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**LISTENING TO AB(PRE)SCENCE: A DERRIDEAN  
APPROACH TO THE ANALYSIS OF SOUND-  
IMAGE RELATIONS IN EARLY CINEMA**

**BY  
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for the Degree of Doctor of Philosophy**

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## ABSTRACT

My thesis is an investigation into the period of history surrounding the introduction of synchronised sound to film. The intention is in part to redress the current position that sound practice and theory holds in film today, but also to discover a method for understanding film as an audiovisual medium; ontologically necessitating an interplay between sound and image. Prioritising sound is not the intention of this thesis, as to do so would negate the ability to understand film as both sound and image.

Theoretical concepts from the deconstructionist philosopher, Jacques Derrida, are appropriated to create a new model that can be used for film analysis. This model attempts to treat film as audiovisual, and uncover specifically, a way in which sound and image can be understood and examined together, resulting in a proliferation of available readings and meanings from the film text.

Two 'transitional' films from 1927, *The Jazz Singer*, and *Sunrise*, along with synchronised sound tests from the 1890s onwards, are used as case studies to which the deconstructionist model of analysis is applied. Once the films are removed from their technological and historical positions in film history, the analysis uncovers new meanings and readings.

Archival magazines and journals are reviewed to provide additional insights into the period of transition to synchronised sound. The knowledge uncovered here helps to contribute to a greater understanding of the period and, combined with a Derridean analysis, the research also offers insight that is valuable to the understanding of film today.



## Preface

My journey towards the belief and enjoyment of deconstructionist theory was not a straightforward one and combined my previously separate areas of practice and theory. My undergraduate degree in Radio, Film and Television studies provided me with a background of practical skills and a love of psychoanalytical analysis, but these were disparate areas.

In my practice, I became a sound designer, working on a number of student, corporate and (some) professional productions. It was my experience, particular during the production phase of film making, that sound was too frequently a neglected element of film practice. I had to be confident, assertive and emphatic to get the results that I (and more importantly, the film) required. I found that the time allocated for lighting and cinematography often appeared infinite, whilst sound recording was not afforded so great a privilege. In the editing phase, my work became vital to 'save' many student films particularly, and the disjuncture between what the director may have imagined, and what they heard from the production recording, was great. It was here that I began to fully understand that the relationship between the filmic and the pro-filmic is, at best, a tenuous one.

Theory became the route that I was most fascinated by, and during my master's degree in film studies I became familiar with V. F. Perkin's approach to film analysis, which best suited my own approach. My interest remained in psychoanalytical analysis which moved into queer studies as understanding my own constructed

identity as a lesbian became more important to me. In my master's dissertation I applied the theories of Judith Butler to film and in reading *Gender Trouble*<sup>1</sup> the theory that particularly resonated with me was the performativity of gender. (2010: Preface, loc 177 of 4612, 3%) The construction of gender as a 'natural' state, maintained through binary opposition, was something that not only made sense theoretically, but I could understand through my own empiricism. The construction of identity was important for a political polemic, but the revealing of this construction was far more significant for proliferating the understanding of 'identity'. As Butler notes:

...gender practices within gay and lesbian cultures often thematize "the natural" in parodic contexts that bring into relief the performative construction of an original and true sex. What other foundational categories of identity – the binary of sex, gender, and the body – can be shown as productions that create the effect of the natural, the original, and the inevitable? (2010: Preface, loc 398 of 4612, 9%)

In reading Judith Butler, I realised that much of her assertions on how binary opposition operated and her suggestions for approaching deconstructionism, came from post-structuralist philosophy, which led, eventually, to Jacques Derrida.

My practice had always informed and improved my theoretical research, and the connection between the subservience of sound and the construction of binary oppositions that maintained this subservience, became apparent. I wanted to apply the theories and thoughts of Derrida to the understanding and construction of sound in film theory. It was an exciting moment as I applied the concepts to the analysis and

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<sup>1</sup> The initial copy I read was printed in 2006, I am now referring to the ebook published in 2010

saw that it was justifiable, and even more, it resonated with my own experience as a practitioner and a theoretician; two identities that themselves contain more slippage than is usually acknowledged.

