ALTERED STATES, ALTERED SOUNDS: An investigation of how 'subjective states' are signified by the soundtrack in narrative fiction cinema.

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Summary

This thesis develops an approach to analyse how film soundtracks are used to signify characters' subjective experiences of altered states that may distort or exceed their ordinary experience of reality through dreams, memories, intoxication, etc. Its aim is to contribute to critical audio-visual literacy by using Van Leeuwen's sound semiotic theory (1999) in conjunction with film sound theory in order to investigate how characters' subjective experiences of particular states of mind (dreams, memories and flashbacks, intoxication, terror and insanity) are signified in narrative fiction cinema by the soundtrack. Its central questions are:

1. How are sound and music used to signify characters' subjective experiences and what makes these uses of sound apt signifiers for signifying these states of mind?
2. Is it possible to investigate this issue using a multidisciplinary approach that combines film theory and sound semiotics?

This study focuses on how characters' subjective experiences of altered states are signified by eliminating either atmosphere or realistic sound effects or by the mixture of reality and unreality (e.g. intoxication where voiceovers and music are used to signify characters' subjective experiences). It will explore how sound semiotics and film sound theory can be used to understand how soundtracks are used to signify filmic characters' subjective experiences of altered states as well as investigating the most appropriate terminologies and transcription methods that may be used for this purpose. It will also discuss how film directors, such as Hitchcock, have created innovative solutions for conveying subjective modality in cinema.

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Chapter 1: Introduction

1.1 Overview of the research

The aim of this thesis is to explore how film soundtracks signify the subjective experiences of characters who experience altered mental states that may distort or exceed ordinary reality, such as dreams, memories, intoxication, etc. Soundtracks signify such altered states either by eliminating atmosphere or realistic sound effects, or through a mixture of reality and unreality. Although this often occurs in Hollywood films, and especially in European art cinema, it is rarely commented on in the literature. Film theorists tend to be preoccupied with a visual description of how this takes place and thereby neglect what role and function soundtracks have in this process.

In order to investigate how soundtracks signify characters' subjective experiences of altered states I use Van Leeuwen's (1999) sound semiotic theoretical study as a template for its analysis. Following Van Leeuwen (1999), I adapt Halliday's (1978) conception of 'modality' to not only express different degrees of truth through the medium of language (e.g. modal auxiliaries such as *may, will, must*), but also through sound. In particular, I adapt his conception of 'subjective modality' to show how different modality configurations of sound express characters' subjective experiences as they move from reality to an altered state through the adjustment (reduction, increase or neutrality) of aural parameters such as pitch, dynamic, volume, reverberation and so on. By using sound semiotic resources to investigate how characters' subjective experiences of altered states are signified by film soundtracks I bring an original contribution to the field of social semiotics.

In this research I reveal that there are several problems with the way that cinema soundtracks are studied within the domain of film sound literature. Firstly, as Beck and Grajeda (2009: 13) point out, theoretical work on film sound over the years has separated 'semiotic and psychoanalytical approaches from materialist and technological-industrial ones'. I think it is necessary to combine a social semiotic approach (the collection, collation and interpretation of data in a social context) alongside the analysis and observations of film theorists and practitioners in order to draw these fields of study together to investigate how soundtracks signify characters' subjective experience of altered states. Secondly, as Donnelly (2001: 1–2) observes, the

musicological study of the soundtrack is often relegated to the 'margins of academia' where music scholars tend to focus on nineteenth century models of concert hall music instead of also considering the importance of film music's performance and its relationship to history and society. Lastly, as Lastra (2008: 124) argues, the emergence of modern, immersive sound design has meant that technological media now reshapes the audience's sensory experience of cinema by 'surrounding the auditor in a more replete and realistic sound environment', thus providing a great capacity for point-of-view character subjectivity.

I argue that in order to attempt to address these issues it is necessary to take a multidisciplinary approach to the study of the soundtrack. It is crucial to incorporate Van Leeuwen's (1999) sound semiotic theory alongside film theory in order to consider the semiotic potential of material properties of the soundtrack: its truths (modalities) and social context, instead of simply discussing them as abstract ideas (musical, linguistic or otherwise), or merely focusing on the technological developments of sound design. By using sound semiotics in conjunction with film theory as a multidisciplinary study of how subjective modalities of altered states are signified in film soundtracks, I propose that I contribute original research to both the field of soundtrack study and social semiotics. The five altered states that I study are: *dreams*, *flashbacks* and *memory*, *intoxication*, *terror*, and *insanity*. In the next section I introduce and discuss my research questions.

1.2 Research questions

1. How are sound and music used to signify characters' subjective experiences and what makes these uses of sound apt signifiers for signifying these states of mind?
2. Is it possible to investigate this issue using a multidisciplinary approach that combines film theory and social semiotics?

The film texts that I have chosen for the discussion and analysis of how altered states are signified by film soundtracks are drawn from European, classical Hollywood and American art house narrative cinema. My intention is to focus on self-reflexive characters that are psychologically driven; in contrast to 'mainstream' cinema where characters' motives are goal-orientated and therefore subject to cause/effect plots. As well as highlighting and identifying any significant conventions that may emerge from

the way directors use sound and music to signify subjective experiences my intention is to verify if multidisciplinary research of this subject is possible and how this can be achieved.

1.3 Structure of the thesis

This section presents an outline of the following chapters' content and function. In chapter two, I discuss what I consider is the most useful and relevant literature from film sound studies that may be used for the study of how the soundtrack signifies the subjective modality of filmic characters when they experience altered states. My literature review begins with a discussion of Bordwell (1985, 2008) and Gorbman's (1987) conceptualisation of the role of the classical narrative soundtrack. I then discuss Chion's (1994, 1999, 2009) perception of how the soundtrack signifies subjective experiences via spatial setting, the voice and the use of 'internal sounds'. I follow this with a discussion of Altman's (1992) notion of '*cinema as event'* where he posits that the study of the soundtrack and its social dimension are equally important as the study of the image. I then investigate his concept of 'point of audition' that examines how audiences are positioned to hear film characters' sound perspective. I then evaluate Donnelly's (2001, 2005) contribution to the study of how film music is configured within cinema, his belief that it is marginalised and how it is necessary to incorporate the social aspects of cinema as part of a study of the soundtrack. Donnelly (2001: 3) argues that film researchers should be aware of the 'transaction between the sound and the listener' if one is to understand how film music works. In accordance with my own viewpoint, Donnelly argues that it is necessary to include semiotics as part of the process of understanding how soundtracks signify meaning.

In chapter three, I discuss Saussure's (1974 [1916]) and Peirce's (1931-58) development of the field of classic semiotic theory before moving on to consider Metz's (1974) and Barthes's (1957/1987, 1964/1967, 1977) contribution to film structuralist and cultural theory. I then outline the main concepts of social semiotic discourse, which includes the belief that classic semiotics is limited by its code-based interpretive practices and failure to include a broader cultural framework of interpretation. I then select what I believe are the most useful aspects of Van Leeuwen's (1999) sound semiotic repertoire for the purpose of investigating how subjective experiences and subjective modalities are signified by film soundtracks. These include sound modality, aural perspective, voice and timbre as well as Van Leeuwen's conceptualisation of

naturalistic and sensory coding orientation, provenance and the materiality of sound.

Chapter four explains my methodological approach for this research. It begins with a consideration of the methodological problems that are precipitated by the complexity of transcribing a multimodal medium that includes camera movement, lighting and *mise-en-scène,* as well establishing how the components of the soundtrack (speech, music and sound) and narrative concerns can be described and analysed without losing a sense of coherence. Firstly, I discuss multimodal discourse and the possibility of using multimodal transcription methodology in order to understand how subjective experiences and modalities are signified. I then discuss the merits and limitations of Gorbman (1987) and Chion's (in Gorbman, 1987) transcription methodology for this purpose. Lastly, I explain how I deploy Van Leeuwen's (1999) sound semiotic resources as part of my transcription and analysis of how soundtracks signify characters' subjective experiences and their subjective modalities.

Chapter five is the first of five chapters that analyses and discusses how film soundtracks are used to signify subjective experiences of characters when they experience altered states. In this chapter, I explore how the soundtrack signifies characters' subjective modality when they *dream*. This chapter integrates Milicevic's (2007) description and observation of dream and flashback sequences alongside Van Leeuwen's (1999) sound modality system of analysis. My objectives are twofold: to establish a functional model that uses sound semiotics to analyse how subjective modality is configured in dream sequences and to identify what familiar patterns exist in these circumstances.

Chapter six is concerned with how characters' experiences of *intoxication* are signified. I incorporate Van Leeuwen's (1999) theorisation of sound modality, voice quality and aural perspective for the purpose of analysis and discussion of the films I have selected. I also include Chion's theorisation (1994, 1999, 2009) of the voiceover in order to show its role and function for signifying film narrative and character subjectivity. I also consider Murray Smith's (2002, 2006) discussion of how pop music and lyrics are configured in *Trainspotting* (Danny Boyle, 1996) to convey its protagonist's subjective viewpoint and state of intoxication.

In chapter seven, I look at how the soundtrack signifies characters' subjective experiences when they recall the past via *flashback* and *memory* sequences in *Once Upon a Time in The West* (Sergio Leone, 1969) and *Blade Runner* (Ridley Scott, 1982). The first section explores how subjective modality is configured within flashback sequences. It begins with the origins of the flashback as a filmic device and then uses sound semiotic methods to analyse and describe this process. It also investigates the role and function of leitmotifs[1] and how they are used to convey subjectivity. Lastly, the concept of sensory modality is introduced in order to understand how soundtracks are used to delineate the difference between 'reality' and altered states.

In chapter eight, I explore how soundtracks can signify *terror* by using Van Leeuwen's (1999) sound semiotic concept of aural perspective. I discuss how physical distance and social distance can be realised by features such as volume level, vocal timbre and reverberation effects. I also incorporate the analysis and observations from film theorists and film practitioners that have a specialised knowledge of how terror is signified in the films *A Man Escaped* (Robert Bresson, 1956) and *The Birds* (Alfred Hitchcock, 1963).

In chapter nine, I discuss how the soundtrack is used to signify characters' subjective experiences in *Hangover Square* (John Brahm, 1945) and *The Shining* (Stanley Kubrick, 1981). I integrate Gorbman's (1987), Chion's (1994, 1999, 2009) and Donnelly's (2001, 2005) analysis and observations of these film texts with a sound semiotic reading of them. This includes Gorbman's (1987) discussion of the leitmotif and meta-diegesis, Chion's (1994, 1999, 2009) observations on the role of the voiceover and Donnelly's discussion of how sensory and the material properties of sound are configured in horror films to signify subjective experiences of *insanity*.

In chapter 10, I discuss what findings emerge from my discussion and analysis of soundtrack semiosis in chapters five to nine. I evaluate the merits and limitations of the analytic procedure and methodology that I have used and present my answers to the questions I posited in the introduction of this thesis. Finally, I discuss the possible areas of future investigation that have emerged from this research project.

[1] For definition of this and other musical terms, please refer to the glossary (p. 167)

Chapter 2: Film soundtrack theory

2.0 Introduction

This chapter sets out to identify how the soundtrack in narrative fiction cinema signifies characters' subjective experiences of altered states. Firstly, I explore how David Bordwell (1985, 2008) and Claudia Gorbman (1987) have addressed the matter of how subjective experiences are signified in classical Hollywood cinema. I will then broaden the study to include the observations and insights that Michel Chion (1994, 1999, 2009), Rick Altman (1992) and the sound designer Walter Murch (2001) provide on this matter. Lastly, I discuss Kevin Donnelly's (2001, 2005) contribution to the study of the soundtrack and his belief that there is an urgent need for a more coherent approach that incorporates semiotics as part of its approach.

2.1 Narrative film theory: Bordwell

Bordwell (1985) draws upon Russian Formalist theory and cognitive psychology in his analysis and discussion of narrative fiction cinema. He breaks down film narrative modes into four main categories: Hollywood cinema, the European 'art cinema', the Soviet historical-materialist film and parametric narration. Firstly, I introduce his narrative logic theory and then focus on his notion of characterisation and point-of-view in classical Hollywood cinema and European 'art-cinema'. I then investigate what salient contributions Bordwell and Thompson (2008: 264–303) bring to the question of how characters' subjective modalities are signified by film soundtracks in their chapter *Sound in the Cinema*.

Bordwell describes narrative film as consisting of three systems that he defines as 'narrative logic (definition of events, causal relations and parallelisms between events), the representation of time (order, duration, repetition), and the representation of space (composition, orientation, etc)' (Bordwell, 1985: 12). He points out that all technical parameters (including sound and editing) can function within any, or all, of these systems. He gives an example of how 'lighting' and camera movements can emphasise an object's significance by creating a sense of space and depth. Other strategies include the use of 'off-screen sound' (sound heard without an identifiable on-screen source) to define an unseen space and therefore contribute to narrative signification. Bordwell defines a story (fabula) as 'the events of the narrative in their presumed spatial,

temporal, and causal relations' (Bordwell, 1985: 12). He describes the plot (the syuzhet) as including 'all the systems of time, space, and causality actually manifested in the film, everything from a flashback structure and subjective point-of-view to minutiae of lighting, cutting, and camera' (ibid.).

The earliest narrative films usually used a long shot of an event that was taken from an omniscient perspective without any movement in time or space through flashback or forward. Bordwell points out that 'even dreams, visions, and memories were seen in superimposition over only part of the frame, with the character still visible in the long shot' (Bordwell, 1985: 162). Contemporary narrative films have moved away from the limitations of being like photographed plays to include a range of narrative techniques that include back-stories, subjective dream sequences and flashbacks. A character's subjective modality may be conveyed through their use of speech, posture, facial expressions, camera movements, visual cuts as well as a soundtrack. Now, even unashamedly commercial film directors will utilise a wide range of sonic and visual techniques to interrupt the chronology of 'narrative time'. These include the use of voiceovers, additional reverberation and the use of asynchronous sounds and music to give clues about a character's history or their prescient visions of the future. In my analytical chapters I discuss how flashback sequences in *Once Upon a Time in the West* (Sergio Leone, 1969) are used as a means of understanding the main protagonist's subjective mentality and his motives.

2.1.1 Classical Hollywood narrative

Bordwell (1985: 157) posits that classical Hollywood film typically presents psychologically defined individuals who are intent on trying to solve clear-cut problems, or attain specific goals, as they enter into some kind of conflict with either others or external circumstances. These narratives usually conclude with them either achieving their goals or being heroically defeated. Bordwell points out that although the typical classical film will probably open with a degree of self-consciousness, as a character establishes his motives, the narrative style will rely upon a cause and effect story world transmitted by the objective eye of the camera as it moves swiftly from one character's point of view to another. The classical film typically contains few subjective point-of-view shots that are invariably anchored in an objective frame of reference. Bordwell points out that even when classical narration confines itself to a character's

limited knowledge this will 'be played off against what other characters know … even flashbacks, which are initially motivated as limited, subjective point-of-view, seldom restrict themselves solely to what the character could have known' (Bordwell, 1985: 207).

2.1.2 Classical narrative soundtracks and point of view

Bordwell (1985: 34) illustrates how music reinforces point-of-view by pointing out how *Rule-Britannia* is used over shots of London in *Monsieur Beaucaire* (George Marshall, 1946) to establish time and place in a similar way to how inter-titles or signs can. He explains how music is often used in cinema to express characters' mental states, (e.g. agitated music for the expression of turmoil or ominous chords for the expression of tension). Bordwell points out that during the 1940s it became quite commonplace for soundtracks to incorporate the use of unusual and weird colouristic sonic effects to depict troubled states (e.g. amnesia, shock and neurosis) of mind. An example of this occurs in *Spellbound* (Alfred Hitchcock, 1945) where the colouristic sound of the theremin is used to accompany Ballantine's strange and seemingly irrational dreams. It is also noticeable in *Hangover Square* (John Brahm, 1945) where George's first psychopathic attack is triggered by the dissonant sounds of a street barrel organ. Bordwell (1985: 34) highlights how music of classical narrative cinema is guided by narrative concerns and confines itself to 'a moment by moment heightening of the story' where 'slight anticipations are permitted, but recollections of previous musical material must be motivated by a repetition of a situation or by a character's memory' (Bordwell, 1985: 35). The following section investigates Bordwell's (2008) description of art film narrative and the psychological traits of its characters.

2.2 Art cinema narration

Bordwell (2008: 152–153) defines art cinema as being explicitly against the 'cause-effect linkage' of classical narrative cinema where characters have clear-cut traits and goals and instead is more concerned with depicting characters' reactions to events rather than their actions. He explains how early art cinema was influenced by German Expressionist theatre techniques that can be observed in *The Cabinet of Dr. Caligari* (Robert Wiene, 1920) with its distorted settings and Schrei acting, as well as with the influence of the Impressionist school on *La Roue* (Abel Gance, 1923) with its superimposition, point-of-view shots and rapid editing. Bordwell points out that by the

1940s art cinema was challenging the dominance of the classical Hollywood narrative cinema with its goal-driven protagonists in the form of Neorealist films such as *The Bicycle Thieves* (Vitorrio De Sica, 1948), which featured characters whose goals were less clear-cut and concerned with 'reality', (e.g. social issues such as unemployment and alienation). By the 1960s French new wave cinema and the emergence of *Cahiers du Cinema* critics had culminated in a distinctive European cinematic style that not only had its own narrative aesthetics, but also a team of dedicated critics who attempted to demarcate its artistic superiority. In the next section I discuss Bordwell and Thompson's (2008) essay *Sound in the Cinema* in order to see what salient ideas they bring to the study of how a character's subjectivity is signified by the soundtrack.

2.3 Sound in the cinema

Bordwell and Thompson (2008: 265) explain that cinema sound is a powerful film technique that shapes how we perceive and interpret images. They point to how orchestral, organ and piano accompaniment was used not only to fill the silence in silent films before the introduction of sound, but also to give the spectator a more complete perceptual experience by unifying both the sound and image. They describe how film sound can shape the way audiences perceive images through the anticipation created by the creak of a door, or in a quiet passage, as a viewer waits for a sound to help explain what is happening. I now investigate Bordwell and Thompson's conception of *The Perceptual Properties of Sound* (2008: 267-268) before discussing Bordwell's notion of *Temporal Relations in Cinema* (2008: 287-290).

2.3.1 Perceptual properties of sound

Bordwell and Thompson (2008: 267) include 'loudness', 'pitch' and 'timbre' in their list of film soundtracks' 'perceptual properties'. However, their definition of these 'perceptual properties' (e.g. 'loudness', 'pitch' and 'timbre') is only superficial and fails to mention other sound resources such as 'reverb' that may also provide significant information about characters' experiences. They also neglect to give any specific details of how these 'perceptual properties' can also help to explain characters' subjective mentality when subject to 'altered states'. It is therefore essential to incorporate Van Leeuwen's (1999: 156–188) sound modality resources in order to ascertain how Bordwell and Thompson's 'perceptual properties' may signify a character's subjective modality. However, Bordwell and Thompson (2008: 287) do present a useful overview

of the technology developments of cinematic sound and the spatial placement of sounds (e.g. distance, stereo and surround sound). For example, they illustrate how surround sound extends the subjective space in *Apocalypse Now* (Francis Coppola, 1979) as Willard recalls his Vietnam war experiences whilst the sound of a ceiling fan morphs into the sound of whirring helicopter blades and then becomes monophonic sound as he opens the venetian blinds to his external world.

2.3.2 Synchronous and asynchronous sound

Bordwell (2008: 287) distinguishes between synchronous sound (where sound matches the image), asynchronous sound (out-of-sync sound) and non-simultaneous sound (e.g. sonic flashbacks of a character's memories). The following chart presents his notion of how sound and image can be placed against one another to signify different temporal events.

Time	Space of Source: Diegetic (Story space)	Space of Source: Non-diegetic (Nonstory space)
1. Non-simultaneous; sound from *earlier* in story than image	Sound flashback; image flash-forward; sound bridge	Sound marked as past put over images (e.g., sound of John Kennedy speech put over images of the United States today)
2. Sound *simultaneous* in story with image	*External*: dialog, effects, music *Internal*: thoughts of character heard	Sound marked as simultaneous with images put over images (e.g., narrator describing events in present tense)
3. Non-simultaneous; sound from *later* in story than image	Sound of flashforward; image flashback with sound continuing in the present; character narrates earlier events; sound bridge	Sound marked as later put over images (e.g., reminiscing narrator of *The Magnificent Ambersons*)

Figure 1: *Temporal relationships in cinema* (Bordwell, 2008: 289)

Bordwell's chart illustrates the complex possibilities of using speech, music and sound to locate events or characters' subjective experiences in different time frames that may not directly correspond with what is presented in the image. Bordwell shows how sound may be used non-simultaneously (e.g. when sounds feature an earlier scene), simultaneously (in the present) or non-simultaneously (e.g. flash-forward or premonitions from later scenes).

2.3.3 Summary

Bordwell (1985) provides an extensive insight into the historical origins of classical Hollywood and European art-film narrative. He explains the fundamentals of classical Hollywood cinema 'narrative logic' as well delineating the differences between its protagonists, with their clearly defined psychology and external goals, and those of European cinema who are often more psychologically complex and self-reflexive. However, as far as the discussion of how characters' subjective modality is signified by narrative fiction, his focus is mainly visual and concerned with techniques such as 'point-of-view shots' rather than characters' 'point of hearing'.

A gloss of Bordwell's (1985, 2008) salient contributions to how soundtracks can render meaning as far as character subjectivity is concerned includes how sonic effects were frequently used during the 1940s to signify characters' psychological problems such as amnesia or neurosis; (which gives a basic description of the elements of music such as pitch, volume, dynamic, etc.) and his *Table of Temporal Relationships* that shows how sound and image relationships can signify characters' experience of present, past or future events. Although Bordwell (2008) points out in *Poetics of Cinema* how 'New Hollywood' and European art-film directors often draw from one another as far as narrative construction and character psychology is concerned, he still fails to address the significance that soundtracks play in their enunciation.

2.4 Film music: Gorbman

My review of Gorbman's theorisation of the soundtrack focuses upon her discussion of how character subjectivity is signified by film music. It will examine her notion of how 'narrative cueing', 'point-of-view music' as well as how 'music as a signifier of emotion' is configured within classical Hollywood soundtracks. Although Gorbman has provided a major contribution to how narrative film music may be understood, she has subsequently become aware that the title of her book *Unheard Melodies* (1987) is somewhat anachronistic as contemporary cinema often foregrounds sound design and commercial 'pop scores' over the conventional score[2]. However, her research of classical narrative cinema proves useful because it provides a guideline to understanding the rules of traditional Hollywood film scoring and therefore highlights

[2] Kassabian, A. (2001) *Hearing Film: Tracking Identifications in Contemporary Hollywood Film Music.* London: Routledge.

any deviations from that format. Her main questions are: 'What is music doing in the movies, and how does it do it?' These provide a simple but clear basis for investigating how 'subjective music' can also be researched.

Gorbman (1987: 1–10) traces the origins of synchronised sound and music in cinema to theatrical and operatic traditions. She explains that silent films originally used extra sounds and music to cover the distracting noise of the movie projector as well as 'explicating and advancing the narrative', 'providing historical, geographical, and atmospheric setting' in addition to identifying characters and their actions. In the following section I discuss Gorbman's (1987: 73) *Principles of Composition, Mixing, and Editing* in order to see what is useful for investigating how soundtrack semiosis takes place in cinema. For the purpose of investigating Gorbman's notion of how film music may signify subjective modality in cinema the following sections focus on her conceptualisation of it through **'**narrative cueing', 'point-of-view' and as an 'emotional signifier'.

2.4.1 Narrative cueing

Gorbman (1987: 82) divides music narrative cueing into two categories: The first category includes cues that mark off beginnings and endings of films; the majority of fiction narrative feature film scores still adhere to this tradition. The second category refers to temporal and geographical location and 'stock categorisation' that are 'strongly codified' by 'Hollywood harmonies, melodic patterns, rhythms and habits of orchestration' that 'are employed as a matter of course in classical cinema for establishing setting' (Gorbman, 1987: 83). She cites Strauss's waltzes as being used to connote Vienna or accordions being used to connote Paris or Rome. This tradition is still used as a kind of 'sonic shorthand' for establishing shots of new locations in James Bond movies or period films.

2.4.2 Point of view

Narrative classical film may also include music in order to create or emphasise a particular character's subjectivity. Gorbman points out that there are several devices that cue the spectator in this event:

> The association of the music with the sight of the character in a shot, a thematic association repeated and solidified during the course of the narrative, orchestration of music that was previously sung by or to the character, and the marked addition of reverberation for suggesting strongly subjective experiences.
> (Gorbman, 1987: 83)

She uses Steiner's score for *Of Human Bondage* (John Cromwell, 1934) as an example of what she describes as 'early point-of-view music in film' (ibid.). Gorbman describes how an educated, upper-class, clubfooted protagonist called Philip Carey develops a romantic obsession for what she describes as a 'prosaic, uninterested cockney' waitress called Mildred (Gorbman, 1987: 84). Gorbman (ibid.) also points out how Philip's recall of a piece of restaurant music reminds him of his romantic feelings for Mildred and is indexical of his subjective point of view. She highlights how the same theme is heard again in the form of a waltz that is placed in reverberation when he takes a medical exam and begins to daydream about her:

> A dissolve turns the skeleton into the shapely form of Mildred. The Mildred Waltz gives way to the waltz now played on a cello and string orchestra and recorded with an inordinate amount of reverberation. This reverberation contrasts markedly with the "dead sound" of the diegetic rendition of the restaurant.
> (Gorbman, 1987: 84).

2.4.3 Music as a signifier of emotion

Gorbman (1987: 79) perceives music as a signifier of emotion in classical narrative cinema. She comments on how it is used to heighten excitement in car chases, inflect romantic scenes with a 'deeper' significance through the use of sentimental strings as well as helping the audience to suspend their disbelief in scenes of horror, science fiction and fantasy. Gorbman (1987: 80) points out that the orchestration of 1940s films contained musical codes that denoted whether a woman was being depicted as what she describes as either a romantic 'good object' or a femme fatale. Women as 'good objects' were accompanied by the 'the euphony of a string orchestra' whereas a femme fatale might be accompanied by jazz music that features brass and woodwinds instruments. Lastly, Gorbman proposes that the use of Romantic music can trigger epic feelings through 'the elevation of individuals who take on a universal significance' Gorbman (1987: 81).

2.4.4 Meta-diegetic sounds

Gorbman divides how soundtracks signify meaning into three levels of signification. These are: diegetic music (story world), non-diegetic music ('commentary' music, outside the story) and lastly meta-diegetic sound, which originates from a character's mind. Milicevic (2007: 1) attributes Gorbman as being the first one who proposed the concept of 'meta-diegetic sound (sounds imagined or hallucinated by a character)' (Gorbman, 1976: 446–452). However, this term does not encompass the many possibilities of how those sounds, which are imagined or hallucinated may occur. Following Bordwell and Thompson's (1979: 246–249) proposal that one should distinguish between those sounds that are articulated 'aloud' and those that are 'thought' by a subject I propose that the concept of meta-diegesis should be divided into two types:

1. Intra-subjective, i.e. sounds or music that are used to present internal thoughts or feelings of a character;
2. Extra-subjective, i.e. sounds or music that present 'externalised' thoughts, or emotions (for example, the voiceover commentary). I will discuss the concept of meta-diegesis in further depth in chapter nine.

2.4.5 Summary

Gorbman (1987: 73) presents three important aspects that implicate how subjectivity is signified by the soundtrack. These are: narrative cueing, point-of-view, and music as a signifier of emotion. Although, Gorbman (1987: 79) argues that 'music is seen as augmenting the external representation, the objectivity of the image-track, with its inner truth' her emphasis always appears to place music as a secondary entity that motivates the visual rather than being a direct signifier. She views music as following conventions and codes where it is used to heighten the excitement of a chase scene, or suggest a romantic scene, rather than exploring in more depth the semiotic potential of the whole soundtrack as speech, music and sound.

Gorbman's (1987) theorisation of the soundtrack is focused upon the idea that film music's main function is to foreground narrative events and characters' emotions instead of being actively listened to. However, this is no longer true as contemporary directors often foreground music, sound design effects and popular song as an essential part of a film's aesthetic or as part of the commercial drive of its producers to attract

audiences to watch it. Nevertheless, Gorbman makes a valuable contribution to understanding how the subjectivity modality of the protagonist, George, is signified by the soundtrack with her analysis of *Hangover Square* that I will discuss in chapter nine. Gorbman also introduces the term 'meta-diegesis' to explain characters' subjective experiences of imagination (hallucinations, dreams and so on). However, her research neglects other elements of the soundtrack, such as the semiotic role of the voice and sound design, thus making it necessary to look towards Michel Chion's (1994: 199) conceptualisation of the soundtrack, as he is aware of the semiotic potential of speech, sound and music as well their relationship with the image.

2.5 The soundtrack: Chion

Chion's prolific output on the soundtrack includes two notable books *AudioVision* (1994) and *The Voice in Cinema* (1999). His invention of new terminologies for various 'sound acts' as well as his attempt to write succinctly about the audio and visual contract and the relationship of the visual image and sound have helped to identify what had been previously either unnoticed or not articulated in cinema study. Chion points out that film critics tend to talk of the image in the singular when there are millions of images that pass before the viewer's eyes. He argues that although only one can be processed at a time it is possible to 'pile up as many sounds on the soundtrack as we wish without reaching a limit' (Chion, 1994: 66–67). In the following sections I discuss Chion's conceptualisation of how subjective modality is signified by the soundtrack. These are: 'point of audition', 'empathy', 'anempathetic sound', 'on-screen sound', 'off-screen sound' and the 'I voice'.

2.5.1 Point of audition

Chion (1994: 89) finds the issue of explaining the 'point of audition' difficult because it is first necessary to decide if the sound is heard from the audience's viewpoint or the character's ('subjective designation'). He points out that it is easier to place a camera in a position to give the viewpoint of a character but less easy to affirm the precise nature of where a sound comes from and therefore ascertain whose aural 'point of view' it is intended to represent. Chion posits two questions:

1. A partial sense: from where do I hear, from what point in the space represented on the screen or on the soundtrack?

2. A subjective sense: which character, at a given moment of the story, is (apparently) hearing what I hear?
(Chion, 1994: 90).

Stam, Burgoyne and Flitterman-Lewis (1992: 62) clarify Chion's concept of 'point of audition' by suggesting it is dependent on three criteria: 'positioning of sound' in terms of production, how sound is situated within the diegesis and lastly where the spectator is positioned (conceptually and physically). They warn of the difficulties of identifying point of audition because the soundtrack does not always obey a natural or realistic signification of everyday perspective.

2.5.2 Empathy and anempathetic sound

Chion (1994: 8) describes empathic sound as music or sound that takes on a 'scene's rhythm, tone and phrasing' and therefore becomes expressive of sadness or happiness. Chion perceives anempathetic sound as being where noise, or music, appears to be indifferent to screen events. He points out that in *Psycho* (Alfred Hitchcock, 1960*)* this occurs with the sonic hum of a fan and a shower running as if nothing had happened. I discuss the use of anempathetic sound in chapter nine when the main protagonist of *Hangover Square* murders a man as an organ grinder's music plays anempathetically in the background.

2.5.3 On-screen sound and off-screen sound

Since the advent of the talkies, synchronised sound has been at the forefront of narrative fiction cinema with characters providing narrative information via lip-sync as well as through their facial movement and body gestures. Whereas Chion (1994: 73) describes on-screen sound as a source that 'appears in the image, and belongs to the reality represented therein' he finds off-screen sound 'deceptive' because it relies on its intrinsic relationship with the image. Chion (1994: 85) shows how off-screen sound functions in *Psycho* when Norman argues with his 'mother'. He points out how this scene is 'based entirely on the curiosity aroused by active sound' as the audience cannot see what Norman's mother looks like.

2.5.4 The voice in cinema and subjectivity

Chion's (1999: 1) conceptualisation of the soundtrack highlights the importance of the voice not only as a carrier of textual information but also as a means of the conveyance of psychological and emotional information that is expressed through its spatial, material and sensory aspects. He points out that the majority of narrative film soundtracks elevate the voice above the other sounds (music and sound effects). He describes this process as 'vocentricism' and points out that 'during filming … it is the voice that is isolated in the sound mix like a solo instrument … we are not talking about voice of shouts and moans, but the voice as medium of verbal expression' (Chion, 1999: 6). Chion sees the roots of vocentricism deriving from early cinema that was influenced by the practices of theatre and opera. Voiceover commentary was often featured in early projections in magic lantern shows before the advent of synchronised sound. Silent cinema actors articulated narrative events by non-verbal means that were sometimes accompanied by inter-titles. With the advent of sound the individual characteristics of voices (pitch, dynamic voice timbre and so on) became an integral part of the signification of a character's subjective modality.

2.5.5 The voiceover

The voiceover provides a direct cinematic aural device for expressing subjective modality. Chion describe 'voix-off' (the voiceover) as an important part of narrative cinema that 'designates any acousmatic or bodiless voices in a film that tells stories, provide commentary, or evoke the past' (Chion, 1994: 49). In line with Bordwell's conception of the voice's function in classical Hollywood cinema Chion also sees it as a means of driving the plot through exposition. He perceives the voiceover as drawing upon *film noir* techniques (see chapter seven on flashback and memory) that encompass subjective authority, self-revelation and nostalgic recollection.

Chion (1999: 50) points out that sound films have 'codified the criteria of tone, colour, auditory space, and timbre to which a voice must conform' so that it is not just 'the voice that says 'I' as in a novel' but its sound and spatial placement. Chion highlights that the 'I-voice' often appears when the action of a film comes to a standstill as someone, who is serene and reflective, will start to tell a story and the character's voice separates from the body and then returns 'as an acousmetre to haunt the past tense images' (Chion, 1999: 49). He explains that in order to make a spectator identify with a

voice as enunciating a subjective position of a particular character 'it must be framed and recorded in a certain manner' by 'close-miking', which helps to suggest a feeling of intimacy that includes dryness or an absence of reverb in the voice. Chion (1999: 51) points out that when reverb is added the 'I-voice' becomes 'distanced' and is no longer a subject with whom the spectator identifies.

2.5.6 Summary

Chion introduces the concept of 'point-of-audition' as being sound that is either heard from the audience's viewpoint or the character's perspective. He distinguishes between film sounds that resonate emotionally with screen events and those that highlight a dramatic moment through their juxtaposition against the image as ironic comment. Chion also points out how the perceptual effects of spatial positioning of on-screen or off-screen sound may create additional narrative layers of meaning where the audience is held in suspense until the image and sound are presented simultaneously. Chion (1994: 90) concludes that it is necessary to incorporate historical and cultural research of the soundtrack in order to understand how spatial, conceptual and perceptual relationships exist between the film image and its sounds. He points out that in order to understand the multi-faceted layers of vocal symbiosis it is necessary to explore its relationship to the image, its spatial position (on-screen, off-screen and acousmatic sound), aural perspective (how close or far away the sound appears as close-miking or reverberation) and a subjective sense (as though it is our own audition) of what a character is hearing. Chion's observations of the dimensions of the soundtrack and its relationship to the image provide an extremely useful insight to how subjective modality may be viewed alongside Van Leeuwen's (1999) sound semiotic system.

2.6 The soundtrack: Altman

Rick Altman is a prolific researcher in film sound theory and its history. For the purposes of my research I will focus on his concern with the limitations of the way the soundtrack is studied before moving on to discuss his concept of 'point of audition'.

2.6.1 *Cinema as event*

Altman argues that 'the text-oriented model [of film studies] has begun to waver in the face of discursive approaches' that include feminist theory, cultural studies, and other critical methods that accommodate a broader notion of what film is and how that may

affect any human activity. In contrast to the notion of film as a text he argues it is more helpful to conceive of 'cinema as event' (Altman, 1992: 2–3). He also points out that although every theory of cinema should address the problem of film sound this has not happened with 'many theoreticians blithely drawing conclusions about the nature of cinema simply by extrapolating from the apparent properties of the moving image' (Altman, 1992: 35).

2.6.2 The musical model

Altman (1992: 15) describes film sound as systematically borrowing from a musical model. He points out that the most influential introductory film textbook of the time defined the acoustic properties of sound as loudness, pitch, and timbre:

> While all film sounds have loudness, pitch, and timbre, not a single sound in cinema can be adequately described with musical terminology … If I attend three concerts of Mozart's 'Little Night Music,' one in a well holstered salon, another in a large concert hall, and a third in a city park, I am in one sense hearing the 'same' music three times, that is music that is represented by a single, identical score. Yet how different are the sounds that reach my ears during the three concerts.
> (Altman, 1992: 16)

Altman (1992: 15) argues that there are limitations with using musical terminology to describe film soundtracks because although all film sounds have loudness, pitch, and timbre it is necessary to be aware that every recording carries both 'narrative' and 'spatial' information that is individual according to where and how it is recorded.

2.6.3 Recording and representation

Both Altman (1992) and Chion (1994) are aware of the limited status of the soundtrack in academic study and stress the need to move beyond the dominance of classical Hollywood cinema and its reliance on characters' vocal performance. Contemporary Hollywood blockbuster films such as *Jason Bourne* (Paul Greengrass, 2007) now incorporate a whole system of sound signification that moves beyond vocentricism with their all-pervading use of sound design for dramatic effect. Altman writes that 'recordings do not reproduce sound, they represent sound' (Altman, 1992: 40). He argues that this is achieved by the choice of such factors as the recording location, what microphone is used, the recording system, postproduction techniques, storage medium, playback arrangement and playback locations. This means that each recording proposes

an interpretation of the original sound. Altman (1992) points out that there is a danger in perceiving that recording is a reproduction of the original sound events:

> Simultaneously capable of misrepresentation and of artistically using all the possibilities of representation, sound thus recovers some of the fascination lost to its reputation as handmaiden of the image. Indeed, it is recording's very ability to manipulate sound that makes it so amply worthy of our interest. (Altman, 1992: 40)

2.6.4 Point of audition

Altman (1992: 60), Lastra (1992: 76) and Chion (1994: 90) share the view that 'point of audition' is where someone will hear for us. Altman argues that instead of giving the listener the freedom to move about 'the film's space at will, this technique locates us in a very specific place – the body of the character who hears for us'. Quite often a character's point of audition is signified by changes in the level of volume and reverb level of the soundtrack so that the audience is given the privileged position of becoming what Altman describes as an 'internal auditor'. Altman (1992: 60) explains that 'point of audition' is frequently used to establish spatial relationships among neighbouring spaces that cannot be presented visually in a single shot. Lastra (1992: 76) clarifies Altman's account of 'point of audition' by explaining that 'Pov sound (like the Pov shot) represents the experience of hearing within the diegesis, normally the hearing of a character' (Lastra, 1992: 76).

2.6.5 Summary

Firstly, Altman highlights the need to extend the traditional ways of studying cinema to include the potency of sound semiosis and move beyond research that is visually biased. Secondly, he also points out the shortcomings of using the 'musical model' and a description of its parameters (such as volume, pitch and timbre) to study film soundtracks. He quite rightly points out that it is essential to enlarge the framework of soundtrack analysis to incorporate the knowledge of technological developments and sound design as part of soundtrack analysis. Lastly, Altman's explanation of 'point of audition' clearly illustrates how representational strategies such as volume or reverberation may be used to signify a character's subjective modality of what is taking place, even if these events take place off-screen.

2.7 The soundtrack: Donnelly

Kevin Donnelly is an aesthetic film historian whose research encompasses film music and popular music. For the purpose of my research topic I will focus on Donnelly's (2001, 2005) analysis and discussion of the current status of film music study, horror film music and *The Shining* (Stanley Kubrick, 1981) (see chapter nine).

