8	9	10	11	12
Occurred	25	0	1	7	10	24	2	1	0	0	0	1
%	93	0	4	26	37	89	7	4	0	0	0	4

Conclusion / Summary:

1: Violate rules of diegetic world's cause and effect / nature / physics.

Shots 1, 3-26: Pierre rides around the countryside in his bed, dressed in pyjamas, often seeing others also travelling around the country roads on beds.

2: Difficult / impossible to understand logic of main protagonist and other characters.

Not used. A variation is used, where everyone in Pierre's dream acts normally, even though in this dream world is unusual (in which people travel around on their beds in their night clothes, also, in daylight).

3: Manner that characters react toward the main protagonist.

Shot 14: Unclear why man on 'tractor bed' is staring at Pierre.

4: POV shots / OTS shots, panning, tilting, camera movement to replicating main protagonist's physical movement.

POV shots are used each time Pierre comes across a person during his journey on his bed e.g. shot 7: Pierre views man in yellow pyjamas trying to fix his bed, as if it is a broken-down car, shot 9: Pierre looks at his secretary waiting at the side of the road in her negligee, shot 21: Pierre's view of the traffic jam of beds.

5: Filmic technique to shock or surprise e.g. panning to reveal or hide details, freeze-frames, sudden camera movements or zooms and pulls.

Editing is used to introduce new details for surprise and comedic effect e.g. shot 4: cuts to a man in pyjamas fixing his car, shot 8: cuts to Pierre's secretary in a negligee stood at the roadside, shot 17: cuts to person on ambulance-bed, shot 20: cuts to traffic jam of beds. Long duration shots of Pierre travelling in his bed are used to reveal new details e.g. shot 3: a second bed with an occupant passes Pierre and drives in the opposite direction, down the road lined by trees, shot 7: as Pierre is travelling he passes a bed crashed against a tree. Long duration shots are often used to introduce new detail, after cutting for surprise / comedic effect e.g. shot 11: as Pierre's bed approaches and passes the crash, more details can be seen of the incident / including of the occupants of the two beds arguing / beginning to fight, shot 17: after cutting to ambulance bed, as the ambulance bed draws closer and eventually starts to pass Pierre's bed, more detail can be seen of the bed and the injured occupant.

6: Exclusion of diegetic sound. Sparse use of sound.

Shots 2-10, 12-24: music only, shot 11: music plus sound of beds crashing, but no sound of explosion / no other diegetic sound. Shot 25: music, plus sound of clock ticking.

7: Starting / ending the sequence with action that signifies a dream took place.

Shot 1: Pierre, lying in bed, closes his eyes and goes to sleep. Shot 28: Pierre, still in bed asleep, smiling, perhaps as if he is dreaming of lying next to / cuddling his secretary.

8: Low definition / obscured image.

Shot 1: At the end of the shot the screen fades to black, making it unclear what will happen to Pierre next.

9: Alteration of colour.

Not used.

10: Use of slow motion.

Not used.

11: Character is alone / only one or two others in usually busy setting.

Not used.

12: Corridor-like location.

Shot 4: Pierre travels on his bed along a road lined with evenly spaced, tall straight trees, producing a corridor-like image.

Appendix 16: Example dream sequence analysis 2

Film: *Blue Steel* (1990) Kathryn Bigelow

Dream: Megan Turner, a New York police officer, dreams she is flying at night, above the city, with her boyfriend Eugene Hunt, a successful stocks and shares trader, in his helicopter. In the dream, she falls out of the helicopter and after grabbing her hand, Hunt releases his grip, letting her fall. The dream mirrors the previous sequence in which Turner and Hunt had a romantic night time flight in Hunt's helicopter and they kissed. Unknown to Turner, Hunt is the killer in the film. Therefore, this is a premonitory dream, as Hunter dates Turner but later attempts to kill her.

Time: 0.40.47 to 0.42.02 Total length of sequence: 1 min: 15 sec Total No of Shots: 12

Shot types: **xws, ws, ms, mcu, cu, xcu**
2 shot, 3 shot, POV, OTS, pan, tilt, crane **eg pan lr = pans left to right, pan cr = pans centre to right**

- 1: Violate rules of diegetic world's cause and effect / nature / physics.
- 2: Difficult / impossible to understand logic of main protagonist and other characters.
- 3: Manner that characters react toward the main protagonist.
- 4: POV shots / OTS shots, panning, tilting, camera movement to replicating main protagonist's physical movement.
- 5: Filmic technique to shock or surprise e.g. panning to reveal or hide details, freeze-frames, sudden camera movements or zooms and pulls.
- 6: Exclusion of diegetic sound. Sparse use of sound.
- 7: Starting / ending the sequence with action that signifies a dream took place.
- 8: Low definition / obscured image.
- 9: Alteration of colour.
- 10: Slow motion.
- 11: Character is alone / only one or two others in usually busy setting.
- 12: Corridor-like location.