This work is my attempt to reconcile my experience of film sound with my desire to analyse *film*. A medium that I truly believe contains so many exciting possibilities of readings and meanings.

Liz Samson – January 2019

## CONTENTS

Introduction	12 – 30
Literature Review	31 – 142
Methodology	143 – 203
Case Studies	204 – 337
Archival Review & Analysis	338 – 445
Conclusion	446 – 455





# CHAPTER 1 - INTRODUCTION

Film is an audiovisual medium. This thesis will endeavour to treat film consistently as interplay of sound and image, where each element is symbiotic to the whole. It has been acknowledged widely in the theory of film sound, that image, and the study of image, has enjoyed a position of dominance. Michel Chion, in *Audio-Vision*, a key text in the relations between sound and image in cinema, opens his preface:

Theories of the cinema until now have tended to elude the issue of sound, either by completely ignoring it or by relegating it to minor status. Even if some scholars have made rich and provocative contributions here and there, their insights...have not yet been influential enough to bring a total reconsideration of the cinema in light of the position that sound has occupied in it for the last sixty years. (1994:xxv)

This image-centric hierarchy embodies every aspect of cinema, from the production to the theoretical, and in the very language used to describe the medium and the means of production. When dealing with film analysis we imagine an idealised notion of a 'viewer' and such investigation concerns itself with subcategories including mise-en-scene, lighting, editing, narrative and filmic structure and sound. Each of these elements for analysis is treated as part of the whole, an aspect of the film, whereas this thesis will suggest that the very concept of film is concerned with sound *and* image. It should not be possible to deal with sound in a film as separate to any other (image-based) element.

The biggest disservice of the film analyst is to contribute to the image-dominance by treating sound as an attribute of the image, rather than an attribute of the film. John

Belton, in his paper *Technology and Aesthetics of Film Sound* does so almost casually, to clarify the ontology of cinematic sound.

Sound lacks “objectivity” (thus authenticity) not only because it is invisible but because it is an attribute and is thus incomplete in itself. Sound achieves authenticity only as a consequence of its submission to tests imposed upon it by sight. (1985: 63)

It is of the utmost importance to address this disservice, which relegates sound to a ‘consequence’ of the image track. This is a common intention of much of the literature that exists on sound in film. Rick Altman, during the introduction of his book *Sound Theory, Sound Practice* acknowledges the problem and offers an alternative:

...theoreticians who overlook sound usually do so quite self-consciously, proposing what they consider strong arguments in favor of an image-based notion of cinema. Indeed, some of these arguments have reached the level of truisms, interrogated assumptions on which the entire field is based. In the pages that follow, I propose to reopen the cases of these arguments, cross-examining the very assumptions that have guided cinema theory over the years. (1992:35)

Altman commendably stakes out his claim on film sound from the emergence of cinema in the late 1800s, accusing cinema of a ‘fundamental lie’ comprising of two fallacies; the *historical* (that image was conceived in cinema before sound) and the *ontological* (that film is an essentially visual medium). His intention is to reassert the importance of sound within cinema, but this example is indicative a more prevalent existing problem in film sound theory.

The continued subservience of cinematic sound has led to a wealth of literature that attempts to prove the importance of sound at the *expense of the image*. In an attempt

to re-dress the balance theoreticians have elevated sound's importance to a level that endeavours to invert the current hierarchy. Whilst not successful in toppling images' supremacy, the literature contributes to a concerning and continued opposition between sound and image. Chion suggests that addition of sound to the image produces an extra and previously unreadable '*added value*' (1994:2) and that "...cinema is primarily vococentric, I mean that it almost always privileges the voice..." Chion privileges sound in his suggestion for a listening 'mode' of film without watching the image which prioritises the 'acousmatic' sound – that which is without source. (1994:32)