2.7.1 Critique of soundtrack theory

As I pointed out in the introduction (see chapter 1, section 1.1) film music is often fragmentary and reliant on a film's logic for its design. However, as Donnelly (2001: 1–2) observes, the study of film music has taken place in the margins of academia with musicologists preoccupied with the traditions of classical orchestral music and semioticians being focused on it as a functional item that exists for its own communication value. Firstly, Donnelly sees traditional notation as not being suitable as a means of transcribing contemporary instrumental performance and production methods. Secondly, he thinks that semiotics, despite being 'word and image-centred', should also be deployed to analyse how film music genres and their codes work.[3] Donnelly argues that the social level of music's life is of primary importance 'as a transaction between the sound and the listener' and perceives film music as a 'vibrant and living form of music that breathes in harmony with a film, to provide a high degree of emotional impact for mass audiences' (Donnelly 2001: 3). Donnelly perceives film and television music as 'all pervading' and aims to control the audience with its 'psychological processes, its symbolic undercurrents and through its status as one of the most potent forms of non-verbal communication' (Donnelly, 2005: 2). Donnelly (ibid.) argues it is easier to discuss a film soundtrack's 'mechanics' and 'rules of construction' rather than dealing with its 'psychic life' that touches the emotions of its listeners. Donnelly's view is similar to Van Leeuwen's argument that 'sound never just expresses or represents, it always also, and at the same time affects us' (Van Leeuwen 1999: 128). My reading of Donnelly's (2001, 2005) work is that he proposes that film music researchers should embrace cross-disciplinary research that includes history, aesthetics, musicology, sociology, semiotics and cognitive music psychology as part of the process of finding out how meanings are constructed and communicated. As I pointed out, Altman (see chapter two, section 2.4.1) articulates that 'cinema is event' not just a text.

[3] NB Social semiotics focuses on social meaning-making practices of all types, whether visual, verbal, or aural in nature (Thibault, 1991).

2.7.2 Horror film music

Many film viewers who have watched mainstream Hollywood horror films are familiar with the suspenseful scene where a protagonist wanders into a deserted building, as high held strings, or a low ominous drone warns the audience of the imminent danger the protagonist may experience. In such scenes the sounds are as frightening as the appearance of a monster or the beast the audience sees. Horror music is easily identifiable because of its exhibitionistic dynamics and sensory effects as it mimics on-screen action, features wide dynamic range and shifts between consonance and dissonance to signify tension. Donnelly (2005: 90–1) highlights the use of the 'drone' and the 'sting' as being two devices that have been used since the inception of the horror film genre. He describes 'the drone' as being used to create tension that is built 'through anticipation' with the use of unresolved dissonances. He also points to the use of the 'sting' as a 'musical physical blast' that derives from the use of instruments (e.g. swanee whistles and bass drums) as mimicry of original diegetic sounds in the silent cinema.

Donnelly (2005: 90) believes that although film music works with recourse to the 'conscious and semi-conscious linguistic codes' it is the 'sheer material aspect in horror films' that somehow gets 'a direct access' to the audience. This is illustrated in *The Shining* where the use of Bartok's and Penderecki's modernist classical music brings not only a provenance (cultural import) value, but is also used to physically and psychically bombard the listener with its dynamic and unpredictable dissonances and sustained sounds that evoke suspense. For Donnelly horror soundtracks deploy music, speech and sound as another dramatic player in a film's drama. He observes that horror films appear to use non-diegetic sound and music more than any other genre as a means of signification. He views horror film music as using leitmotifs, recognisable patterns and extreme dynamics as part of their narrative deployment as well as an additional psychological use that is 'based on fundamental notions of presence/absence, perceived origin and physical volume' (Donnelly, 2002: 90).

2.7.3 Historical heritage of horror film soundtracks

Donnelly points out in his chapter on horror film music (2005: 88–109) that musical techniques of early twentieth-century art music are often used as an influence for horror

film music. He refers to Eisler and Adorno's reference about how tremolo strings have become an intrinsic part of the way fear and suspense are signified in horror films:

> The tremolo on the bridge of the violin, which thirty years ago was intended even in serious music to produce a feeling of uncanny suspense and to express an unreal atmosphere, today has become common currency.
> (Eisler and Adorno, 1947: 17)

Donnelly (2005: 91) lists *The Bride of Frankenstein* (James Whale, 1935) and the *House of Dracula* (Erle Kenton, 1945) as early examples of the use of tremolo as a 'horror effect'. He points out how harmonic language has been derived from Stravinsky's *The Rite of Spring, Petruska* and *The Firebird* (e.g. the use of the ethereal whole-tone scale) to also become 'part of the musical language of horror films in the 1930s'. Donnelly also points out how theatre and popular music has been assimilated into the repertoire of horror film music scores. A gloss of Donnelly's (2005: 91) list of horror film music resources are: deeply pitched strings; drones; unresolved dissonances (to create tension); ostinatos and short sharp blasts of sound that cause physical shock and surprise; tremolo and sul ponticello as what he describes as 'mysterious ambience' that may accompany a scene where there is narrative tension. In my analysis of *The Shining* I will identify the way these musical resources are used to signify characters' subjective modalities.

Donnelly points out how horror film music is regularly used in Dracula films as an effect, or device, to signify Dracula's attacks as well as the fear of his victims. He notes that in Werner Herzog's *Nosferatu* (1979) the vampire omits musical sound when it attacks that gives this scene an added supernatural dimension that defies convention and cliché. My analysis of *The Shining* shows how music plays an intrinsic role in signifying characters' subjective modality via the use of strange textures, dissonance and explosive dynamics that signify characters' experiences of 'extreme moments' of fear, insanity and psychic phenomenon.

2.7.4 Beyond representation

Donnelly (2005: 94) argues that semiotic attempts to merely decode film music into words, ideas and narrative appear to him to be a 'risible banal conceptualisation' of something that he believes is more 'emotional, seductive and mysterious' than simple

communication. He thinks that film music's relationship with the audience involves more than simply adopting Bordwell's (1991: 8–9) idea of just 'reading of audio signs' and believes that it is also necessary to take into account the materiality effects of music as well. Donnelly, like Van Leeuwen, is alert to the problems of examining a soundtrack only for its codal signifying qualities and thereby neglecting any social influences, material effects, or other semiotic resources that lie beyond the linguistic framework:

> It is possible to make – perhaps a temporary, contingent and heuristic – distinction between film music that works primarily through conscious and semi-conscious linguistic codes (and can thus simply be decoded by the analyst using semiotics, and film music that is premised upon having a material effect, as sound volume and the action of sound waves upon the listeners.
> (Donnelly, 2005: 94)

Donnelly believes it is important for film soundtrack researchers to be aware of the direct effect of sound and music on the listener as 'physiological effects bypass culture's learned structures' (ibid.). Donnelly cites Barbara Kennedy (2000: 3) as one of a new generation of film theorists who feels that representation has 'swamped other concerns about film' and has thereby neglected the effect sound's material properties may have on audiences.

2.7.5 Immersion, subjectivity and the soundtrack

Donnelly (2005: 95) points out that electro-encephalogram readings of brain waves, respiration and heart rates show clearly that loud blasts of sound, such as 'stingers', physically affect an audience's nervous system on a primal level. Although an audience can avert their eyes from the screen during a particularly gruesome moment in a horror or thriller, the soundtrack can still affect them with an intense moment of savagery that is encoded in its musical blast of sound. This is demonstrated in *Psycho* as the sound of rhythmic and forceful sounding strings 'heighten' the scene's drama as stabs his victim to death.

2.7.6 Discussion

Donnelly (2001, 2005) presents an informative overview of the status of contemporary film music study and the historical background of horror film music and its semiotic functions. I agree with Donnelly's idea that film music research needs to foreground a multidisciplinary approach that includes history, aesthetics, musicology, sociology,

semiotics and cognitive music psychology. I also agree with his idea that the analysis of film music cannot discount its 'communicational aspects' as well as how emotions and sensations are signified. In order to discuss and analyse the full semiotic possibilities of the soundtrack it is important to move beyond using 'abstract' music notation and contemplate how the material properties of a soundtrack signify meaning. It is also necessary to investigate the new semiotic potential of sound design resources and how subjective experiences are signified.

2.8 Overview

Although it is a challenging task I believe it is necessary to pursue as broad a reading of the soundtrack as possible. This should include Bordwell (1985, 2008), Gorbman (1987), Chion (1994, 1999), Altman (1992) as well as locating new researchers, such as Donnelly (2001, 2005), Whittington (2007), Stephen Deutsch (2008) and Milicevic (2007). It is important to accumulate knowledge of film sound theorists, sound designers, composers and directors' observations and experiences of film soundtracks in order to understand its true semiotic potential through its narrative function, technological developments, material properties and socio-cultural references.

Despite the fact that there is an extraordinary amount of film theory literature that can be used to further define how subjective modalities may be signified by the soundtrack, there is a lack of unity about the way it is theorised. There is an absence of a coherent overall view amongst film sound theorists of how to approach the study of the soundtrack in a systematic way that acknowledges the sonic qualities of speech, music and sound, its narrative and visual context as well as the implications of context and codes and the wider resonances of cultural history, aesthetics and production values. I concur with Milicevic's following assessment of the problems with film soundtrack study, its lack of coherence and the need to embrace 'contextual relationships'. Milicevic writes that:

> All these film theories that attempt to classify film sound into absolute and complicated categories to talk about sound which parallels or counterpoints the images, sound that is synchronous or asynchronous in relation to the images, sound that is either realistic or unrealistic, or sound that is literal or nonliteral … The reason why these film sound theories have difficulties lies in their attempt to get absolutely finite results beyond contingency, instead of the contextual

> relationships. Unfortunately, in the end they become more about making classifications than they do about understanding cinema.
> **(**Milicevic, 2007: 1)

The following chapter will examine how sound semiotics and social semiotics place context as a fundamental principle of their design.

Chapter 3: Theoretical frameworks: classic semiotics, social semiotics and sound semiotics

3.1 Introduction

This section of the literature review traces the development of classic semiotics and the emergence of structuralist film theory in the 1960s. It then gives an overview of the principles of social and sound semiotic theory and explains how they can be used to investigate how film soundtracks may signify characters' subjective modality. Semiotics involves the study of signs that may take the form of words, images, sounds, gestures and objects. In contrast to classical semiotic study contemporary semioticians such as Hodge, R. and Kress, G. (1988), Thibault, P. J. (1991) Kress, G. and Van Leeuwen (1996) stress the importance of social and cultural contexts to understand how meanings are made and social reality is constructed. In the next section I will discuss Ferdinand de Saussure and Charles Peirce's contribution to the development of classic semiotics.

3.2 Classic semiotics: Saussure and Peirce

Saussure proposed that semiology should be the 'science which studies the role of signs as part of social life' (Saussure, 1974 [1916]: 31–91). Classic semiotics tended to neglect the social dimension of his semiotic doctrine and has focused more on theorising the complexities of sign relationships with one another and, as a result, abstracted signs and sign systems from their contextual usage. Saussure's notion of the science of semiotics is a fixed one that neglects how a sign's meaning may change over time. Saussurean study places the emphasis on the linguistic nature of communication at the expense of non-linguistic forms of communication. His theoretical approach is not designed to accommodate the continual innovations that exist between the co-dependent dialogue of language and culture.

Van Leeuwen (2005: 26) points out that although Saussure made the distinction between synchronic semiotics, as a description of a state of affairs at a given moment in time, and diachronic semiotics, as a historical description of how things change and evolve, his focus was on 'describing language synchronically, as a system' rather than diachronically. In contrast to Saussure's thinking, Van Leeuwen (2005: 26) perceives

social semiotics as attempting to combine 'the synchronic system' and 'diachronic narrative' by addressing social reasons for change (via semiotic resources and new ways of using existing semiotic resources).

Saussure created a dyadic model of the sign as a '*signifier*' and the '*signified*'. He viewed a linguistic sign as not just the link between something and a name, but between a concept [*signified*] and a sound pattern [*signifier]*. Chandler (2007: 14) explains that Saussure makes the distinction between the '*signifier'* and the '*signified'* in these terms:

> A sound pattern is the hearer's psychological impression of a sound, as given to him by evidence of his senses. This sound pattern may be called a 'material' element only in that it is the representation of our sensory impressions. The sound pattern may thus be distinguished from the other element associated with it in a linguistic sign. This other element is generally of a more abstract kind: the concept.
> (Saussure, 1983[1916]: 66)

Saussure stressed the 'arbitrariness' of the sign. An example is the English word for 'dog' that becomes 'chien' in French, which will change again according to the language that is chosen. Saussure perceived 'no inherent, essential, transparent, self-evident or natural connection between the signifier and the signified – between the sound of a word and the concept to which it refers' (Saussure, 1983 [1916]: 67–117 in Chandler (2007: 14). Saussure's structuralist approach meant that he perceived individual texts as closed-off entities that are separate from 'reality' and thus only focused exclusively on their internal structures. His dyadic model is a fixed one that neglects how a sign can change over time and has no direct reference to a 'reality' outside of the sign. However, in cinema many subjective sound devices are non-arbitrary because they are dependent on the context they are used in, or how a film director may choose to use them, e.g. Hitchcock's introduction of reverberation in *Blackmail* (Alfred Hitchcock, 1929) to signify Alice's sense of guilt as she recalls murdering an assailant.

In contrast to Saussure's dyadic model, Peirce (1931) created a model that is triadic. He saw the sign as being divided into three parts as the 'representamen' (the sign), an 'interpretant' (the sense or concept) and the 'referent' (object). Peirce's object (referent)

is not confined to physical things, but can also include abstract and fictional concepts. Peirce's model 'allocates a place for materiality and for reality outside the sign system' (Chandler, 2005: 33). In contrast to Saussure, Peirce believed that the study of parole (culture) was essential for a deeper awareness of how semiotic codes work. Peirce includes the possibilities of non-linguistic communication in his tripartite scheme where there is an 'icon' (signs that are representational, such as portraits or cartoons), 'index' (signs that denote objects by being connected to them such as thermometer readings) and a 'symbol' (arbitrary or purely conventional signs, such as language or numbers that are learnt) acting as devices to signify information**.**

In order to understand the multidimensional aspects of cinema it is certainly necessary to reach beyond the limitations of a self-contained abstract theory of language that is unconcerned with how language, cinema and culture are changing. The study of cinema requires cultural context and its diachronic study (historicism) as opposed to its synchronic study (studied as a complete system at a given point in time). Hodge and Kress argue that there are dangers that emerge from Saussure's and Peirce's classic semiotic discourse because they both place an emphasis on 'structures and codes ... at the expense of functions and social use of semiotic functions [and] the complex interrelations of semiotic systems in social practice' (Hodge and Kress, 2006: 1). I will now discuss Metz and Barthes's contribution to film structuralism and cultural theory.

3.3 Film structuralism: Metz and Barthes

3.3.1 Metz

One of the most significant shifts in narrative analysis began in the 1960s with the French theorist Christian Metz who used Saussure's linguistic theory to bring structural analysis into film scholarship. Metz (1974: 31–91) questioned whether 'langage' (spoken or written language) or 'langue' (a language system) was the most appropriate way of describing cinematic language. He decided upon 'langage' as he thought 'langue' demanded a double articulation of which cinema was incapable. He then looked for cinematic equivalents to language and systematically attempted to show how denotative and connotative meaning is generated by the image, titles, spoken language, dissolves and music. However, Stam, Burgoyne and Flitterman-Lewis (1992: 56) point out that as cinematic expression involves five tracks (image, dialogue, noise, music, written materials) film always seems to escape the language that is used to describe it.

3.3.2 The question of film language

Stam points out that Metz's question of whether cinema was *langue* (language system) or *langage* (language) meant he had to discard 'the imprecise notion of film language that had predominated up to that time' and involved him 'clos[ing] in on the object of semiotics: the study of discourses, of texts, rather than that of cinema in the broad institutional sense' (Stam, 2000: 110). Stam (ibid.) lists the problems that Metz encountered with trying to make a comparison between film and language. Firstly, although Metz acknowledged that there are infinite possibilities of film shots, there are only a finite amount of words in any language. Secondly, he realised that filmmakers can bring their own innovative strategies to shots whereas words have restricted pre-existing definitions that already exist in lexicons. Thirdly, film shots provide 'an inordinate amount of information and semiotic wealth' that cannot always be communicated in words. Metz also realised that as 'the image is *always* actualised' the picture of a revolver refers to a specific revolver instead of the flexibility encapsulated in the word 'revolver' as 'a purely virtual unit' (Metz: 1974: 67).

Metz concluded that the cinema was not a language system 'because it contradicts three important characteristics of the linguistic fact' (Metz, 1974: 75). These are glossed by Stam (2000: 112) as 'the arbitrary sign, minimal units, and double articulations'. For Metz, language is a system of signs used for intercommunication and cinema only presents one-way communication. Stam summarises:

> Cinema is a language, in sum, not only in a broadly metaphorical sense but also as a set of messages grounded in a given matter of expression, and as an artistic language, a discourse of signifying practice characterised by specific codifications and ordering procedures.
> (Stam, 2000: 112)

3.3.3 *Grande Syntagmatique theory*

Metz believed that the organisation of images into a narrative was one of the most important ways that film resembles language. In his *Grande Syntagmatique* theory Metz (1974) proposed that narrative segments could be classified into eight different types of sequences of film shots (syntagmas). These eight syntagmas were distinguished primarily through the editing process and expressed through what Stam describes as 'the spatial temporal and logical connections that form the universe of the fabula' (Stam, Burgoyne and Flitterman-Lewis, 1992: 79). However, there is a problem with

Metz's *Grande Syntagmatique* theory because it is difficult to distinguish syntagmas from one another in practice. Anyone who tries to apply Metz's system to the analysis of a film is confronted not only with the lack of clear definition between each one of the eight syntagmas, but also the fact that his theory is overtly visually biased and therefore sidelines the role and functions of the soundtrack. Bordwell observes that 'difficulties arise where there is asynchronous or overlapping sound that does not match the division of the images' (Bordwell, 2007: 512).

Stam (2000: 117) points out that when Metz used his *Grande Syntagmatique* theory 'to breakdown the film *Adieu Philippine* (Jacques Rozier, 1962) into 83 autonomous segments' his analysis missed many of the most interesting features of the film (e.g. its portrayal of the TV milieu, working class attitudes and characters' accent and gender roles and flirtation in 1960s France). He also argues that Metz's *Grande Syntagmatique* theory privileged narrative mainstream film and marginalised other forms, such as documentary and avant-garde cinema. Metz (1974: 107) concluded that the 'concept of linguistics can be applied to the semiotics of the cinema only with the greatest caution'. He realised that the artistic status of cinema resides in its connotative qualities (e.g. framing, camera movement and lighting effects) and he had neglected this and mainly focused on its denotative functions in order to explain its narrative form. I will now discuss Barthes's contribution to structuralism and the importance of situating 'signs' within a social context.

3.4 Barthes

In an article written for the *Times Literary Supplement* Barthes (1967: 13) defined structuralism as a way of analysing cultural artefacts that originate in the methods of linguistics. Barthes believed that to understand language it must not only be examined in isolation, but also in a social context. Barthes declared that:

> Semiology aims to take in any system of signs, whatever their substance and limits: images, gestures, musical sounds, objects, and the complex associations of all of these, which form the content of ritual, convention or public: these entertainments constitute, if not languages, at least systems of signification. (Barthes, 1967: 9)

Barthes's investigation of bourgeoisie society and its accompanying 'myths' created the basis of what is called cultural studies as he questioned the conventions of society and the arts in order to reveal its underlying ideology and veracity. Although Barthes was inspired by structuralism he also included social and cultural context, whereas Metz did not.

3.4.1 Langue

Barthes (1967) follows Saussure's thinking when he talks about language and perceives 'langue' as a set of conventions that have their origin in the linguistic practices of the speaking masses ('parole'). He relates the idea of 'langue' to the sociologist Durkheim's notion of the 'collective unconscious' that was popular during the early twentieth century and had been influential upon Saussure's thinking. However, in contrast to Saussurean thinking Barthes believes it is important to acknowledge how social and historical influences can shape a sign's meaning over a period time. This idea is observable in Hollywood film scores where the repetition of musical ideas in specific types of scenes over time has become a 'musical language' of its own:

> Hollywood music is very nearly a public communication, like radio. If you are a movie fan you may sit in a movie theatre three times a week listening to the symphonic background scores which Hollywood composers concoct …Your musical tastes become moulded by these scores …[which] you see [and] love … Music suddenly becomes a language for you, without your knowing it.
> (Turner, 1992: 17)

Advertisers also use music as a kind of language to elicit certain responses from audiences towards their products by appropriating familiar themes from popular movies such as *Psycho* (Alfred Hitchcock, 1960) or *Jaws* (Steven Spielberg, 1975) that may be used to either connote danger or ironically allude to it. Chandler points out all signs, texts and codes need to be carefully read because when we interpret television or photography as a window of the world, 'We treat the signified as unmediated or transparent [and] Saussurean-inspired semiotics demonstrates that the transparency of the medium is illusionary' (Chandler, 2007: 213).

3.4.2 Codes: connotation and denotation

Barthes played an important role in defining the terms 'denotation' and 'connotation' by drawing upon Hjelmslev's (1943) argument that different means of expression of the

same concept produced different meanings. This idea can be observed with language translation when native speakers do not just translate the basic concept, but also imply cultural information about the country that they originate from. Barthes established that the term connotation could be also applied to semiotic modes other than language. Following Saussaurean thinking Barthes privileged connotative meanings (socio-cultural and 'personal' ideological and emotional associations) over denotative, or literal, meaning but concluded it was not easy to separate the 'signifier from the signified', or the 'ideological from the literal' (Barthes, 1977: 166).

In the same way that the Hollywood soundtrack has become a 'public language', music's connotative properties are instilled into us from an early age with the songs and lullabies that we learn as children, which reflect our country of birth through their specific types of rhythms, scales, harmonies and phrasing that may later accompany our work and recreational activities when we become adults. Philip Tagg points out how music can be used to evoke sentiments of national identity and used by governments and corporations to evoke patriotic and nationalistic feeling:

> Stylised national folklore is used as the connecting link between complex organisational hierarchies in society (e.g. industries, governments, symphony orchestras) ... These movements were particularly strong in Adorno's Randgebieten (Slavonic nations, Hungary, the Balkans, Russia, Scandinavia, Britain, Spain) ... [and] later to be used extensively by Hollywood.
> (Tagg: 1982: 5)

Film directors often use film soundtracks as a means of ensuring that audiences read their films in a particular way: slow tempos, minor keys and plaintive strings to suggest sadness, or up-tempo, major-based music to suggest vitality and excitement. Actors and sound designers also manipulate their speech and sounds to encourage audiences to perceive screen events in a particular way (via aural parameters such as pitch, timbre, rhythm and so on). Haeffner argues that Hitchcock's cinematic style is based around the connotative power of the camera and soundtrack working together to create terror and suspense:

> A typical viewer of a Hitchcock movie expects suspense and moments of psychological terror. The camera and soundtrack work in tandem to conjure this for the audience. Hitchcock deliberately presses buttons.
> (Haeffner, 2005: 49)

Although Barthes [4]did not write extensively about the cinema, or how the soundtrack functions in relationship to the image, his many discourses on the arts may be transposed for this purpose. For example, Barthes's analysis of photography can be transposed to explore how Foley sounds (naturalistic sound effects) are used in cinema. Barthes (1964: 44) points out that with photography the mechanical capture of an image reinforces the myth of its objectivity. There is also a substantial amount of human intervention involved in the process of taking a photograph because of the way framing, distance, lighting, printing and effects can alter the final product. In the same way that a cameraman may appear to record reality, a 'Foley' soundperson can use his technical means to select a version of reality with sound. In this case the representation of reality is determined by what microphone is selected, its placement, and whether it is unidirectional, omnidirectional, etc. In both instances human intervention frames either the picture, or sound, to represent what the photographer, or soundman, wishes to portray. For example, the signification of a character's subjective experiences can be hyperbolised by close-up miking of their heartbeats, or breathing, in order to suggest an indexical account of their emotional distress in a scene of terror.

3.4.3 *The Grain of the Voice*

Van Leeuwen (1999: 128) argues that the poststructuralist writing of Kristeva, Barthes and others formed the backbone of a movement to reintroduce the materiality of the sign. Barthes (1977) points out in his article, *The Grain of the Voice* that the material sounds of a singer's voice are an integral part of their communicative process and must be considered as important as issues such as genre, a composer's coded idiolect, or style. Barthes describes this concept as the 'materiality of the body speaking its mother tongue', something which is directly brought to our ears in one and the same movement from deep down in the cavities, the muscles, the membranes, the cartilages' (Barthes, 1977: 179). Barthes emphasised the importance of the material effects of sounds singers produce over any interpretative style. As Van Leeuwen points out 'sound never just 'expresses' or 'represents', it always also, and at the same time, affects us' (Van Leeuwen, 1999: 128).

[4] Barthes, R. (1977) *Image-Music-Text*. London: Fontana.

3.4.4 Summary

Barthes highlights the need to investigate language and art forms within their social context and seeks ways to disarm cultural myths[5] that may conceal how they are produced or understood. He has played an important role in defining the terms 'denotation' and 'connotation' and stresses the importance of connotative meaning ('socio-cultural' and 'personal' influences) over literal meaning. Although Barthes was not overtly concerned with writing about cinema his writing about other art forms provides useful models that can be transposed to investigate its semiotic functions. His articulation of the processes of myth, connotation and the exploration of the materiality of sound provide useful theoretical platforms for investigating subjective modalities of the soundtrack. The following section will discuss the literature I have used from the field of social semiotics and sound semiotics for my research of soundtrack semiosis.

3.5 Social semiotics

In contrast to Saussure's and Peirce's idea of classic semiotics, social semioticians investigate human signifying practices in specific social and cultural situations by taking Saussure's original conception of semiology 'life of signs in society' more literally and try not to dismiss any cultural, or historical influences that may be significant to their analysis and discussion of their enquires. Social semioticians attempt to explain meaning-making as a social practice by expanding on Saussure's founding insights by exploring the implications of the fact that social processes form the 'codes' of language and communication. Social semiotics focuses on social meaning-making practices of all types, whether visual, verbal, or aural in nature (Thibault, 1991). These different systems for meaning-making, or possible 'channels' (e.g. speech, writing, images) are known as semiotic modes. Semiotic modes can include visual, verbal, written, gestural and musical resources for communication. They also include various 'multimodal' ensembles of any of these modes (Kress and Van Leeuwen, 2001).

Although Saussure had made a distinction between the synchronic study (at one point in time) of the language system and the diachronic (historical time) study of language,

[5] Barthes, R. (1957/1987) *Mythologies*. New York: Hill & Wang.

he argued that linguistics must move away from the diachronic orientation that studies language as a functional totality. In contrast, social semiotics tries to account for the variability of semiotic practices (named 'parole' by Saussure). This altered focus showed how individual creativity, changing historical circumstances, and new social identities and projects can all change patterns of usage and design (Hodge and Kress, 1988).

The main task of social semiotics is to develop analytical and theoretical frameworks, which can explain meaning-making in a social context (Thibault, 1991). Traditional semiotics tends to be formalistic and abstracts signs from the contexts of use, but social semioticians are more concerned with 'meaning-making' and using available data (including social or cultural information) as a 'resource'. Social semiotics examines semiotic practices, specific to a culture and community, for the making of various kinds of texts and meanings in various situational contexts and contexts of culturally meaningful activity. Lemke writes that 'People make meanings; they do not simply exist in a culture' (Lemke, 1995: 9). 'Meanings' are made within communities and the analysis of that meaning should not be separated from the historical, cultural and political dimensions of these communities. This belief is echoed by social semioticians who also prefer to contextualise their semiotic research within a social setting.

3.5.1 Codes

Codes are a set of practices that are familiar to users of the same medium, language or culture. Society is constructed around its members being aware of these codes. Turner (1992) writes:

> Codes are interpretive frameworks, which are used by both producers and interpreters of texts. In creating texts we select and combine signs in relation to the codes with which we are familiar in order to limit ... the range of possible meanings they are likely to generate when read by others.
> (Turner, 1992: 17)

However, Van Leeuwen (1999: 5) points out that although the dominant interpretation of language was as a code (a set of rules) in the past he believes that the confines of a bureaucratic approach, as used in business (with documents, agendas, meeting formalities, and so on), are bypassed in mediums such as poetry,

advertising, or children's conversation where more individualistic choices are made outside the same constraints, or limitations, of codes or systems. In the context of music performance ritual, Van Leeuwen explains that in classical music there exists a 'bureaucratic' nature that adheres to defined codes that are abandoned within jazz music where freedom of expression and individuality is encouraged.

Van Leeuwen's (1999: 8) process of creating resources derives from the classification of aural parameters that follows a systemic functional approach (cf. for example, Halliday, 1978; Martin, 1992). These 'choices' are made up from a set of resources set out as binary opposites, e.g. loud-soft (to indicate anger or meekness). Van Leeuwen is not concerned with the construct of codes that have definite and fixed meanings, but resources that produce 'meaning potential … [where] the importance of context cannot easily be overstated' (Van Leeuwen, 1999: 10). The following section examines Van Leeuwen's (1999) conceptualisation of how linguistics, semiotics and musicology can be used to explore the communicative uses of speech, music and sound and how sound semiotics may be used for the analysis of subjective modality in cinema.

3.6 Sound semiotics

Van Leeuwen develops Halliday's theorising of language as a social semiotic (1978) and systemic functional linguistics (1985) and transfers the techniques to the study of sound. Van Leeuwen (2005: 162–163) explains that Halliday (1985) moved linguists' traditional focus on a 'specific grammatical system of modal auxiliaries' to a new dimension where 'modality not only allows us to choose degrees of truth, but also kinds of truth for instance'. In the same way that in language modal auxiliaries such as *may*, *will*, or *must* could be indicative of a person's level of commitment to achieve a goal, semiotic aspects of speech, music and sound (e.g. pitch, dynamic, timbre) could be used to indicate a person's subjective modality.

Van Leeuwen (1999: 9) categorises the study of sound semiosis into six topics. These are: sound perspective, sound time and rhythm, the interaction of 'voices' (e.g. 'turn taking'), melody, voice quality and timbre, and modality. They derive their semiotic affordances from their 'materiality' (1999: 125); that is from the

concrete material resources (human, musical and non-musical instruments) that are used to produce sounds. He argues that the semiotic resource of loudness can be judged along a range of modalities, e.g. the perspective of an object's, or subject's, distance may be judged by whether one hears it as a soft or loud sound. Other semiotic resources, such as voice quality, can be accessed on a plane of modality judgments from soft to loud and smooth to rough, etc. If a person's voice is soft it may be because they may wish to convey intimate secrets, or are shy, whereas if they are 'loud' it could be because they are angry or excited. As well as providing a descriptive account of the semiotic resources of sound, Van Leeuwen (1999: 9) investigates how it is possible to 'say and do things' with sounds and how to interpret their meaning. He agrees with Martinec's (1996) idea that 'what is presented or represented by a sound' is important in its definition. Van Leeuwen cites the linguist Firth's observation that 'part of the meaning of an American is to sound like one. In other words "by sounding American" Americans present themselves as Americans to others' (Firth, 1957: 225).

Van Leeuwen follows a systemic functional approach and develops a system network for each of the semiotic resources of sound he examines. He describes the choices offered by these semiotic resources, their semiotic value, and potential for meaning making (and how that meaning may be presented or represented). Van Leeuwen (1999: 46) extends his theoretical modelling to include an interpretive framework that engages the concepts of 'provenance' and 'experiential meaning potential' and the concept of social context. Provenance refers to when a sound is imported from one 'place' (one era, one culture, one social group) into another; its semiotic potential derives from associations with that place and experiential meaning potential refers to how the physical production of a sound carries a meaning potential. The remaining part of this review will concern itself with examining what aspects of Van Leeuwen's sound semiotics theory may have relevance for the analysis of how characters' subjective modalities are signified by the soundtrack. These are: modality, aural perspective, provenance, sensory coding and the voice.

3.6.1 Modality

Van Leeuwen (1999) points out that the term 'modality' refers to the linguistic resources for the expression of 'degrees of truth' that may be expressed by modal auxiliaries such as *may*, *will* and *must.* He distinguishes between what he calls 'logicians modality' (truth and falsehood) and the observations of social semioticians, such as Hodge and Tripp (1986) and Hodge and Kress (1988), who are not so concerned with the actual objective truth, but the truth as seen by speakers, or writers, as they 'assign modality to their assertions to express how true they would like these representations to be taken' (Van Leeuwen, 1999: 156). He explains how he and other social semioticians have extended the linguistic concept of modality beyond language and pointed to the importance of non-verbal communication for the expression of modality (e.g. Kress and Hodge, 1979; Hodge and Tripp, 1986) and theorising the modality of images (Hodge and Kress, 1988; Kress and Van Leeuwen, 1990: 1996). Van Leeuwen's idea is that the question of truth plays a role in every kind of communication (Van Leeuwen, 1999: 158). This could extend to speech, gesture, music, clothes, photography and so on.

Van Leeuwen's (1999: 170) inventory of the semiotic potential of sound resources (which he describes as 'articulatory parameters') facilitates the investigation of how the modality ('truth value') of a sound and its context may signify meaning. Modality judgments of these sounds are 'cued' by the degree to which a number of different parameters are used in the articulation of these sounds, (i.e. the coding orientation used in that context) that determines the modality value of a particular sound, the degree and kind of truth that will be assigned to it. Van Leeuwen (1999: 170–71) uses techniques of linguistic analysis to produce a sound semiotic approach that he calls the 'modality of sound' (where the truth of a recording uses certain means of aural expression to represent the world). He illustrates his idea by discussing the different ways that locomotive trains can be signified by sounds and music. His first example is Honegger's symphonic poem *Pacific 231* where musical sounds are used to abstractly represent a locomotive accelerating (via the sounds of strings sliding up to represent its whistle and the sound of brass, strings and tympani representing its chugging engine as it accelerates). The second example uses a recording that includes naturalistic noises (clicks, squeaks, hisses and sound of the grinding wheels) to realistically represent the sound of an old steam engine. The

third example illustrates how a film director might use sensory sounds to frighten his viewer by making the locomotive train sounds more 'three dimensional' with the sound of its 'deafening roar, heightened reverb, ear-piercing grinding of the wheels' and a whistle's shrill scream. His last example is the abstract chugging sound that usually accompanies Disney's character Dumbo. Van Leeuwen (1999: 171) points out that this sound is almost musical, but lacks the 'embodied physicality' of a real train as its facets are amplified for comic effect.

Following Van Leeuwen's model of sound semiosis, I will explore the possibilities of how characters' subjective experiences are signified via abstract, sensory and naturalistic uses of sound. I will also investigate how aural perspective (via spatial positioning, reverb, echo, etc.) and the material properties of sound can signify characters' experiences in this situation. It is also important to understand how sound designers' manipulation of sounds (frequencies, change of spatial depth, pitch ranges, timbres, etc.) can be parameterised. One solution is to be found in Van Leeuwen's inventory of 'sound gestures' that can be summarised as pitch extent (monotone to maximally wide pitch range), durational variety, dynamic range, perspective (foreground, middle, background), fluctuation (steady sound to rapid fluctuation or tremolo), absorption range (dry or spacious use of reverberation) and the degree of directionality. Van Leeuwen points out how different degrees and kinds of aural realism are dependent on how articulatory parameters (pitch, volume and texture) are amplified, or reduced, to signify a particular event. He suggests that 'mixed coding orientations are common in high art practices which questions definitions of truth and reality' (Van Leeuwen, 1999: 182).

3.6.2 Sensory coding orientation

The use of sensory sounds ('heightened sound') has become an established practice amongst many filmmakers that wish to portray characters' subjective experiences in a range of genres such as thrillers, horror films, etc. Van Leeuwen points out how directors are able to imbue horror soundtracks with additional emotive impact by 'widening the pitch range' or 'increasing the duration variation' (Van Leeuwen, 1999: 170-180). He defines this process as sensory coding orientation where 'the representational and the presentational begin to mix … the aim of the horror film is not to represent horror, but to horrify' (Van Leeuwen, 1999: 179). In both flashback

and dream sequences ‘naturalistic’ sound is often removed and replaced by sensory sounds in order to distinguish between reality and an altered state.

3.6.3 Aural perspective

Van Leeuwen writes that every semiotic mode can create relations between ‘what is being presented or represented and the receiver, the reader and or viewer or listener of the message’ (Van Leeuwen, 1999: 12). He argues that just as visual artists have developed a means of presenting visual perspective through the size or framing of subjects it is possible for sound designers and composers to use volume to signify distance. Sound perspective is not just a ‘relative’ concept, but is also a ‘subjective’ concept where the ‘loudness’ is relative to the ‘position of the listener’ (Van Leeuwen, 1999: 17). Van Leeuwen uses Schafer’s (1977) terminology ‘Figure’, ‘Ground’ and ‘Field’ in order to identify the position of sound according to its relation to their distance from the listener. ‘We will adopt Schafer’s terms … not only in the literal sense, but also to symbolic places or positions’ (Van Leeuwen, 1999: 16).

Van Leeuwen (1999*:* 18) explains how the three distinct groups of sounds ‘Figure’, ‘Ground’ and ‘Field’ can be heard in a recording by Eloisa Mathieu, entitled *Ambient Sounds at Costa Rica: Afternoon at the Selva Biological Station.* He explains that in this context the ‘Field’ is the sound of the cicadas – a continuous ‘broadband’ sound and a kind of drone’; the ‘Ground’ is a variety of birdcalls; and the ‘Figure’ is a howling monkey. Van Leeuwen points out that sometimes it is only possible to identify the ‘Figure’ and ‘Ground’ sound, i.e. sounds that are closest or furthest away. Van Leeuwen (1999: 120) explains that Gorbman’s (1987: 76) notion of music remaining in the background in cinema is reversed in Jane Campion’s *The Piano* (1993) when Ada’s inner world (of muteness and loss) is featured as the ‘Figure’ and the realistic sounds of the gushing rain and Stewart's violent actions recede into the background. He also points out how in everyday life it is quite common to have sounds and music dominating the soundscape via the sound of police, ambulance and fire engine sirens, public address announcements, the sound of muzak and so on.

3.6.4 Provenance

Van Leeuwen (1999: 210) describes 'provenance' as being the associations that sounds carry when they are imported from one 'place' to another. He cites how the Beatles and The Rolling Stones importing sitar music into their compositions evoked Indian culture and the association of its appearance with meditation and drug culture. Simon Frith cites *Zorba the Greek* as another example of provenance because it has become 'so powerfully connotative of "Greece" that Greek restaurants have to use it to convince customers of their "Greekness"' (Frith, 1984: 84). People's accents, traditional dress and the national songs that they play all become connotative of particular cultural values that can be exported to other cultures as provenance.

It is important to pay attention to where the meaning potential of a sound quality is derived from and how it is produced. Is it produced from a person's voice or body and what aspects of the sound production characterise the sound produced and what do these sounds signify? Van Leeuwen (1999: 125-155) identifies the 'key sound features' of voice quality as 'tension', 'roughness', 'breathiness', 'loudness', 'pitch register', 'vibrato' and 'nasality'. He concludes that the meanings of sounds can be examined for their 'materiality' (the physical characteristics of the music or sound producer). He emphasises the importance of understanding the connotative implications of speech, music and sound. Questions that should be asked include who produces that sound; where does it come from; does it have a historical background; and has it been imported from the past? (Van Leeuwen, 1999: 141). Technological developments have had a major impact upon the process of vocal signification in all recorded media including film where the electronic manipulation of sound is able to amplify voice qualities of breathiness, roughness and so on.

3.6.5 The voice: technology

The use of amplification allowed public communicators to establish a personal relationship with listeners even though they were literally a great distance away. Van Leeuwen (1999: 26) points out how radio and television presenters have a tendency to change their voice according to the genre of the broadcast format they are involved in. Newsreaders adopt higher and tenser voices to convey current

affairs whereas commercial disc jockeys are either energetic and speak loudly for young audiences or aim to be relaxed and more gentle sounding on easy listening stations that are aimed at older audiences. Developments in microphone technology have also allowed singers with quieter and softer voices to become more expressive and intimate because their subtle vocal nuances could now be heard. Frith (1988: 19) writes that Bing Crosby pioneered the intimate 'crooning' style that worked best with domestic listeners.