Shot no.	Shot type	Time (hr/min/sec)	4 POV / OTS, pan / tilt / crane	6 Diegetic / sparse sound - *denotes irregular.	Notes	1	2	3	4	5	6	7	8	9	1	1	1
1	xws	0.40.47	Megan Turner POV from inside helicopter. Camera is always moving.	Slow, panning, synth pad sound similar to beginning of Terminator 2 dream sequence, mixed with voice pad synth sound.	Night time. View from helicopter, from above / amongst tops of skyscrapers, with the buildings lights shining in the night (same as shot from previous sequence when Turner was taken for a ride by her boyfriend Hunt, the killer, in his helicopter (Turner doesn't know he is the killer).		/				/						

2	cu	0.41.11	Static shot. Probably shot in studio with flashing lights and sound to add realism.	Synth sounds continue.	Turner, inside helicopter, smiling at view. Similar to shots from previous sequence when Turner was looking out of helicopter. Red lights flash on Turner's face.	/						
3	Mcu	0.41.13	Static shot.	Diegetic sound of helicopter door opening – is loud, clear in detail. Synth continues.	Helicopter door opens. Turner is surprised. Falls out of helicopter, toward camera. Hunt watches / seems to watch intently in background.	/						
4	cu	0.41.14	Static shot.	Synth continues. 2 tom drum strikes used to enhance atmosphere / subtly mixed in with end of door opening sound.	Door swinging further open, Turner falls out of door – very smooth edit from shot 3 – almost seems like part of same shot. Hunt moves fast – seems like he is trying to help but his face looks very intense.	/						
5	ms	0.41.15	POV from Hunt's view. Blue screen shot.	Synth continues. Sound of Turner's panicked breathing.	Turner hangs onto Hunt's hand, dangling out of helicopter. City is visible below.	/						
6	cu	0.41.16	POV from Turner's view.	Synth continues. Sound of Turner's panicked breathing.	Hunt's hand holding Turner's hand. In shot 5 Turner clasps Hunt's hand with her right hand around outside of Hunt's hand – in this shot, Turner holds in handshake type of hold.	/						
7	mcu	0.41.17	OTS from Turner perspective.	Synth continues. Sound of Turner's panicked breathing. Some slight distortion in high end of audio.	Hunt, inside helicopter, looks intensely toward Turner whilst he holds onto her hand with red light flashing on his face (hands are out of shot). He starts to subtly smile at end of shot.	/						
8	cu	0.41.19	POV from Turner's view.	Synth continues. Sound of Turner's panicked breathing. Synth sound making 'shhh' sound.	Continues from shot 6. Hunt's hand holding Turner's right hand. At end of shot Hunt's grip becomes looser.	/						
9	mcu	0.41.19	OTS from Turner perspective.	Synth continues. Breathing sound stops. Synth sound making 'shhh' sound continues. Tom drums added.	Continues from shot 7. Hunt's face is bathed in red light flashing. Turner's outstretched fingers are silhouetted on Hunt's face. He smiles as he lets go of her hand.	/						
10	Ms	0.41.23	POV from Hunt perspective.	Synth continues. Sound of Turner's panicked breathing. Synth sound making 'shhh' sound continues.	Turner is falling, her hands stretched out, upwards. Her face is surprised, her eyes wide open staring in shock that she is falling. City is visible below. Slow motion.	/						

5: Filmic technique to shock or surprise e.g. panning to reveal or hide details, freeze-frames, sudden camera movements or zooms and pulls.

Uses fast cutting to shock, enhanced by using a much longer duration initial shot (shot 1, duration 24 seconds), to a shorter shot 2 (duration 2 seconds) so the following faster cutting has greater impact e.g. shots 3-8 last a total of 6 seconds (0.41.13 – 0.41.19).

Therefore, shots 3-8 fulfil element five – there is some redundancy in shot 8, but the grip is loosening, so still adds to the drama, and shot 9 continues from shot 7, but Hunt's face adds intrigue to the sequence as his facial expression is difficult to read (does he want to save Turner or will he let her go?). Shot 10 cuts to Turner falling, and shot 11 reveals the drop from a new dramatic angle.

6: Exclusion of diegetic sound. Sparse use of sound.

Shots 1,2 and 4-11: Mainly synth sound –producing a mixture of atmospheric music and sound design. Some sparse diegetic sounds are incorporated e.g. shots 5-8: Turner's breathing, shot 11: Turner screaming. Some synth sounds and music sounds impersonate diegetic sound e.g. shot 4: tom drums used to enhance clicking sound of helicopter door opening, shots 8-11: synth sound making a 'shhh' sound as Turner panics and Hunt helps / watches Turner panicking and Hunt releases Turner.

No diegetic sound of helicopter or city below. Shot 4: only lasts one second with Turner's focus on door opening, so even though diegetic sound is sparse, in this shot diegetic sound is a main feature.

7: Starting / ending the sequence with action that signifies a dream took place.

Shot 12: Turner wakes up quickly, in a panic.

8: Low definition / obscured image.

Shot 3: Hunt is obscured / blocked by Turner / focus is on Turner, so Hunt is slightly blurred - difficult to see Hunt's movements, to see if he pushed Turner or Turner falling was an accident. Shots 7,9: Hunt's facial expression is obscured by OTS of Turner, flashing lights and short duration of shot - is unclear if Hunt is trying to save Turner or is enjoying watching her struggle.

9: Alteration of colour.

Not used. Using same colour as previous sequence when Turner and Hunt enjoyed a romantic helicopter flight tricks / confuses the audience / the audience are unsure if the sequence is depicting waking reality until the end of sequence, when Turner wakes up.

10: Use of slow motion.

Shots 10,11: Used when Turner falls.

11: Character is alone / only one or two others in usually busy setting.

Not used.

12: Corridor-like location.

Not used.