James Lastra, in his book *Sound Technology And The American Cinema* revisits early cinema to revise the perceived importance of image in the emergence of the medium as a distinct art form – he comments here on the early practice of spoken lectures and illustrated songs in pre-synchronous cinema:

...in the practice of lecturing, *images* here accompany *sound*, not vice versa. The functional subservience of image to sound is emphatically declared by the widespread practice of illustrating songs with stock slides rather than with specially produced series, indicating that the motivation for the performance was aural, not visual. (2000:101)

It is clear that Lastra is referring to the opposition of sound and image – in his attempt to invert the opposition he unintentionally clarifies and strengthens the division – his use of 'vice versa', literally 'the position being reversed' implies that he accepts the existence of the 'position' and its usefulness in analysis of film sound.

It is my intention to revisit film sound history and theory and reintroduce sound, not to the history of film studies, but to film itself. To attempt this is to attempt a destabilisation of the opposition of sound and image in film. This will require a model that differs from the existing philosophies inherent in the study of film and is situated in the area of poststructuralism. I will attempt to demonstrate that, by removing the opposition between sound and image, it is possible to proliferate possible readings of film and illuminate existing potency that has previously been imperceptible.

The history of sound studies in film has been predominantly concerned with two distinct eras - pre and post synchronicity. Much like the opposition of sound and image, film studies has treated the history of sound as an opposition and trajectory between pre and post synchronisation, the 'silent' film and the 'talking' film.

The study of early cinematic sound becomes a detailing of the sound that existed and counters the myth of the 'silent' cinema.

From the beginning, the cinema abhorred silence; the cinema *needed* some sort of sound, if only to cover up the distracting noises of the projector and the shuffling of the audience. (Scott Eyman, 1999:25-26)

There is much written on various sound techniques, highlighting the progressing sophistication and complexity of these in the 1920s. Much of this area, however, is based on the perceived trajectory towards a synchronicity of sound and image – the implication that, from its inception, sound was conceived as an inevitable attribute to the image.

The perceived 'problem' with the study of early sound in 'silent' film is twofold – firstly, it is physically difficult to access, relying on written accounts, reviews, scores, production notes and testimonies, but secondly, and more critical, is the ambiguity surrounding the ontology of early (pre-synchronous) sound, and its placement of the analysis in terms of importance and authenticity alongside the image. Buhler and Neumeyer (*Music And The Ontology of The Sound Film: The Classical Hollywood System*) somewhat dismiss the nature of early film sound as an element that “...belonged to performance rather than the film per se.” (2015:20) This ontological consideration is likely to place sound at a level below the importance given to image.

There does exist some discourse on the specific ontology of early sound, this is mostly concerned the specificity of representation, either for sound that occurs outside the frame, or for the *implied* sound within the image.

The paradox and charm of deaf cinema resides in the importance it accorded fairly early on to aural phenomena. It could render a continuous sound (such as an insistent alarm, church bells ringing, or a machine operating) by means of a short refrain-shot that would be repeated every fifteen or twenty seconds, alternating with images of those who are hearing it. (Michel Chion, 2009:5)

The study of silent cinema music uses archival material, scores, anecdotal accounts and a wide array of similar resources to build an 'accurate' depiction of what existed before the technology to record was in place. There is in this area the tendency is also to describe music in terms of a perceived trajectory towards to model of 'classic film sound' – to treat music and instrumentalists as part of an evolution towards the 'talking' films. Alberto Calvacanti's essay, *Sound in Films* provides an example of this:

As cinema developed commercially, the music became more elaborate and played a larger and larger part in the show as a whole...The piano became a trio. The trio became a salon orchestra. The salon orchestra became a symphony orchestra. Not only the composition of the orchestra but also the technique of the musical accompaniment enjoyed, or suffered, continuous development. (1985:100)