3.6.6 Social distance and the voice

Van Leeuwen points out that 'every semiotic mode can create relations between what is being presented or represented' (Van Leeuwen, 1999: 12). He describes the sound of the voice as an important factor in the system of social distance. He defines five levels of 'social distance' that take place between a communicator and a receiver without the use of amplification. These are:

1. Intimate distance (whispering or maximally soft voices)
2. Personal distance (soft relaxed voices at low pitch and volume)
3. Informal distance (full voice at somewhat higher pitch and volume)
4. Formal distance (overloud, higher and tenser, projected voice)
5. Public distance (maximally loud).

(Van Leeuwen, 1999: 27)

Social distance is commonly signified in narrative cinema via intimate voiceovers that disclose mental subjectivity with various levels of volume pitch and tone. The subsequent development of microphones, mixing and recording techniques over the last century has allowed radio, television broadcasters as well as film actors to explore the full range of vocal dynamic to sound like their audience's best friend or roar with electronically altered voices as monsters from outer space.

3.6.7 Materiality of sound

Whereas Shepherd (1991: 65) observes that the 'spiritual and the personal had been squeezed out' in favour of 'bureaucratic rationality'. Van Leeuwen (1999: 127) points out how modern production allows contemporary singers and instrumentalists to develop their own individual styles, (e.g. the punk stance and hip-hop culture). A performer's subjective modality can be understood by whether they use a soft and

smooth voice (relaxed) or a rough one (tense). Van Leeuwen points out how sound designers now pay as much attention to sync 'effects' as they previously did to dialogue or music in order to signify the expressive and emotive qualities of a scene. He illustrates his point by referring to the sound effects in the film *The Piano* where 'the creaking and groaning of timber' and 'the soft sighing and deep mysterious rumbling of the ocean' are, he argues, 'as telling and emotionally effective as music' (Van Leeuwen, 1999: 128). Recently the role of sound design has come to equal, or sometimes even eclipse, the conventional music score as it is used as a dynamic tool to create tension and comment on the time and places of events and characters' emotions in the way that conventional Hollywood scores used to. Van Leeuwen's inventory of meaning-making resources of the voice provides a useful and important tool in this research in order to examine how soundtracks signify subjective modalities.

3.7 Overview

This research proposes that it can provide an original contribution to the field of sound semiotics and study of the film soundtrack by exploring the modality configurations of sound in the context of how subjective experiences of characters and their subjective modality is signified and expressed. It will incorporate Van Leeuwen's (1999) work on sound modality, the voice and aural perspective as the foundations of this investigation. Its intention is to formulate a cohesive methodology that unites Van Leeuwen's sound semiotic theory with a non-semiotic study of the soundtrack in order to bring cohesiveness to the understanding of how a character's subjective experiences are signified. As I have already stated (see chapter one, section 1.1), there is plethora of film sound theorists that discuss the soundtrack from a multitude of different perspectives, but there is a lack of coherence amongst them. Quite often theorists observe the soundtrack from a 'discipline led' methodology and therefore neglect not only how the soundtrack and image may modify one another, but also the importance of situating their study within a social context. The dangers of this compartmentalisation, i.e. the overt focus on subjects such as music, sound theory, and sound design rather than the soundtrack make it hard to assimilate data in a cohesive manner. As a result there is no coherent study of the soundtrack's relationship to the image as a whole, and certainly none about how altered states are signified by the soundtrack.

Chapter 4: Methodology

4.1 Methodology

In this chapter I will discuss the descriptive and analytic approach adopted in this thesis. I will begin by examining the problems and possibilities of how to transcribe film soundtracks using social semiotic and film sound methodologies. I will then explain how I have used Van Leeuwen's (1999) sound semiotic theory and film sound theory in my analysis and description of how the subjective modality of characters are signified by the soundtrack.

4.2 Film transcription: methodological problems

> I like to think cinema is stumbling around in the "pre-notation" phase of its history. We're still doing it all by the seats of our pants … if you compare music in the twelfth century with music in the eighteenth century, you can clearly see a difference of several orders of magnitude in technical and emotional development, and this was all made possible by the ability to write music on paper. Whether we will ever be able to write anything like cinematic notation, I don't know but it's interesting to think about.
> (Murch, 2002: 51)

The concept of transcribing cinematic events presents two main problems. Firstly, it is difficult to find a way of transcribing a multimodal medium that includes visuals (camera movement, lighting and *mise-en-scène*); soundtrack (speech, music and sound) and narrative meaning and still remain coherent. Secondly, as Ochs points out 'researcher's data' is usually a 'selective process that reflects their theoretical goals and definitions' (Ochs 1979: 43–72). She argues that tape recorders and video cameras may yield different data according to how a microphone or camera is placed and thus influences the outcome of how data may be ultimately read or interpreted. The following section explains the basic principles of multimodal discourse and investigates whether I can use multimodal transcription methodology for my investigation of how characters' subjective experiences are signified when they are subject to altered states.

4.3 Multimodal discourse and transcription methodologies

Iedema (2003) points out that the term multimodality was introduced to highlight the importance of taking into account semiotics other than language-in-use, such as image, music, gesture, and so on. He describes how the increased presence of sound, image and film, through television, computers and the internet is one of the main reasons behind the recent interest in the 'multi-semiotic complexity' of the representations that we produce and see around us. The evolution of multimodal thinking took place as a systemic-functional framework that began with the analysis of visual representation (Hodge and Kress, 1988; Kress and Van Leeuwen, 1990) and spatial construction (O'Toole, 1990, 1991, 1994). Van Leeuwen then adopted Halliday's systemic-functional notions into his investigation of speech, music and sound (Van Leeuwen, 1999). In *Reading Images* (1996) Kress and Van Leeuwen observe that 'framing' in visual communication (where elements are marked off from each other as pictorial framing devices) exists as a multimodal principle and is termed phrasing (short pauses and discontinuities of various kinds that may be rhythmic or dynamic) in time-based modes, such as music or with an actor's movements. The following section investigates the multimodal transcription methods that are used by Norris (2004), Van Leeuwen (1999) and Thibault and Baldry (2006) in order to see if they have relevance for my own transcription methods.

4.3.1 Norris: multimodal interaction and transcription

Norris **(**2004: 1) reveals that her focus is to investigate how multimodal interaction takes place in everyday situations (e.g. office interactions, musicians practising, street buskers). She points out how even simple conversations between friends are multimodal events where each person's language includes verbal choices of 'content … the prosody, and the pitch' of their voices, as well as nonverbal gestures such as their sitting position and facial expressions. She bases her transcriptions on video camera recordings that she makes of multimodal interaction that take place in everyday situations. Norris (2004: 2) points out that her task of transcribing multimodal events into a printable format is complex because each mode is structured differently with the communicative mode of language being 'sequentially structured' (with prefixes and words that are used to adjust the meaning of sentences), whereas gesture is synthetically structured (where one gesture after

another does not necessarily extend the sense of the first gesture).

Although Norris (2004: 64–65) uses video recordings to facilitate the difficult process of the transcription of colour and people's body posture, she admits that the mode of recorded music is still not easily translated. My own experience of transcribing film soundtracks confirms her premise because it is necessary to understand the semiotic potential of pitch, rhythm, texture and its materiality as well as its provenance value (import of cultural ideas) before transcription can take place in any meaningful way. There is also the problem of how to notate or describe sounds that originate from musical instruments, such as synthesisers and samplers where conventional notation is not appropriate.

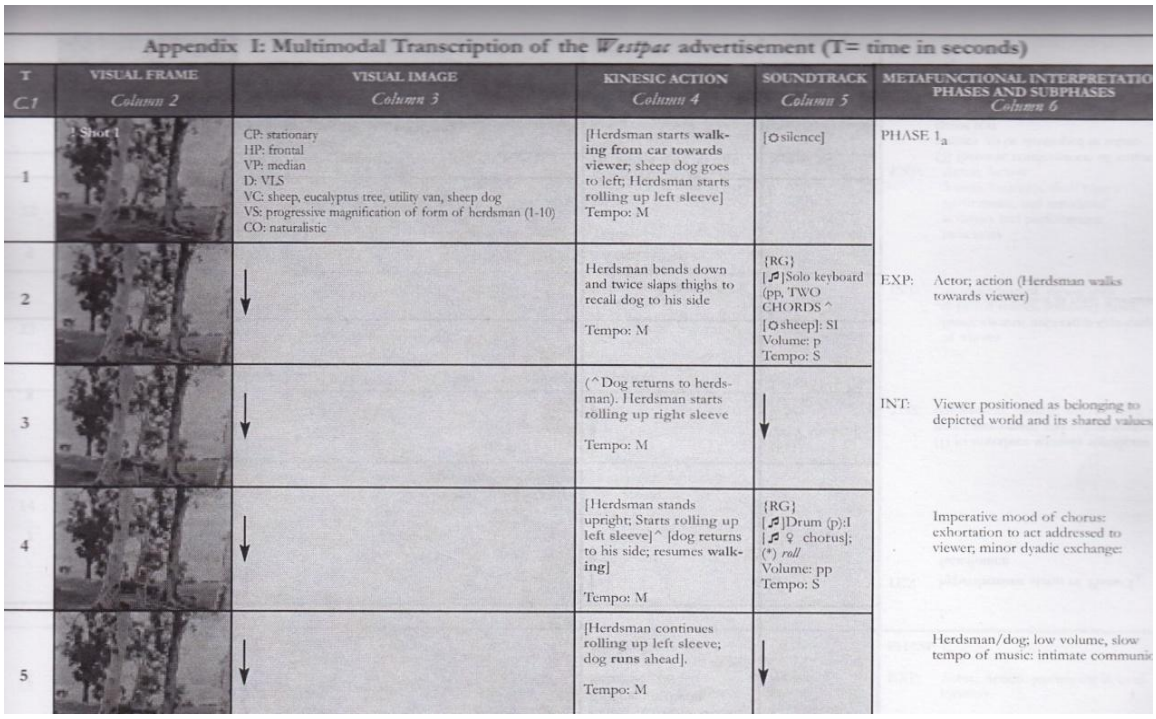
Norris (2004: 65) highlights that with multimodal transcription 'there is a constant interplay between analysis and method of description' that is always based on theoretical assumptions. I have found the need to combine an analytic and descriptive approach in my transcription charts in order to accommodate both film theory and sound semiotics in my research. Although I do include transcriptions of characters' speech, my research focuses mainly upon what Norris (2004: 65) describes as the 'de-emphasis of spoken language' in order to 'accentuate the other communicative modes that are essential in interaction as spoken language' (which in this case is the soundtrack).

My underlying problem with using Norris's transcription methodological approach for my research is that although she pays a lot of attention to verbal and non-verbal communicative events, such as gesture, pose, movement and sound, her focus is on the transcription of unscripted events of everyday life rather than how narrative cinema often uses pre-designed means of signification via camera movement**,** lighting and actors' movement. It is quite common for directors to use camera movements (angles and distance) as a means of depicting a character's experiences. An example of this occurs in *Once Upon a Time in the West* (Sergio Leone, 1969) where extreme close-up shots of Harmonica's eyes are used as a way of indicating that a flashback sequence will take place. My main concern with Norris's transcription methodology is that she fails to include any transcription details of music or sound and merely points out how difficult it is.

4.3.2 Baldry and Thibault: multimodal transcription and the soundtrack

Baldry and Thibault (2006: 1) investigate if multimodality can be used as a single framework to adequately describe what they perceive as 'the very different semiotic systems' of language, gesture, music movement, etc. They cite Halliday's (1989: 10) theory that texts are not limited to the spoken and written media of language and may be spoken, written or appear in any other medium of expression. However, although they present a coherent discussion of how multimodal cohesion exists within web pages, printed texts and advertisements they do not discuss how soundtrack semiosis takes place in cinema.

Baldry and Thibault's transcription of a *West Pac* advert demonstrates their preoccupation with its visuals, kinesic action and the metafunctional interpretation of phrases, but does not show clearly how music, or sound, signifies these events. The following transcription reveals that the soundtrack occupies the least space with its narrow column. Although Baldry and Thibault indicate a keyboard sound is used in their transcription they do not elaborate further on what sounds it produces, or the significance of what those sounds could be. The inclusion of volume and tempo markings also does not further clarify what they wish to say about the role and function of the sounds and music in their transcription.



Appendix I: Multimodal Transcription of the *Westpac* advertisement (T= time in seconds)

T C1	VISUAL FRAME Column 2	VISUAL IMAGE Column 3	KINESIC ACTION Column 4	SOUNDTRACK Column 5	METAFUNCTIONAL INTERPRETATIO PHASES AND SUBPHASES Column 6
1	Shot 1	CP: stationary HP: frontal VP: median D: VLS VC: sheep, eucalyptus tree, utility van, sheep dog VS: progressive magnification of form of herdsman (1-10) CO: naturalistic	[Herdsman starts walking from car towards viewer; sheep dog goes to left; Herdsman starts rolling up left sleeve] Tempo: M	[ʘ silence]	PHASE 1_a
2		↓	Herdsman bends down and twice slaps thighs to recall dog to his side Tempo: M	{RG} [♬]Solo keyboard (pp, TWO CHORDS ^ [ʘ sheep]: SI Volume: p Tempo: S	EXP: Actor; action (Herdsman walks towards viewer)
3		↓	(^Dog returns to herdsman). Herdsman starts rolling up right sleeve Tempo: M	↓	INT: Viewer positioned as belonging to depicted world and its shared values
4		↓	[Herdsman stands upright; Starts rolling up left sleeve]^ [dog returns to his side; resumes walking] Tempo: M	{RG} [♬]Drum (p):I [♬ ♀ chorus]; (*) *roll* Volume: pp Tempo: S	Imperative mood of chorus: exhortation to act addressed to viewer; minor dyadic exchange:
5		↓	[Herdsman continues rolling up left sleeve; dog runs ahead]. Tempo: M	↓	Herdsman/dog; low volume, slow tempo of music: intimate communic

Figure 2: Multimodal Transcription of the *WestPac* advertisement (Baldry and Thibault, 2006: 143)

4.3.3 Van Leeuwen: rhythmic phrases as frames for communicative acts

Van Leeuwen (2005: 181) explains how rhythm provides a source of multimodal cohesion in texts and communicative events (music, acting film and television). He points out how rhythmic structuring contributes to 'getting the message across' through the rhythmic coordination of the soundtrack with action, camera movements and editing points. Van Leeuwen (2005: 184) highlights how phrasing becomes important in semiotic articulation as a frame for communicative acts such as speech music and dance. The following transcription shows his analysis of how multimodal cohesion takes place in a scene from *Hôtel du Nord* (Marcel Carné, 1938).

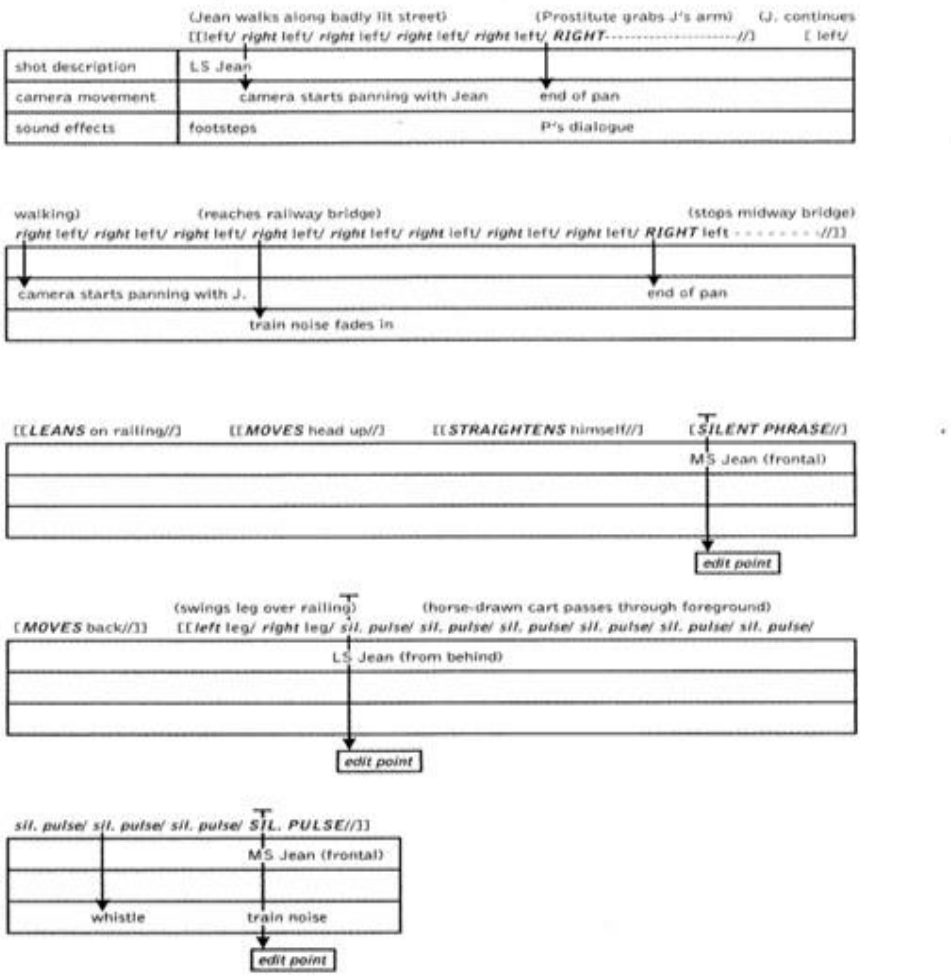


Figure 3: Rhythmic analysis of a scene from *Hôtel Du Nord* (Marcel Carné, 1938)

Although Van Leeuwen's transcription provides a clear example of how the rhythmic interaction of different 'tracks' takes place as a multimodal entity (with its details of camera panning and character movement) my focus is on how the soundtrack (speech, music and sound) signifies characters' subjective experiences. Although I point out how camera distance may be part of the process of how subjective experiences are signified, my focus is on how sound semiotic resources (the material effect of pitch, dynamic, texture) convey subjective experience rather than the overall effect of how multimodal rhythmic cohesion takes place in cinema.

4.3.4 Summary

Multimodal discourse highlights the importance of non-verbal communicative modes as being equally important as language is for signification. The recent proliferation of multimodal communication (film, television, computers and the internet) has necessitated the understanding of what Iedema (2003: 1) calls 'multi-semiotic complexity' of the representations we produce and see around us. Even though I find the idea of multimodal transcription interesting I have not found a suitable transcription model that can directly facilitate my investigation of how sound semiosis takes place in my chosen field of study. However, the field presents interesting possibilities for the future research of cinema from a multimodal perspective. The following section discusses the merits of using sound semiotics in conjunction with film sound theory as a basis for my analysis and transcription methodology of this research project.

4.4 Sound modality

Van Leeuwen (1999) adopts a social semiotic approach to sound analysis. He writes that 'social semioticians have extended the linguistic concept of modality beyond language, pointing to the importance of non-verbal communication in expressing modality' (1999: 158). He cites Hodge and Kress (1988) and Kress and Van Leeuwen (1990, 1996) as social semioticians who have applied modality in theorising the 'meaning' of images. For Van Leeuwen, sound modality can be approached along the same lines:

> Modality judgments cued by the *degree* to which a number of different parameters are used in the articulation of the sounds … the coding

> orientation used in that context, determines the modality value of a particular sound … and more specifically the *coding orientation* used in that context, determines the modality value of a particular sound – the *degree* and *kind* of truth we will assign to it.
> (Van Leeuwen, 1999: 170)

Van Leeuwen's idea is that modality judgments can be made about conventional musical resources such as pitch, timbre, dynamic and rhythm, or may include perspective depth, fluctuation, friction, absorption range and directionality. Van Leeuwen (1999: 177-179) links coding orientation to the context of how a sound event signifies meaning. Although he defines 'naturalistic modality' of sound and music as being 'everyday sounds' that are neither 'reduced' nor 'dramatised' and 'sensory modality' as being the dramatisation or 'emotive effect' that is often found in seductive adverts or horror films, he explains that the idea of 'abstract modality' of sound is more difficult to define, arguing that music as the 'most abstract form of sound' is always sensory. Van Leeuwen (1999: 171) illustrates this process taking place in Disney's cartoon *Dumbo* (1941) where the locomotive sounds are a mixture of 'relatively abstract' and 'essential' musical sounds for the representation of its 'chugging wheels' and 'clacking of wheels on rails' alongside sounds that are 'exaggerated and amplified for comic effect' in a sensory manner.

Van Leeuwen concludes that whereas with visual communication it is possible to reduce data in a scientific diagram, map or sketch of a person but still retain the 'essence' of a message through its 'abstract modality' 'it is difficult, indeed almost impossible, to be completely dispassionate and unemotional in the medium of sound (Van Leeuwen 1999: 177). For the purpose of clarity I therefore focus my investigation of sound modality and coding orientation in cinema around his notion of 'naturalistic' and 'sensory' sound modality (with the knowledge that sensory coding and abstract coding may take place simultaneously). [6]

[6]Although Van Leeuwen (1999: 177) suggests a third category of 'sensory – abstract coding orientation' I have focused only just two main categories of sound coding orientation that are either 'naturalistic' or 'sensory' in concord with Deutsch's conception of 'literal' sound and 'emotive' sound (see chapter 7, section 7.5).

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For the purpose of identifying how characters' subjective modalities are signified by film soundtracks, Van Leeuwen's sound modality system provides a powerful tool as it shows how the aural parameters of speech, music and sound may be amplified, decreased or left neutral in order to signify either their 'altered' states or 'reality'.

4.5 Subjective modality

Although Van Leeuwen's (1999) adaptation of Halliday's linguistic principles from his book *Language as a Social Semiotic* (1978) is central to his sound semiotic work (which includes a discussion of television and film soundtracks) he has not developed the use of the 'subjective modality' of sound. However, Van Leeuwen does explain Halliday's distinction between 'subjective modality' and 'objective modality'. He writes that:

> In the case of subjective modality, the truth criterion goes something like this: the stronger my conviction about the truth of an assertion, the higher the modality of that assertion. In the case of objective modality the idea of objective truth is *explicitly expressed*.
> (Van Leeuwen, 2005: 163)

Whereas Van Leeuwen (1999: 187) suggests that sound scripts should be made to analyse the modality configurations of the sounds of dream sequences, memory sequences, or other sequences that are 'seen through a special mental state' he does not go any further to investigate how an analysis of the subjective modality of sound should be investigated. The intention of this research is to use Halliday's term 'subjective modality' to refer to how modality configurations of sound express film characters' subjective experiences when they either dream, experience terror, or may be intoxicated. Van Leeuwen's sound modality resources will then be adapted to show how subjective modality can be evaluated by the transcription and analysis of modality cues into modality judgments. The following section will introduce the film theorists I have selected for the research of how characters' subjective modality is signified when they experience altered states. I will then explain my choice of films and introduce my method of soundtrack transcription.

4.6 Introduction to film sound theory

The film sound theorists that are selected for this research are David Bordwell (1985, 2008) and Claudia Gorbman (1987) because of the relevance of their theoretical observations on the classical narrative soundtrack and the way that character subjectivity is conceived within that structure. Michel Chion (1994) and Robert Altman (1992) are also mentioned because of their observations on the relationships between the audio and visual aspects of film, its perceptual qualities, as well as point-of-view and point of audition. Mladen Milicevic's (2008) essay *Film Sound Beyond Reality* provides a useful introduction to the origins of subjective sound and its study. The sound designer, Walter Murch (2001, 2002) provides a rich resource of practical examples from his work as a sound and film editor. Lastly, Kevin Donnelly (2001, 2005) provides useful theoretical insights into the status of film soundtrack study. His observation and analysis of horror film soundtracks and their sensory and material effect on audience perception intersects with my discussion of Van Leeuwen's concept of 'sensory coding orientation' and 'the materiality of sound' which will be discussed in chapter nine.

4.7 Data analysis

Selection process

Fourteen films provide the main analytic focus of this research's aim to find out how the subjective experiences of altered states are signified by narrative film soundtracks. They are drawn from both European and American art house narrative fiction cinema. The intention is to focus on self-reflexive characters that are psychologically driven, which is in contrast to mainstream cinema where characters' motives are goal orientated and mainly appear to exist in cause/effect plots.

The selected films are categorised into five types of altered states. These are:

Dreams sequences: *Blackmail* (Alfred Hitchcock, 1929); *Spellbound* (Alfred Hitchcock, 1945); *Wild Strawberries* (Ingmar Bergman, 1957); *The Conversation* (Francis Coppola, 1974); *American Beauty* (Sam Mendes, 1999).

Intoxication: *Trainspotting* (Danny Boyle, 1996); *Easy Rider* (Dennis Hopper, 1969); *Pulp Fiction* (Quentin Tarantino, 1994).

Terror: *A Man Escaped* (Robert Bresson, 1956); *The Birds* (Alfred Hitchcock, 1963).

Flashbacks and memory: *Once Upon a Time in the West* (Sergio Leone, 1969); *Blade Runner* (Ridley Scott, 1982).
Insanity: *Hangover Square* (John Brahm, 1945); *The Shining* (Stanley Kubrick, 1980).

The data analysis is formulated around three aspects of Van Leeuwen's (1999) sound semiotic resources that I selected for the purpose of investigating how soundtracks signify characters' subjective modality. These are: sound modality, aural perspective, voice quality and timbre. Firstly, I chose sound modality because it presents a way of understanding how the adjustment (amplification, reduction or mixture) of sound parameters of pitch extent, dynamic range, reverberation, etc. can express subjective modality. This is demonstrated in Van Leeuwen's (1999: 182) analysis of an *X–files* episode called 'Colony' (Nick Marck, 1995) where he shows how 'amplified dynamics', 'fluctuation' and amplified reverb' express a doctor's anxiety when he senses an alien presence. Secondly, Van Leeuwen's (1999: 16–17) adoption of Schafer's (1977) idea of 'Figure' ('the focus of interest'), 'Ground' (setting) and 'Field' (distance) presents another opportunity to investigate how characters' subjective modality is expressed by how sounds are positioned both literally and symbolically. Lastly, I think voice quality and timbre also present an additional means of ascertaining how subjective modality is expressed through its experiential meaning potential, (i.e. the physical efforts that are involved to make a sound) as well as the connotative aspects of its place of origin.

4.8 Transcription

In each transcription I identify which altered state will be studied and what aspects of sound semiotics and film sound theory are chosen for this purpose. I then watched films in their entirety in order to identify how each altered state sequence could be understood within the narrative context of the whole of each film. I then transcribed the salient aural and visual cues for signifying characters' subjective experiences of the five altered states that I had chosen. These were then set out as five columns of timecode and verbal descriptions of the image, dialogue, sound effects and music. The intention was to create an analytic model for the identification of soundtrack modality clues for when characters enter altered states, experience these 'states' and then eventually return to 'reality'. I then analyse the data to see what patterns emerge and what meanings can be construed through applying sound semiotic strategies. Whereas dream, flashbacks and

memory sequences usually had an identifiable 'entrance' and 'exit point', other states, such as intoxication, life threatening and insanity were more open ended. In this case it was necessary to define the limits of each altered state in its context by taking into account the narrative context of the film and editing cuts between different scenes.

4.8.1 Sound modality and transcription

An example of the analytical procedure is illustrated in the transcription table of the film *Spellbound* (Alfred Hitchcock, 1945) where Van Leeuwen's (1999: 156–188) sound modality concepts are applied to a dream sequence. The soundtrack moves from a naturalistic depiction of the setting as 'reality', where normative ambience is removed to a sensory representation of events, as the articulatory parameters of the soundtrack (rising pitch of the theremin) are used to signify Ballantine's subjective modality as he begins to dream.

Excerpt from *Spellbound* (Alfred Hitchcock, 1945)

Time	Image	Dialogue	SFX	Music
00:00:15	Zoom into protagonist's face.	Ballantine: I can't make out just what sort of a place it was.		Theremin ('De-contextualisation').
00:00:20	Close-up of giant cat eyes and a large bright light.			Rising pitch of harp arpeggio and theremin.

Whilst I was engaged in several provisional analyses of dream sequences it soon became clear that certain patterns began to emerge for how characters' subjective modalities are signified. A scene of subjective mentality would often be signified by a close-up of their face, or head, as 'de-contextualisation' takes place (i.e. normative ambience is removed) and sounds, or music, were 'heightened' through the use of additional reverb, pitch rises or volume increase, etc.

4.8.2 Aural perspective and transcription

My transcription of how aural perspective is used to signify characters' subjective experience utilises Van Leeuwen's (1999: 16) adoption of Murray Schafer's (1977: 157) set of terms and definitions. These are set out as being a 'Figure' (the focus of interest), 'Ground' (the setting or context) and 'Field' (the soundscape). Van Leeuwen

stipulates that he adopts Schafer's model of sound perspective with the provision that it may also apply to 'places in the literal sense' as well as 'to symbolic places or positions'. Van Leeuwen points out that there 'there might be just two layers, a background, instead of three' (ibid.). The following excerpt from a transcription of aural perspective is modelled on Van Leeuwen's notion of how aural perspective can be categorised in order to portray physical and social distance as 'Ground', 'Figure' and 'Field'. This excerpt shows how the use of a voiceover and aural perspective enables the audience to identify with a prisoner's subjective modality when he tries to escape.

Excerpt from *A Man Escaped* (Robert Bresson, 1956) (aural perspective)

Timecode	Image	Social distance	'Ground'	'Figure'	'Field'
01:25:38	Mid-shot of Fontaine.	Close.		Fontaine's voiceover: Had he sat down? Was he lighting a cigarette?	Sound of a guard walking on gravel.
01:26:50	Close-up.	Close.		Fontaine: He stopped and turned around.	Sound of a guard walking on gravel.

4.8.3 Transcription of the voice

As narrative cinema has a strong tendency to be vocentric, I thought it was important to understand how Van Leeuwen's (1999: 46) notion of 'experiential meaning potential' of vocal production (the physical effort required for its production) can signify its owner's subjective modality ('truth/s'). For example, the incessant sound of a person screaming in a high-pitched voice might denote their hysteria, or alternatively a soft and whispering voice might denote their intimate relationship with another person. I realised that 'experiential meaning potential' can also be applied to how production effects, such as distortion or reverberation, might signify a person's subjectivity, for example in a scene of insanity, such as the shower scene in *Psycho* (Alfred Hitchcock, 1960). In order to explore how the possibilities of the 'experiential meaning potential' of vocal quality signify meaning I incorporate Van Leeuwen's (1999: 125–155) semiotic model of voice quality and timbre alongside the analysis and observations of Chion (1994) Altman (1992) Whittington (2007) and Bordwell (1985, 2008).

4.8.4 Music transcription

One of the problems with using music transcription of film scores is that it does not represent the whole of the soundtrack or denote what is happening with the screen image. Although I do include some music transcription in this thesis, its use will be to specifically illustrate how the subjective modality of a character is signified when subject to the effects of an altered state. A second problem is that the use of musical transcription invariably neglects performance or production techniques. A transcription of Jimi Hendrix's guitar playing does not represent the sheer physicality and dynamic of his individualistic style, or the armoury of effect units that produces his sound. It is the sensory impact of his performance that signifies what he feels as much as the notes he plays.

4.8.5 Gorbman: film soundtrack transcription

In her book *Unheard Melodies* (1987) Gorbman quotes extensively from Bellour's essay *The Unattainable Text* (1975) as a reiteration of her belief that film is an unquotable text. Bellour reveals that:

> The frozen frame and the still that produces it are simulacra … Obviously the language of the analysis is responsible for the rest. It attempts to link together the multiplicity of textual operations between the simulacra of the frozen images like any other analysis.
> (Bellour, 1975: 20)

An examination of two of Gorbman's analytical approaches highlights that her descriptions do not reveal clearly what is happening with the soundtrack and image. Her following transcription of *Hangover Square* (John Brahm, 1945) looks cluttered and it is not clear if the street revellers make any sounds or if the barrel organ music is heard diegetically or non-diegetically. The following text is an extract from Gorbman's analysis of the opening scene of *Hangover Square*:

> Shot1: Fade-in to Cu at the end of barrel organ; iris out and dolly to Ms, organ grinder turning the crank, removing hat, and mopping brow. Crane up and out to general high shot of street revellers. Pan L to follow a lamplighter crossing a street, in front of a horse and cart. Tilt up to lamp. Crane R and into window of room cluttered with antiques [ominous dissonant chord now overlaps with organ music]; over-the [killer's]-shoulder of Ogilby in MCU, trying to defend himself;

> Ogilby throws three objects at camera. [Dissonant chord in steady crescendo, organ music fading.]
> (Gorbman, 1987: 154)

Gorbman's analysis of the first scene of *Hangover Square* does not show any obvious relationship between the actions she describes and the role and function of the soundtrack. In Gorbman's transcription of Jean Vigo's film *Zéro de Conduite* (1933) her use of musical notation alongside photographical stills (see below) does not clearly reveal exactly what is happening with the narrative in this scene. It also does not give a clear indication of relationship between the whole soundtrack (speech, music and sound) and the visuals, meaning it is impossible to glean as much information as would happen if a sound semiotic approach were taken and specific elements such as pitch, dynamic, timbre could be analysed for their semiotic potential.

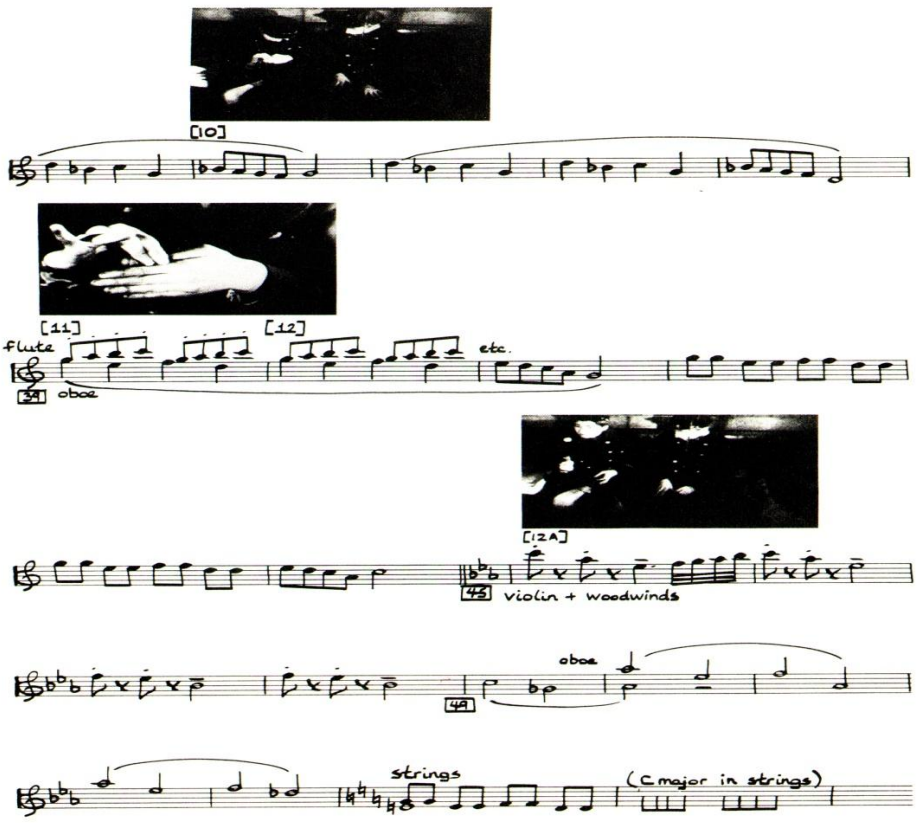

Figure 4: Extract from Gorbman's transcription of Jean Vigo's film *Zéro de Conduite* (1933) (Gorbman, 1987: 121)

4.8.6 Chion: film soundtrack transcription

Chion perceives audiovisual analysis as aiming 'to understand the ways in which a sequence or whole film works in its use of sound combined with its use of images' (Chion, 1994: 186), yet he thinks that sounds are more difficult to categorise than images. He is concerned about 'the risk of seeing the audiovisual relationship as a repertoire of illusions, even tricks' because he sees audiovisual analysis not involving clear entities, or essences, like the shot, but only 'effects', which he thinks are something 'considerably less noble' (ibid.) He argues that it is necessary to 'establish objects and categories but first discard time – worn concepts', which prevent us from both 'hearing and seeing' (ibid.) Chion's premise is that to approach the difficult task of audiovisual transcription it is necessary to consider both what one sees and hears. A gloss of Chion's (1994: 186–198) suggestions for the transcription and analysis of audiovisual materials shows that he thinks it is important to be precise with the use of words that we use to describe sound events. For example, instead of simply saying there is 'a sound', the use of descriptive words such as 'crackling', 'rumbling' or 'tremolo' can be used. Chion suggests that the analyst must 'characterise the general quality of the sound and particularly its consistency'; the soundtrack's 'consistency' being the degree of interaction of different audio elements such as voices, music and noise. Chion reveals that it is also important to be aware of the way different soundtracks position the 'voice' within the sound effects and music. He contrasts the soundtrack of Andrei Tarkovsky's *Stalker* (1979) with Ridley Scott's film *Alien* (1979) to illustrate this point:

> In Tarkovsky's *Stalker* the sounds are more detached from one another: voices that sound close and distinct, sounds of drops of water, and so on. In *Alien*, on the other hand, voices are enmeshed with natural sounds within a sonic continuum of voices, music and noise.
> (Chion, 1994: 189)

Although Chion presents a more detailed account of how to explore audiovisual analysis than is recounted here the results of his actual analysis of texts do not clearly illustrate many of the rich analytical concepts and tools he suggests in his book *Audiovision*. Below is an extract from a transcription of the film *Persona* (Ingmar,

Bergman 1965):

Model Analysis: The Prologue sequence of *Persona*

Shot Breakdown

A. The Arc-lamp
B. 1. Cu of the arc-lamp of a projector, with its two carbon rods igniting. Starting from a black screen, the rods become increasingly brighter: abstract at first, they take on concrète form, then a return to abstraction in the intense light.
C. Sound: A high, sustained pair of notes (in a major 2d) on string or woodwind instrument. Other notes, having started lower, converge towards the first in an ascending glissando. A whole series of glissandi joining a common bundle moving toward a single high note: strident dissonances the louder and nearer they get to it.

Although Chion gives details of both the visual and sonic events in this scene it is not clear what the purpose of music is, besides perhaps accentuating the intensity of the arc light. In contrast, a sound semiotic approach to this scene would be intent on trying to contextualise the use of sound in order to describe its function with more clarity.

4.9 Subjective sound and meaning

This research uses a qualitative approach for its process of analysis and description. Even though I adopt a systematic sound semiotic approach to my collection of data and analysis of film soundtracks, my research is always subject to what Van Leeuwen describes as the idea of 'sign interpreters using the interpretative resources available to them according to their interest at the moment of sign interpretation' (Van Leeuwen, 1999: 194). This analytical process can never be completely objective as it will always involve cultural, experiential and aesthetic judgments that reflect my own relationship to each film soundtrack I investigate and the analytical and descriptive processes I choose for that purpose. A significant feature of using sound semiotics in order to analyse and describe the soundtrack is that it guides the interpreter towards possible meanings rather than finite conclusions. Subjective modality is always guided by the constraints of a film's narrative and its perceptual relationship to the image. As Van Leeuwen (1999: 195) points out, 'sound … is seen as immaterial and evanescent: it is

not, and never can be an object that can be grasped and possessed'. Although one can break down the individual components of sound into pitch relationships, timbre and harmonic configuration, there is a danger of de-contextualising the soundtrack to a level where the individual components rather than the whole are highlighted. It is therefore necessary to remember that there is a constant interaction between the image and soundtrack as each modifies one another. In light of this, my transcription methodology not only focuses on clarifying how sound resources are deployed to signify subjective modality, but also considers audiovisual congruency as well as narrative concerns. Finally, it is also important to remember that no one experiences music, or sound, in exactly the same way. Some may not even notice film music while others may become nostalgic because they hear their favourite pop song in a cathartic moment of a film.

Chapter 5: The subjective modality of dreams

5.1 Introduction

> Every dream will reveal itself as a psychological structure full of significance, and one which may be assigned to a specific place in the psychic activities of the waking state.
> (Freud, 1976: 1)

This chapter is concerned with how the soundtrack can signify the subjective modality of film characters' dreams. This will be illustrated with data from the following films: *Blackmail* (Alfred Hitchcock, 1929), *Spellbound* (Alfred Hitchcock, 1945), *Wild Strawberries* (Ingmar Bergman, 1957), *The Conversation* (Francis Coppola, 1974) and *American Beauty* (Sam Mendes, 1999). Specifically, it will examine how the soundtrack is used to inform the viewer of a character's transition from 'reality' to dreams and then back again, and how it interacts with the visual elements of a film (camerawork, *mise-en-scène* or editing) mirroring and juxtaposing the visual, or producing its own semiotic codes.

5.2 Subjective sound in dream sequences

Before engaging in a detailed analysis of films that contain dream sequences, it is important to locate how a soundtrack can communicate 'subjective states' of characters. According to the film sound theorist Mladen Milicevic (2007), Claudia Gorbman (1987) was the first person to propose the meta-diegetic category for internal sounds that depicted mental subjectivity. Gorbman viewed the soundtrack as having three levels of diegetic sound (story-world sound), non-diegetic sound (outside the story world, e.g. the underscore) and lastly meta-diegetic sound (sound that related to a character's internal world).

Milicevic (2007) adopts Vlada Petric's (1995) concept of oneiric cinema (the visual depiction of dream and altered states) to describe departures from normative sound to that of subjective mentality (what is 'heard' or imagined in a character's mind), such as the use of sound in dream and flashback sequences. In order to organise our understanding of oneiric sequences, he introduces two terms: 'hypnagogic', 'representing the state of falling asleep or drifting away from the reality world' and

'hypnopompic', 'representing the state of waking up or coming back to the reality world' (Milicevic, 2007: 2–3).

In order to establish how the soundtrack of a dream sequence is constructed it is necessary to ask the following questions: what techniques are used to signify a departure from normative sound? Do the visual images mirror these sounds? Are close-ups of characters always used to signify that events will subsequently take place inside their mind? These questions will be investigated with the help of transcription charts compiled from the research of dream sequences in narrative fiction cinema. Following Milicevic's approach to subjective mentality, a tripartite framework is introduced to address specific questions about the relationship between the soundtrack and characters' subjective mentality when they are dreaming:

1. Hypnagogic state (falling asleep). What visual and sonic resources signify a character is falling asleep?
2. The dream. What visual and sonic resources are used to signify that a character is dreaming?
3. Hypnopompic state (waking up). What are the visual and sonic resources that signify a character is returning to 'reality'?

I start the analytic part of this chapter with a brief discussion of Hitchcock's *Blackmail* as it features one of the earliest known examples of sound being used to signify a character's altered state. This is followed by the analysis of *Spellbound*, *Wild Strawberries, The Conversation* and *American Beauty*. Each analysis will feature a transcript that examines how speech, music and sound are used in conjunction with the image to signify characters' transportation from reality to their dreams and back again. Van Leeuwen's (1999) sound semiotic resources will be used in order to investigate how subjective modalities are signified by each of the soundtracks.

5.3 *Blackmail* (Alfred Hitchcock, 1929)

Hitchcock's first sound film *Blackmail* followed closely behind the first 'talkie', *The Jazz Singer* (Alan Crosland, 1927). Lack writes that with this film Hitchcock seized on the possibilities of binding music, dialogue and sound effects into a highly effective gestalt with which the spectator could be manipulated' (Lack 1997: 93). *Blackmail*

features a girl called Alice who has killed a painter. Her inner state of turmoil is reflected as the audience hear the words 'knife, knife' several times as she fails to understand her neighbours' discussion of the murder, which sounds like vague noises in her head. At this point the meta-diegetic sound of the film returns to diegetic sound as Alice hears her father ask for a bread knife that is similar to the one she had used in order to kill her attacker.

The audience are shifted from Alice's diegetic world to her subjective perception of turmoil through unusual camera angles and the use of reverberation on the word 'knife' that resounds in her mind. The removal of reverberation on her father's voice signifies a return to reality as he asks her to pass a knife to him. This scene signifies a subjective experience where the audience hears what the character 'hears' in their head as opposed to the sounds originating in their external environment. The next section introduces the first of four film analyses that explores how subjective modality is signified by the soundtrack through the use of sound semiotics and film sound theoretical observation.

5.4 *Spellbound* (Alfred Hitchcock, 1945)

Spellbound provides a good example of a semiotically rich dream sequence that combines surrealism and Freudian psychoanalytical theory. The plot is centred on an amnesiac that thinks he has murdered a doctor. However, when his dreams are analysed by two psychiatrists this does not prove to be the case. The scene opens with Ballantine in a psychoanalytical session recalling a recent dream he has had: "I kept thinking while I was dreaming that all this meant something". The camera then zooms into a close-up of his face as he says, "I just can't make out this place". At this juncture, the soundtrack features the theremin (an electronic musical instrument that produces an 'other-worldly sound') that signifies a shift away from 'reality' as the audience are 'distanced' from the 'natural ambience' and normal sounds of 'reality' of his counselling session. The dislocating sound of a theremin and synchronised orchestral music marks out the abrupt and dramatic surreal scene he witnesses. When his dream ends the soundtrack returns to its original natural room ambience as the theremin sound ceases. The following transcription shows how the soundtrack signifies Ballantine's subjective modality when he dreams. The audience is shown his point-of-view as they simultaneously hear his voiceover revealing his thoughts and feelings.

Timecode	Image	Dialogue	Sfx	Music
01:18:57	Mid-shot of Ballantine telling his analyst about his thoughts.	Ballantine: Let's see. I kept thinking while I was dreaming that all this meant something.		
01:19:09	Constance walks through the door.	Constance: We'll find out.	Footsteps.	
01:19:12	Zoom into Ballantine's face.	Ballantine: I can't make out just what sort of place it was.		Theremin fluctuation sounds ('De-contextualisation').
01:19:25	People playing cards in a theatre.	Ballantine: It seemed like a gambling house. Lots of curtains with eyes painted on them.		Theremin fluctuation sounds ('De-contextualisation').
01:19:35	Man with giant scissors cutting a curtain.	Ballantine: A man was walking around with a giant pair of scissors.		Strings accelerando.
01:19:43	A girl walks in and moves towards a table.	Ballantine: Then a girl came in kissing everybody. She looked like Constance.		Violin motif.
01:20:09	A man sitting at a table.	Ballantine: Well I was sitting there playing cards with a man with a beard.		Theremin fluctuation sounds ('De-contextualisation').
00:01:45	Ballantine turns towards Constance.	Ballantine: Does it make any sense what I dreamed?		Theremin fluctuation sounds ('De-contextualisation').

Transcript 5.1: Ballantine's Dream

5.4.1 Deployment of sound semiotic resources

This section discusses how characters' subjective modality in *Spellbound* is signified by pitch, dynamics, fluctuation and activation.

i. Pitch

Van Leeuwen (1999: 172) posits that 'the extension' beyond a fairly wide pitch range becomes 'more than real' and may be experienced as 'emotively heightened' in scenes of emotionally charged speech, or moments of high drama in opera. Ballantine's first dream sequence demonstrates this concept as the oscillating high, eerie sounds of the theremin create a 'de-contextualising' effect as the camera zooms into Ballantine's face as his voice-over says "I can't make out just what sort of a place it was". The strangeness of the theremin's sound is reinforced with the accompanying sound of a rising diminished harp arpeggio (01:19:17) as the viewer witnesses the first of Ballantine's many strange inner visions.

ii. Dynamic range

The dynamic rise and fall of instruments in the dream sequence signifies Ballantine's 'inner' turbulence as he is confronted by one bizarre image after another. These dynamics foreground what Van Leeuwen (1999: 173) describes as the 'emotive dimension' where music follows the tradition of Romantic composers to foreground characters' passions and emotions through the rise and fall of music dynamic in their works. The soundtrack is used to mirror and anticipate Ballantine's surprise as the volume level of the theremin and orchestra rise and fall according to the impact that each surrealist vision has upon his psyche.

iii. Fluctuation

The oscillating sound of the theremin in *Spellbound* signifies Ballantine's sense of dislocation and weirdness as he dreams. Van Leeuwen (1999: 175) suggests that 'fluctuation' (unsteady rapid vibrato) has the semiotic potential for indicating a person's emotional state as opposed to completely steady sounds that suggest a person's 'neutral' emotional state. The unsteady oscillations of the theremin highlight Ballantine's feeling of dislocation as he experiences his surreal dream.

iv. Activation

Van Leeuwen's (1999: 203) concept of 'activation' is formulated around the idea that when a musician, or singer, produces louder dynamics, or higher pitch, it requires 'increased effort' and therefore has the semiotic potential of signifying a person's increased mental or physical activity. The soundtrack mirrors Ballantine's hyperactive mind through the dynamic range of instruments and shifts in pitch and timbre. The following transcription shows 'activation' taking place as he dreams.

Timecode	Shot	Image	Instrument	Gesture	Device
01:19:12	Close-up.	Ballantine.	Theremin.	Activation.	('Fluctuation').
01:19:20	Close-up.	Giant cat's eyes.	Strings.	Activation.	Dissonance. Staccato.
01:19:41	Close-up.	Man with giant scissors.	Strings.	Activation.	Dissonance and semi-quaver movement.
01:20:08	Mid-shot.	Man with beard.			Dissonance and semi-quaver movement.

Transcript 5.2: 'Activation' chart

Ballantine's dream sequence fits into my tripartite model that is based on Milicevic's concept of signification in oneiric cinema (see above). The transition from reality to Ballantine's hypnopompic state is signified by the removal of normative ambience and the use of the unworldly sounds of the theremin. When Ballantine's dream finishes the soundtrack returns to normative ambience with the sounds of his psychiatrist's voice. Ballantine's psychological disturbance is emphasised by the use of wide pitch ranges and the acceleration and de-acceleration of the soundtrack's tempo. The soundtrack's music is also used to match the emotion of the narrator's voice by emphasising significant or 'shocking' events as it corresponds with the film's editing pace.

5.4.2 Summary

The chapter, so far, has introduced Milicevic's concept of three levels through which the soundtrack enunciates subjective states. These are: diegetic sound (sounds within the story), non-diegetic sound (sounds that accompanying the story) and meta-diegetic sound (sounds that a character hears within his mind). Milicevic's use of the terms 'hypnagogic' and 'hypnopompic' are then adapted into a tripartite model that shows how the soundtrack signifies the act of falling asleep, dreaming and waking up. I then introduced Hitchcock's early experiments with 'subjective sound' in *Blackmail* before moving on to its use in his film *Spellbound*. Here, I use Van Leeuwen's sound (1999) modality resources in order to ascertain how the soundtrack signifies Ballantine's subjective modality. Finally, I then constructed an 'activation table' that illustrates how aural parameters of sound used (e.g. increased pitch, louder volume and so on) to signify the intense effect that Ballantine's surreal dreams have on him.

5.5 *Wild Strawberries* (Ingmar Bergman, 1957)

Bergman employs a common European art cinema strategy of using dreams and flashbacks to focus on the protagonist's (Borg) inner thoughts and feelings. He was inspired to make this film because a car journey he had made from Stockholm to the province of Dalarna made him recall his own childhood memories. In *Wild Strawberries* Borg seems to be able to literally walk into his past life via these dreams and flashbacks as though nothing had changed from that time. Borg's challenge is to acknowledge how his selfish behaviour has resulted in his present sense of isolation and loneliness.

The film begins with Borg's voiceover revealing his sense of solitude and isolation. Chion (1999: 49) describes voiceovers as usually designating any acousmatic or bodiless voice in a film that tells stories, provides commentary or evokes the past. He explains that these 'voices know all, remember all, but quickly find themselves submerged by the visible and audible past they have called up - that is in flashback' (ibid.).

The following transcription illustrates how sound, music and image are used to narrate Borg's inner journey after his voiceover has announced that he has had a "peculiar and unpleasant dream ... in an unknown part of town".

Timecode	Image	Dialogue	Sfx	Music
00:03:37	Close-up of Borg sleeping.	Borg: I had a peculiar and unpleasant dream.		Orchestral music.
00:03:42	Profile of Borg.	Borg: I dreamt that during my walk that I had strayed into an unknown part of town with deserted streets and houses in disrepair.		Harp arpeggio pitch rise ('De-contextualisation').
00:03:56	Long-shot of Borg who is walking down a street.		Sound of Borg's footsteps.	
00:04:08	Faceless clock. Cut to Borg looking at it.		Silence.	
00:04:14	Borg opens his watch.		Sound of a watch being opened ('Heightened' sound').	
00:04:59	Mid-shot of Borg looking puzzled.		A pulse that sounds like a heartbeat becomes louder.	
00:05:38	Borg's POV of a faceless man, who falls to the ground and disintegrates.		A man falling (accentuated sound effect). A church bell tolls.	
00:05:40	Close-up of Borg's reaction.		Church bell tolls.	

00.06:11	Horse and carriage goes towards Borg.		Sound of the horse and carriage. A church bell tolls.	
00.06.32	Carriage crashes into a lamppost.		Sound of the collision. ('Heightened sound').	
00.06.41	A wheel rolls towards Borg.		A wheel rolling towards him. ('Heightened sound').	
00.06.46	The hearse rocks from side to side. The coffin begins to slide off it.		Coffin creaks ('Heightened sound').	
00.06.49	Mid-shot of Borg's reaction.		Coffin creaks. ('Heightened sound').	
00.06.56	The coffin falls on to the ground.		Loud crashing sound. ('Heightened sound').	
00:07:04	Long-shot of Borg staring at the accident.		Silence.	
00.07.33	Borg is grabbed by the hand from the coffin – his own.			High tremolo string crescendos ('Activation').
00:07:45	Close-up of Borg's face. He looks terrified.			Strings and tympani crescendo.
00.07.55	Close-up of Borg's face as he awakes from his dream.		A clock ticks.	

Transcript 5.3: Borg's morning dream

The previous transcription features a harp arpeggio that acts as a bridging device between reality and Borg's dream. Seemingly disconnected events are accompanied by 'heightened' sounds of footsteps, a collision of a hearse and eerie silences before the normal sound of a clock ticking signals he has woken up. Tarkovsky (describes Bergman's approach to this soundtrack as one where he singles out and hyperbolises naturalistic sounds such as 'hollow footsteps in an empty corridor' the 'chime of a clock' and even the 'rustle of a dress' (Tarkovsky, 1987: 162). As Borg encounters each new surreal event in his dream his reactions are captured in a series of close-ups that measure his response to each one that he comes across. Carl Plantinga (1999) describes this process as a 'scene of empathy':

> We see a character's face, typically in close up, either for a single shot of long duration or as an element of a point-of view-structure alternating between shots of the character's face and shots of what he or she sees ... such scenes are also intended to elicit empathetic emotions in the spectator.
> (Plantinga, 1999: 239).

The following transcription shows a pattern that emerges for the depiction of dream sequences. These are: a close-up shot, de-familiarisation (removal of naturalistic sound for sensory sounds), POV shots and a return to a close-up shot as naturalistic sound returns.

Hypnagogic state.	Close-up of Borg's brightly lit face.	Borg's voiceover is prominent in the mix: there is an ascending arpeggio to signify he is dreaming.
Dream state.	Increased point-of-view shots. Clock without a face. Man without a face. Borg's own face in a coffin.	The soundtrack oscillates between silence and heightened natural sounds.
Hypnopompic state.	Borg waking up.	Normal room ambience.

Transcript 5.4: Structure of Borg's first dream sequence in *Wild Strawberries*

5.5.1 Borg's journey

The next dream sequence occurs when Borg falls asleep on the car journey whilst being driven by his daughter-in-law. As he falls asleep his voiceover reveals that his dream will reveal incisive and humiliating information about his past. The sight and sound of a flock of birds fleeing a storm symbolises Borg's transport to the past. Even though Borg is now old he meets his former fiancée, who is still a young girl in his dream. She holds a mirror up to his ravaged face and accuses him of being emotionally frigid and reveals that she will marry his brother instead of him. The following transcription shows how the soundtrack signifies Borg's feelings of loneliness and sense of abandonment as he remembers his fiancée deserting him for his brother.

Timecode	Image	Dialogue	Sfx	Music
00:53:49	Sara runs to a baby's cot that is by a tree in the woods.		Baby's cry.	Orchestral music.
00:53:56	Sara picks up a baby and rocks it gently in her arms.	Sara: My poor baby is quiet and asleep. Don't be afraid of the birds.		Consonant sound of woodwinds and strings.
00:54.50	Birds in a thunderous sky.		Sound of birds shrieking.	Woodwind and strings become dissonant. ('Activation').
00:55:22	Borg starts walking.			Hypnotic woodwind motif. Slow piano melody cross-faded into woodwind sounds.
00:55:32	Borg walks to the house and stares inside the window and sees Sara and his brother embrace each other.			Slow piano melody.

Transcript 5.5: Borg's fiancée

The transcription shows Borg's emotional pain as being signified by the melancholy and dissonant sound of non-diegetic orchestral music along with the heightened diegetic sounds of bird shrieks and a child crying. There is a brief respite from the soundtrack's melancholy when Sara comforts a baby, but Borg's pain is again signified as he watches his ex-fiancée embrace his brother as a slow, sad piano theme plays. The scene then concludes with a basket of strawberries being spilt as a symbolisation of Borg's loss of youth and innocence. It is this scene from which the film derives its name.

5.5.2 Summary

'Heightened sounds' and emotive music, rather than the use of dialogue, feature as the main means of signifying Borg's subjective modality in *Wild Strawberries*. The film's soundtrack is replete with sonic inferences that function both literally and symbolically to communicate Borg's psychological state. Gado (2007: 213) gives examples of how 'heightened sounds' signify the protagonist's subjective modality with the 'eerie creaking of springs' in the morning dream when Borg confronts his own death with the sound of an infant's wail as a hearse ejects his coffin. Other 'heightened sounds' (such as the amplified sounds of heartbeats, the bird caws and a baby crying) signify Borg's existentialist pain as well as the use of long poignant silences and 'commentative music' also play a key role in signifying his subjective modality. *Wild Strawberries* has a European narrative style, with its slow pace and the self-reflexive nature of Borg who is at the heart of this story. His drama is internal rather than external as he tries to come to terms with his old age, loneliness and his imminent death. Sometimes the pace of this film is so slow that at moments time seems to almost stop completely as Borg's dreams slowly reveal their underlying profundity and begin to answer his unspoken questions.

5.6 *The Conversation* (Francis Coppola, 1974)

Murch (2002: 152) points out that Francis Coppola's film *The Conversation* was influenced by Michelangelo Antonioni's film *Blow-up* (1960), which is about a photographer who believes he has found evidence of a murder in his photographs. *The Conversation* transposes this idea into the world of a sound surveillance expert named Harry Caul who tries to trace a potential murderer through his sound recordings. However, Harry makes an erroneous decision about the true identity of the murderer

because he is swayed by guilty feelings about a previous case he has failed to solve correctly.

Although the film's narrative appears to revolve around what appear to be 'objective recordings' of a furtive couple's conversation in a park, Harry's misinterpretation of events leads the audience to also misjudge the real perpetrators of the murder. In an interview with Murch, the film's editor, Ondaatje (2002: 262) suggests that *The Conversation* is 'wholly and singularly made from Harry's point-of-view' with his interpretation of the recording being augmented with an 'extra visual narrative that doesn't actually exist', but is an imaginary audio-visual narrative in his mind:

> Harry has, all along, mentally altered the cadence of the line, which is hyper subjectivity, because of what happened in the past, where people were killed as a result of his actions. So he chooses which of the characters are likely to be innocent victims – the attractive young couple, particularly the girl.
> (Murch, 2002: 250)

The following transcription is of Harry's dream as he falls sleep with the recording of 'the conversation' playing in the background. In his dream, Harry follows a woman called Ann whose life he believes to be in danger. His subjective modality is revealed by his anxious sounding monologue, *musique concrète* and electronically treated piano sounds.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
01:14:03	Close-up of Harry who is lying in bed. The camera zooms from him.		The distant sound of a bell. Train horn ('De-contextualisation').	
01:14:22	Close-up of Ann's face.		Reversed electronic sounds, bongos and a car horn.	
01:14:42	Harry follows Ann into a park.		Muted sound of a train bell ringing.	
01:14:14	Close-up of Harry sleeping.		Bell ringing. Soft humming sound.	
01:14:25	Ann is standing on a hill.	Harry's voice in reverberation: Listen, my name is Harry Caul.		
01: 15:00	Mid-shot of Harry.	Harry's voice in reverberation: Can you hear me?		

01:15:02	Mid-shot of Ann in mist.	Off-screen voice of Harry: Don't be afraid.		
01:15:08	Long-shot of Harry. He is also engulfed in mist.	Harry: I know you. You don't know who I am but I know you.		
01:15:13	Long-shot of Harry.	Harry's voice in reverberation: There isn't much to say about myself.	Humming sound.	
01:15:30	Long-shot of Harry in a park.	Harry: I was very sick when I was a boy.		
01:15:39	Long-shot of Ann surrounded by mist.	Harry's voice in reverberation: One doctor said I'd probably never walk again.		
01:16:02	Mid-shot of Harry.	Harry's voice in reverberation: When I woke up my body was all greasy with the wax and oil she had put on my body.	Reversed piano crescendos.	
00:16:21	Mid-shot of Harry.	Harry's voice in reverberation: He'll kill you if he gets the chance. I'm not afraid of death.		
01:16:37	Mid-shot of Harry in the mist.	Harry's voice in reverberation: I am afraid of murder.		
01:16:44	Close-up of Harry asleep.		Electronic swell. Bell rings.	
01:16:51	Harry outside hotel room number 773.		Electronic swell ('Activation').	
01:16:56	Close-up on the door handle of room 773.		Volume increase ('Activation'). Electronic noise.	
01:17:00	Harry runs into a hotel room.		Bell rings ('Activation').	
01:17:10	Close-up of blood on a shower curtain.		Bell rings ('Activation').	
01:17:14	Harry wakes up.		Bell ringing fades and normative ambience returns.	

Transcript 5.6: Harry's dream

As the camera pulls back from a close-up of Harry laying in his bed the sensory use of *musique concrète* sounds are heard (01:14:03). The use of reverb on Harry's voice as he dreams creates an uncanny sense of 'unreality' as he calls out to a girl in the mist who does not answer him. When the scene returns briefly to 'reality' Harry is seen lying in bed asleep muttering to himself without reverb on his voice, but when he starts dreaming again it returns as he is seen shadowing a girl in the mist. At 01:16:51 the pitch and volume of Harry's voice rises as he tries to warn her that she will be killed. The whole soundtrack then crescendos as the scene changes to Harry discovering that she is still alive, but that she is next to a shower curtain that is covered in blood in a hotel room. As Harry wakes up, non-diegetic sensory sounds fade away and normative ambience returns again.

Bordwell points out that 'there is more than character subjectivity at work' in *The Conversation* because it also uses 'authorial intervention to increase ambiguity' (Bordwell, 1985: 377). He suggests that Harry's dream can be read either as his premonition or as the narration's flash-forward. Bordwell suggests that Coppola creates ambiguity by refusing to assign certain images either to the character or to the narration. Murch (2000: 46) thinks that the use of ambiguity in films helps to provoke an audience's participation by giving a certain amount of information, but then requires them to complete the ideas, thus engaging each member of the audience as a participant in the work. Murch is aware that every person who watches a film brings their own interpretation and pre-conceived notions of what is happening in it according to their own experiences.

The Conversation questions the notion of the objectivity of surveillance techniques. Although Harry uses the latest technology and is extremely dedicated to his work, he makes an erroneous decision about who the true victim is because of his own subjective reading of the situation that is informed by his guilty feelings about a previous case where he had failed to help the true victim. Bordwell writes that:

> The film gives us access to the protagonist's state of mind through his behaviour and speech, dreams and chiefly, through Harry's dissection of the tape … We are inclined to read these images as flashbacks, cued by the recording: that is 'objective,' but the images are Harry's recollections.
> (Bordwell, 1985: 376)

Harry's interpretation of events is flawed even though he uses the 'state of the art' equipment available to him because he started with the wrong premise. This film scenario could be described as having a parallel with the concept of sound semiotic study. The analyst must not only collect data and scrutinise it in order to find how aural parameters (such as pitch, dynamic and timbre) may signify meaning, but also be alert to the importance of information that may originate from other sources, such as director's wishes, narrative structure, technological limitations and so on. This knowledge may reorientate the analyst's ultimate findings substantially.

5.7 *American Beauty* (Sam Mendes, 1999*)*

American Beauty is a black comedy that portrays the life of two American suburban dysfunctional families. At the beginning of this film Lester Burnham (a depressed middle-aged, middle-class suburban dweller) informs the audience, via a voiceover, that he will be dead in a year. Lester regains his enthusiasm for life when he meets Angela, his daughter's teenage friend, with whom he becomes enamoured. In order to impress her and rebel against his dull suburban life he starts to lift weights and re-familiarise himself with his own teenage memories by smoking marijuana and listening to his 1970s psychedelic record collection. In order to investigate how sound and music are used to signify Lester's subjective modality I focus on two dream sequences from this film. The first dream sequence takes place when Lester is at a basketball match where Angela is performing a dance routine.

The beginning of the first dream sequence is signified by the diegetic sounds of a basketball match being cross-faded into the non-diegetic sounds of a hypnotic percussion figure that signifies Lester's internal reality. As Lester fantasises, the camera moves back and forth between close-up reaction shots of him and his POV shots of Angela as she performs an erotic dance for him. As her movements become more sensual the music takes on a mystical tone. The end of his dream is signified by a synthesizer glissando and the return of normative ambience as the school band is heard playing again. The following chart illustrates how Lester's dream sequence is structured. It begins with a close-up of his face that signifies he is falling asleep (hypnagogic). It is then followed by slow motion POV shots and sensory sounds that signify his actual dream. Finally, his return to a waking state (hypnopompic) is signified

by a cross-fade back to the original diegetic sounds of the school band and the audience's applause.

Signifying levels	Visuals	Soundtrack
Hypnagogic state	Close-up of Lester's incredulous expression. His eyes are raised and his mouth hangs open.	Energetic diegetic sounds of a school band are faded out and cross-faded into slower and hypnotic systems rhythm played by percussion and mallets ('De-contexualisation').
Dream state	Audience disappears around Lester who literally sits in his own world. An increase of Lester's point-of-view shots of Angela performing a dance 'for him'. Sensory images of Angela dancing in slow motion as brightly coloured rose petals emit from her chest.	Non-diegetic systems music signifies Lester's internal world.
Hypnopompic state	The scene returns to the scene of the school band and dancer's performance.	The systems music is cross-faded back to the original diegetic music of the school band. Audience applause is heard as the band finishes its performance.

Transcript 5.7: Lester's Daydream

5.7.1 Lester's dream

The second dream sequence begins with an aerial shot of Lester lying in bed with his wife. As he lies there bright red rose petals float down in front of him as the ethereal sounds of a synthesizer are heard. These sounds are then replaced with the hypnotic rhythmic pattern of marimba motif as the camera shows Lester's POV of Angela dancing slowly and seductively in front of him. He informs the audience that he has finally awakened from his 'twenty-year coma' of living a vacuous life. The following transcription shows how the soundtrack signifies Lester's subjective modality.

Timecode	Image	Dialogue	Sfx	Music
00:19:06	A rose petal falls to the ground.			Ethereal synthesizer sound. ('De-contexualisation').
00:19:16	Aerial view of Lester lying asleep with his wife beside him as petals fall down on him.			Hypnotic marimba motif.
00:18:29	Mid-shot of him smiling. His eyes are open. He is engulfed in falling rose petals.	Lester: It's the weirdest thing. I feel like I've been in a coma for about twenty years and I'm just now waking up (close-miked and dry).		Marimba motif and ethereal synthesizer.
00:19:38	Lester lying in bed. He is smiling.			Hypnotic marimba motive and ethereal synthesizer sounds with modulation wheel bends.
00:19:44	Lester's POV of Angela who is naked and lying down in a bed of rose petals. She is waving her arms.			Hypnotic marimba motif. ethereal synthesiser sounds.
00:19:49	Lester's POV of Angela who is on mid-shot now and is smiling seductively. She waves.			Marimba motif. Ethereal synthesiser sounds.
00:20:00	Mid-shot of Lester. He is lying in bed with rose petals floating down on him. He is smiling.	Lester: Spec-tac-ular.		Marimba motif.

Transcript 5.8: Lester's fantasy

The transcription shows Lester's voiceover as an important means of signifying his thoughts and feelings to the audience. His voiceover conforms with Chion's notion of an 'I voice' that it is 'close-miked' and creates 'a feeling of intimacy' (Chion: 1999: 50). As Lester informs the audience with his calm voiceover that he has woken up 'spiritually', rose petals float down gently from the ceiling and the calming sounds of a synthesizer and a repetitive hypnotic marimba motif are heard. Mendes (1999) comments in the film's documentary that his idea was to signify Lester's dreams as a series of mythical journeys that linger over and relish 'moments of eroticism'. Another

means of designation of characters' subjective modality is through his choice of diegetic music in the film. Whereas Lester's wife chooses to play the sentimental music of *South Pacific* (as a thin veil for their dysfunctional relationship) Lester prefers to play the passionate psychedelic sounds of the *Grateful Dead* that affirms his new lust for life. Lester is the only character in the film that the audience gets to know, with his intimate thoughts and feelings being revealed through the use of voiceover and the sounds of his own 'interior score'.

5.7.2 Conclusion

A common pattern emerges in all of the films studied. Firstly, normative ambience is replaced by the use of voiceover, sensory music and 'heightened sounds' to locate protagonists in their dream states and then finally normative ambience returns as they wake up. The following table shows this process.

Dream sound modality	**Naturalistic sound**	**Sensory sound**
Hypnagogic state	Natural ambience removed.	Rising pitch. Change of tempo. Swell of volume. Voiceover. De-contextualisation.
Altered state (dream)	'Heightened' use of natural sounds.	Voiceover. Accentuated sound effects. Commentary music or sound.
Hypnopompic state	Natural ambience returns.	Sensory sound removed.

Transcript 5.9: Dream states

So far, my analysis reveals that dream sequences normally feature close-ups, POV shots and reaction shots of what characters see as the main visual means of signification. The soundtrack normally features a deviation from the previous normative ambience to signify a character's transition from a normal conscious state to an altered one. Invariably this is expressed by the use of 'heightening sounds' (activation of pitch,

volume, reverberation or change of texture). There is also a frequent use of ascending pitches and/or volume increases to signify their transitions to their dream states. After a dream state has been signified by 'heightened sounds' and 'activating' music the soundtrack will 'deactivate' as the scene returns to normality.

In this chapter I have established that the soundtracks of my researched films move through three main levels of signification to depict characters' dreams. These are: the hypnagogic state (the 'entrance point' where normative ambience is removed), the dream itself (where sensory and heightened natural sounds are used) and the hypnopompic state ('exit point' where normative ambience returns). Three out of the four films that I have studied feature close-miked voiceovers that reveal characters' intimate feelings and their thoughts. Another common feature that emerges is that in all of these dream sequences normative ambience is replaced with sensory soundscapes in order to signify the transition from everyday events to dreams. Examples of this occur in *Spellbound* with Ballantine's confusion being signified by the rising pitch and fluctuating tones of a theremin ('activation') and through the use of heightened Foley sounds in *Wild Strawberries* to convey Borg's surrealistic dream.

Chapter 6: The subjective modality of intoxication

6.1 Introduction

The focus of this chapter is to examine how directors use the soundtrack to signify characters' experiences of intoxication. The films that are selected for this research are *Easy Rider* (Dennis Hopper, 1969), *Trainspotting* (Danny Boyle, 1996), and *Pulp Fiction (*Quentin Tarantino, 1994). I will use Van Leeuwen's sound modality (1999: 156–187) resources in order to understand how the main protagonists' subjective modality can be understood as they take a variety of different drugs and alcohol to become intoxicated. It will also incorporate Chion's (1994, 1999, 2008) observations of how the soundtrack is used in these films to signify characters' subjective modality.

6.2 *Easy Rider* (Dennis Hopper, 1969*)*

Easy Rider's narrative is based around the story of two hippy bikers called Billy and Wyatt who are trying to 'find themselves' by travelling across America after successfully making money from a drugs deal. Two main characteristics that distinguish this film from other American films of the 1960s are its European new wave aesthetic and its foregrounding of popular songs. Biskind (1999: 75) describes the film's director, Dennis Hopper, as trying to make a personal and honest movie by using his own personal experience of drugs, music and the 1960s counterculture.

Hopper uses three different methods to depict Billy and Wyatt's intoxication. Firstly, he presents their intoxication in a documentary style as 'objective modality', where the audience witnesses them becoming 'stoned' as their conversation degenerates into juvenile laughter and silliness. Secondly, he uses pop music in a sensory way to create a party atmosphere as well as emphasising Wyatt's introversion at this time as he mourns the loss of his dead friend. Lastly, Hopper montages sounds and images to create a sensory gestalt of a group LSD experience. At this point the soundtrack features monologues, fragmentary conversation, off-screen voiceover, non-verbal utterances and strange ambient sounds as a sound collage. The following transcription shows Billy, Wyatt and George getting 'stoned'.

Timecode	Image	Dialogue	Sfx	Music
00:55:03	George smokes marijuana.		Sound of cicadas.	
00:55:10	Mid-shot of Billy.	Billy: Oh wow! What was that man? What the hell was that man? (The pitch and volume of his voice rises.)	Sound of cicadas.	
00:55:21	Billy leans forward and gesticulates with his right hand.	George: Billy, I was watching this object man like the satellite we saw yesterday night. It was just going right across the sky then it suddenly just changed direction.	Sound of cicadas.	
00:55:30	Wyatt looks upwards towards the sky.	Wyatt: You're 'stoned' out of your mind, man.	Sound of cicadas.	
00:55:33	Mid-shot of Billy looking annoyed.	Billy: Oh yeah I'm 'stoned' you know man, but like, you know, I saw a satellite.	Sound of cicadas.	
00:55: 39	George sitting on the ground looking bemused.	Billy: And it was going across the sky and it flashed three times at me and whizzed off, man.	Sound of cicadas.	
00:55 50	Mid-shot of George exhaling marijuana.	George: That was a UFO beaming back at you. We've seen forty of them flying information. They've got bases all over the world man ('Activation').	Sound of him exhaling a joint. Sound of cicadas in the background.	
00:56:19	Billy looks very 'stoned' and confused.	Billy: What are you talking about man?		
00:56:31	Close-up of George.	George: Well, they are people just like us from within our own solar system except their society is more highly evolved. They don't have wars.		
00:57:20	Billy stands up.	Billy: I think it's a crackpot idea … If they were smart why don't they reveal themselves and get it over with.		
00:57:36	Close-up of George.	George: Why don't they reveal themselves is because if they did it would cause a general panic.		

Transcript 6.1: The campfire

6.2.1 Deployment of sound modality resources

This section discusses how 'objective modality' is signified via the use of vocal pitch, vocal dynamics, vocal timbre and naturalistic coding in *Easy Rider.*

i. Pitch register

Billy's intoxication is signified by his voice rising as he exclaims 'Oh wow!' when he thinks he sees a satellite fly across the sky. His vocal pitch is raised again when he shouts back at George that his ideas about alien invasion are crazy. He then begins to laugh loudly when he realises Billy is joking. In contrast to Billy's emotional outbursts, George deliberately tries to keep his vocal pitch at a steady level before also succumbing to being 'stoned'. He erupts into an uncontrollable fit of laughter as his voice also rises in pitch.

ii. Dynamic range

Billy and Wyatt's vocal dynamics also provide modality cues that signify their state of intoxication. Billy raises his voice with surprise when he thinks he sees a satellite in the sky. He also raises it when he realises that George has been playing with the fact that he is 'stoned' and is extremely susceptible to his suggestions. In contrast to the boisterous banter of George and Billy, their friend Wyatt is taciturn and prefers to be left alone to his own thoughts.

iii. Voice timbre

Billy's vocal timbre is quite hard and abrasive and thus reflects his tense and uptight personality, which is in contrast to Wyatt's voice that is more soft and mellow. However, when they become 'stoned' their voices resonate together in a loud and penetrating manner that reflects their state of intoxication. Although music and sound effects are not used in this scene I think it is important to extend Van Leeuwen's (1999) concept of vocal timbre to also explore how music and sound's timbre may also provide sound semiotic potential.

iv. Naturalistic coding

Van Leeuwen (1999: 179) describes 'naturalistic coding' as the process of using normal and everyday sounds to signify reality as opposed to the use of sensory devices such as 'heightened' sounds. Hopper portrays Wyatt and his friends getting ''stoned'' in a

documentary style that does not include the use of underscore or sensory sounds, just their conversation and background environmental sounds. As the camera pans around the group it soon becomes clear they are all high on drugs as their disjointed conversation about extra-terrestrial life becomes punctuated with shouting and uncontrollable laughter.

6.2.2 The party

The next scene shows Billy and Wyatt becoming intoxicated at a party after having found out that their friend George has been killed by local 'rednecks'. The scene opens with Wyatt's 'stoned' POV shot of a beaded curtain that appears out of focus. It then shows him contemplating religious art as acappella vocals are heard singing *Kyrie Eleison*. In contrast, Billy is seen gorging himself with food and wine as he attempts to seduce a girl (01:12:59). There is a stark contrast between the spiritual sound of the acappella vocals, which are bathed in reverb to signify Wyatt's subjective modality, and Billy's decadence, which is signified by a wild guitar solo as he becomes increasingly intoxicated. The following transcription shows Billy and Wyatt's different priorities at the party.

Timecode	Image	Dialogue	Sfx	Music
01:11:32	Close-up of Wyatt's blurred POV of some beaded curtains.			*Kyrie Eleison.*
01:11:46	Blurred close-up of Wyatt staring into space.			*Kyrie Eleison.* Acappella vocals in reverberation.
01:11:54	Wyatt and Billy seated at a table.	Billy: Hey we'll go there for one drink.		Music muted.
01:12:01	Extreme close-up of Billy gorging himself with food.			*Kyrie Eleison.* Vocals, organ vibrato, guitar and drums.
01: 12:21	Close-up of Wyatt.			*Kyrie Eleison.*
01:12:23	A painting of a naked woman.			*Kyrie Eleison*. Tremolo guitar, bass, and delicate drumming. ('Activation'.)
01:12:59	Wyatt admires a religious statue as Billy moves straight towards a girl dancing on a table.			*Kyrie Eleison*. Instrumental jam.

Transcript 6.2: *Kyrie Eleison*

The previous transcription reveals that reverberation is frequently used to signify Wyatt's subjective modality as he contemplates the option of organised religion as an alternative to his hedonistic lifestyle.

6.2.3 The LSD trip

This scene takes place in a cemetery where Wyatt and Billy take LSD with two prostitutes. When Wyatt and his accomplices begin to hallucinate the soundtrack and visuals move away from a naturalistic documentary style to become a sensory representation of their experience. Normative ambience is replaced with the ominous noise of a tape loop as the sound of crying and shouting is mixed with a girl (off-screen) reciting from the Bible. The camera moves erratically from one image to another through a series of jump cuts and fish-eye view shots to signify the mental chaos of the group. The following transcription shows how the soundtrack is used to signify their sense of drugged confusion and disorientation.