This perceived trajectory contributes to the retroactive construction of a fissure between pre and post synchronous sound. I will demonstrate that there is present a compulsion to reduce sound and sound technology to a series of events along an inevitable line toward a dominant 'classic' model. The study of this 'line' of sound is usually carried out by examining the various elements of the soundtrack; music (often first and foremost), dialogue, sound effects and silence. This can be problematic as the elements in isolation do not readily provide a coherent analysis of the *film*, the audio-visual event, but more than this, it is impossible in this way to consider the interplay between the different sounds and different types of sound and the image. Andy Birtwistle notes this effect in *Cinesonica*:

Unfortunately, in considering these elements of the soundtrack in isolation, the tendency is to neglect their interrelatedness, and more importantly, their changing relationships with one another and with the images on screen. (2010:2)

Therefore, a chronological and structural approach to sound and sound technology can discount the meaning inherent in specific cinematic texts. To reduce these texts to a moment in a technological history is to deny them the authority they have as autonomous works.

Douglas Gomery, in his book *The Coming of Sound* (2005) highlights the importance of the understanding of the film industry and the economics surrounding the

introduction of synchronised sound to film. For Gomery, the trajectory is smooth; “The coming of sound was a classic – if rapid – gradual evolution, not chaos.” (2005:Chap 12, p.153 of 155, 83%). Gomery is emphatic in his assertions that the economics of the film industry shaped the decisions surrounding sound in film, but this economic trajectory is in danger of reducing sound to its placement on a progressive line towards classical cinema. Whilst this may appear to be the case economically, the period of transition during the introduction of synchronised sound is only able to be analysed to a greater potential when released from its placement on an evolutionary line.

To fully highlight the fallacy of the boundary between synchronous and non-synchronous cinema it is crucial to scrutinise the very moment when this boundary or ‘fissure’ is purported to occur – the widely recognised moment in 1927 when cinema began to ‘talk’.

In fact, there had been many experiments in synchronicity before this point. Since the emergence of cinema, practitioners and inventors had been investigating potential technology. Key figures include Thomas Edison and his assistant William Dickson, who produced a range of experimental sound films from as early as 1895, and Theodore Case and Lee DeForest, who enjoyed a turbulent working relationship in the early 1920s, although Case had been experimenting with sound film from 1915. It will be important to visit these film experiments as they challenge the preconception that

film sound emerged in the late 1920s and slotted into a smooth and inevitable trajectory.

When studying the emergence of synchronised sound, it is inevitable to be confronted with a multitude of theoretical texts that deal with the 'moment' of 'talking' films. This is always illustrated by one crucial film text – *The Jazz Singer* (Crosland, 1927). This film is widely acknowledged as the first feature-length film to include synchronised speech, and as Buhler, Neumeier and Deemer note, in their discussion of the study of film sound that "...certain titles do come up again and again, among them *The Jazz Singer...*" (2010:xvi). There was a clutch of films between 1926 – 1928, an extremely short period, that exhibited conventions of both 'silent' and 'talking' cinema –they had some element of synchronicity alongside the techniques of melodramatic acting and intertitles to represent emotions and dialogue. These films also had a fully synchronised musical score; the music was pre-recorded and played via speakers at a predetermined and consistent rate, eliminating the need for live musicians.

These films, which I will call 'transitional films' (although I do so with reservations as I am in danger of adhering to the perceived technological trajectory), are vital artefacts as they erode and agitate the existence of an impenetrable demarcation between non-synchronous and synchronous film. It is *within* and *from* these texts that an alternative model of film analysis can be conceived – because they bridge the fissure, they do not sit comfortably on either side.