Time	Image	Dialogue	Sfx	Music
00:00:10	Wyatt, Billy and two prostitutes.		Industrial loop ('De-contextualisation').	
00:00:32	Billy drinking whisky.	Billy: Shut up and take it.		
00:01:30	Crucifix on the cemetery wall.	Girl's voiceover: Born from the virgin Mary suffered under Pontius Pilate.	Industrial sound.	
00:01:43	A naked person lying on the ground.	Girl's voiceover: From the dead.	Industrial sound.	
00:01:45	Trees against the sky.	Girl's voiceover: Father Almighty.	Industrial sound.	
00:01:52	Camera zooms out from Wyatt and the statue.	Girl's voiceover: A communion of saints. The resurrection of the body.	Industrial sound fades.	
00.01:55	Jump-cut between three religious cemetery statues.	Girl's voiceover: Life everlasting, Amen.		
00.01:57	Girl takes her clothes off in doorway.	Girl's voiceover: As it was in the beginning.		
00:03:23	Wyatt comforts a girl in his arms.	Girl: Just stop I'm dying. I'm going to die.	Industrial sound.	
00:04:49	Wyatt talking to a statue.	Wyatt: You're such a poor mother and I hate you so much.	Industrial sound.	

Transcript 6.3: The trip

The previous transcription shows how their LSD experience is signified by normative ambience being removed ('de-contextualisation') and replaced by the sounds of their disoriented voices and 'found sound' to form a sound montage. The uncontrolled rise and fall of their voices' pitch and volume signifies their mental imbalance as they shout and cry. At one point a girl's shrill voice is heard screaming, 'I'm going to die' (00:03:23) as Wyatt comforts her in his arms. Later, he is heard screaming as he curses his dead mother for deserting him when he was a child.

6.2.4 Discussion

Hopper deploys a range of different sound strategies to signify characters becoming intoxicated in *Easy Rider*. Firstly, the camping scene is presented in a naturalistic documentary style as objective modality. Secondly, at the party the sensory use of *Kyrie Eleison* signifies Wyatt's religious awakening via the acappella vocals in reverberation and Billy's preoccupation with being hedonistic is echoed with sound of a psychedelic guitar solo. Lastly, the acid trip is represented by a sensory gestalt of sound and vision that represents the group's 'reality' as they try to cope with the hallucinatory effects of LSD. This is signified by the erratic sound of their voices as they are heard laughing, shouting, screaming and crying. The soundtrack signifies their changing psychological state as they move from initial levity to self-reflexivity and then all seem to experience an existentialist crisis as they contemplate their own mortality while high on LSD in a cemetery. The following section examines the importance of music for the signification of character's subjective modality.

6.3 *Trainspotting* (Danny Boyle, 1996)

In order to investigate how subjective modality is signified by the soundtrack of *Trainspotting* I draw upon Van Leeuwen's (1999) sound semiotic resources, Chion's (1999) observation of the role of the voice and Smith's (2006) discussion of the role of popular and classical music in this film. The film's narrative traces the lives of a group of young Scottish heroin addicts. It appeared in the cinema when drug culture in the 1990s had reached its zenith. There is a propensity towards the use of expletives, the use of Scottish vernacular language and colloquial references to drugs that is an integral part of Irwin Welsh's novel on which the film's screenplay is based. The film's director, Boyle, points out that:

> Our guiding aim was always to try to be honest about heroin. So yes, the beginning of *Trainspotting* is completely seductive. The dilemma was that we wanted to make an entertaining film about something potentially lethal, something that people may find unacceptable.
> (Boyle in Brooks, 1998: 89)

Although Boyle adheres to his concept of showing the 'lethal effects' of heroin he also lightens the intensity of its horrors by using a variety of pop music that is drawn from the 1960s to the 1990s. The soundtrack features songs and dance tracks that revolve around youth rebellion and drug culture in order to make the film popular with a younger generation who are conversant with drug taking and 'raves'. An example of this is when Renton, a heroin addict, is seen triumphantly running away from security guards in the opening scene to the pounding beat of Iggy Pop's *Lust for Life*. He is later seen overdosing in a street as Lou Reed's song *Perfect Day* (an autobiographical account of his own drug experiences) is heard as non-diegetic music.

6.3.1 The voiceover

Chion (1999: 5) writes that 'in every audiomix', the presence of a human voice 'instantly sets up a hierarchy of perception'. In the case of *Trainspotting*, Renton's voiceover is elevated above all other audio events in order to present his subjective perception of events and guide the audience through his world of addiction and theft. His ironic comments single him out as more intelligent and streetwise than his friends as he questions why he should choose 'life instead of heroin'. Renton's ironic voiceover provides a crucial insight to his subjective mentality and his attitudes to the world around him. The opening scene is constructed around Renton's sneering voiceover that dismisses society and consumerism in favour of drugs.

6.3.2 Popular song and lyrics

Murray Smith points out that changes in the nature of film scoring have ensured that popular song now 'often carries the burden of emotional delineation once handled by classical scoring alone' (Murray Smith, 2006: 1–2). He suggests that song lyrics in this film are only one element of its larger aesthetic context as only a few words of the opening scene's song *Lust for Life* are heard ('Here comes Johnny Yen again' and 'I got a lust for life'). He posits that the use of song lyrics in films extends beyond their lexical meaning to include both the theatrical and expressivity of their performance. This is

certainly true with the strong rhythmic beat and mantric chant of *Lust for Life* being the main feature of the song in this context. The opening scene shows clearly that meaning is distributed across visual action, voiceover, sound effects and the song's strong rhythms.

Timecode	Image	Dialogue	Sfx	Music
00:00:01	Blank screen.		Sounds of traffic and people running.	*Lust for Life* Energetic Drum rhythm.
00:00:10	Mid-shot of Renton.	Renton's voiceover: Choose life, choose a job. Choose a career.		*Lust for Life.* Energetic drum rhythm).
00:00:14	Long-shot of Renton who is running.	Renton: Choose a family. Choose a fucking big television.		*Lust for Life.*
00:00:22	Renton falls on the bonnet of a car.		Car screech.	*Lust for Life.*
00:00:30	Renton catches his breath back.	Renton: Choose good health.	Renton's heavy breathing.	*Lust for Life.*
00:00:32	Renton is smoking heroin.			*Lust for Life.*
00:00:40	His friends are posing in front of a football net.	Renton: Choose leisure wear and matching luggage.		*Lust for Life.*
00:00:47	Sick Boy (intertitle).	Renton: Choose DIY and wondering who the fuck you are in the morning.		*Lust for Life.*
00:01:19	A close-up of Renton's head on the ground.	Renton: But why would I want to do a thing like that? Who needs reasons when you've got heroin?	Thud of his head hitting the ground.	

Transcript 6.4: Renton

Renton's 'drugged cynicism' is at the centre of this scene. This is signified by his scathing and ironic voiceover and the choice of music that accompanies him as he is seen running, falling on to a car bonnet and finally passing out.

6.3.3 Deployment of sound semiotic resources

This section investigates how dynamics, rhythm and provenance are configured in *Trainspotting* to signify Renton's subjective modality.

i. Dynamic range

The film begins dynamically with the sound of traffic, running feet and the rhythmic beat of *Lust for Life* as Renton and his friend flee from the pursuit of security guards. The audience then realises that Renton's escape has been thwarted as he falls onto a car's bonnet as the loud screech of a car's brakes is heard (00:00:22). Renton pants loudly as he tries to catch his breath and then ironically declares 'Choose good health' just after having been almost killed.

ii. Rhythm

Trainspotting is replete with energetic rock, pop songs and dance tracks that are used to signify Renton and his accomplices' youthful energy and hedonism. The film begins without visuals – only the rhythmic sounds of Renton's and his friend's footsteps as they try to run away from security guards can be heard. These sounds are then cross-faded into the pounding beat of bass and drums of *Lust for Life.* Renton's voiceover matches its tempo and rhythmic intensity as he derides consumerist society and proposes the merits of being outside it as an unemployed and irresponsible drug addict.

iii. Provenance

Van Leeuwen (1999: 210) defines 'provenance' as a sound that has been imported from a different place, culture or social group into another. He states that its semiotic potential derives from its associations with the place it has been imported from. The 'import' of the song *Lust for Life* imbues Renton's vocal tirade with Iggy Pop's rebellious anarchic stance as a drug-taker who lives for the moment with its repeated mantric chant of 'lust for life'. The following section investigates how sound is 'heightened' to signify Renton's state of intoxication and ultimate depravity as he searches for suppositories in a filthy public toilet.

6.3.4 The toilet: magic realism and sensory sound

Phillips (2009: 295) describes Boyle as employing a technique he refers to as 'magic realism' in *Trainspotting* where 'wildly improbable or impossible events in an otherwise realistic narrative' take place. Renton's desperate search for filthy suppositories in a public toilet are juxtaposed with a surrealistic dream sequence where he imagines himself diving for pearls in a clear blue ocean as the soothing sounds of Eno's ambient track *Deep Blue Day* represents his drugged bliss. At this point in the film the soundtrack demonstrates what Van Leeuwen describes as a 'sensory coding orientation' where 'the representational and the presentational' begin to mix (Van Leeuwen, 1999: 179). As Van Leeuwen points out 'a seductive advertisement's role' is not the mere representation of seduction, but seduction itself:

> What matters is the emotive impact, the degree to which the sound has an effect of pleasure or its opposite. And this is done by amplifying the articulatory parameters, by widening the pitch range, increasing the durational variation and so on.
> (Van Leeuwen, 1999: 179).

When Renton enters the toilet the heavily reverberated sound of dripping water emphasises its damp and squalid appearance. Smith points out that what is unique about *Trainspotting* is 'the redemption of material impoverishment through aesthetic transformation' (Smith, 2002: 33–35). Although the toilet scene rubs 'our noses in the reality of this environment' this scene is followed by Renton's dive into the 'fantastic lagoon' which is the 'pristine convenience' that Renton sees in his mind's eye (ibid).

6.3.5 'Heightened sounds'

Forbes and Street argue that the use of surrealistic and fantastical elements in *Trainspotting* enables the film to present and deal with issues and scenes that would normally have been considered much too 'harrowing in more conventional realist form' (Forbes and Street, 2000: 187). This can be observed with the use of the 'heightened sounds' of dripping water that accentuates the filthy and damp setting of the public convenience where Renton attempts to retrieve his suppositories from. As his hand reaches into the toilet, Eno's serene music *Deep Blue Day* is heard as the audience now witnesses Renton's fantasy of swimming underwater in a clear blue ocean. However, as

the music stops the soundtrack returns to the 'heightened sounds' of dripping water that signifies Renton's reality; he gasps and retches loudly as he finally reclaims the suppositories from a filthy toilet bowl.

6.3.6 The overdose

The following section discusses how the soundtrack signifies Renton's subjective modality as he succumbs to a near fatal overdose of heroin. This scene begins with Renton exchanging banter with his drug dealer before injecting himself with heroin that he has just purchased. Lou Reed's nonchalant voice is heard singing *Perfect Day* as Renton slumps unconscious in a street. It becomes apparent that there is an irony in the words that Reed sings ('you keep me hanging on') as Renton tries to hang on to life. When Renton is taken to a hospital his subjective modality is signified by the amplified sounds of his breathing through an oxygen mask as he struggles to breathe. The following transcription shows how Renton's overdose is signified by sound and music.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
00:43:56	Inserts needle into his arm.		Sound of traffic.	
00:44:47	His friend looks down at him. He appears very far away.	The drug dealer: Perhaps sir would like to call for a taxi.	Sound of an ambulance in the distance.	*Perfect Day*–Perfect Day. It's just a Perfect day.
00:44:50	Aerial shot of him. He has overdosed.		Sound of an ambulance passing by.	*Perfect Day.*
00:44:57	His friend drags him downstairs.		Sound of Renton being dragged down stairs.	*Perfect Day*.
00:45:19	Low angle shot of him lying in the road.			*Perfect Day* – Oh, it's just a perfect day I'm glad I spent it with you.
00:45:56	His friend helps him into a taxi to take him to hospital.		Sound of a taxi's engine and a dog barking.	*Perfect Day* – Oh, such a perfect day. You just keep me hanging on.
00:47:30	Renton in a comatose state on a stretcher in a hospital.		Sounds of Renton trying to breathe ('Heightened sound').	*Perfect Day* – You is going to reap just what you sow.

Transcript 6.5: The overdose

The previous transcription shows how the soundtrack moves from the naturalistic sound of Renton's conversation with his drug dealer to the sensory use of *Perfect Day* as non-diegetic music. Lou Reed's monotone singing is used as a surrogate 'voice' for Renton who now lays unconscious in the street and is unable to speak. The pace of the song reflects the lethargic effects of heroin abuse as well as providing an ironic comment on Renton's drugged euphoria.

6.3.7 Renton's withdrawal

Renton's parents lock him up in his bedroom to experience 'cold turkey'. The following transcription shows how Renton's subjective modality is signified through sound as he withdraws from heroin.

Timecode	Image	Dialogue	Sfx	Music
00:48:27	Renton's mother locks his door.		Reverberation on lock being turned ('Heightened sound').	
00:48:35	Renton in bed.	Renton's voiceover: I don't feel the sickness yet but it's in the post.		Synthesizer pulse ('De-familiarisation').
00:48:44	Reverse angle of him lying down.	Renton: Too ill to sleep. Too tired to stay awake.		Synthesizer pulse.
00:49:17	Schoolgirl sitting on his bed.	Girl: Oh you've got blue eyes.		Synthesizer pulse. Its volume increases.
00:49:52	Renton's mother and father.	Renton's parents: No clinics, no methadone.		Drums and synthesizer pulse.
00:50:17	Renton's bedroom.	Renton screams: just bring me one more hit please.		Drums, keyboard pulse and keyboard.
00:51:33	Renton's POV from under his bedclothes.		TV applause.	Trance music.
00:51:51	Renton's parents at his bedside.	Renton: There comes a time when you have to say goodbye to all that nonsense.	Sound of a lighter in reverberation ('Heightened sound').	Trance music.
00:52:17	Spud sits on his bedroom door.		Sound of his feet banging.	Trance music.
00:52:17	Baby crawling on his ceiling.			Trance music becomes louder.
00:53:23	Renton lying on his bed.	Renton: Ahh, I want my mummy. Stop.		

Transcript 6.6: Renton's withdrawal

The previous transcription reveals how although Renton's voiceover dominates the soundtrack, it is interspersed with heightened naturalistic sounds and trance music that becomes more energetic as he starts to hallucinate wildly. A series of surrealist visions appear in his mind's eye before ultimately screaming for his mother.

6.3.8 Summary

My investigation of how Renton's subjective modality is signified by the soundtrack when he is intoxicated has used Van Leeuwen's (1999) sound modality resources, Chion's discussion of the voiceover and Smith's (2002, 2008) discussion of popular songs. The use of Van Leeuwen's sound modality resources has highlighted the importance of the role of music with its lively rhythms and dynamics, and the songs that have been deliberately selected for their provenance value. Chion's (1999) notion of how voiceovers are prioritised in cinema as a means of signifying subjective truths is illustrated by Renton's voiceover in *Trainspotting*. Smith (2006) also identifies how lyrics as well as music may be used in a textual and theatrical manner (i.e. the opening scene where *Lust for Life* is used to evoke Renton's euphoria as he flees from security guards). Lastly, Boyle's vision for *Trainspotting* was to make a film that was an 'honest portrayal of heroin abuse', yet 'seductive' and 'entertaining' (Boyle, 1998: 89). I think he achieved this through his juxtaposition of Renton's depraved drug use with his ironic self-reflexive comments, the feature of pre-composed pop music and the use of heightened visuals to show his hallucinatory experiences.

6.4 *Pulp Fiction* (Quentin Tarantino, 1994)

Tarantino's cinematic style frequently revolves around popular culture. His influences in *Pulp Fiction* originate from pulp fiction gangster novels and magazines that he satirises. His soundtrack comprises popular music from the 1950s, 1960s and 1970s that are used as a backdrop for his protagonists' hedonistic and violent pursuits. Tarantino uses a postmodernist style that features pop songs as socio-cultural shortcuts in order to elicit audiences to respond to his films as though they are iconic. Wood (1998: 111) describes Mia's and Vincent's night out at Jack Slim's restaurant as being a 'celebration of 50s nostalgia', which is reflected by the way people dress, the music they listen to and artefacts of that period. The following transcription shows how popular music is used to signify Vincent's intoxication when he is 'high'. Vincent's 'fix' is endowed with a mythical sense of drama as the sound of electric tremolo guitar in *Misirlou* recall

the epic grandeur of confrontation in Leone's spaghetti westerns. However, in this instance the confrontation is between Vincent and his next heroin fix.

Timecode	Image	Dialogue	Sfx	Music
00:28:03	A blurred close-up image of a heroin 'tool kit' being opened up.		Sound of heroin tool kits zip being opened ('Heightened sounds').	*Misirlou* -Tremolo guitar chords and rhythmic bass notes.
00.29.08	Close-up of Vincent behind the wheel of his car. He looks 'stoned'.		Wind sound mixed with the sound of breathing sounds ('Heightened sound').	Surf music.
00.29.28	Close-up of a syringe being assembled.		The sound of a needle being assembled.	Guitar, bass and drums and percussive beat in a reverberation.
00.29.19	Close-up of a lighter being lit.		The sound of a lighter being lit.	Guitar, bass and drums.
00.29.23	Close-up of heroin powder being heated up on spoon.		The bubbling sound of heroin as it is being heated.	Guitar, bass and drums and percussive beats in reverberation.
00.29.29	A shot of Vincent driving.		Sound of car engine.	The guitar plays a high melodic theme over drums and bass ('Activation').
00.29.33	Extreme close-up of Vincent injecting himself.			Surf music ('Activation').
00.29.37	Extreme close-up of the needle filling with blood.		Sound effect of blood filling a syringe.	Surf music.
00.29.49	Extreme close-up of Vincent's face. He is high.			A saxophone riff begins over surf music.

Transcript 6.7: Vincent's fix

The transcription shows Vincent preparing his 'fix' and then becoming intoxicated. His drug experience is represented through the use of graphic close-ups, visual ellipsis and the use of sensory sound and music.

6.4.1 Deployment of sound semiotic resources

i. Dynamic range

Tarantino often uses popular music with a fast tempo and loud volume to signify characters' experience of violence or intoxication. This is demonstrated when Vincent becomes high as the adrenaline-fuelled sound of *Misirlou* is heard with its energetic tremolo guitar riff, pounding bass and drums. The appearance of a high guitar melody (00.29.29) alongside 'heightened sound' effects also add to the dramatic value of the scene; the audience are encouraged to empathise with Vincent's drug craving and sense of excitement as he prepares to get high.

ii. Sensory sounds

Tarantino foregrounds sensory sounds by amplifying the articulatory parameters of ordinary sounds in order to signify Vincent's intense concentration on preparing the heroin for his next fix. This is observed with the amplified sounds of him unzipping his heroin kit, a lighter being lit and the sound of the heroin being heated. After Vincent has 'fixed up' the sound of a car engine revving signifies the 'rush' he feels as the heroin begins to takes effect. A flashback shot shows a syringe filling with his blood and he is then shown looking very 'stoned' as the raspy and penetrating sounds of a saxophone are heard.

iii. Provenance value

Powrie and Stilwell (2006: xvii) point out how Rodman[7] shows how the individual songs of *Pulp Fiction* and *Trainspotting* must not only be understood as individual pieces, but as 'topical leitmotifs' where the common style of several pieces are associated with a character or narrative situation. This is observed with the instrumental music of *Misirlou*, which is first heard as car radio music when Vincent drives with his friend at the beginning of the film and then accompanies many of his later appearances. Tarantino uses popular music in *Pulp Fiction* as a stylistic means of compartmentalising characters and narrative events into eras through its iconic value of its performance and performers.

[7] Rodman's essay *The Popular Song as Leitmotif in 1990s Film* in *Changing Tunes: The Use of Pre-existing Music in Film* (Powrie and Stilwell, 2006).

6.4.2 Mia's overdose

This scene begins with Mia and Vincent returning from a night of drinking, dancing and taking drugs. As Mia is inebriated she completely forgets about Vincent and starts dancing to one of her favourite records in another room. Although the scene begins in a light-hearted manner, Mia's drugged revelry culminates with her falling unconscious on the floor. The following transcription shows how the soundtrack is used to convey Mia's state of intoxication when she arrives back at her flat.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
00:48:07	Vincent opens the front door and him and Mia dance into her apartment.		A door bangs loudly against a wall. An alarm goes off.	
00:48:14	Vincent swings her around.	Mia giggles loudly.		
00:48:27	Mia and Vincent look at each other.	Vincent: Is this what you call an uncomfortable silence?		
00:48:30	Vincent and Mia look at each other.	Mia: I don't know what you call that.		
00:48:33	Mia walks towards her bar.	Mia: Drinks, music!	Mia's footsteps.	
00:48:38	Mia stands in front of a tape-recording machine.		A tape is spooled back to the beginning.	
00:48:57	Mid-shot of Mia dancing on her own in her living room.	Mia: Bum bum bum.		Song –*Girl You'll Be a Woman Soon* is heard as diegetic music from Mia's POA[8].
00:49:23	Mia dances.	Mia sings along to the record.		'Don't let them make up your mind.'
00:49:36	Vincent talking to himself.	Vincent: What can I say? Don't be rude. Drink your drink. Do it quickly. Say goodnight and go home.		Vincent's POA. The song volume is lowered.

[8] POA stands for 'point of audition'.

00:49:49	Mid-shot of Mia dancing.	Mia sings along out of tune.		'Girl you'll be a woman soon. Soon you'll be a woman.' Mia's POA.
00:49:56	Mia dances frenetically.			'Misunderstood for all of my life.'
00:50:30	Mia sits down and lights up a cigarette and then lies back on her sofa.			'Don't let them make up your mind.' The song's volume is lowered.
00:51:41	Mia snorts drugs she finds in Vincent's coat.		Sound of Mia snorting drugs.	'Please come take my hand.'
00:51:55	Close-up of Mia with blood coming out of her nose.		Mia groans.	Song starts to fade out.
00:52: 07	Close-up of Mia who is unconscious. Fade to black.			

Transcript 6.8: Mia's overdose

The previous transcription shows how sounds signify Mia's inebriation. First, her house alarm goes off, then the front door is slammed shut and she is heard giggling loudly as she dances in her hallway with Vincent. She then dances drunkenly to the song *Girl, You'll Be a Woman Soon*, which she sings along with (but hopelessly out of tune), before overdosing on drugs that she has found in Vincent's coat.

6.4.3. Conclusion

This chapter has discussed how the soundtrack signifies intoxication in *Easy Rider*, *Trainspotting* and *Pulp Fiction*. All three of the directors use popular music as a means of 'socio-cultural shorthand' (provenance) to signify their characters' subjective experiences of intoxication, although their generic styles may differ. This idea originated with the landmark soundtrack of *Easy Rider* where songs, music and lyrics reflected 1960s youth counterculture of free love, the peace movement and drug taking. Powrie and Stilwell (2006: xvii) highlight how popular song scores of 1990s, films such as *Trainspotting* and *Pulp Fiction,* also draw upon 'the extra-cinematic competency of

the audience to derive meaning' from them; this is also certainly true of *Easy Rider*. The iconicity of performers, as well a celebration of the past, all contribute to how audiences of different generations relate to the films' stories, soundtracks and their identification with protagonists' behaviour.

All three directors foreground 'heightened' sounds and visuals for signifying characters' experiences of being intoxicated. Hopper exemplifies Van Leeuwen's (1999) concept of 'naturalistic coding' to signify his characters getting 'stoned' in the campfire scene, however, he uses 'sensory coding' in the party scene and LSD sequence in *Easy Rider*. It is also observed that the directors of *Trainspotting* and *Pulp Fiction* have a preference for using 'sensory coding' to signify characters' experiences of being intoxicated. Whereas Boyle comically and surrealistically foregrounds weird visuals and sound effects, Tarantino uses graphic visuals, 'activating' sounds and music to 'heighten' characters' subjective experiences of intoxication. Tarantino also foregrounds the provenance value of songs as a central part of his cinematic design where their historical background, lyrics and instrumentation, as well as their performers' race and gender, all contribute to signify characters' subjective modalities. The three films that I studied reveals how sound and music are used diegetically, non-diegetically and meta-diegetically to imbue scenes with mood, suggest character's musical preferences, as well as signifying their conscious or unconscious desires as part of the process of signifying their experiences of intoxication.

Chapter 7: The subjective modality of flashbacks and memory

7.1 Introduction

This chapter will examine how protagonists' subjective modalities are signified when they remember the past. Firstly, it will discuss the origins of flashbacks in *film noir* cinema. It will then investigate how the soundtracks of *Once Upon a Time in the West* (Sergio Leone, 1969) and *Blade Runner* (Ridley Scott, 1982) are used to signify characters' subjective modality through their memories and flashbacks.

7.2 Flashbacks and the soundtrack

Hayward explains that flashbacks date back to the beginning of the twentieth century with the birth of cinema and psychoanalysis. She points out that the beginning of a film flashback is conventionally signified by a 'fade or a dissolve that is often on the face of a person whose flashback we are about to witness' (Hayward, 2005: 133). She sees flashbacks as 'almost always serving to resolve an enigma (a murder, a state of mental disorder, etc.) they are by nature investigative or confessional codes' (ibid.). She writes that although 'there is a shift in temporal and spatial reality, that shift does not undermine the narrative logic' (ibid.).

Flashback sequences were prevalent in *film noir* cinema of the 1940s. These films would normally have a story told in hindsight via a voiceover. Their plots would involve an unsolved crime and a femme fatale that might pull the truth seeker, or detective, into a morally difficult situation. Stylised expressionistic lighting would literally only reveal half of the facts and therefore intensify the sense of a mystery, or enigma. Hitchcock's thriller films show evidence of both expressionistic and *film noir* techniques. He used the device of 'subjective views' to present events via a restricted narrative that positioned the viewer with a particular subjective vantage point. A famous example of this is in the film *Rear Window* (Alfred Hitchcock, 1954) where an over inquisitive convalescent imagines a murder scenario that proves to be inaccurate.

This section will examine how the soundtrack signifies its main protagonist's subjective state as he recalls the past. Firstly, I have posited the following questions in order to understand what features of the soundtrack are used to signify subjective modality in

this instance and how they are used. Secondly, I will examine what sound semiotic, socio-cultural and historical concerns enable a deeper understanding of why particular sounds, or instruments, are used in this context and how they are organised.

1. How is the main protagonist's flashback introduced and what are the musical, or non-musical devices, that are used to signify his subjective modality?
2. What aspects of Van Leeuwen's (1999) sound semiotic methodology are appropriate for the elucidation of subjective modalities in this film?
3. What are the other cultural or historical aspects of the film's soundtrack that should be included to further understand why certain instruments and orchestration are used to depict the main protagonist's subjective mentality?

In order to answer these questions it is necessary to not only analyse in depth how articulatory parameters such as pitch, timbre volume are used to signify subjective mentality, but also to investigate what other cultural/historical or extra-musical factors should be accommodated in the understanding of how subjective modality is communicated (signified) via the soundtrack. Instead of the cinematic device of voiceover being used to explain the transition to the past (as used in early *film noir*), it is left to the non-linguistic devices of leitmotifs and *musique concrète* to signify the main protagonist's subjective modality. The following section will examine how the use of *musique concrète* in *Once Upon a Time in the West* is used to signify characters' subjective modality, as the audience becomes pre-conditioned to accept that ordinary sounds are used to create tension before dramatic duels and scenes of violence. The opening sequence of *Once Upon a Time in the West* establishes the importance of non-musical sounds (*musique concrète*) as three bored henchmen wait for Harmonica.

7.3 *Musique concrète* in *Once Upon a Time in the West*

In the opening scene the audience hear the amplified sounds of a fly buzzing, the creak of a door and the squeaky wind that are foregrounded in place of dialogue. Frayling points out that this soundtrack provides a variety of effects:

> A metal door slamming (electronically) simulated. Wooden doors creaking, knuckles being pulled, water dripping on to a bald pate, a fly buzzing, a telegraph receiver tapping, and, most of all, a water-wheel, in much need of oiling, inexorably turning around.

(Frayling, 1981: 168)

The wailing sound of a harmonica finally interrupts the mesmerising array of *musique concrète* sounds. It first appears to be part of the underscore (non-diegetic music) and then is heard as diegetic music performed by the main protagonist who is named after the instrument. Harmonica rarely wastes words and shows that he prefers to play his harmonica rather than speak as he literally plays his own soundtrack. Harmonica not only plays his own themes but is also the only character that has flashbacks.

Cumbow (2008: 197) describes Morricone's arrangement of *musique concrète* sounds as 'an exotic arsenal of bangs, whips cracks, gunshots, clicks and clangs' that characterise his 'orchestration of the savage'. The sound of the wind functions as a sound motif of death that is present in all of Harmonica's flashbacks. It is heard when he confronts his brother's murderer and is featured after he kills him. In this film, the sound of the wind introduces a sense of desolation that is also depicted visually by the vast landscape and the relative smallness of the figures that are juxtaposed within it. The wind also functions as a motif to signify an imminent death or flashback. Van Leeuwen describes how non-human sounds may conjure a supernatural realm for a listener or audience:

> 'Not human' can also come to mean 'supernatural'. The music and sound effects that supernatural events not only tend to use 'non-human' instruments, electronic instruments for instance, or instruments that can play much higher or lower than the reach of the human voice, but also 'non-human' forms of timing. (Van Leeuwen, 2005: 53)

The following section will examine the role and function of music leitmotifs in cinema.

7.4 The leitmotif

Cinema composers have adopted leitmotifs[9] because they help to identify characters, places or recurring thematic ideas. The use of leitmotifs in *Once Upon a Time in the West* provides an explicit way of introducing the main protagonists' entrances and exits.

[9] The concept of leitmotif is often associated with Wagner, who used recurring motifs to signify a person, place or an idea in his operas (e.g. *The Ring*). Eisler (1947: 4) highlights that the use of the leitmotif has become prevalent in cinema scores because it provides a shortcut to identify people, emotions and symbols.

In Harmonica's case the recurrence of his motif alerts the audience about his presence even before he is seen. The addition of reverberation on the harmonica signifies that the audience becomes privy to Harmonica's subjective modality in the form of a flashback. Frayling identifies four main themes in *Once Upon a Time in the West* that identify characters' appearances and their mood. These are:

> The comic (Cheyenne's theme whistling, electric piano and banjo), the expansive title theme (richly orchestrated, with solo female voice), the brutally jarring (Harmonica's theme-harmonica and amplified guitar, backed by syncopated violin chords), and the hopeful, with sinister undertones (Morton's 'Pacific' theme).
> (Frayling, 1981: 197)

The following section will discuss the narrative role of the Harmonica motif in the third and final flashback sequence.

7.5 Flashbacks and sound in *Once Upon a Time in the West*

Although flashbacks were often used in Hollywood as a means of showing characters' memories, Leone believed that their function should be more Freudian:

> Until [the 1960s] the Americans had been using flashbacks in a very closed way, too rigorously. This was a mistake: you have to let them wander like the imagination or like a dream.
> (Leone, in Frayling, 2000: 197)

Frayling describes the flashbacks in *Once Upon a Time in the West* as providing 'missing pieces in the puzzle of each story woven into other motifs on the soundtrack' to indicate 'the importance of these vague, unfocused memories at key moments in the development of the plot' (Frayling, 1981: 168). He describes the three flashbacks in the film as 'being triggered by a repetitive melody, providing missing pieces in the puzzle [where] one had to discover it bit by bit' (Frayling, 2000: 197).

The first two flashbacks follow a familiar pattern with the sound of wind, the harmonica motif and close-ups of the protagonist's face. However, whereas the first two short flashbacks do not reveal the identity of an unidentified mysterious blurred figure, the third flashback reveals both his identity and the significance of the harmonica theme to

the film's narrative denouement. Although the third flashback sequence begins with the expected use of a camera close-up, wind sound and harmonica motif (as in the earlier flashbacks), the soundtrack now features an orchestral crescendo that builds into what Van Leeuwen has called 'the emotive dimension' (1999: 173). Here sounds and music function as a sensory mechanism before dropping away to leave the sound of a church bell tolling as Harmonica's brother is hanged. The flashback sequence finishes and 'reality' is signified by Harmonica's gunshot that kills his opponent. The following transcription shows the subjective modality of Harmonica's final 'revenge' flashback.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
02:19:43	Close-up of Harmonica's face.		Wind ('De-familiarisation').	Harmonica motif in reverberation.
02:19:47	Frank walking slowly. It's a different setting.		Wind.	Harmonica motif in reverberation.
02:20:32	Mid-shot of Frank pulling out a harmonica.			Orchestra takes up the harmonica theme.
02:20:47	Extreme close-up of Harmonica's eyes.			String pedal.
02:20:57	Frank holds a harmonica.	Frank: Keep your loving brother happy.		Orchestra becomes softer.
02:21:06	Harmonica has a harmonica thrust into his mouth.		Bell tolls.	Orchestral dynamic chord.
02:21:32	Harmonica's brother being hanged.			Orchestra and electric guitar.
02:21:56	A camera pans up to his brother who has a noose around his neck.			Orchestra and percussion.
02:22:18	Close-up of his brother's grimace.			Orchestra, percussion and soprano voice.
02:22:27	Extreme close-up of Harmonica who is crying.			Strings and percussion.
02:22:42	Harmonica falls in a slow motion shot to the ground.		Bell tolls.	Wind sound, toll of a church bell and the harmonica motif.
02:22:48	Harmonica shoots Frank.		Gunshots. Reverb ('Heightened sounds').	

Transcript 7.1: Flashback sequence: revenge

The transcription above shows there is extensive use of close-up shots in the third flashback sequence. It begins with a slow zoom that lasts 16 seconds and finally finishes with an extreme close-up of Harmonica's face. The length of the shot gives more time for the non-diegetic music to heighten the drama at the beginning of this scene before the camera shows Harmonica's inner thoughts as he recalls the past and decides to avenge his dead brother. Plantinga writes that 'scenes of empathy' often incorporate shots that become 'progressively closer as a stylistic means of focusing our attention on the character's interior life' (Plantinga, 1999: 239). The use of close-up shots here focuses the audience's attention on the main protagonist's reality.

7.6 Deployment of sound modality resources

This section will investigate what contribution pitch, timbre, rhythm and dynamic bring to an understanding of how Harmonica's subjective modality may be understood in *Once Upon a Time in the West.*

i. Pitch register

Van Leeuwen defines 'pitch register' as 'the sound quality we have in mind when we refer to voices, instruments or other sounds as high or low in character' (Van Leeuwen, 1999: 210). He points out that its semiotic potential derives from small things making high noises and louder noises tend to rise in pitch, so that high can indicate real, or metaphorical, power or status. The harmonica's high pitch gives it a metaphorical power as its wailing signal draws the audience's attention to the beginning of each flashback. Frayling (2000) recollects Morricone explaining the origins of the three-note central harmonica motif that was inspired by his study of Arnold Schoenberg and serial music:

> I use this kind of music very often, onscreen, where I integrate it into the very heart of tonal fragments. In Bronson's harmonica theme, for example, I incorporated a little series of interior sounds … I used just three notes of the instrument, for a public that is used to a simple form of music, articulated, I'd say, as a physical force like a heartbeat.
> (Frayling, 2000: 284)

In the final flashback sequence the three-note harmonica motif is first heard as a solo instrument and then with an orchestral accompaniment that imbues the scene with drama via its higher pitches and swell in volume. Its function is to emphasise

Harmonica's emotional reaction to the memory of his brother's savage murder and prepare the audience for his subsequent revenge. Cumbow (2008) describes this flashback as a shared one between Harmonica and his brother:

> The harmonica is jammed into Frank's mouth; Leone intercuts a final flashback of Harmonica-as-a-boy crashing to the ground, the harmonica bouncing out of his mouth. Then he cuts back to Frank's own collapse into death, no answer can be the most eloquent answer of all.
> (Cumbow, 2008: 70)

ii. Dynamic range

Van Leeuwen suggests that 'speakers who seek to sway their listeners emotively will amplify their dynamic range' and 'the same applies to speech and musical sound' (Van Leeuwen, 1999: 173). He points out in his sound semiotic inventory that there was a tradition, established in the Romantic period, where music was used to foreground emotions by using dynamic markings that ranged from pianissimo to fortissimo. In *Once Upon a Time in the West* this process can be seen as the audience is encouraged to identify with its protagonist's emotions through the dynamic and emotional quality of Morricone's score. It acts as a surrogate 'voice' to express the main protagonist's feelings as his pain turns to anger and he finally avenges his brother's murder.

iii. Timbre

Morricone is well known for his use of unusual instrumental timbres. His score for *Once Upon a Time in the West* features an eclectic mixture of avant-garde compositional ideas and popular music that is mixed with more conventional orchestration techniques taken from J. S. Bach and Romantic composers. As a result his score has a distinctive array of timbres that are instantly recognisable because of their colourful and memorable use of folk instruments. The musicologist Philip Tagg (personal communication) has described these folk instruments as being 'elevated' above the orchestra (i.e. folk instruments taking priority over the conventions of symphony orchestra configuration; like the proletariat being elevated above the bourgeoisie). The film theorist Russell Lack (1997: 191) points out how Morricone's methods of 'junkyard orchestration' include 'the electric guitar, bits of scrap metal, and wordless vocal passages that are contrasted with the depth of emotion that 'the arching sustain of a single instrument' can convey. He describes Leone's directorial style as

being:

> Blackly comic and fatalistic vision reducing the West to a killing ground marked of by extended visual loungers in which figures are choreographed in empty landscapes accompanied by sparse almost atonal noises rather than the booming Appalachian lyricism of a decade before.
> (Lack, 1997: 191)

iv. Rhythm

In cinema there are two co-existing main rhythmic elements that may work synchronously or asynchronously. These are the visual rhythm, which is achieved by the speed of cuts (editing of the images), and the musical rhythm. Frayling (2000: 291) remembers being told by the film's director, Sergio Leone, that the rhythm of *Once Upon a Time in the Wes*t was intended to create the sensation of the last gasps a person takes before dying. This is evident in the final denouement scene where Harmonica has a shoot-out with his brother's murderer whilst the accompanying music is at the slow tempo of 60bpm in order to emphasise the visual impact of this scene. The scene begins with a held establishing shot that features the sound of the slow and drawn out harmonica motif. However, as the action intensifies, the instruments and visual images accelerate in pace until the climax where a slow motion sequence shows Harmonica as a child falling to the ground whilst a bell tolls slowly. At this point slow-motion visuals emphasise the emotional impact these memories have on Harmonica. The following section discusses how Van Leeuwen's (1999) concepts of 'sensory coding orientation' and 'provenance' may contribute to a deeper understanding of a character's subjective modality.

7.7 Sensory coding orientation

Sensory coding takes place in the final flashback sequence of *Once Upon a Time in the West* as Morricone's music signifies the final build-up to Harmonica taking revenge for his brother's murder. Firstly, there are the sensory sounds of a mournful sounding, amplified harmonica motif that is followed by the loud and angry sounds of a distorted electric guitar. These instruments are then joined by a marching drumbeat and an orchestral crescendo that climaxes with the sound of a sonorous, wordless soprano singing above it. Finally, all of these instruments disappear and are replaced by the sound of a lonely church bell that signals death. The soundtrack's enunciation of the characters' subjective modality of the flashback sequence follows the below trajectory. I

have created a list to show how the soundtrack signifies Harmonica's emotions:

1. Reflection, 02:19:43 (harmonica motif and wind howling).
2. Trauma, 02: 21:50 (the orchestra, percussion and wordless voice).
3. Grief, 02:22:36 (the plaintive sounds of harmonica as it falls from his mouth).
4. Anger, 02:22:50 (howling wind and then gunshots).

The final section of this chapter will discuss the concept of 'provenance' and its contribution to how the soundtrack may signify meaning.