Existing literature tends to deal with this uncertainty by relegating these films to a very specific 'moment' – the site of change. This theoretical model attempts to 'resolve' the bridge by reducing the potency of the films to a moment of technological advancement. Any mention of *The Jazz Singer* in a text on film studies is inevitably accompanied by a sentence that reduces its impact on film history to simply 'the first speaking film.' Kirsten Thompson and David Bordwell epitomise this in their key text, *Film History, An Introduction*: "The introduction of synchronized sound is usually dated from 1927, when Warner Bros. released the enormously successful *The Jazz Singer*." (1994:213) A similar example can be seen in Pam Cook and Mike Bernink's (editors) *The Cinema Book*: "...in October 1927 Warners released *The Jazz Singer*. Capitalising on the success of the 'first talkie', Warners acquired and equipped for sound the First National exhibition circuit." (1999:7)

These theoretical texts are important as they represent key books on many film studies programmes – Bordwell and Thompson are two thirds of the partnership responsible for *The Classical Hollywood Cinema*, (David Bordwell, Janet Staiger and Kristin Thompson, 2002) perhaps the most well-known and read book concerning the dominant classic Hollywood model. These examples represent countless others, where the introduction of synchronised sound, and in particular *The Jazz Singer* are reduced to a necessary bullet point in the history of cinema. The danger of this reduction is evident in Jay Beck's essay *The Evolution of Sound* (2011) which discusses the moment immediately after the release of *The Jazz Singer*:

"In the months and years that followed, the American studios worked at refining the awkward style of the early talkies to an aesthetic that was in line with the demands of the narrative." (2011:69)

This language, of 'refining' a style that is 'in line' with the classical narrative model of cinema demonstrates the existence of the theoretical writing that adheres to an historical and technological trajectory, as Beck says, "...sound film was able to evolve from its fragmented origins into a stable narrative system." (2011:70) Helen Hanson claims that "...the transition to sound by Hollywood's major studios [had been] broadly completed by 1929..." (2017:1).

It is therefore evident that after this brief period of transition, the practices of mainstream Hollywood film sound recording became very quickly homogenised; as Charles O'Brien in his book *Cinema's Conversion to Sound – Technology and Film Style in France and the US*, notes, very quickly technological and ideological practices operated to standardise certain aspects of film sound:

In the United States, simultaneous sound-image recording, except for dialogue, was largely abandoned by 1932. Instead of the recording of actors' performances, sound-film work in 1930s Hollywood was understood in terms of a process of assembly, whereby scenes were constructed from separate bits and pieces – shot by shot, track by track. (2005:1)

This demonstrates how significant and valuable the short 'transitional time' in American sound cinema is for analysis. It is a moment where a variety of methods and ideologies are exposed and used alongside each other, prior to the period of 'homogenisation'.

Gomery claims that this homogenisation was *caused* by the introduction of synchronised sound into cinema, saying that:

Despite all the arguments of change in the films themselves, all the coming of sound caused was the solidification of the classical Hollywood narrative film style as 1930 commenced. (2005:Chap 11, p.139 of 155, 77%)

It is precisely the period between this 'homogenisation' from Beck's 'fragmented origins', and the 'arguments of change' that Gomery alludes to, that this thesis wishes to consider, and in doing so, release the transitional period from its historical and technological restrictions.

This thesis will use *The Jazz Singer* as well as *Sunrise: A Song of Two Humans* (Murnau, 1927)<sup>2</sup> as case studies for a new method of film analysis that will demonstrate the multitude of meanings and readings that are present and can be made manifest when the films are liberated from an historical path. *Sunrise* is a film produced and released within weeks of *The Jazz Singer* – another, so-called 'transitional' film it offers an entirely different treatment of synchronised sound, relying on its score and sound effects rather than synchronised dialogue, for its image and sound interplay.

It is important to note that this method of analysis will not just be relevant to a specific era and a handful of specific films, but these 'transitional' examples allow for the easy exposure of the constructed opposition between 'silent' and 'talking' cinema. This construction is present and hidden in all film but the ability to expose it will be honed by working through examples where the rupturing of synchronous and non-synchronous techniques is particularly apparent. To embark upon a model of analysis

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<sup>2</sup> Afterwards known as 'Sunrise'

that exposes constructed oppositions is to embark upon a methodology that utilises deconstructionist theory and in particular, several key concepts by Jacques Derrida.