7.8 Provenance

As I have discussed (see chapter six, section 6.3.3) 'provenance' is concerned with the act of sound being imported from one culture, or social group, to another, although it is possible to acknowledge that provenance can be observed with Morricone's use of the guitar and the harmonica in *Once Upon a Time in the West* (as these instruments are traditionally associated with cowboys). However, on this occasion these instruments are not only electronically amplified, but also have additional reverberation applied to them in order to stylise their sound and thus heighten their dramatic function.

7.8.1 Summary

So far, this chapter has investigated how the soundtrack is used to signify the main protagonist's flashbacks and memories in *Once Upon a Time the West*. Flashbacks in this film follow a similar trajectory to dream sequences with their 'entrance points' (where normative ambience is removed), flashback sequences (where sensory and heightened natural sounds are used) and 'exit points' (where normative ambience resumes). Firstly, it discusses the function of the leitmotif as a means of identifying characters with a musical theme which signifies their subjective modality. It then discusses how *musique concrète* sounds, such as the wind 'motif', are used to signal death as well as transport its protagonist into the past. Next, it uses sound modality resources to understand how pitch, dynamic, timbre and the use of rhythm signify the protagonist's mood and response to his memories. Lastly, it examined how the sensory use of sound encodes the flashback sequence emotively as well as discussing the 'provenance' value of using the harmonica and electric guitar in Leone's version of the Wild West (the Spaghetti Western). In the next section I investigate how memory is signified by the soundtrack of the original version of *Blade Runner* through sound,

music and voiceover. Although the story is told through Deckard's voiceover each of the replicants' (human-like robots) pre-programmed memories also provide a valuable insight into his, and their, reality.

7.9 *Blade Runner* (Ridley Scott, 1982)

In this section I investigate how characters' subjective memory is signified by sound and music. In order to do this I incorporate Whittington's (2007) study of sound design with sound semiotics to see how the voiceover, sound and music are used for this purpose. At the centre of the narrative of *Blade Runner* is Deckard who has become disillusioned with his work as a 'Blade Runner' (a replicant exterminator). Although Deckard has tried to retire he is persuaded by his former boss to resume his career and pursue five replicants (human-like robots) who have escaped from the 'off-world' and now present a threat to humanity. However, somewhat ironically, Deckard falls in love with a girl called Rachael who turns out to be a replicant.

The film opens with a replicant called Leon being examined by Holden, who carries out the 'Voight-Kampff test' to see if he is human. Leon's lack of general knowledge, hesitancy to answer questions and his frustration at not being able to understand his interrogator's questions result in him murdering Holden. First I examine the role of the main protagonist's voiceover and then discuss how the subjective modality of the replicants is presented through speech, music and sound.

7.9.1 The voiceover

Classical Hollywood cinema frequently utilised voiceovers to imply a subjective authority of main protagonists who explain their inner thoughts to audiences. Whittington (2007: 171) points out that the use of the device of the voiceover in cinema is a throwback to the *film noir* style that existed in Hollywood during the 1940s and 1950s. In *film noir* cinema voiceover was often used as a means for 'troubled characters (usually male) to reflect on a personal crisis, trauma, or death'. The use of voiceover in the original release of *Blade Runner* emphasises Deckard's interpretation of events and how he remembers them. Whittington (2007) points out that Deckard's voiceover in *Blade Runner* maintains a state of privileged authority that directly relates to its unfolding narrative events:

> From the beginning of the film, he is established as a tracker, protagonists, and guide, presenting the narrative point of view and frame an understanding of action, characters, and events. His voice has imposed a subjective viewpoint that is at times nostalgic, regretful … often analytical.
> (Whittington, 2007: 178)

In contrast to the original theatrical release of *Blade Runner* Whittington (2007: 173) explains that that the director's cut (1992) leaves out the voiceover meaning that the narrative enactment was evenly distributed amongst the dialogue, sound effects and music. This resulted in it being more 'lyrical and visceral, rather than detached and analytical', which is a more typical feature of the 'blockbuster tradition'. Whittington (2007: 173–4) suggests that the removal of the voiceover in the director's cut repositions the main protagonist in the diegesis and encourages the audience to be immersed in the film's cinematographic sonic elements (Vangelis's music score and the film's ambient backgrounds and sound effects), thus making the film appear more film noiresque.

7.9.2 Technology and the voiceover

Since the inception of cinema the voiceover has been elevated over other elements of the soundtrack. In *Blade Runner* the volume of the music and sound effects are often ducked to accommodate Deckard's voiceover and dialogue, which takes precedence over the other elements of the soundtrack. Whittington (2007: 174) points out that the 'voice is often the most aggressively manipulated element of a soundtrack' with the recording process using microphones that are specifically designed to enhance its qualities so that its 'fidelity and intelligibility of dialogue' are assured in the mixing process. He explains that the recording of voiceovers via 'close-miking' offers a quality of 'authority' and 'codes of intimacy' that is reminiscent of the radio aesthetic. Voiceovers perform as commentary that are positioned outside of the film so that they are not limited by the constraints of screen action, either temporally or spatially; for example, quite often when Deckard's voiceover is heard describing what is happening in the film other elements of the soundtrack become of secondary importance, or completely disappear. In the following section I investigate how sound and music are used to signify the replicants' subjective modalities as they try to 'remember' the past.

7.9.3 Subjective modality and the replicants' memories

i. Leon

When Leon is subjected to the Voight-Kampff test the soundtrack features the diegetic sounds of electronic instruments that register his brain and body activity in order to identify whether he is a human or a replicant. The following transcription shows how the soundtrack signifies Leon's subjective modality.

Timecode	Image	Dialogue	Sfx	Music
00:05:32	Mid-shot of Leon.	Leon: Is this the test now?	High frequency machine sounds.	
00:05:33	Mid-shot of Holden.	Leon: You're walking along in the sand when all of a sudden.		
00:05:44	Mid-shot of Leon.	Leon: But how did I come to be there? Holden: Maybe you're fed up.	High frequency machine sounds.	
00:05:45	Mid-shot of Holden.	Holden: Maybe you want to be by yourself. Who knows?	High frequency machine sounds.	
00:06:07	Mid-shot of Leon.	Holden: And you see a tortoise near you. It's crawling towards you. Leon: Tortoise, what's that?	Machine sound increases in volume ('Activation').	
00:06:21	Mid-shot of Holden.	Holden: You reach down and you flip the tortoise on its back Leon.	High frequency sound is muted.	
00:06:14	Mid-shot of Holden.	Holden's voice echoes: The tortoise lies on its back trying to turn itself over but it can't.	Electronic heartbeat fast pulse. High frequency sound.	
00:06:33	Mid-shot of Leon; his mouth is open.	Holden: What do you mean I'm not helping? (He shouts)	Electronic heartbeat fast pulse. High frequency sound.	
00:06:37	Leon's eye on the monitor.	Holden off-screen voice: You're not helping. Why is that Leon?	Electronic heartbeat pulse accelerates and increases in volume.	

Transcript 7.2: The Voight-Kampff test

The previous transcription shows how sound is indexical of Leon's subjective modality as there is a direct correlation with what he is able to remember and the sounds that emanate from the Voight-Kampff machine. Leon reveals his confusion with his constant interruptions of Holden's questions that are designed to establish whether he is human or a replicant. He asks, "Is this the test now?" (00:05:32) and then later asks how he came to be in the desert sand (00:05:44). As Leon struggles to understand the questions he is asked an electronic pulse is heard getting faster (as though it his own electronic heartbeat). When Leon can no longer restrain his agitation and frustration he shouts back at Holden, "What do you mean that I'm not helping?" before shooting him. Leon's subjective modality is signified through a combination of the mechanistic beeps of the Voight-Kampff machine, his nervous interruptions and his ultimate rage when he screams at Holden. When Holden bombards Leon with a series of questions Leon's 'point of hearing' is represented by Holden's voice being buried in echo as though all the questions have been blurred together (00:06:14).

ii. Rachael

Rachael is the equivalent of a femme fatale character, from the *film noir* tradition, who seduces the hero and leads him towards circumstances that may culminate in dangerous consequences. Deckard's job is to destroy replicants and Rachael is a replicant, but instead of destroying her he becomes infatuated with her. When Rachael asks Deckard whether he has ever made the mistake of killing a human instead of a replicant her question touches his deepest fear that he may make that mistake and he convinces himself that her sensitivity must mean she is human. However, when subjected to the Voight-Kampff test Rachael's answers expose herself as a replicant because her lack of human 'memories' means she cannot make correct moral judgements based on what she knows. Her failure to respond to the questions correctly is highlighted by the increased activity of the Voight-Kampff machine as one of her eyes is displayed in a close-up as she hesitates over her answers. The following transcription shows how sound and music are used to signify Rachael's subjective modality as she struggles to answers correctly when cross-examined by Deckard.

Timecode	Image	Dialogue	Sfx	Music
00:19:21	Deckard is sitting at his desk (*film noir* lighting).	Deckard: It's your birthday. Someone gives you a calfskin wallet.		Held synthesizer chord ('Sensory sound').
00:19:38	Close-up of Rachael followed by the close-up on some bellows.	Rachael: I wouldn't accept it, also I'd report the person who gave it to me to the police.	High frequency sounds of the eye-scanner.	Synthesizer sound.
00:19:41	Eye-scanner.	Deckard: You've got a little boy (off-screen company announcements)		Synthesizer.
00:19:46	Close-up of Deckard.	Deckard's voice in reverberation: He shows you his butterfly collection. Plus the killing jar.		High synthesizer texture.
00:19:51	Close-up of Rachael smoking a cigarette.	Rachael: I'd take him to the doctor.	Sound of her inhaling from the cigarette, machine pulse.	A synthesizer choir sound gradually swells in volume.
00:19:59	A monitor that shows a close-up of Rachael's eyes.	Deckard: You're watching television. Suddenly you realise there is a wasp crawling on your arm.	High frequency of the machine.	Ambient chord.
00:20:03	Close-up of Rachael.	Rachael's voice with a small reverberation: I'd kill it.	Voight-Kampff machine – high frequency sounds.	Ambient music.
00:20:07	Close-up of the eye-scanner.		Voight-Kampff machine sounds.	Ambient chord.
00:20:43	Close-up of Deckard.	Deckard: You're watching a stage play where a banquet is in progress. The guests are enjoying raw oysters.	Voight-Kampff machine sounds.	Ambient synthesizer pad.
00:20:49	The eye-scanner.	Deckard: The entrée consists of boiled dog.	Voight-Kampff machine sounds increase.	
00:21:54	Close-up of Tyrell.	Tyrell's voice in reverberation: Rachael is an experiment no more.		Synthesizer ambience. Chimes ('Activation').
00:22:09	Close-up of Tyrell.	Tyrell's voice in reverberation: If we give them past we create a cushion, a pillow for their emotions and consequently we can control them better.		
00:22:12	Close-up of Deckard.	Deckard: Memories. You're talking about memories.		Non-diegetic female women's voices. Swell of synthesizer.

Transcript 7.3: Rachael and the Voight-Kampff test

The previous transcription shows how sound and music are used to signify whether Rachael is human. Firstly, through the indexical mechanistic beeps of the Voight-Kampff machine that registers her physiological responses, secondly through the use of 'heightening' effect of reverberation on her voice and lastly via the use of underscore music, which highlights her strange and seemingly psychopathic responses.

7.9.4 Rachael's theme

The distinctive quality of Rachael's theme is that it uses acoustic instruments rather than electronic instruments in order to convey her 'human like' emotions as she becomes romantically involved with Deckard. Although Vangelis's electronic score was previously used as a descriptive backdrop to depict the futurism of Deckard's world, it now becomes foregrounded in order to signify her emotional relationship with Deckard.

Timecode	Image	Dialogue	Sfx	Music
01:05:15	Rachael looking at the photos.			'Rachael's theme'. Sensuous saxophone melody.
01:05:26	Close up of Deckard lying down with his eyes closed.			'Rachael's theme'.
01:05:37	Rachael plays the piano.			'Rachael's theme'.
01:07:08	Deckard appears besides her.			Electric piano. Synthesizer and bass.
01:07:13	Music notation on the piano.	Deckard: I dreamt music.		Electric piano melody and synthesizer.
01:07:16	Mirror profile shot of their faces.	Rachael: I didn't know if I could play. I remember my lessons, I don't know if it's me or Tyrell's niece.		Piano theme. Held synthesizer chord.
01:07:35	They stare into one another's eyes.	Deckard: You play beautifully.		Modulation of synthesizer chord to a new key.
01:07:42	Deckard kisses her.			The music swells.

Transcript 7.4: Rachael's theme

The previous transcription highlights how the use of acoustic instruments and the sentimental 'Rachael's theme' imbue this scene with a sense of intimacy and warmth that is absent from earlier scenes of this film's dystopian future. Rachael confesses she is unsure whether her memories are 'programmed', or real, as she plays the piano.

7.9.5 Roy Batty and emotive sound

The following transcription shows how the soundtrack is deployed to make Batty's speech emotive as he reminisces about his life and realises that his date of termination is due.

Timecode	Image	Dialogue	Sfx	Music
00:41:49	Close-up of Batty's face.	Batty: I've seen things people wouldn't believe. Attack ships on fire off the shoulder of Orion.	Rain sounds.	Synthesizer chord and electric piano melody non-diegetic sensory).
00:42:05	Close-up of Deckard bloodied face.	Batty: I watched sea beams glitter in the darkness at Taunnhauser Gate.	Rain sounds become louder.	High chord on piano (Soft and atmospheric).
00:42:16	Close-up of Deckard.	Batty: All those moments will be lost in time like (his voice becomes choked) tears in the rain.	Rain sounds.	Synthesizer swell.
01:42:32	Close-up of Deckard.	Batty's voice off-screen: Time to die.	Rain (volume lowered).	Electric piano melody.
01:42:41	Close-up of Batty looking down at the ground.		Rain sounds.	Synthesizer swell.
01:042:47	Close-up reaction shot of Deckard.		Rain sounds.	Synthesizer swell. Electric piano melody rises up.
01:42:52	An extreme close-up of Batty with his head bowed to the ground.		A bird wings are heard flapping.	Synthesizer swell. A chimes glissando.
01:42:53	A dove flies into the sky.		Rain sounds.	Synthesizer swell.
01:43:04	Close-up of Deckard with his eyes now open.	Deckard's voiceover: I don't know why he saved my life. Maybe in those last moments he loved life.	Rain sounds.	Quiet synthesizer sounds.
01:43:32	Close-up of Deckard sitting down.	Deckard: All I could do there is sit there and watch him die (Off-screen in reverb).	Rain sounds.	Quiet synthesizer sounds.

Transcript 7.5: Batty

The previous transcription shows how Batty's soliloquy and the foregrounding of elegiac music elicit audience empathy as he fondly remembers his life and mourns its passing. Even though Batty has almost killed Deckard he decides to let him live because he realises the preciousness of life as his 'life-programme' runs out. Batty is heard reminiscing over miraculous visions he has seen on other worlds that he poetically

describes in his soliloquy: “I’ve seen things you people wouldn’t believe. Attack ships on fire off the shoulder of Orion. I watched sea beams glitter in the darkness at Tannhauser Gate.” The camera then fixes on a close-up of his face as he exclaims that all these moments will be lost like ‘tears in the rain’ (00:42:16). His poetic imagery, emotive music and the sound of falling rain combine into a sensory gestalt to reference his crisis as he mourns the end of his life. The camera focuses on an extreme close-up of his bowed head as a bird flies up into the sky as a symbol of his freedom from enslavement to mankind. The sound of Vangelis’s elegiac music and a dove’s wings flapping emphasise the drama of this event (01:42:52).

The following section highlights how film soundtracks can be used realistically to depict screen events or ‘emotively’ to signify characters’ subjective modalities. Deutsch’s (2008) following diagram (Figure 3.4) illustrates his perception of how soundtracks may feature sound and music either ‘literally’ as naturalistic sound or ‘emotively’ as sensory sound.

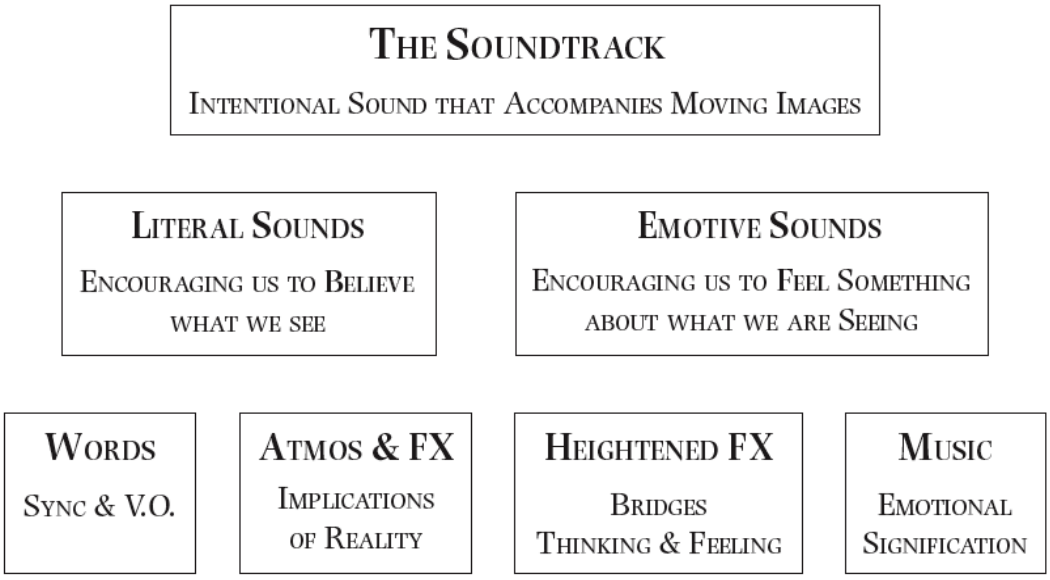

Figure 5: The soundtrack: (Deutsch, 2008: 4)

Deutsch’s (2008) concept of the binary opposition of ‘literal’ and ‘emotive sounds’ in film is reminiscent of Van Leeuwen’s (1999: 179) concept of naturalistic and sensory sound in recorded sound, which has already been discussed in the literature review. Deutsch’s chart clearly shows how Foley sounds (synchronised sounds and the voice)

act as literal sounds and 'heightened sound' effects are used to create emotive and dramatic effect. The use of 'emotive sound' is one of the central ways that the soundtrack of *Blade Runner* signifies its characters' experiences as the aural equivalent of *mise-en-scène* besides Deckard's voiceover.

7.9.6 Conclusion

In contrast to *Once Upon a Time in the West,* where Harmonica's memories are represented through his POV flashbacks with their definite 'entrance' and 'exit' points, the signification of memory in *Blade Runner* is more complex as it is an intrinsic part of the plot. Whereas Deckard's voiceover informs the audience about his past experiences, non-verbal audio clues are used to signify whether the other characters are human or not. Firstly, this is observed with the diegetic sounds that the Voight-Kampff machine emits as it tests whether they are human or not. Secondly, this is observed as diegetic and non-diegetic music and sound effects are used to signify their emotions as they recall the past. This is observed as Rachael sentimentalises about her family whilst playing a romantic piano piece that becomes assimilated into the underscore. Vangelis's elegiac music is also being used to add additional pathos to Batty's poetic soliloquy about the pleasures he has experienced in his brief life as a replicant but must let go.

Chapter 8: Subjective modality and terror

8.1 Introduction

This chapter examines how the subjective modality of terror is signified in *A Man Escaped* (Robert Bresson, 1956), and *The Birds* (Alfred Hitchcock, 1963). It will use Van Leeuwen's (1999**)** theorisation of aural perspective alongside observations drawn from Bordwell (2008), Weiss (1978) as well as film directors and sound designers.

8.2 *A Man Escaped* (Robert Bresson, 1956)

This analysis focuses on how Bresson uses sound resources to signify the subjective experiences of the protagonist (Fontaine), who is a prisoner of war. These sound resources include: voiceover, aural perspective (social distance), off-screen sound, reverberation and the use of sound motifs. The film's narrative revolves around Fontaine's daily prison rituals and his painstaking attempts to construct tools for his escape whilst remaining undetected by the prison guards who he must outwit. The audience quickly realises that Fontaine must rely on his hearing to avoid being detected by the guards who keep him imprisoned. Bresson foregrounds aural clues as much as visual clues in order to convey Fontaine's reality:

> The eye solicited alone makes the ear impatient; the ear solicited alone makes the eye impatient. Use these impatiences. Power of the cinematographer who appeals to the two senses in a governable way. Against the tactics of speed, of noise, set tactics of slowness, of silence.
> (Bresson, 1986: 52)

Bresson signifies Fontaine's POV via claustrophobic, tightly framed images and an interior monologue that informs the audience of his inner thoughts and plans to escape. His filmic technique encourages the audience to pay great attention to subtle sonic clues that help explain what his visuals have not shown. Beck and Grajeda describe the function of sound in *A Man Escaped* as a means of creating suspense in a drama that is played out 'between one sound and another, between metal on concrete and footsteps. Sounds become extensions of the characters of Fontaine and the guard' (Beck and Grajeda, 2008: 27).

8.2.1 Role of the voiceover (interior monologue)

Fontaine's voiceover presents most of the narrative information of *A Man Escaped* with the exception of his brief conversations with other prisoners. Bordwell and Thompson confirm the importance of Fontaine's voiceover as a means of understanding the film's narrative as well as his subjective feelings:

> We receive vital information through the commentary. Sometimes the narration simply states facts: the pin Fontaine obtains came from the women's prison … Fontaine often tells what his thoughts had been. After being beaten … we hear his voice say, "I'd have preferred a quick death." Often the actor does not register such thoughts visually.
> (Bordwell and Thompson, 2008: 293)

Fontaine's voiceover provides the audience with privileged access to his most intimate thoughts as he silently waits for an opportunity to escape. On one occasion when he is pretending to be asleep his voiceover reveals that this is to prevent his prison guards beating him again after his recapture. In the final scene his voiceover conveys his anxiety as he debates what to do when he hears the sounds of a guard's footsteps in the prison courtyard as he attempts to escape.

8.2.2 Aural perspective

As I have discussed (see chapter three, section 3.6.3) Van Leeuwen (1999) utilises Schafer's (1977) notion of aural perspective as a means of organising how sounds are placed at different distances from the listener in order to make the listener relate to them in different ways. Van Leeuwen (1999: 22–23) highlights how 'sound may be divided into three groups (positioned as 'Figure', 'Ground' and 'Field') or two groups (positioned as 'Figure and Ground', or as 'Figure and Field'). He explains that perspective is realised by the relative loudness of the simultaneous sounds (i.e. how near, or far away, the listener thinks they are). This can be signified via sound mixing where the director can highlight or de-emphasise specific sounds in accordance to what he wishes to emphasise. The following adapts Van Leeuwen's transcription of a radio play called *Wild Honey* (1999: 31) for the purposes of analysing perspective in *A Man Escaped*. It shows how Fontaine's subjective world dominates this scene with Bresson's use of visual close-ups of Fontaine's hand, the car door and the inside of the vehicle, as

well as sounds of the car's engine and its gear changes as Fontaine 'listens' for an opportunity to escape.

Time	Image	Social Distance	Figure	Ground	Field
00:02:25	Close-up on Fontaine's hand reaching for the door handle.	Close.	Soft hum of the car's engine.		
00:02:39	Fontaine is shown sitting with another person in the back of a car. Fontaine pulls his hand back from the door handle.	Close.	Soft hum of car engine.		
00:02:43	A close-up shows two other prisoners handcuffed to each other.	Close.	Car's engine becomes louder.		
0:02:52	Fontaine's point-of-view shot of the car's driver and the road ahead.	Close.	Hum of car engine.		
00:03:10	Fontaine's hand reaches towards the door handle again.	Close.	Car engine slows down. Sound of a gear change.	Horse and cart sounds.	

Transcript 8.1: The car journey

Bresson's narrative unfolds through the use of voyeuristic close-ups and medium shots as the audience perceive events through Fontaine's eyes and ears. There is no use of dialogue or narrative from 00:03:15 until 00:05:43. It is not until the next scene when Fontaine is locked in a cell that the audience hears him speak for the first time via a voiceover that informs the audience of how he was beaten when captured. The following transcription shows the aural perspective of the soundtrack when Fontaine is captured. This scene unfolds with a series of POV shots from Fontaine's perspective and accompanying sounds that build to a climax as he leaps from the car (00:03:47).

Timecode	Image	Social Distance	Figure	Ground	Field
00:03:15	Fontaine's POV shot of the road ahead and gear change.	Close.	Acceleration sounds of a car's engine.		
00:03:46	Fontaine's POV. Shot of a tram pulling in front of the car.	Close.	Car engine.		
00:03:47	POV shot of the tram.	Close.	Tram sound.	Tram bell sound becomes louder ('Activation').	
00:03:49	Fontaine leaps out of the car.	Close.	Tram sound at its loudest.		
00:03:52	Fontaine's empty car seat.	Middle.		Off-screen gunshots and the sound of running feet.	
00:04:11	Fontaine is handcuffed.	Close.	Sound of the handcuffs being locked.		
00:04:20	He is marched towards a building.	Close.	The German guard tells him to stand still.		

Transcript 8.2: Fontaine's capture

In the next scene Bresson foregrounds sound to emphasise Fontaine's claustrophobic circumstances as a prisoner. He features off-screen reverberating voices, footsteps and keys to reinforce Fontaine's feeling of powerlessness as he pretends to be asleep in his cell while being totally alert to the sounds around him. The additional use of reverberation (00:04:38 and 00:04:55) emphasises the authoritarian nature of the German soldiers who shout angrily at him and other prisoners. However, in contrast to the German soldiers' voices, Fontaine's voiceover is intimate and lacks reverberation as he informs the audience of his feelings and intention to escape (00:05:43).

Timecode	Image	Social distance	Figure	Ground	Field
00:04:38	Fontaine stands by a wall.	Middle.	Off-screen angry voice of a German soldier in reverberation.		
00: 04:44	Fontaine is taken by two soldiers towards another building.	Close.	Sound of their footsteps on the path.		
00:04:55	Fontaine's door is closed.	Close (becomes louder).	Off-screen sound of German soldier shouting orders.		
00:05:23	Fontaine is dragged into a cell. He has been beaten up.		He is handcuffed.		
00:05:41	His jacket is placed over him. A close up of him lying on the floor.	Close.	Reverberation sound on a door being locked.		
00: 05: 43	Close-up of him lying on the floor. His eyes are open (showing that he is conscious).	Close.	Fontaine's voiceover: I could feel I was being watched. I didn't dare move.		

Transcript 8.3: The cell

8.2.3 Restricted vision and acute hearing

As Fontaine's POV is limited he is forced to use his sense of hearing to compensate for what he cannot see. His acute sense of hearing makes him hyper alert to the fact he must be vigilant of the sounds he makes as he attempts to escape and know exactly where the prison guards are at any given moment. The audience are positioned to hear Fontaine's world as though it is their own. The film's drama is heightened by the tension created by Fontaine correctly identifying off-screen sounds that present a potential threat to his life as he attempts to escape.

When Fontaine makes his final escape the audience are captivated by his interior monologue that reveals his plan and the potential life-threatening consequences. The soundtrack features both the intimate expression of his thoughts, via his interior monologue, as well as the diegetic off-screen sounds that either interrupt, or confirm,

his observations. The aural perspective of the diegetic sounds is experienced as 'Figure' sounds referring to sounds that take place in the foreground and may immediately affect the listener. Van Leeuwen (1999: 23) describes 'Ground' sounds as being of less immediate consequence for the listener. However, in this film every sound, no matter its distance, has a potential significance to Fontaine's survival. In this film there is a noticeable absence of 'Field' (Faraway) sounds as the plot is centred on Fontaine's subjective experiences. The most significant sounds that Fontaine hears beyond his immediate environment are passing trains that cover his escape efforts and the striking of a church bell that indicates guard 'watches'.

8.2.4 Social distance

In *A Man Escaped* Fontaine is rarely heard speaking outside the context of his voiceover. There is a contrast between the loud sounds made by his captors and his attempts to be as quiet as possible in order to conceal his escape plans. The German soldiers assume a role of authority and domination over their prisoners as they shout, slam doors and march loudly in contrast with their prisoners who try to remain as quiet and insignificant as possible. Van Leeuwen commenting on social distance states that:

> When we are close to people (literally and figuratively) we speak more softly than when we have a more formal relation with them … as distance grows, the voice not only becomes lord, but also higher and sharper.
> (Van Leeuwen, 1999: 24)

In contrast with the German soldiers who are terse and loud, Fontaine rarely speaks aloud in the diegesis. The film's director, Bresson, is mainly concerned with the portrayal of Fontaine's psychological point of view (mental subjectivity) as he listens, plots and waits for an opportunity to escape. Later in the film, at 00:04:38, Fontaine is ordered to stand by a wall as he listens to soldiers shouting off-screen. Their voices have additional reverberation applied to them to signify their social distance from him in terms of social standing and power. Off-screen sounds reoccur in many situations in *A Man Escaped*. They extend the spatial sense of the diegesis and encourage the audience to imagine visual elements of the film that are never actually presented. The audience has no alternative but to enter into Fontaine's subjective mentality as the narrative is told from his perspective.

8.2.5 Aural perspective, off-screen sound and reverberation (the prison scene)

Van Leeuwen (1999) points out that parameters, like reverb, are used not just to create the sound of a perfect hall, but used as 'independent signifiers, sound quality variables in their own right':

> Alongside tenseness, roughness and all the other sound qualities … reverb can be used, for instance to make some sounds appear subjective and 'interior', almost as though heard from inside the body, and others as more objective and 'exterior'.
> (Van Leeuwen, 1999: 167)

In *A Man Escaped* the sound of German soldiers' reverberating voices screaming orders contrast with Fontaine's interior monologue that has a relatively dry sound without a noticeable use of reverberation. The lack of reverberation produces a closer and therefore more intimate sound that signifies his subjective modality. The use of reverberation is also used to emphasise the anonymity of unseen figures moving outside his cell (00:56:22). The combination of reverberating doors slamming and locks being turned emphasises Fontaine's sense of powerlessness as he strains to understand his environment through his ears alone. Chion (1994: 58) points out that it is not only the application of a parameter such as reverberation that signifies meaning but also its context. He describes how isolated sounds, such as footsteps in a street that are treated with reverberation, can reinforce the feeling of emptiness and silence. In the film *A Man Escaped* this technique can be observed in numerous circumstances as the audience is encouraged to be alert to the smallest sounds that Fontaine hears and makes himself, which may result in his death.

8.2.6 Sound motifs

Bresson eliminates extraneous sounds and prefers to focus the audience's attention on the sound of an object or person that emphasise a given moment of the narration. An analysis of the use of diegetic sound in *A Man Escaped* reveals that Bresson chooses mainly to focus the listener on one sound source at a time. However, he sometimes produces a variation on this technique by presenting Fontaine's voiceover narrative and diegetic sounds simultaneously. When Fontaine makes his final escape the reoccurring sound of a passing train functions as a sound motif. It acts as a background sound that provides cover for him and his accomplice as they make their way across several

rooftops to Fontaine's killing of a guard before they escape. The sound of a train's whistle is heard at a key moment when Fontaine decides to take the life-threatening decision to climb down into the prison yard (01:24:59). Bresson also uses the sound of vehicles as a metaphor for the freedom of the outer world that Fontaine yearns to escape to. Even the sound of a mysterious squeak is later revealed to be a German guard on his bicycle who they must avoid in order to climb the final wall to freedom. The final scene has a sound mix of 'Figure' and 'Field' with his voiceover providing the 'Figure' and the sound of the guards, passing trains and the toll of a church bell functioning as the 'Field'. The following chart reveals how Fontaine's POV is limited as he is forced to use his sense of hearing to compensate for what he cannot see.

Timecode	**Image**	**Social distance**	**'Ground'**	**'Figure'**	**'Field'**
00:24:25	He lowers a rope down.	Close.	Fontaine lowers the rope.		
01:24:45	Close-up of boy's anxious face. Fontaine climbs down.	Close.		Fontaine whispers: Down you go.	
01:25:12	Mid-shot of him looking down at an iron hook he has picked up.	Close.		Fontaine's voiceover: I put down the iron hook, this weapon didn't seem quite right.	
01:25:25	Mid-shot of him looking down at the iron hook in his hand.	Close.		Fontaine's voiceover: I had to act.	
01:25:28	Mid-shot of his chest.	Close.		Fontaine's voiceover: Had he sat down? Was he lighting a cigarette?	Sound of a guard walking on the gravel of the prison's courtyard.
01:26:50	Close-up on face.	Close.		Fontaine's voiceover: He is turning around.	Sound of the guard walking slowly away.
01:27:31	He turns around to attack the guard.	Moving closer.			Sound of a train going past. Volume increases as it draws nearer ('Activation').

Transcript 8.4: The escape

The previous transcription reveals how Fontaine's POV is limited as he is forced to use his sense of hearing to compensate for what he cannot see. He has an acute sense of hearing that is alert to the movements of unseen guards and the background sounds of passing trains in order to work out how he can escape without being discovered. Fontaine's 'hearing' is the audience's. This heightens the tension of the scene, as every unexpected sound is a potential obstacle for Fontaine's escape. The final escape takes place at night and therefore the audience must rely on what he hears, rather than sees, as he makes his escape.

8.2.7 Summary

The soundtrack of *A Man Escaped* presents several layers of signification of Fontaine's mental subjectivity. Fontaine's voiceover functions as an internal monologue that establishes his inner thoughts, views towards his captors and his desire to escape. It keeps the audience informed of his progress in crafting tools and moments of fear of him being discovered. Fontaine's voiceover is soft and relaxed and fits into the category of what Van Leeuwen describes as 'personal distance' between him and his prison guards as he keeps the audience informed of his achievements and setbacks.

Bresson's cinematographic style avoids establishing shots that reveal whole settings, but instead focuses on details in a series of close-ups and medium shots of parts of people and environments. Bresson uses off-screen sound as a device to create tension and anticipation as the viewer tries to decode the external sounds that Fontaine hears outside his cell. These include shouting, running, locks being closed, doors slamming and eventually the masking sound of trains as he climbs down into the prison yard. The use of carefully crafted and detailed aural clues play a significant part in the creation of the claustrophobic atmosphere of prison life that the audience experiences through Fontaine's perspective. The audience becomes highly attuned to Fontaine's reality, and ultimately empathises with his incarceration, as they experience the sense of claustrophobia through a limited visual perspective and wonder whether off-screen sounds and voices are potential threats or not.

Van Leeuwen's (1999) model of aural perspective provides a useful tool in indicating how individual sounds can be categorised by their volume, pitch and tone. In the case of

Fontaine his voiceover presents information from a 'personal distance' with a 'relaxed voice at low pitch and volume'. The viewer becomes accustomed to Fontaine's premeditated and patient actions in his endeavour to break free from his prison cell. Bresson's depiction of events alternates between half-explained, visual scenarios and off-screen sound where ambiguous matters are invariably clarified by Fontaine's voiceover. Reverberation also plays an important role to signify Fontaine's lack of social power when he is confronted with bellowing guards whose voices and actions reverberate outside his cell as he is left in almost darkness.

8.3 *The Birds* (Alfred Hitchcock, 1963)

The analysis of this film will examine how sound is used to signify terror through subjective viewpoint, aural perspective and via the manipulation of bird sounds, voice, electronic music and the use of silence. Transcription charts will be used to investigate how sounds are arranged in terms of aural perspective to reveal characters' subjective experiences when their lives are in danger.

8.3.1 The subjective viewpoint

The sound designer Sonnenschein writes that it is important for an audience to identify with the subjective experience of a character so that they become intrinsically involved in filmic events and empathise with a character or characters:

> By getting inside a character's head, hearing what he or she is hearing, the audience can have a strong bond with that experience, especially if it is shown in which the viewpoint is contrastingly objective … having the character in the scene, intercutting the image with what the character is seeing strengthens this association.
> (Sonnerschein, 2001: 177)

Hitchcock establishes the subjective mentality of his main protagonist, Melanie, by revealing what she sees and hears and then showing her reaction to what she perceives. Melanie's voyage seems trouble free until a large seagull suddenly appears from nowhere. The audience is aware of the bird approaching before she notices it suddenly swooping down to peck her forehead. A close-up shot then reveals her reaction as she holds her hand to her face as a spot of blood appears on her glove (00:22:33). The bird is then heard flying away with a shriek. The audience has been alerted to the sudden

violence that the seagulls can perpetrate in this film. Haeffner observes that:

> *The Birds* contains several sequences in which Hitchcock's use of editing is used especially to explore the dynamics of seeing and being seen. In the Bodega bay sequence … Hitchcock cuts backwards and forwards repeatedly between Melanie and Mitch, as first Melanie sees Mitch unseen, and then they watch each other. The scene builds up a tension that culminates in a single gull swooping out of the sky to attack Melanie.
> (Haeffner, 2005: 40)

The following transcription shows how aural perspective is configured as Melanie makes her boat trip.

Timecode	**Image**	**Social distance**	**'Figure'**	**'Ground'**	**'Field'**
00: 22: 25	Melanie stands in the motorboat as she pushes herself out to sea with a paddle.	Close.	Lapping water.		
00:22:48	She sits in the boat and smiles as she watches Mitch look for the mysterious deliverer of the canaries.	Close.	Lapping water.		
00:23:04	She ducks down in the boat when she realises Mitch is looking in her direction.	Close.	Lapping water and seagulls.		
00:23:14	Motor being cranked.	Close.	Engine starts.		
00:23:34	Melanie watches Mitch drive along the coast.	Close.	Seagulls. Motorboat engine.		
00:24:26	A seagull flies towards her.	Close.	Motorboat engine.		
00:24:27	Melanie holds her head where she has been bitten.	Close to middle.	Seagull's shriek.	Motorboat engine.	
00:24:28	Shot of the seagull flying away.	Close to middle.	Seagull's shriek.	Motorboat engine.	
00:24:31	Melanie takes her hand off her head and looks at the blood on her glove.	Close.	Motorboat engine.		

Transcript 8.5: Melanie's journey

The transcription shows how Hitchcock positions sound effects of the ocean, motor boat and bird caws in the foreground. The dramatic effect of the bird's attack is heightened by the sound of its symbolic triumphant shriek as it flies away after pecking Melanie. This event contrasts with the previous soothing sound of the lapping waves and seagulls as background ambience. The aural perspective of this scene is almost one dimensional with the sounds of the ocean dominating as 'Figure' and the occasional sound of seagulls heard as 'Ground'.

The following transcription illustrates how Hitchcock prioritises the sounds of the birds' wings and shrieks in preference to the use of dialogue. The volume and sheer intensity of the bird sounds provides a sensory depiction of Melanie's terror, which is emphasised by the use of close-up POV shots of what she sees, hears and her reactions. The aural barrage of birds' sounds as they shriek loudly and flap their wings furiously functions as a 'Figure' that is in direct contrast with Melanie's muteness as she attempts to avoid their attack.

Timecode	Image	Social Distance	'Figure'	'Ground'	'Field'
01:23:03	Aerial view of Melanie in a telephone box trying to escape birds that are attacking her.	Close.	Seagulls shrieking.		
01:23:17	Close-up of Melanie as she holds her hands to her face.	Close.	Seagulls shrieking.		
01:23:22	As Melanie opens the telephone box door seagulls try to attack her.	Middle to Close.	Seagull's shrieking and the sound of their wings flapping.	Sound of a siren.	
01:23:43	She falls back against the telephone box door as she sees the seagulls looming towards her.	Close.	Seagulls shrieking.		

Transcript 8.6: Aural perspective of the telephone box attack

The transcription shows how the soundtrack signifies Melanie's terror as she runs and hides in a telephone box to escape being attacked by a flock of seagulls that are

swooping down on her. Initially the sound of burning buildings and bird sounds is positioned as 'Ground' in the sound mix, but then is repositioned as 'Figure' sounds as Melanie's point-of-audition of her perilous situation as the birds make relentless attacks upon her and the other town people. The accelerated visual edits help to accentuate the drama of this scene as the camera cuts between Melanie looking helplessly at the town around her being destroyed as she hears the sounds of vehicles crashing, buildings burning and sirens.