Derrida's work is concerned with the literary criticism, although his writing has heavily influenced many areas of social science and the humanities. There are few examples of this philosophy being appropriated for film studies, the most significant one being *Screen/Play, Derrida and Film Theory* (1989) by Peter Brunette and David Wills. They acknowledge that Derridean theory has not commonly been applied to film:

Given the interest shown in Derrida's work by French feminist theorists, it is surprising that his name has not been more frequently invoked by feminist film theory. This neglect is symptomatic of the extent to which Derridean thought has been elided from film theory in general, in spite of the fact that literary criticism – which has generally led developments in film criticism, at least until recently – has increasingly turned to deconstructive strategies... (1989:20-21)

Considering this it may at first seem surprising to use areas of film criticism that were popular in the 1970s and 80s, and then to use a philosopher who has not commonly been associated with film theory. However, I will justify this methodology as consisting of the best and most effective concepts with which to offer an alternative to a model of film analysis that separates an audiovisual medium into an AUDIO/visual medium. By revisiting strategic film texts with this model, new knowledge can be created, and the method of proliferating legitimate and justifiable meaning from film texts can be developed.

Derrida believes in highlighting and celebrating the separate parts that constitute the text, and in doing this exposing the construction and the interplay between the elements. This interplay is an area that is otherwise inaccessible, as a structuralist approach would only interrogate, (and would only have the *ability* to interrogate) the individual parts. Derrida believes the site of richest analysis is where the difference between the previously distinct elements of text breaks down – this can only be made visible by a rigorous critique of binary oppositions – the very same oppositions that reduce the potential of analysis between and within film image and sound. The construction of a binary opposition (sound and image) and the imagined trajectory towards what Derrida calls the *logos* - or the truth of the text, contribute to a reduction in analysis.

The first key Derridean concept I will be appropriating is that of *trace* – a concept that celebrates the simultaneous fracturing and joining of two previously distinct and discrete elements – (sound and image, or non-synchronous and synchronous sound). This concept provides the framework with which to operate in this previously inaccessible area. Brunette and Wills' interpretation of *trace* is that:

Every concept...has its opposite somehow inscribed within it, in the form of what Derrida calls a "trace," which, like a footprint, is paradoxically there and, as a sign of absence, not there at the same time. (1989:7)

This is a very useful starting point for my own interpretation of this concept that will be specifically related to film criticism.

The second Derridean concept that I will appropriate is that of the *hinge* which is a word with a dual meaning – evoking both the joining of, in Derrida’s example, language and writing, and also the break or fracture. It is worth noting that the original French word, *brisure*, has inherent within it both meanings whereas the English translation is only clearly understood as ‘joining’.

The *hinge* marks the site of the perceived opposition or line, but unlike a structuralist concept it allows the interplay of elements from both previous ‘sides’. Unlike a traditional analysis that attempts to decode the elements to arrive at a reading that is closest to the ‘truth’ (a reading that Derrida would call the *sign*), the *hinge* is not concerned with a linearist approach but *only* with the proliferation of meaning that is generated by an interplay of elements and ideas. The *hinge* allows the presence of *trace*: the imprints and prints of both elements together. In *Of Grammatology* Derrida comments that: “The hinge [*brisure*] marks the impossibility of the sign, the unity of a signifier and a signified...”(1997:67) In other words, the *hinge* means that a structure that posits one element (sound) as less important in a hierarchy, and therefore becoming only a signifier of ‘truth’ and the other element (image) as the dominant element in the hierarchy and being placed closer to the ‘truth’ (the signified) is no longer possible. Once the hierarchy is dissolved there is no longer any necessity for a belief in one possible reading. This leaves analysis open for a proliferation of meanings, generated through the interplay of the two elements. In the case of cinema, sound and image.

This will be examined in much more detail in the main body of the thesis, but I think that it is possible to see, from this brief outline, that not only is a critique of the dominant model possible, but also a framework on which to develop an alternative form of analysis that treats cinema as a medium that consists of both sound and image; elements that cannot, and should not, be treated independently of each other.

The thesis will consist of chapters that examine the existing literature before moving into the development of a new model for film and sound/image analysis.

Chapter One will review the existing literature on film sound. It may seem contradictory to focus on film sound and, at the same time, claim cinema as an audiovisual medium, but in order to consider the problem of film analysis it is essential to consider those texts which highlight the problem of sound as 'the other' and subservient element in film. This chapter will review the oppositional voices to sound image relations who were practitioners during the 1920s, predominantly the Russian Soviet filmmakers, whose opposition to synchronised sound was couched in terms of the importance of montage. Sound theorists who attempt to re-dress the balance of image and sound analysis are important to review in detail, as they effectively posit the 'problem' and in some instances, offer significant and useful alternatives. A review of Jean-Louis Baudry's paper *Ideological Effects of the Basic Cinematographic Apparatus* (1986) provides an interesting avenue for the consideration of the apparatus of cinema production but neglects to deal with any sound apparatus. A revision to this concept will prove relevant and useful to Derridean concepts. Literature which deals specifically with the era of the transition of

sound, and the case study films, will also be considered along the broader themes of film history, the ontology of sound in both non-synchronised and synchronised film, and the analysis of film music.

Once existing sound literature has been considered, Chapter Two will deal with the proposed methodology of Derrida's concepts - *trace* and *hinge* will be fully evaluated and explored and a model for film analysis will be developed that will be used as a method of close textual analysis. As well as explaining the theories involved and developing a methodology, the chapter will justify the use of a deconstructionist, Derridean, approach. This chapter will also consider more specifically the way that the model of classical Hollywood cinema operates in relation to theories of deconstructionism. An approach for close textual analysis will be explored with the application of V. F. Perkins' theory in *Film as Film* (1993) and Chion's proposed modes of listening in *Audio-Vision* (1994).

Chapter Three will put the methodology into practice with a close textual analysis of selected case studies; first *The Jazz Singer* (Crosland, 1927). This 'transitional' film will be the site of 'new knowledge' generated from a revision that does not relegate the text to an historical and technological place in film theory. The moments in the film where the characters speak, and we hear them, are inextricably intertwined with the moments of 'silent' conventions – it will be apparent here that any attempt to separate these moments is futile and the only logical avenue is to deal with both elements together, demonstrating Derrida's concept of *trace*. *Sunrise* (Murnau, 1927); as another transitional film *Sunrise* is key in both justifying a Derridean approach and



becoming the site of new knowledge from an alternative model of analysis. The elements in *Sunrise* of synchronised and non-synchronised sound are subtle – there is no synchronous dialogue, and these subtleties will be essential in demonstrating the effectiveness of the Derridean approach. The ‘fissure’ of sound and image, and of synchronicity and non-synchronicity is less apparent in *Sunrise* and following the analysis of *The Jazz Singer* it will be useful to see how this analysis can be developed.

The analytical model will be further developed by critiquing the film sound experiments of early cinema. Pioneers such as DeForest, Case and Dickson produced numerous experimental ‘shorts’ – as the first creators of synchronous film, their method and content are of utmost importance. These shorts will demonstrate the multitude of ideas and techniques and operate to derail the perceived trajectory from ‘silent’ to ‘talking’ cinema. This chapter will also indicate the potential of the Derridean model beyond the boundaries of this thesis – it is intended that this model can provide the means with which to analyse film as a truly audiovisual artefact, and also offer film theorists a chance to revisit key film texts without the shackles of the dominant models of analysis. Once liberated from a framework that relegates film texts to a specific historical and technological era, a multitude of new and important meanings can be accessed.