8.3.2 *Musique concrète* and the electronic score

The title sequence of *The Birds* uses *musique concrète* instead of a conventional score. Its soundtrack is made from electronically treated bird sounds produced by the electronic music composers Remmi Gassman and Oskar Scala. Brophy writes that these sounds were created by using 'taped sounds of birds [which are] altered in pitch, tone, duration and shape, then mixed in a multi-layered cacophony of screeches and flapping sounds in sync with the animated silhouettes of bird shapes' (Brophy, 1999: 1). The soundtrack features only two conventional pieces of music that appear diegetically in the form of a piano recital and the sound of schoolchildren singing a song before they are attacked whilst leaving their school. The rest of the soundtrack comprises a combination of natural sounds and electronically enhanced sounds to replace the role of a conventional music score.

8.3.3 Bird sounds

Elizabeth Weiss explains how Hitchcock's soundtrack for *The Birds* is constructed to produce terror as it continues the subjective tradition in which 'aural intrusion plays an essential role':

> In *The Birds* Hitchcock deals abstractly with fear itself, rather than with any particular manifestation of it … Hitchcock's emphasis on sound effects is indicated by the fact that he foregoes background … it is composed from a constant interplay of natural sounds and computer-generated bird noises.
> (Weiss, 303: 1985)

From the beginning of *The Birds* the soundtrack is dominated by the sound and presence of birds. When Melanie enters a pet shop at the beginning of the film she is

surrounded by the sound of birds as she playfully pretends to be an employee in order to flirt with her future boyfriend, Mitch. At the children's party scene Hitchcock deliberately saturates the soundtrack with electronically manipulated bird sounds in order to enhance the sense of terror, as birds appear to fly from all directions as they attack the children. The children's screams and the sound of shrieking birds form a deafening and immersive sound mix that signifies pure terror. The birds dominate both the visual space, as well as the aural space, as they burst balloons and create panic and chaos. While being interviewed by Truffaut, Hitchcock said that in order to emphasise the impact of the murderous birds that attacked Melanie he and his technicians:

> Inserted the natural sounds of wings but … [also] stylised them so as to create greater intensity. We wanted to get a menacing wave of vibration of the noise of the wings. Of course I took the license of not having the birds scream at all. (Hitchcock, in Truffaut, 1983: 297)

This stylisation of sound intensifies the victim's sense of terror as the soundtrack works first in unison with bird attacks and then is removed as victims gesticulate helplessly in silence. The next section examines how the human voice is used to portray characters' terror through the use of speech and non-verbal utterances as the victims in this film are literally left speechless.

8.3.4 The human voice and non-verbal signification

Hitchcock involves the viewer's imagination by giving them parts of his cinematic jigsaw. He often presents events in a restricted narrative style that leaves the audience wanting to know what will happen next. This occurs in Melanie's boat trip scene where there is no dialogue or verbal explanation of what will happen next, only the sounds of the ocean, her boat's engine and occasional seagull sounds. This is also observed with the birds' second attack as the only words that are heard are a child's voice shouting, "Look, look". The main emotional impact of this scene is created by the sound of children's screams and bird shrieks as visual cuts are accelerated and a flurry of action takes place. In this scene Hitchcock creates an intense sense of terror without the use of dialogue or any other form of verbal explanation.

The second bird attack features children being attacked at a birthday party as Mitch and Melanie return from a walk in the hills. The audience sees events from both Mitch and

Melanie's perspective as the children play in a garden below. The camera then focuses upon a girl being blindfolded as her birthday cake is secretly brought out. Tension is created by the audience becoming aware that she will be attacked before she even knows what is happening. Children's screams, sounds of balloons popping and the shrieking sounds of seagulls all create a sensory gestalt. In this scene Hitchcock builds his theatre of terror stage-by-stage, introducing individual characters that either witness, or directly experience, terrifying events. Hitchcock uses both visual mayhem and sonic cacophony to signify the children's distress and terror as the birds attack them.

8.3.5 The sound of machines

Hitchcock uses the sound of a noisy engine to announce Melanie's entrance into the quiet seaside town of Bodega Bay. When she takes two lovebirds to Mitch's sister as a present for him, she is seen driving a sports car and heard shifting gears noisily. Weiss describes how Melanie's vehicle's engine signifies her disturbing presence for the small town as she arrives in the town with 'two love birds swaying on their perches as she rounds the corners too fast' (Weiss, 1985: 309). She points out that Hitchcock's intention was to take real sounds and stylise them so he could emphasise the drama of the engine sound to 'something that's like a cry. It's as though the truck were shrieking' (ibid.). Weiss points out that 'there are aural cross-references of all sorts: the birds sound like machines because of the electronic origins of their sounds, the humans sound like birds' (ibid.).

8.3.6 Cathy, non-verbal sounds and silence

When Melanie first calls out to her friend Cathy in an alarmed and anxious voice she is nowhere to be seen. She is then seen standing in a stupefied silence near a dead body as several birds gather around her. The audience's sense of tension is increased as they wait to hear her explain what has happened, but she is only able to sob. By avoiding the use of dialogue Hitchcock heightens the suspense of the scene by interspersing Cathy's silence with her sobs, the dislocated sounds of synthesised birdcalls and their flapping wings. This all contributes to the terrifying atmosphere of the scene and helps to build its tension.

8.3.7 Extra subjectivity

The next section examines Weiss's concept of 'extra subjectivity' in *The Birds*. She writes that Hitchcock's interest, from about 1958 to 1963, went beyond point-of-view shots that identified with a given character. She describes Hitchcock as attempting to directly touch the fears of the audience:

> At the end of *The Birds* the characters may or may not have escaped their assailants, but the audience is left behind, in a world where the birds - which represent any terrifying, incontrollable forces- have prevailed.
> (Weiss, 1985: 304)

This scene is established with an aerial shot of the town as the birds mass above it. The birds are responsible for the town's chaos that includes burning buildings, bleeding victims, as well as Melanie, who is trapped in a telephone box as the camera moves back and forth between point-of-view and reaction shots. Hitchcock said that:

> Melanie Daniels takes refuge in a glass telephone booth and I show her as a bird in a cage. This time it isn't a gilded cage, but a cage of misery. Here the human beings are in cages and the birds are on the outside.
> (Hitchcock, in Truffaut, 1983: 297)

The sound of the bird's screeches becomes more intense as Melanie witnesses the horrors around her as a bird smashes into the glass of the telephone box she is sheltering in. As she attempts to leave the telephone box the audience hears a furore of birds' shrieks, their wings flapping and sirens screaming. The camera then cuts to a close-up 'reaction shot' of her looking desperate as she wonders how she will escape.

8.3.8 The attic attack

The suspense in this scene is created by the absence of sound as Melanie climbs the stairs to the attic to investigate a noise she has heard. After complete silence the audience suddenly hears the cacophonous noise of birds' wings flapping wildly and their shrieks merging with her screams. Cook writes that:

> There is a classic Hitchcockian use of point of view as Melanie moves towards the stairs and the attic door, which could be seen to serve a double function: to build suspense from the rhythm of shot/reverse-shot, and to emphasise Melanie's subjectivity through point of view before she is reduced to an object in the attic.
> (Cook, 1987: 128)

The following transcription shows how Hitchcock uses sounds to signify Melanie's terror.

Timecode	Image	Social Distance	'Figure'	'Ground'	'Field'
01:43:00	Close-up of Melanie's hand opening an attic door.		Silence.		
01:43:30	Melanie holds her arms up against a bird – the assault.	Middle to Close.	She whimpers. The birds' fluttering becomes louder.		
01:43:56	Melanie's POV shot of a bird flying towards her face.	Close.	Birds' fluttering sounds.		
01:43:57	Close-up shot of Melanie's face with a bird attacking her.	Close.	Birds' fluttering sounds intensify. Melanie gasps.		
01:44:28	Profile shot of Melanie's face with blood on it.	Close.	Melanie: Oh Mitch! Birds' fluttering sounds.		
01:44:46	Melanie slumps unconscious on the floor.	Close.	Mitch's voice: Melanie, Melanie.		
01:44:58	Mitch breaks into the room and drags her out of it.	Close.	Birds' fluttering sounds. They shriek at him.		

Transcript 8.7: The attic attack

The previous transcription shows that Hitchcock favours a mono-dimensional approach to the configuration of his sound mix. He places the most significant sounds of his soundtrack in the foreground as 'Figure' and only places sounds in the background ('Field') as the bird attacks recede. The dramatic contrast between the tense periods of silence and their sudden cacophonic presence makes the bird sounds appear more terrifying. When Melanie is attacked in the attic she becomes inarticulate as only her gasps and whimpering sounds are heard before she falls completely silent. Mitch's urgent shout signifies his shock as he sees her lying on the floor covered in blood. Whereas Hitchcock previously focused on the vicious sounds of shrieking birds as they attack, he now focuses upon the manic sound of their wings. Hitchcock comments in his interview with Truffaut that:

> For instance, when Melanie is locked up in the attic with the murderous birds, we inserted the natural sounds of wings, but we stylised them so as to create intensity. We wanted to get a menacing wave of vibration rather than a single level. There was a variation of the noise, an assimilation of the unequal noise of the wings. Of course I took the dramatic license of having the birds not scream at all.
> (Truffaut, 1983: 297)

Melanie's experience of fear and terror is signified either through her cries and gasps or silence as the overbearing presence of the bird's dominant scenes both visually and sonically. Her terror is expressed by the use of internalised 'meta-diegetic sounds' and externalised (non-diegetic) sounds of what she hears. The viewer does not 'hear' her thoughts, or experience her 'inner soundscape', but merely watches helplessly from a distance as she is brutalised both sonically and physically. Her subjective mentality is represented by her visual response to what she sees and hears. Hitchcock quite often produces suspense and terror on a non-linguistic level by foregrounding human and bird screams. He often intensifies scenes of suspense by removing sound or visual clues. This accentuates characters' overwhelming terror by bringing them together as a visual mayhem, which takes place as birds and their victims' screams blur into a sonic tapestry of fear and terror.

8.3.9 Conclusion

In *A Man Escaped* and *The Birds* the reconfiguration of 'normal' audio perspectival layering is a central part of how characters' subjective experiences of 'terror' are signified. Sound effects that are normally placed in the background become foregrounded to signify their experience of terror. In *A Man Escaped* Fontaine's aural environment is intrinsically important to him because his visual perspective is limited to the confines of a car and his prison cell. 'Heightened' speech and other sounds also play a vital role in signifying Fontaine's experiences of terror. An example of this occurs in the opening scene where loud gunshots, shouts and the sounds of him being chased by German guards are heard. Reverberation is also used to create a sense of social distance between him and the guards and also extend the filmic space by suggesting the vastness of the prison that he is incarcerated in. 'Normal' audio perspective layering is also reconfigured in *The Birds* to signify Melanie's experience of terror as bird screeches and the sound of their flapping wings become indistinguishable from children, or adults, screaming.

Chapter 9: The subjective modality of insanity

9.1 Introduction

In this chapter I examine how protagonists' subjective experiences of insanity are signified by the soundtracks of *Hangover Square* (John Brahm, 1945) and *The Shining* (Stanley Kubrik, 1981). I deploy Van Leeuwen's (1999) sound semiotic resources in order to analyse and discuss how sound and music's aural parameters are used for this purpose, as well as locating salient analysis and discussion from film sound theory that includes Gorbman (1987), Chion (1994, 1999, 2008), Donnelly (2005) and Deutsch (2008).

9.2 *Hangover Square* (John Brahm, 1945)

Hangover Square's narrative revolves round the main protagonist, George, having epileptic fits that are brought on by him hearing specific music or melodies (known as musiogenic epilepsy). I draw upon Gorbman's (1987: 151–161) study of the film to discuss how its music follows the classical Hollywood format, as well as using Van Leeuwen's (1999: 156–187) sound modality concepts to explain how its soundtrack signifies subjective modality. The plot of this film is structured around a composer who is susceptible to psychotic seizures brought on by dissonant music or sounds. The following section will explore how the diegetic music is used to signify George's subjective modality in *Hangover Square*.

9.2.1 Subjective music

The musical score provides the focal point of *Hangover Square's* narrative with the main protagonist's piano concerto containing what Gorbman describes as 'all the motivic material of the entire score' (Gorbman, 1987: 153). The concerto that George composes is passionate and romantic (like himself), but is also imbued with his sense of frustration that is signified by the restless and tumultuous sound of his music; it is dynamic, full of florid scalic runs and has a pitch range that at moments of high drama features the full weight of the orchestra. George's compositions are heard both diegetically and non-diegetically in the film. Most of his musical themes are woven into his final piano concerto performance as the auditorium burns around him. They are transposed back to the underscore when he finally has a mental breakdown and can no longer play. The line between diegetic and non-diegetic music is regularly crossed in

this film as if it is a mirror to George's shift between sanity to insanity. This occurs as he experiences what Gorbman (1987: 157) describes as 'musicogenic epilepsy', i.e. epileptic seizures that are brought on by hearing specific types of music or even specific melodies. George's first psychotic fit is activated by the repetitive and dissonant sound of a barrel organ grinder's music that then becomes part of the underscore as non-diegetic accompaniment to George savagely murdering an old man.

9.2.2 Empathetic and anempathetic sounds

Chion (2009: 487) points out that whereas empathetic sounds usually participate 'in the feeling of a scene by emulating the scene's rhythm, tone and phrasing', anempathetic sound does the opposite. The following transcription shows how the diegetic sounds of a barrel organ playing in the street becomes anempathetic music as George kills an old man in a psychotic fit.

Timecode	Image	Dialogue	Sfx	Music
00:01:24	Street scene with a barrel organ grinder.		Street bustle and laughter.	Barrel organ playing
00:01:55	George's POV of his victim that he stabs.		The old man cries out.	Dissonant brass. Chord crescendos.
00:02:01	A light is smashed on the victim's head and sets the house alight.		Sound of a light being smashed.	Orchestral brass sting ('Heightened sound').
00:02:27	A fire brigade arrives.		Fire brigade's bell rings.	
00:02:31	George walks along a street holding his head. He bumps into somebody.		Off-screen – sound of the fire brigade's bell fading way.	Muted brass sting.
00:02:46	George's POV of the man is blurred and out of focus.			Dissonant orchestral chord.
00:02:50	Close-up of George who looks confused.			Cellos, bass and a brass chord.
00:03:07	George bumps into a man and almost falls over.	Man: Hey what's the idea of walking into me like that?		Loud brass sting.
00:03:21	George turns around. He has blood on his head.	George: No I'm all right.		High string.
00:03:28	Close-up of Fulham road sign.			Brass sting.

Transcript 8.8: The first murder

9.2.3 Deployment of sound modality resources

Here, I apply Van Leeuwen's (1999) sound modality resources to understand how dynamic, range, pitch extent and timbre is used to signify the main protagonist's subjective modality in *Hangover Square*. The following section will discuss how these aural parameters are also used in order to signify the main protagonist's subjective modality by 'sensorising' events.

i. Dynamic range

Van Leeuwen points out that music's emotive impact was foregrounded in the Romantic period. He writes that 'it is not accidental that Romantic music, in which expression of emotion became foregrounded, began to use an increased dynamic range' (Van Leeuwen, 1999: 173). The emotive impact of sound is reiterated by Kalinak (1992: 18), who argues that sound can elicit a direct response through its dynamics, or level of sound, as volume reaches the nervous system with distinct impact, increasing or decreasing its stimulation in direct proportion to its level:

> Extremes in sound are the most noticeable dynamic because of their pronounced divorce from the natural sound level of everyday life. Extremely loud music can actually hurt the listener, while extremely soft music tends to drop out of range of human perception.
> (Kalinak, 1992: 18–19)

George's subjective modality in *Hangover Square* is signified by the expressive dynamic range of the soundtrack that echoes both his actions and different states of mind. Herrmann's score draws upon the Romantic concept of composers using dynamics as an important mechanism to signify a character's emotionalism. The dissonant sounds of diegetic barrel organ music, which pre-figure the murder, are adapted into an orchestral non-diegetic musical commentary that crescendos to a climax when George kills his first victim. As events become more dramatic, so does the music that culminates in a loud dissonant brass sting as the pawnbroker lets out a final cry as he is stabbed. The murder of the victim is then followed by the cacophonic sound of a gaslight being smashed on the victim's head as a fire is started. After these dramatic events the soundtrack's volume is lowered to the quieter sound of string and brass chords that accompany George's momentary confusion as he slowly comes out of his psychotic fit (00:02:50). However, the volume of the soundtrack increases again as the sound of a loud brass sting highlights both George's collision with innocent bystanders

and also alerts the audience to his connection with the murder of the pawnbroker (00:03:07).

ii. Pitch register

Van Leeuwen's (1999: 172) concept of how the expansion of pitch range can signify emotion is illustrated when the high-pitched dissonant sound of the barrel organ's motif (00:01:24) in the opening scene is used to create tension and is then heard as part of the non-diegetic score as a man is murdered. As George attacks his victim and then sets him alight; the orchestra rises to a crescendo that culminates in a piercing brass chord as he stabs him to death. Later, as George staggers in a trance on a street near the scene of his crime, the sound of a high string note suggests his association with the murder as a close-up shot shows blood dripping from his head.

iii. Sensory coding orientation

Van Leeuwen's (1999: 179) idea that horror films are not just designed to represent horror, but actually horrify, is witnessed in the opening murder scene of *Hangover Square* where sound, music and non-verbal utterances are all used to heighten the emotive impact of the victim's fear and his murderer's rage. As the victim screams loudly (00:01:55) an orchestral crescendo emphasises the dramatic events that have taken place. The audience is privy both to George's point-of-view as they see and hear the world from his perspective (00:33:31).

9.2.4 The meta-diegetic soundtrack

George's second psychotic attack is triggered by the sound of lead pipes falling off a passing horse and cart. Gorbman (1987: 157) points out that in *Hangover Square* the onset of George's 'seizures' is depicted both visually and sonically. An example of this takes place as his POV shots of events are shown as being distorted and an objective shot of his head comes into focus as an eerie shimmering chord is heard. George then becomes overwhelmed by the dissonant sounds of internal music (meta-diegetic sound) that seems to play inside his head. As his fit subsides he is unable to distinguish between real sounds and his aural hallucinations.

Timecode	Image	Dialogue	Sfx	Music
00:33:13	Close-up of George looking perplexed.		Horse and cart off-screen sounds.	
00:33:24	Close-up of George looking disturbed.		Cacophonous sound of falling pipes.	(Intra-subjective music.)
00:33:31	George's POV of blurred image of the street.			Dissonant high-pitched chord woodwind chord ('De-familiarisation').
00:33:34	George's eyes bulge.			High-pitched piccolo note. Woodwind.
00:33:35	George looking psychotic and confused.			Dissonant woodwind chord crescendos.
00:33:40	Close-up of George who is holding his ears.	Emanation speech heard off-screen in reverberation.		Sharp and loud dissonant woodwind chords.
00:33:50	The camera zooms out as he stares down at his tie.	Emanation speech fades.		Sharp and loud dissonant woodwind chords.

Transcript 8.9: The second murder

As in the opening murder scene, the role of the soundtrack's dynamic range and pitch extent play an integral part in the signification of George's subjective modality. George's transition from normality to psychotic fits is signified by the use of heightened diegetic sound (lead pipes falling down) and non-diegetic music (the loud dissonant sounds of high-pitched brass and woodwind).

The final denouement scene of *Hangover Square* culminates in all of the motific elements that have been used to signify George's subjective modality (diegetic, non-diegetic and meta-diegetic sounds) being performed in a passionate concert where he finally has a complete mental breakdown. Although George finally performs his concerto, he eventually dies by being literally consumed by the flames of his passion for music as the auditorium burns down around him. Gorbman (1987: 159) describes him

as a ‘pyromaniac organ grinder’ and ‘victim’ who is enslaved by musical logic and must finish his performance at all costs without concern for the human catastrophe around him. The whole concerto performance scene is dominated by his music that cues the entrance of policemen, the flashbacks of his psychotic fits and his final collapse. The entrance of Scotland Yard detectives is signified by loud dramatic ‘stings’ that are played by brass instruments whilst George momentarily glances up from his performance as his hands continue to automatically hammer manically on the piano. Meanwhile, as George has flashbacks of his psychotic attacks, the music from his piano concerto functions as his own personal soundtrack as meta-diegetic sound. POV shots of George’s ‘meta-diegesis’ are replayed as the thunderous sound of dissonant piano chords emphasise his mental imbalance (01:11:23). The following transcription shows how diegetic music is used to signify his subjective modality.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
01:10:53	A man enters the concert hall.			Loud brass ‘sting’.
01:11:08	George playing his piano concerto. He looks anxious.			Loud low fast piano runs (‘Activation’).
01:11:10	A policeman enters.			Tympani rolls act as a representation of George’s heartbeat.
01:11:13	Mid-shot of George.			Loud mid-range octave piano runs (‘Activation’).
01:11:15	Two policemen enter through another door.			Tympani rolls.
01:11:18	Close-up of George’s anxious face.			Piano octave runs.
01:11:23	George’s POV flashback of lead pipes falling.			Crashing dissonant piano chords alongside the piano scales.
01:11:27	Close-up of tympani.			Tympani.
01:11:31	Aerial close-up shot of George’s hands manically playing the piano.			Loud contrapuntal scales.
01:11:33	Close-up on the string section.			Loud dissonant downward string run.
01:11:40	George sees himself strangling Netta while she plays the piano. It is repeated three times.			Loud downward piano glissando.

01:11:51	Close-up on the brass.			String and brass section become louder and more dissonant.
01:12:06	Close-up of George's anxious expression.			Loud rhythmic piano phrase.
01:12:11	George strangles a girl.			Loud rhythmic piano phrase.
01:12:16	George's POV of the conductor who is out of focus.			Whole orchestra.
01:12:19	His flashback of the Guy Fawke's bonfire.			Whole orchestra.
01:12:24	George leans forward and holds his head. He then starts to play again.			Loud dramatic brass.
01:12:33	George's final piano chord.			Brass chords echo the piano chords.
01:12:40	Barbara goes to his side.	George: I can't continue. Please play for me Barbara.		

Transcript 8.10: George's mental breakdown

The previous transcription reveals that George's piano concerto is reminiscent of nineteenth-century Romantic piano compositions with its extended use of pitch, dynamics and textural richness. George's mental instability is signified by increased visual cuts and the way his playing becomes faster and faster as he loses his grip on reality. Kalinak explains that 'quick tempi tends to intensify stimulation of the nervous system, slow tempi tend to dissipate it' (Kalinak, 1992: 18). In this instance, the film viewer's nervous system is stimulated by George's increasingly manic performance that accelerates in tempo. Smith (2002: 117) summarises the effects of this concerto as being a 'diabolical, Lisztian work' that compresses three movements into one by using 'the romantic idiom as commentary, employing 19th century harmonics to explore the tragic and solitary aspects of Romanticism' in order to depict the doomed world of George Bone.

9.2.5 Conclusion

Hangover Square integrates diegetic, non-diegetic and meta-diegetic music and sound, as well as diegetic speech, in order to signify George's subjective modality. Firstly, the plot is structured around George being a composer who is extremely susceptible to

dissonance sounds, or music, and kills people when he is disturbed by its dissonance (the barrel organ music, lead pipes falling off a cart and so on). Secondly, George's compositions also provide the main themes of the non-diegetic score as well as dramatising his musicogenic fits. Lastly meta-diegetic sound and music are manifest in George's aural hallucinations when he becomes psychotic because of the effects of dissonant sounds.

9.3 *The Shining* (Stanley Kubrick, 1980)

The plot of *The Shining* is based around the mental deterioration of Jack Torrance, who believes he is the reincarnation of a caretaker who had murdered his family. This analysis will discuss how the soundtrack signifies his descent into insanity, which is precipitated by his 'possession' by a supernatural force. It will draw upon Van Leeuwen's (1999) work on sound modality, Donnelly's (2005) discussion of *The Shining* and Deutsch's (2007) conception of how 'literal' and 'emotive sounds' are used to signify reality and drama in cinema.

9.3.1 Horror film music

The Shining is essentially a horror film. Although it lacks a conventional horror score, its use of pre-composed music imbues the film with a mysterious ghostly presence that erupts into a horrifying sonic onslaught at moments of high drama. As I have already mentioned Van Leeuwen views the aim of horror film 'not to represent horror, but to horrify' (Van Leeuwen, 1999: 179). He points out that in the horror genre, what matters is the 'emotive impact' that is achieved by 'amplifying the articulatory parameters, by widening the pitch range, increasing the durational variation and so on' (ibid). Secondly, Donnelly argues that music functions as a central effect in horror films, rather than simply 'window dressing accompaniment for scary visuals' (Donnelly, 2005: 106). Lastly, Deutsch makes a distinction between 'literal' and 'emotive sounds' in cinema that matches Van Leeuwen's concept of naturalistic and sensory sound, both of which have been discussed previously in the literature review. The first analysis will incorporate both Van Leeuwen's sound modality resources and Donnelly's observation of the origins and 'codes' of horror film soundtracks.

Donnelly's (2005: 91) study of horror film soundtracks has resulted in him compiling a list of instrumental sounds and sonic effects that are used to signify horror effects. A gloss of these is: the organ (religious, gothic sound), tremolo (uncanny sound to produce a feeling of uncanny suspense), stings (musical blasts), tension ostinato (a loop of music that provides tension through cumulative effect) and the drone. Donnelly (2005) points out that music is very much a clearly readable process in horror films where audiences can hear what it is happening without having to concentrate too much on the music's activities. The following transcription shows how the soundtrack is used to signify Jack's subjective modality as he demonstrates 'special powers' by telepathically 'seeing' his wife and child in a maze. In this scene his hidden frustrations are revealed as he manically throws a tennis ball against a wall as the non-diegetic music of the soundtrack heightens the drama of this situation.

Timecode	**Image**	**Dialogue**	**Sfx**	**Music**
00:25:24	Wendy and Danny in a maze.	Wendy: Isn't it beautiful. Danny: Yeah.		Descending eerie viola melody.
00:26:07	Jack throws a tennis ball against a wall.			Synchronised sforzando piano.
00:26:19	Jack walks towards a model maze.			Tremolo strings ('Fluctuation').
00:26:27	Jack stares at the model maze.			A repeated single piano note slowly crescendos. String melody. Tympani roll.
00:26:32	Close-up of Jack looking down at the maze.			A slow chromatic string line ascends.
00:26: 36	Slow camera zoom from Jack's POV into the maze.	Off-screen voices of Wendy and Danny: Isn't it beautiful? Yeah.		Slow descending celesta chromatic scale. Rising dissonant strings ('Activation').
00:27:10	Wendy and Danny walking in the maze.	Wendy: I didn't think it was going to be this big. Did you? Danny: No.	Sound of footsteps.	Rising dissonant strings ('Activation').

Transcript 9.1: The maze

The following section examines how the transcription reveals how pitch range, dynamic extent, timbre, fluctuation and rhythm have been configured to signify Jack's madness.

9.3.2 Deployment of sound semiotic resources

i. Pitch extent

Although the string orchestral accompaniment to Jack's first 'shining' features a restrained use of pitch range, the audience quickly becomes aware of his inner mental chaos when dissonant celesta arpeggios with an extremely wide pitch range are heard as he begins to 'shine'. The disturbing sound of celesta arpeggios are then accompanied by a slow-rising strings motif as the camera moves from his POV, of a model maze, to reveal his family in actuality as they walk in a real maze.

ii. Dynamic range

Musical dynamic is used to signify Jack's anger as the sound of synchronised sforzando piano chords accentuates the image of Jack violently throwing a tennis ball against a wall. The sound of ominous tympani rolls, rising celesta arpeggios and dissonant strings are then used to generate a tense atmosphere of malevolent supernatural forces, as well as accentuating Jack's fury. Donnelly (2005: 48) points out how music in this scene features as another 'actor' with its 'vertiginous sounds of dissolution' being used to signify Jack's inner turmoil. As Jack throws his tennis ball at the wall for a second time the sound of a tympani roll adds another dramatic level to the scene and encourages the audience to understand that the soundtrack role will be to signify Jack's subjective mentality (mood, thoughts, etc) throughout the rest of the film. Lastly, the final sound of a tympani drum roll and a string crescendo in this scene suggest Jack's 'possession' as he begins to 'shine'.

iii. Fluctuation

The audience first becomes aware that something is strange as tremolo strings are heard when Wendy and Danny take a walk in the hotel's maze. The use of tremolo ('fluctuation' or wavering sounds) from the inception of early horror films was used as a means of signifying suspense or danger. This device is used frequently in *The Shining* to signal Jack's delusional and psychotic mentality and the ominous and potentially dangerous presence of supernatural activity that takes place in the Outlook Hotel. Van Leeuwen writes that:

> Degrees of the articulation of fluctuation range from the completely steady sound to the maximally deep and or / rapid 'vibrato'… the 'fluctuation range' is

> therefore again a scale which ranges from the restraint or ritualisation of emotion, via a relatively 'neutral naturalism', to the increasingly strong expression of emotion.
> (Van Leeuwen 1999: 175)

When Jack first 'shines' the shimmering sound of tremolo strings signifies the 'supernatural vision' of his family as they enjoy a walk in the hotel's maze. The micro-rhythmic activity of string tremolo sound's pitch shifts adds an element of eeriness to this scene. Whereas Jack's family appear to be having a pleasant stroll in a beautiful environment, the soundtrack belies this appearance as tremolo strings and a flurry of celesta arpeggios signal something more ominous is taking place.

iv. Rhythm

Rhythmic 'activation' is used to signify Jack's restlessness and frustration. It appears in several different guises in the maze scene. Firstly, with the use of synchronised piano chords that accentuates Jack's furious hurling of a tennis ball at the hotel's walls, secondly with the rhythmic sound of a xylophone that accelerates, crescendos and then mysteriously de-crescendos. The xylophone figure is accompanied by a tympani roll (often used as an accompaniment in silent film sound to signify thunder or danger) and then lastly by the vertiginous sound of dissonant celesta arpeggios. The following section will investigate how Penderecki's *De Natura Sonoris No 2* is used to signify Jack's engagement with the supernatural as he appears to travel through time when he enters the Gold Room.

Penderecki's *De Natura Sonoris no 2* is used as an aural reinforcement of Jack's mental deterioration as he spasmodically punches the air while walking towards the Gold Room, which will transport him (in his mind) through time to the 1920s. Powell describes Jack's manic and destructive energy as 'exploding' in the Gold Room, where his 'mental anomalies have reanimated dead guests as schizoid personae' (Powell, 2005: 49). Although Jack appears to obtain a drink and converse with a barman while in the Gold Room, there is no evidence of either when his wife arrives, suggesting that he is suffering from a delusional fantasy. The following transcription shows how the soundtrack signifies Jack's subjective modality in this scene.

Timecode	Image	Dialogue	Sfx	Music
00:46:33	Jack walks along a corridor muttering to himself.			Dissonant string and brass.
00:46:43	Jack opens his arms out wide.			Synchronised orchestral stab.
00:46:54	He stares at a sign that says the Gold Room.			High string alert sound over a brass and woodwind chord.
00:47:10	He turns on the lights in the Gold Room.			Dissonant strings over a woodwind chord.
00:47:41	Jack leans on the bar.	Jack speaking to himself: I'd do anything for a drink.	Wind blowing softly.	
00:49:00	Jack leans forward to the barman.	Jack: Say Lloyd how's my credit list anyway.		
00:49:20	Mid-shot of Jack at the bar.	Lloyd: Your credit is fine Mr Torrance. Jack's voice in reverberation: That's swell. I like you Lloyd.		
00:49:49	Mid-shot of Jack. He drinks.	Jack's voice in reverberation: I never laid a hand on them god damn it.	Wind blowing softly and the sound of him shaking ice in his glass.	
00:51:14	Mid-shot of Jack looking angry.	Jack: As long as I live she'll never let me forget what happened. I did hurt him o.k. It was an accident. A voice screams off-screen.	Wind blowing softly.	
00:51:23	Wendy runs along a corridor that leads to the Gold Room. She has a baseball bat in her hand.		Sound of her footsteps and heavy breathing.	
00:53:25	She runs into the room that Jack is in. She is hysterical.	Wendy: Jack! Thank God you're here.		
00:53:30	Jack and Wendy. Wendy holds his shoulder.	Wendy: Jack, there's someone in the hotel with us; there's a crazy woman who tried to strangle Danny.		

Transcript 9.2: The Gold Room

The previous transcription shows how the soundtrack begins with the 'emotive sounds' of non-diegetic music and Jack's strange non-verbal utterances and then moves to the non-diegetic, ominous sound of wind, signifying Jack's insanity. His erratic punching of thin air and his grunts highlight his deteriorating state of sanity; orchestral stabs are heard slightly out of synchronisation with these movements in order to reinforce the strangeness of his behaviour. The combination of the unresolved dissonances of Penderecki's music, the sound of an ominous wind blowing (signifies the evil breath of the hotel's ghosts) and Jack's own non-verbal utterances all resonate as signifiers of his descent into madness as he becomes a puppet of the supernatural forces of the Outlook Hotel.

9.3.3 'Pre-composed' popular music

When Jack returns to the Gold Room a band is heard playing period music of the 1920s as a ball takes place. In contrast to the dissonance and dynamics of Bartok's and Penderecki's music that has signified Jack's growing insanity, the popular music seems romantic and harmonious, however, by the end of this scene Jack is seen discussing the murder of his wife and son. Donnelly suggests that the role of the 1920s dance music in *The Shining* could be described, in Adornian terms, as the 'embodiment of evil' (Donnelly, 2005: 50–2). There is indeed an ominous subtext in the lyrical content that alludes to eternal love when Jack has nothing but hate and rage for his family. Although Jack appears to be content and familiar with this setting, it is there that he receives instructions from the 'otherworld' to murder his wife and son.

When Jack follows the waiter to the bathroom he learns that he is the real 'caretaker' of the hotel and it is his duty to 'correct' (kill) his wife and son. By now Wendy has realised that Jack is psychopathic and manages to knock him out in an altercation with him in which he falls down a staircase and becomes unconscious. As she struggles to lock him up before he wakes a low drone increases the scene's tension. It begins to rise in pitch as he slowly returns to consciousness.

Jack pretends he is feeling dizzy in order to evoke sympathy from his wife. However, the frenzied rise in pitch and volume of Penderecki's music, his manic laughter and shouting reveal his true demonic self. When he is left alone the off-screen reprimanding ghostly voice of Grady tells him he is ineffectual and too weak to 'correct' his wife and

son. The accompanying sound of a swirling wind provides the dramatic backdrop for Grady's ghostly presence, which is Chion's (1999: 23) notion of an 'acousmetre' (off-screen voice) that is invested with magical and malevolent powers. The following transcription shows Jack trying to cajole his wife in to letting him out of the storeroom she has locked him in; Jack's mania is signified by his voice and the soundtrack.

Timecode	Image	Dialogue	Sfx	Music
01:24:08	Low angle shot of Jack.	Jack shouts: Wendy listen. Let me out of here.		Low drone moving upwards in pitch.
01:24:19	Jack hearing Wendy's sobs tilts his head towards the door.	Jack: Wendy, baby. I think you hurt my head real bad. I'm dizzy. I need a doctor.	Wendy's sobs are heard off-screen.	Penderecki's string arrangement ('Activation').
01:24:47	Wendy holds a knife.	Jack's off-screen voice: Honey, don't leave me in here.	Wendy's sobs.	Penderecki's string moving slowly upward ('Activation').
01:25:03	Wendy speaks to Jack from behind a door.	Wendy: I'm going to go now. I'll bring back a doctor.		Penderecki's strings rising in pitch ('Activation').
01:25:50	Wendy listens. Cut to low angle shot of Jack looking disturbed.	Jack: Go check out the snow-cat and the radio and you'll see what I mean 'Ha Ha'.		Electronic treatment and a low-thudding sound.
01:25:34	Close-up shot of Jack who has a demonic expression.	Jack: You've got a big surprise coming to you. He laughs. You're not going anywhere.		Sounds of pitch shifted electronic treatments.
01:25:55	Jack pushes against the ceiling.	Jack: Go check it out.	His laughter.	Manic electronic sounds.

Transcript 9.3: Jack's imprisonment

The previous transcription shows Jack's devious attempts to get his wife to free him. His split personality is signified by his ability to quickly transform the sound of his voice from being wounded and helpless to ferocious as he declares that his wife will never escape from him as he has immobilised the snow-cat she planned to use for her escape. Penderecki's *Polymorphia* is used to create the atmosphere of terror and fear of this scene.

The following transcription shows how sounds and music are used to express psychopathic nature as he smashes his way into the hotel room where his wife and son are hiding. The combination of his physical vicious attack on the door with an axe and the sonic onslaught of the soundtrack create a terrifying scene as they both attempt to flee from him.

Timecode	Image	Dialogue	Sfx	Music
01:33:34	Jack smashes a door with an axe.		Crashing sound of an axe.	*Utrenja: Kanon Paschy.*
01:33:44	Wendy takes Danny into the bathroom.			Tremolo strings ('Activation').
01:33:54	Mid-shot of Jack smashing the door down.		Smashing sound of his axe on the door.	Tremolo strings.
01:34:04	Danny holds on to his mother's waist. He also looks petrified.		Loud crash.	Tremolo strings.
01:34:18	Jack appears in the hole he has smashed in the door.		Thud of the door being smashed.	Tremolo strings.
01:34:20	Close-up of Jack.	Jack: Wendy, I'm home.		Dissolution sounds.
01:34:49	Jack limps into the hotel room.	Jack: Now come out from wherever you are.		Muted dissolution sounds.
01:35:03	Wendy is still trying to open the bathroom window. She turns around.		Sound of Wendy panting as she struggles.	Dissolution sounds begin again.
01:35:36	Mid-shot of Jack who is smiling menacingly.	Jack: Little pigs, little pigs. Let me come in.		Dissolution sounds.
01:35:58	Jack attacks the bathroom door with his axe.	Wendy off-screen screams.		Dissolution sounds.

Transcript 9.4: Jack goes crazy

The transcription illustrates how the soundtrack is used to signify Jack's insanity and the fear that he instils in his family. The sonic bombardment of diegetic sounds in this scene dramatically heighten Jack's ferocity as he smashes his axe against the bathroom door and his wife screams in sheer panic. She lets out a blood-curdling scream when she hears his axe smash the bathroom door as 'dissolution' sounds accentuate her fear. She vainly attempts to escape out of a bathroom window to avoid his attack. The scene then

builds to a climax with the increased use of 'dissolution effects' and acceleration of visual cuts to signify Jack's mania as he tries to kill his wife and child.

9.3.4 Sensory and 'emotive' sound

Music, verbal utterances and sound effects are commonly used in *The Shining* to heighten dramatic events in order to create a sensorial realisation of Jack's subjective world as he becomes more delusional and psychotic. Van Leeuwen (1999: 179) describes sensory sound as being achieved by the expansion of 'articulatory parameters' of music, speech and sound that can be observed by the way pitch range, timbre, dynamic range, rhythm activation are used to enhance the emotive impact of films or adverts. The following sections discuss Deutsch's (2007) and Donnelly's (2005) notion of 'emotive sound' and 'sensation and emotion'.

9.3.5 Deutsch and 'emotive' sound

Deutsch categorises the soundtrack into two categories: 'literal sounds' (where words, sync, voice and atmospheric sound are used to imply 'reality') and 'emotional' sounds (where 'heightened sound' effects and music are used to signify a 'sensory' evocation of an event). By 'literal sounds' he means those sounds that signify realistic events and encourage the audience to believe what they see and 'emotive sounds' being a means of stimulating the viewer/ listener to feel a certain way about what they see. Deutsch (2007: 4) illustrates his idea with an example of a man walking along a street who passes a house – the soundtrack invests the moment with an emotional quality that encourages the audience to feel a certain way:

> Perhaps the man will slow down at that point, reinforcing the music with movement (or vice versa), but even if he passes the house without reacting to it, the audience registers its significance, perhaps only subconsciously. Music is almost always an emotional signifier, even if presented as literal sound.
> Deutsch (2007: 4)

The Shining features many examples where the soundtrack is used as an emotional signifier (or in sound semiotic terms as 'sensory' sounds), where the aural parameters of music, speech and sound are pushed to the maximum to signify either Jack's insanity, the presence of supernatural forces, or the terror of his family as he tries to assault them. Examples of sensory sound can be observed with the 'heightening effect' of

Penderecki's music, the loud crashes of Jack's axe against a splintering wooden door and Wendy's whimpers, gasps and screams. As Van Leeuwen explains:

> There is also the level beyond naturalism, the level of 'more than real' where what matters is the emotive effect … In a horror film the wind howls, the doors creak and the footsteps crunch in gravel with more than real loudness and texture to instil fear and foreboding'.
> Van Leeuwen (1999: 176)

9.3.6 Donnelly: sensation and emotion

Donnelly (2005: 95) argues that while analysis 'cannot discount the communicational aspects of film, it has found it all too easy to ignore its sensations and emotions', which are more difficult to write about. He points out that the experiential level we can perceive before cognition of cinema's representational elements means it is impossible to try and read a soundtrack as though it is words on a page:

> There should be a distinction between music that works primarily through conscious and semi-conscious linguistic codes (and can thus simply be decoded by the analyst using semiotics), and film music that is premised upon a more material effect, as sound volume and the actions of soundwaves upon the listeners.
> (Donnelly, 2005: 94)

9.3.7 Conclusion

This chapter used sound semiotics and film sound theory to investigate how characters' subjective modality of insanity is signified in *Hangover Square* and *The Shining*. In both films the articulatory properties of music and sound (e.g. pitch, dynamics, reverberation and so on) are either drastically exaggerated, or reduced to 'heighten' the expression of characters' subjective experiences of insanity. In both films the protagonists' insane behaviour leads them to commit horrific acts of carnage that are a typical feature of the horror film genre. With this knowledge I thought it was important to incorporate Donnelly's (see chapter nine section 9.3.1) explanation of how the functions and effects of 'horror film music' are deployed for this purpose, as well as using sound semiotics for its analysis. Van Leeuwen (1999: 172) and Donnelly (2005: 93–94) both point out it is often the material qualities of 'horror music' that help to 'heighten' audiences' sense of shock and surprise. Donnelly highlights how the use of 'sound volume', the action of soundwaves on the listener and the strategies of 'horror music' (e.g. 'stingers', drones and the use of dissonance) help to create drama in *The*

Shining. Donnelly (2000: 46–52) also explains the historical origins of its pre-composed music ('provenance value') and thus helps to explain its powerful and dramatic signification of Jack's insanity.[10]

I now summarise sound and music by giving a brief review of the sound semiotic resources that are deployed for this purpose. Pitch is often used to mirror the protagonist's experience of agitation and psychotic activity through a process of 'activation' and then 'de-activation' if they return to normality (e.g. when George is seen walking on a London street after his second psychotic fit). Dynamics also play an integral part in signifying characters' mental imbalance and helps to demarcate their insane behaviour from normal behaviour. 'Fluctuation' is often used as a way of increasing a sense of tension that anticipates scenes of irrationality, or displays of insanity (see chapter nine, section 9.3.1). Another important strategy is 'sensory coding' where musical and sonic elements such as stings, non-verbal utterances and orchestra crescendos are used to 'heighten' dramatic events and protagonists' subjective modality through their sudden and dynamic activity. As Van Leeuwen points out, realism is often sidelined in situations of film horror where the priority is to promote 'emotive effect' (Van Leeuwen, 1999: 176).

Finally, both the use of sound semiotics and film sound theory has provided invaluable tools and information for investigating how the subjective modality of characters is signified when they are subject to altered states. In the case of insanity the examination of the aural elements of pitch, dynamic, timbre, fluctuation and the 'sensory orientation' of sounds featured as the main, common elements of its signification of the two films that were analysed. The final chapter evaluates my contribution and findings to the study of how 'subjective states' are signified by the soundtrack in narrative fiction cinema.

[10] This is Donnelly's explanation about the common characteristics between twentieth-century modernist classical music and horror music (i.e. 'discordant', 'visceral and harrowing') and also identifies its historical origins and why it is so emotive.

Chapter 10: Conclusion

10.1 Introduction

In this chapter I evaluate the contribution this thesis makes to the field of soundtrack study as well as to how the comprehension of the subjective modality of altered states may be better understood by using a multidisciplinary approach that draws on sound semiotic analysis alongside film sound theory. I use this concluding chapter as a forum for reflecting on the merits and limitations of social semiotic analysis in conjunction with film sound theory for the designated research. Finally, I make some suggestions for possible future research of this topic.

10.2 Contribution and evaluation

In this section I reiterate my research questions and produce my findings. I then give a brief overview of how the advances of sound technology have augmented the possibilities of how music and sound are deployed to signify characters' subjective experiences of altered states. Next, I highlight some of the resources and strategies that are used to signify characters' experience of the five altered states (dreams, intoxication, flashbacks and memories, terror and insanity) that I studied before moving on to discuss the merits of using a multidisciplinary approach for this research. I then discuss how research in this area may be developed.

The research questions set out at the beginning of the thesis were concerned with:
(1) investigating how sound and music are used to signify the subjective experiences of a character when they experience altered states; as well as
(2) discussing whether it is possible to do this by using a multidisciplinary approach combining film theory and social semiotics.

10.3 Sound, music and subjective experiences

Since the inception of cinema, technological developments and cultural changes have widened the possibilities of how directors signify characters' experience of altered states as audiences have learnt the 'public language' of the Hollywood studio system, as well as experienced the emergent voices of European cinema, world cinema and experimental filmmakers' attempts to reinvent the practice. As

I have discussed in the literature review (chapter two, section 2.1) the depiction of subjective experiences of altered states such as dreams, visions and memories originally involved the use of long shots of an event that were taken from an omniscient perspective and routed in the present without flashbacks or flash-forwards. It is now quite common for contemporary film directors to use multiple cameras, microphones, Dolby surround sound, mixing desks and sound design software in order to signify different temporal settings, geographical locations as well as expressing characters' rapidly changing thoughts and moods. First, I will set out the salient findings that I discovered by applying a sound semiotic approach to how sound and music signify characters' subjective experiences before discussing film sound concepts outside the domain of semiotics.

i. Sound modality and subjective experiences

By applying Van Leeuwen's (1999: 170–188) theory of sound modality to film soundtracks I was able to identify what aspects of soundtracks (pitch, dynamic, timbre, fluctuation and so on) were used to signify characters' experiences of altered states as well as how they were used. For example, the fluctuating sounds of the theremin in the first dream sequence of *Spellbound* (Alfred Hitchcock, 1945) (chapter five, section 5.4.1) signify Ballantine's sense of bewilderment as he witnesses surrealistic events. The application of Van Leeuwen's sound modality concepts to film soundtracks also highlighted how sounds and music are either used as naturalistic coding (a literal signification of events), or sensory and abstract coding (as a way of emotionalising them). This is demonstrated in *Trainspotting* (Danny Boyle, 1996) (chapter six, section 6.3.4) where the amplified sounds of dripping water sensorise the squalid environment of a public convenience before Renton succumbs to hallucinations and imagines himself swimming in a tropical ocean. Film directors frequently use naturalistic recordings to suggest reality and sensory sounds or music to suggest alternative experiences, such as altered states, cartoons and so on.

ii. 'De-contextualisation' and altered states

My investigation of how subjective experiences of dream states are signified by sound and music reveals there is a common pattern that emerges. Firstly,

normative ambience is removed as 'de-contextualisation' takes place when a voiceover informs the audience a dream sequence will take place. At this point sensory music and 'heightened sounds' are introduced to signify unusual and dramatic events that take place in a character's mind. Finally, these sounds and music are removed as normative ambience returns to signify the character has woken up from their dream experience.

'De-contextualisation' is often used in dream sequences, as well as flashback and memory scenes (particularly *film noir*), to signify a character's transition from reality to an altered state. This can be observed in both *Spellbound* and *Wild Strawberries* where 'normative' (everyday sounds) are removed and replaced by more dynamic and unusual sounds to signify characters' surrealistic dreams. In *Spellbound* the high fluctuating pitches of the sounds of a theremin signify Ballantine's sense of dislocation and in *Wild Strawberries* the crashing sounds of 'heightened' Foley sounds highlight Borg's horror as he sees his own hand reach out of a coffin to grab him. 'De-contextualisation' also takes place in *The Conversation* where normative ambience is removed and replaced by a sound montage of *musique concrète* as Caul falls asleep and his disembodied voice is heard in reverberation recounting a story of his childhood and his inner angst.

I observed that flashback and memory sequences have a similar structure to dream sequences with 'de-contextualisation' being used to signify a character's transition from 'reality' to a flashback or flash-forward. The flashback sequences in *Once Upon a Time in the West* also feature an 'entrance point', 'the altered state' and an eventual return to their present 'reality'. The beginning of Harmonica's flashbacks are introduced by close-ups of his face as normative ambience is removed and replaced by sensory sounds, which are then faded out and replaced as normative sound resumes when he returns to 'the present'. I also noticed that flashback and memory sequences often feature the use of voiceovers, the sensory use of music and amplified Foley sounds to convey characters' subjective modality. Whereas music is used as the main signifier of Harmonica's memory of past events in *Once Upon a Time in the West,* Deckard's voiceover is the main signifier of his subjective modality as he recalls events in *Blade Runner.*

iii. The deployment of music and sound as a 'heightening effect'

Another common strategy that is used by filmmakers to signify a character's subjective experiences of altered states is the 'heightening' of these events by 'amplification and/or foregrounding' of the aural parameters of soundtracks. As my transcript shows (chapter six, section 6.3.7) this occurs in *Trainspotting* when Renton attempts to withdraw from heroin in his parents' house. In this scene 'heightened' sounds include the dramatic sound of his bedroom door being locked, the sound of a lighter in reverberation and the sound of his friend's feet banging against a door. As this happens, the repetitive sounds of trance music increase in pace and volume to signify the intensity of his drug experiences; it is as if the music itself is a drug coursing through his veins. 'Heightened' sounds are also used in *Pulp Fiction* (Quentin Tarantino, 1994) (chapter six, section 6.4): Vincent opens his tool kit as the sound of wind, breathing and a zip opening are brought to the front of the sound mix in conjunction with the hyperactive sounds of an electric guitar rendition of *Misirlou*. The 'heightened' sounds as a means of signifying characters' subjective experiences are not limited to just altered states of intoxication, but occur across the other altered states that I studied. Other prominent uses of 'heightened sounds' occur in scenes of terror in *The Birds* as well as in scenes where subjective experiences of insanity are signified in *Hangover Square* and *The Shining*.

iv. Provenance and subjective modality

As I pointed out (chapter six, section 6.3.3) it is also common practice for filmmakers to use the provenance value of sounds or music as a way of imbuing characters with a particular cultural or social association. Pre-composed popular songs are used to signify characters' experiences of intoxication in *Easy Rider, Trainspotting* and *Pulp Fiction*. *Easy Rider* is littered with rock music that includes protest songs, which reflects American youth's disenchantment with their society and government in the 1960s. In *Trainspotting* 1970s drug anthems and 1990s rave music are used to accompany Renton and his cohort's disenchantment with the economic depression of Edinburgh during the 1990s. The use of pop songs and music features in *Pulp Fiction* as a means of stylising scenes and signifying characters' subjective modality, as they are often responsible for playing their own soundtracks through records and tape recordings. When Vincent and his date return home from a night of dancing at a 'pop-theme restaurant' Mia plays a

tape recording of *Son of a Preacher Man*, which she dances to in a crazy way, before overdosing to a rendition of *Girl You'll Be a Woman Soon* by Urge Overkill. The provenance value of pre-composed classical art music also features in *The Shining* to signify Jack's extreme emotions and mental deterioration. This is reached by what Donnelly (2005: 36–52) describes as the 'dissolution effects' of Penderecki's *De Natura Sonoris no 2* and his orchestral work *The Dream of Jacob.*

v. Subjective modality, voice timbre and quality

As I have pointed out (chapter three, section 3.4.3), 'sound never just "expresses" or "represents", it also, and at the same time affects us' (Van Leeuwen, 1999: 128). Technological advances in sound production have meant that film sound designers and sound engineers do not only focus on what Van Leeuwen (1999) describes as 'clean' dialogue and 'sync' effects, they also combine sound effects to produce a sense of 'presence' and emotive expression in films such as *The Piano* (Jane Campion, 1993):

> Sound effects of the creaking and groaning of timber and of the soft sighing and deep mysterious rumbling of the ocean can thus become as telling and emotionally affective as music.
> Van Leeuwen (1999: 128)

In *Once Upon a Time in the West* the ominous presence of wind sounds signal Harmonica's flashbacks and anticipate his eventual confrontation with death. In *Blade Runner* sound design signifies the de-humanising presence of technology with its constant beeps and clicks that measure replicants' responses. In the beginning of *Trainspotting,* Renton's subjective modality is signified by his ironic breathless, frenetic diatribe and the sounds of his feet hitting tarmac as he flees from security guards while *Lust for Life* plays loudly as non-diegetic music.

vi. Aural perspective and 'social distance'

My deployment of Van Leeuwen's (1999: 12 –34) sound semiotic notion of aural perspective revealed that directors such as Hitchcock and Bresson deliberately distort normative perspective in order to 'heighten' characters' subjective experiences. In *The Birds* and *A Man Escaped* aural elements that would normally be considered relatively trivial or mundane are dramatised to signify protagonists'

subjective modalities. In the terror of bird attacks is foregrounded by the sounds of their screeches and wings flapping as humans often cower away from them or scream in unison (i.e. children in the school playground). Van Leeuwen's idea of 'social distance' is illustrated in *A Man Escaped* where Fontaine's often quiet and submissive behaviour is contrasted by his German guards, who signify their authority through loud and brusque behaviour.

vii. Reverberation: spatial perspective and subjective 'distortion'

Sonnenschein points out that 'visual and auditory cues are what define our perception of space and its various sizes, distance, perspective, directionality, subjective/emotional space, and movement' (Sonnenschein, 2001: 83). As I have already discussed (see chapter eight, section 8.2.5), Van Leeuwen argues that reverberation is often used to make some sounds appear subjective and 'interior', almost as though heard from inside the body, and others as more objective and 'exterior' (Van Leeuwen, 1999: 167). A character's sense of 'external' perspective (i.e. distance, perspective or directionality) may be signified by the sound of reverberated footsteps, voices, or an organ in a large cavernous space, such as a cathedral or cave that suggests its large size. Alternatively, a character's 'internal' (subjective/emotional space) may be signified by the 'heightening' effect of reverberation where normality is 'distorted'. This is observed in *Trainspotting* when Renton withdraws from heroin addiction as ordinary sounds (such as a key being turned in a lock and the sound of a lighter) are 'heightened' by reverberation to signify Renton's 'internal' space (as a subjective 'distortion' of his reality).

As I stated in the overview of this research (chapter one, section 1.1) my aim was to explore how Van Leeuwen's chapters on sound modality resources (1999: 156–188), aural perspective (1999: 12–34) and voice quality timbre (1999: 125–155) could be used as a template for my analysis, transcription and observations of how the subjective modality of characters are signified by soundtracks when they experience altered states. Although I believe that Van Leeuwen's sound modality resources (1999: 156–188) provide an extremely useful template for soundtrack analysis, there are adjustments that need to be made in order to use these resources to investigate how the subjective modalities of altered states in cinema are signified. I believe that Van Leeuwen's (1999: 156–188) concept of 'absorption range' (dry sounds to maximally spacious and reverberating) could be extended to include other sound processing effects, such as

echo, equalisation and filtering, that are now a commonplace means of signifying subjective modalities (e.g. as emotional, psychological and geographical positioning) in contemporary film music and sound design.

My research revealed that directors often use sound and music innovatively to reconfigure what might be considered 'normal' perspective at times of intense drama, or when they wish to signify a character's subjective experience. For example, Hitchcock and Bresson often deliberately blur the boundaries between 'Figure', 'Ground' and 'Field' to foreground characters' subjective experiences of terror. Van Leeuwen's (1999) concept of social distance also proved useful for identifying characters' subjective modality by the way they used their voices to convey authority, or intimacy, via dynamics and timbre. It was also possible to further identify aspects of characters' personality and experiences by the material effects of the sounds they made as they moved and spoke. I suggest that it is important to include sound semiotic resources as a means of investigating how subjective experiences of altered states are signified because it enables a researcher to specifically identify not only what aspects of a soundtrack are involved in the signification of their subjective modality, but also how this is done.

10.4 Multidisciplinary research and the soundtrack

In order to situate my argument for the multidisciplinary research of sound and music in cinema I will first present a brief overview of my findings, as far as existing film soundtrack research is concerned, before explaining how the inclusion of sound semiotics as part of a multidisciplinary approach may benefit the research of how subjective experiences are signified by sounds and music. Milicevic observes (chapter two, section 2.6) that film sound theorists have difficulties in deciding how they will study soundtracks and often become more absorbed with classification than understanding the contextual relationships that exist within films. Beck and Grajeda (chapter one, section 1.1) point out how theoretical work on film sound has been separated around models based on either semiotic and psychoanalytical approaches, or materialist and technological-industrial ones. Donnelly (chapter two, section 2.5.6) argues that musicological analyses of film music scores rely heavily on abstract written notation and thus ignores 'the living relationship that music has with its surroundings' (2001: 2). More recently Donnelly (2008: 2) points towards

the need to re-conceptualise cinema as a sonic media where the 'musicalising' of sound takes place. I think it is important to coalesce the most salient ideas of theorists' mono-methodological approaches for the study of how sound and music signify subjective experiences in conjunction with sound semiotics in order to ensure their material effects, cultural influences and social context are also taken into account.

Bordwell's and Gorbman's structuralist and psychoanalytical approach towards sound and music does not fully explore cinema's inner contextual relationships, the importance of social and cultural influences or the significance of technological changes. Bordwell demonstrates a preoccupation with the visual aspects of cinema and the compartmentalising of film into generic forms and codes. His focus on narrative structure and the image therefore contributes to his neglect of the semiotic value of speech, music and sound in cinema. Even though Bordwell (2008: 267) discusses 'loudness', 'pitch' and 'timbre' he fails to explain their semiotic potential in the way that Van Leeuwen (1999) does with his sound semiotic approach. Although Gorbman (1987: 73) presents three ways that subjective experiences are signified by film music in her *Principles of Composition, Mixing, and Editing* (i.e. narrative cueing, point of view and music as a signifier of emotion), she fails to acknowledge how sound design and commercial 'pop scores' with their material effects and cultural resonance have now challenged the dominance of the idea of the traditional music score.

If one accepts that Bordwell and Gorbman fit into Beck and Grajeda's (2009: 13) notion of being 'psychoanalytical and structuralist' in their approach to cinema sound's theorisation then it can be also construed that Altman, Murch, Whittington and Chion conform to their notion of those that are inspired by 'technological and materialist-industrial' concerns. Certainly, Altman (1992, 2004) traces the evolution of sound cinema in the early 1920s to the innovative processes that took place with new technologies, such as multi-track recording, Dolby sound and surround sound from the 1970s onwards. He demonstrates a propensity to be absorbed with the technical aspects of microphone place, synchronisation and how a character's 'point of audition' is rendered by proximity, sound equalisation and the application of reverberation. Murch (2002) also displays a deep understanding of how the technical configuration of sound through sound mixing, sound design and editing can contribute greatly to how

characters' subjective experiences of altered states are signified. He illustrates this through specific examples in *The Conversation*, *Apocalypse Now* (Francis Coppola, 1979), *The English Patient* (Antony Minghella, 1996) and *The Talented Mr Ripley* (Antony Minghella, 1999).

Whittington's (2007) study of sound design reflects how it has become a dominant form of signification in contemporary science fiction and horror films where technological innovations of sound and their material effects have become equal to, if not more important than, the image. It has helped to explain and contextualise how sound and music is conceived, both technically and conceptually, in my analysis of the original version of *Blade Runner*. As contemporary sound design has eroded the boundaries that were formerly clearly defined within classical Hollywood sounds (especially in science fiction films and horror films) it is now also important to consider how its integration with music cues can also play a vital role in signifying subjective experiences. As Lastra points out sound designers now take on the responsibility for 'auralising' the sound of films and making definite creative decisions about them in a way that pop music engineers and producers are responsible for giving records a 'distinctive audio signature or feel' (Lastra (2008: 135).

Chion's (1994, 1999) theorisation of sound and the image as 'audio-vision' and his recent publication *Film A Sound Art* (2009), which distils his previous work and includes new analysis and discussion of music as well as his own terminology for how audio-visual events takes place, positions him at the forefront of film soundtrack research. He not only identifies the close relationships between sound and image in the cinema, but is also able to marry and articulate how sound and music signifies subjective experiences from both a technical and aesthetic viewpoint. He is able to decode the use of technical apparatus to signify subjective experiences and suggest their subjective modalities in a wide range of scenarios, which makes his work an invaluable resource for a soundtrack. Chion (2009: 296) proposes it is often necessary to forget 'realist' aesthetics and use 'close-miking' in sound recording because if the microphone were placed in the same position as a camera audiences would not hear what was being said (e.g. crowd scenes or a conversation that takes place in an aeroplane that is seen in the distance).

I think that Chion's explanation of the technical, material, spatial and aesthetic possibilities of soundtrack signification provides an invaluable repository of knowledge that I believe complements Van Leeuwen's sound semiotic resources as a way of investigating how the subjective experiences of altered states are signified. Chion's observations on the role and function of the voice (chapter two section 2.3) also highlight how the spatialisation of 'on-screen and off-screen sounds', use of internal sounds, features of 'point of audition', as well the use of anempathetic sounds orientate the audience to perceive characters' subjective experiences in specific ways. His analysis and conceptualisation of film soundtracks thus fill gaps that are not accounted for in Van Leeuwen's sound semiotic resources, which focus on the importance of the material characteristics of sounds and their social context. Chion's analysis and discussion of how voiceovers and off-screen sounds signify subjective experience have contributed significantly to my understanding of how characters' subjective experiences and subjective modalities are expressed in my research of *Spellbound*, *Wild Strawberries*, *American Beauty* and *Trainspotting*. This approach also complemented my analysis and discussion, which is based on the deployment of semiotic sound resources.

In terms of Beck and Grajeda's conceptualisation of how soundtracks are studied, I would position Donnelly as a bridging agent who wishes to link both structuralist and psychoanalytical viewpoints, as well as technological and industrial-materialist ones, in conjunction with his own specialist knowledge as an 'aesthetic historian' to the field of sound and music research. I concur with Donnelly's (2008: 2) notion that music (as well as sound) can appear to be, what he describes as, 'ephemeral, emotional and irrational' and it is not enough to merely talk about their 'rules of construction' and ignore their 'psychic life'. The 'psychic life' to which Donnelly refers is an inherent part of humankind that comes about through human interaction, cultural changes, different social groups and technological change, which is intrinsic to the process of film making, the enunciation of 'self' and therefore signified by its simulacra, or mirror, in cinematic sound and visuals.

My research reveals a convergence between Donnelly and Van Leeuwen's views of how sound should be studied. Donnelly (2005: 2) describes himself as an 'aesthetic historian' who expresses his wish to understand how music (and I assume sound)

'through its psychological processes, symbolic undercurrents' is one of the most potent forms of non-verbal communication. Van Leeuwen sets out from a social semiotic viewpoint to understand how the non-verbal communication of speech, music and sounds, through its material effects and social context (therefore including any underlying psychological and symbolic processes), emanate from media such as radio, cinema, theatre and so on. I think Donnelly and Van Leeuwen represent a new generation of theorists who recognise the need to shed the dogma and increase the limited scope of previous mono-methodological approaches to the research and explanation of the semiotic role and function of speech, sound and music in society.[11] Modern media, such as radio, cinema, theatre and the internet, have reinvented the way sounds and music are conceptualised, produced and distributed through the innovative procedures and technological means of sound mixing and sound design.

10.5 Conclusion

This thesis investigated how film soundtracks signify the subjective experiences of characters who experience altered mental states such as *dreams, flashbacks and memory, terror, intoxication* or *insanity*. It explored the sound resources that are available for this purpose and how they may interact with other cinematic events such as its visuals and narrative. Although film theorists have traditionally investigated how music is used to create narrative continuity, denote character through leitmotifs and convey aspects of subjective states, there is only sparse research of how sound design is used for this purpose. As I pointed out in chapter 4 there are several methodological problems with film theorists' and social semioticians' transcription of cinematic events and how semiotic coding takes between place between speech, music and the image. Whereas Gorbman's transcripts ignore sound design and Chion's transcripts lack a systematic approach, the multimodal transcription charts of Baldry and Thibault also fail to consider the semiotic role of the soundtrack as a whole (i.e. as speech, music and sound). I have illustrated with my transcription charts that it is necessary for soundtrack transcription to not address the semiotic role of speech, music and sound and their inter-relationships but also their relationship with a film's visuals and narrative.

[11] See Beck, J. and Grajeda, T. (2008) *Lowering the Boom: Critical Studies in Film sound* and Donnelly, K. J. (ed.) (2001) *Film Music: Critical Approaches*.

Having already shown the benefits of using Van Leeuwen's sound semiotics resources as far as soundtrack analysis is concerned, I will now point to its weaknesses. Whereas he shows how sound semiotic resources such as pitch, dynamic and timbre can be systematised in order to identify how subjective modalities are signified there are other terms such as 'duration range' and 'absorption range' that I do not think are so useful. Firstly, there are not many obvious examples of where the 'duration range' of sounds may contribute any salient semiotic meaning to film soundtracks. Secondly, his idea of 'absorption range' to describe the sense of spatial depth of sounds is superfluous as sound designers and film composers already employ the terms 'reverberation' or 'dryness' for this purpose. Van Leeuwen could also be accused of linguistic imperialism when he introduces unnecessary linguistic terms as a substitute for terminology that musicians or sound designers already have. For example, he substitutes the term 'connective articulation' for the traditional musical term 'legato,' which refers to how sounds are connected smoothly together in a melodic phrase. Another problem that also emerged was Van Leeuwen's ambiguous notion of 'sensory-abstract coding' that amalgamated two separate concepts of 'sensory coding' and 'abstract modality' together. In accordance with Deutsch's notion of how soundtrack semiosis takes place (see chapter 4, section 4.4) I think it is clearer to refer to literal (i.e. naturalistic) and emotive (i.e. sensory) sound and use the word 'abstract' for the description of a sound quality rather than using the term 'abstract modality' for the description of a character's truth[12].

In conclusion, my findings show that naturalistic sound coding is often used for the signification of characters' everyday experiences and sensory sound coding is frequently used to signify their experiences of altered states. Although a clear pattern emerged in the way that *dream, memory* or *flashback* scenes were signified, the distinction between characters' experiences of altered state and 'reality' was not always apparent as characters were not always shown returning to 'reality'. Lastly, I also observed that film directors' auteur tendencies permeated not only their visual style and narrative enactment in the films that I chose for analysis, but also through their idiosyncratic choices and uses of sound and music.

[12] Van Leeuwen (1999: 203-214) does not incorporate the term 'abstract modality' in his glossary.

Future research

I have argued in this thesis that the future study of how subjective experiences and characters' subjective modality is signified by the soundtrack requires a multidisciplinary approach where researchers need to coalesce film sound theory, sound semiotics and practitioners' observations. As Beck and Grajeda point out, sound theorists and historians need to 'not only cohere around their subject but to also articulate cross-disciplinary methodologies and analytical approaches' (Beck and Grajeda, 2008: 2). I think that the future study of soundtracks should embrace sound semiotics into a multidisciplinary investigation of how meanings are made. This would include psychoanalytical, structuralist, material, technological and industrial methods as well as cultural, historical and aesthetic issues. The inclusion of sound semiotics would facilitate not only the systematisation of soundtrack semiosis (by naming and framing sound acts and their semiotic role and function), but also contribute to focusing the field of soundtrack theory to coalesce around an agreed set of terminologies for this process.

I propose that topics such as gender, genre and auteur study could benefit from the study of how sound resources signify subjective modality and meaning. Firstly, as far as gender and characters' subjective modality is concerned, Tagg's (2003: 666–679) inventory of television and film themes provides a good starting place to investigate how soundtracks signify gender via their use of pace, melodies and instrumentation. Secondly, Whittington (2007) highlights how contemporary film genres, such as science fiction and horror, often include innovative hi-tech sound effects to codify characters' subjective experiences (e.g. tension, surprise, shock and terror) instead of dialogue. I suggest that the deployment of semiotic sound resources could be used to trace these developments and help to systematise their material effects and social influences. Lastly, I think that the concept of the auteur should not only be applied to how directors signify characters' subjective experiences and subjective modality through visuals and narration, but also through their use of soundtracks for this purpose. Soundtracks that reflect a strong sense of individuality and auteur style in this thesis include the work of Hitchcock, Bresson, Bergman and Coppola.

As far as the future research of how subjective states are signified by film soundtracks is concerned I suggest that the concepts and terminology of sound semiotics should be extended to incorporate the new possibilities of sound design and audio manipulation.

By exploring Van Leeuwen's notion of system networks of sounds (1999:198- 202) as well as Sonnenschein's (2001) and Viers's (2008) categorisation of natural, human and mechanical sounds I think it would be possible to formulate a more detailed description and account of contemporary sound design and its semiotic potential. This would also involve asking questions about what the semiotic potential of sound effects such as echo, flange, chorus, phasing, reversed and equalisation are in order to broaden the sound semiotic reading of film soundtracks. I also think that the future research of how soundtrack semiosis takes place requires that film sound theorists should be encouraged to be more open to each other's methodologies and attempt to find a common language to describe how the process takes place. By using a multidisciplinary approach that includes the observations and practices of film directors, composers and sound designers alongside the academic approaches of film theory sound semioticians, I think that I have shown how it is possible to construct a more accurate and well-rounded picture of how soundtrack semiosis takes place.

I also think another interesting question for future researchers of how altered states are signified by soundtracks relates to the way digital technologies and computer software have recently enabled film directors, composers and sound designers to manipulate visual and sonic effects in ways that have been previously impossible. They are now able to create new visual scenarios and soundscapes that contribute a new way for audiences to perceive characters' subjective experiences and their personal subconscious thoughts in films such as *Eternal Sunshine of the Spotless Mind* (Michel Gondry, 2004**)** and *Inception* (Christopher Nolan, 2010). In both of these films the directors deliberately blur the distinctions between what is real and what is imagined through restricted narrative techniques that encourage audiences to piece together characters' subjective worlds as well as producing innovative visual and sonic relationships through contemporary computer digital effects.

My research project has followed Van Leeuwen's (2005: 1–3) idea of a social semiotic enquiry that hopes to stimulate thought and posit questions that may not always have finite answers. My aim has been to investigate new possibilities within the reading of soundtracks that embrace sound semiotics, the emergence of new technologies, as well as investigating the need to be alert to cultural or historical enquiry. It has also focused on the important role that the material properties of speech, music and sound play in the

signification of characters' subjective modality. Its intentions are to remain open to other methodologies and thereby produce an inter-subjective dialogue between the reader and myself. I hope that this research stimulates the reader to embrace sound semiotics, cultural and historic background, new technologies and sound design, as well as the need to be aware of the material properties of speech, music and sound as part of any future investigation of how sound and music are used in cinema to signify characters' subjective experiences and subjective modality.

Glossary

This glossary is designed to clarify the use of sound semiotic, film sound and musicological terms contained within the research for anyone not familiar with their usage. Its sources are drawn from Van Leeuwen (1999, 2005), Altman (1992), Chion (1994, 1999, 2004), Deutsch (2005) and my own observations.

Activation: The semiotic potential of ascending pitch and increased pitch range. It derives from the increased effort required for pitch range, and can therefore be used to rally people together in some common activity, to represent people, places and things as active, energetic and so on.

Absorption Range: Modality scale running from maximally dry to maximally spacious, reverberating and resonant sound.

Abstract sensory modality: A criterion for judging modality of sound events that rests on the presence of abstract representation (e.g. a musical representation of a steam train).

Acousmatic sound: Sounds that denote the off-screen presence of a person/s or object.

Activation: The semiotic potential of ascending pitch range that reflects increased effort and may signify the energetic behaviour of a person, or people.

Anempathetic sound: The effect of diegetic music cue's (or sound's) ostensible indifference to a tragic scene.

Coding orientation: A system of values that underlie the way messages are 'encoded' (e.g. naturalism, sensory sounds and abstract sounds).

Consonance: Harmonic music or sound.

Crescendo: The rise in volume of instruments or sounds.

De-activation: The semiotic potential of descending pitch range that reflects decreased effort and may signify a person or people becoming more relaxed.

De-contextualisation: The removal of natural room or environmental ambience to suggest a transportation of a character's physical or mental transformation away from everyday events.

Decrescendo: The decrease in volume of music or sounds.

De-familiarisation: Sounds that aid the process of 'de-contextualisation' (e.g. the use of the eerie theremin in *Spellbound* (Alfred Hitchcock, 1945).

Descending melody: Melodies that have a falling pitch.

Diegetic sound: Music and sounds that screen characters can hear.

Dissolution sounds: Donnelly (2005: 48) describes of the use of Bartok's *Music for Percussion, Strings and Celesta* as being used to create the effect of 'vertiginous sounds of "dissolution"' in *The Shining*. I adapt the term of 'dissolution' as a means of describing sounds or effects that conjure a feeling of chaos, decay or things falling apart.

Drone: Low-held instrumental sounds (commonly used to indicate suspense in horror films).

Dynamic range: Modality scale running from being audible to extreme volume.

Emanation speech: The textural use of speech where individual words are intelligible.

Emotive confinement: The semiotic potential of using Van Leeuwen's range of sound modality resources (e.g. dynamic range, pitch range) to interpret how they signify emotional/dramatic decreased activity.

Empathic effect: Music or sound that is in harmony with the emotional climate of a scene.

Emotive sound: Sounds that stimulate the audience to feel a certain way about what they see.

Environmental setting: Ongoing, oscillating sound textures, which are used as a setting for sound acts.

Expansion: The semiotic potential of using Van Leeuwen's range of sound modality resources (e.g. dynamic range, pitch range) to interpret how they signify emotional/dramatic activity.

Field: The least significant sounds of the semiotic three-layered model of perspective (far distance).

Figure: The most immediate or relevant sounds that a listener must identify or react to in a film (close distance).

Fluctuation range: A modality scale running from a complexly steady sound to maximally deep and/or rapid vibrato.

Foley sounds: Synchronous or live sound effects.

Formal distance: The relation between the sound and the listener (e.g. louder if calculated to be heard by a large audience and quieter if addressed to just one person on a more personal or intimate level).

Gestalt "The whole is greater than the sum of the parts" is often used as a means of explaining gestalt theory. See David Hothersall: *History of Psychology*, chapter seven,

(2004.)

Gesture: The contrast between 'gesture' and 'texture' is essentially the same as that of sound act and setting.

Ground: Sounds that emanate from the listener's social world (middle distance).

Heightened sounds: Sounds that are exaggerated for dramatic effect through volume, or reverberation, and so on.

Immersion: When a sound, or sounds, appears to come from every direction and the listener therefore becomes immersed in it.

Intimate distance: When someone communicates intimately with another through whispers, or a very soft voice.

Intra-subjective sound: Internal sounds that a character hears.

I-voice: Usually a narrator whose voice is close-miked and speaks with maximum proximity to the audience's ear.

Leitmotif: A musical theme that signifies a character's presence on screen.

Legato: Connected notes in a melodic phrase.

Literal sound: Sounds that signify realistic events that encourage the audience to believe what they see.

Meta-diegetic sound: Meta-diegetic sound are the sounds a film character hears in their minds.

Modality: A set of resources for indicating the truth of presentation or representation. How real a soundtrack should be regarded, or how sincere a tone of voice should be taken.

Modality configuration: A presentation or representation may contain a mixture of low and high modality cues (e.g. when real actions are combined with animation).

Multimodal cohesion: Different kinds of semiotic resources are integrated to form multimodal texts and communicative events.

Naturalism: Events that are not dramatised or emotionalised (naturalistic sounds).

Non-diegetic sound: Sounds that are outside of a character's world (such as the underscore).

Off-screen sound: A sound that is heard, but not seen on screen.

Ostinato: A repeated motif or phrase.

Personal social distance: Personal communication with someone, which is realised by a soft and relaxed voice at low pitch and volume.

Pitch range: A modality scale that runs from a maximally wide pitch range to a

maximally narrow one (monotone).

Pitch register: The sound quality that refers to voices, instruments, or other sounds as high or low in character. Its sound semiotic potential derives from three factors: small things make high noises; louder voices rise in pitch (therefore reflecting their status) and lastly women's voices are higher than men' s voices.

Point of audition: A character's sound perspective.

Presentation: Presentation occurs when sounds are used to exact meanings in the here and now rather than referring to something that is not present.

Provenance: When sound that is imported from one place to another; their semiotic potential derives from the associations with the 'place' they have been imported from.

Pulse: A regular beat that may have a stressed accent to indicate where the music bar begins.

Reverberation: Reverberation is the collection of reflected sounds from the surfaces in an enclosure like an auditorium.

Rhythm: Phrased pulses that are marked off by accents (stressed beats).

Semiosis: The production of meaning whether for presentation or representation.

Sensory sound: The emotive qualities of a sound.

Setting: 1. Rhythmic/melodic motifs and patterns that repeat themselves.

2. Irregular vibrating, or oscillating, ongoing sound textures.

Sound bridge: Sounds that carry over from one scene to another.

Sound design: The design of sonic spaces through the manipulation of music, speech and sound. This incorporates the use of equalisation and audio processing that may feature the use of reverberation, echo, chorus, pitch shift, reverse and so on.

Sound event: An instance of communicating by means of sound (e.g. a song, film cue, voiceover).

Sound montage: The overlaying of speech, music and sound (e.g. the LSD sequence in *Easy Rider* (Dennis Hopper, 1969).

Sound perspective model: A three-layered model of sound (see Figure, Ground and Field).

Sound quality: Sound quality may be constant, as in the case of habitual voice settings, or the singing style of particular singers, or it may be specific to a particular kind of a sound event (a classical guitar, or sales pitch). It could be a groaning sound to express dismay, the wail of a saxophone to create an emotive climax, or, as in *Blade Runner* (Ridley Scott, 1982), to suggest romance.

Staccato: Notes that are separated from one another by articulated stabs (called disjunctive articulation in sound semiotics).

Stasis: The semiotic potential of a level pitch (monotone, deadpan, lack of musical or sonic pitch movement).

Subjective modality: A character's subjective experiences/truths.

Synchresis: The gestalt effect of synchronised sound and images that may make an event either iconic, or metaphorical. Cinema makes an abundant use of this process with the use of Foley sounds and post-synchronisation.

Tempo: The speed of a piece of music (pulses between beats).

Tension: Tension is produced by physical effort (e.g. tension of the throat muscles). Its semiotic potential derives situations in which a person may be tense, or alert, or have to exercise self-control.

Theatrical speech: Diegetic speech of characters, e.g. dialogue or soliloquy.

Timbre: The textures, or colours, of speech, music and sound (see voice timbre).

Timecode: A code that designates second, minutes and hours of a film.

Underscore: Music that exists outside a film's diegesis that is used to narrate cinematic events that take place.

Vocentricism: The voice is central to a film's enunciation.

Voiceover: Either a character or an off-screen narrator's voice.

Voice timbre: Colours and texture of a voice, e.g. tone, dynamic and pitches of a voice.

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