Chapter Five will review and analyse archival literature gathered from trade journals, exhibitors’ magazines and fan magazines of the 1920s. Reviewing this material is essential for generating more understanding of the period of change in film. It is hoped that the variety of articles will provide a comprehensive picture of the time

period and challenge the fallacy that film sound was integrated seamlessly into the journey of film into the classical Hollywood model. Dissenting voices from practitioners, technicians, inventors, exhibitors and fans will complicate the notion of a format of synchronised sound that was in demand. Reviews of *The Jazz Singer* and *Sunrise* will provide insight into the dominant modes of thinking at the time; the reviews will offer additional insight into both films and enhance an overall understanding of them, and how they can be used and integrated into a revised version of film sound and image history. The reaction from the industry to the changing landscape of film sound will be reviewed and analysed – models of sound and image relations that were discarded can now be revisited and evaluated. These reactions will generate more understanding of the current model of film sound and help to widen and proliferate the way that film sound is understood and studied. Finally, Chapter Five will apply a Derridean analysis to key areas discovered in the archival research and from this hope to provide a relevant and contemporary proliferation of meanings and readings of film and film sound and image history.

Chapter Six, the conclusion, will draw together the elements of film, film analysis, and archival analysis that are within this thesis, and demonstrate the comprehensiveness of the Derridean model. This chapter will also suggest possible new avenues of research that have been opened through an exploration of Derridean concepts and film analysis. It is my intention to generate new and expanding avenues of knowledge and understanding from this method, therefore the conclusion of this thesis should be the first step for an alternative model of film analysis that is widely appropriated and utilised throughout all areas of theoretical film studies. This thesis will use the terms

'silent' film to refer to film that does not contain synchronised sound – it does this with the understanding that film was never truly 'silent'. Film is an audiovisual medium.

## CHAPTER 2 - LITERATURE REVIEW

Literature which has been key to the understanding of film and film sound will be reviewed to provide a picture of the theories, particularly those which inform understanding of the journey of sound in film from the 1920s to the dominant classical model. It is intended to highlight where gaps exist in the literature, and to expose areas that assist in placing sound as subservient to image. Literature from archival research will be reviewed in Chapter 5 alongside analysis of the archival material itself.

MARY ANN DOANE

Mary Ann Doane, in her paper *Ideology and the Practice of Sound Editing and Mixing* (1985) addresses the ideological purpose played by sound in the Hollywood studio system. She is concerned with how sound's role differs from that of image yet homogenises the essentially heterogeneous nature of film. This is achieved, posits Doane, through the practices of mixing and editing.

Whilst Doane acknowledges that sound is neglected both in the theory and language of film, she denies that the practice of filmmaking neglects sound, simply that the ideological nature of sound practice works to keep sound as subordinate and invisible. Cinema, for Doane, mirrors the nature of bourgeois ideology, where:

...the concept of knowledge is split from the beginning. This split is supported by the establishment and maintenance of ideological oppositions between the intelligible and the sensible, intellect and emotion... (1985:54)

Far from one aspect of knowledge – to 'know' or to 'see' the split in bourgeois ideology incorporates both 'seeing' and 'feeling', the latter attached to the emotional and psychological function that Doane believes sound performs in film.

The danger of combining image and sound occurs then, when the split in knowledge is highlighted – Doane quotes from Roland Barthes: "'bourgeois ideology...records facts or perceives values, but refuses explanations...'" (1985:55) Any perceived split would require an explanation. Doane argues that editing and mixing are functions that enable a homogenised relationship between sound and image – an argument

strengthened by her reasoning that ‘...in sound technician’s discourse synchronisation and totality are fetishized and the inseparability of sound and image is posited as a goal.’ (1985:58)

Functions such as blooping and continuous sound (not silence) are used to create a smooth homogenised piece, clearly demonstrated by the practice of parallel cutting – sound is employed to smooth over the cuts in images; this practice is prevalent in the dominant classical Hollywood film model. Doane also points to another aspect of sound mixing that has the potential to rupture the bourgeois ideology – that of layering sound in a strict hierarchy to favour intelligibility through dialogue. This is known often as the classical sound hierarchy.

The need for intelligibility and the practice of using speech as a support for the individual are both constituted by an ideological demand. Yet it is an ideological demand which has the potential to provoke a fundamental rent in the ideology of the visible. (1985:58)

What Doane means is that without ‘realistic’ perspective, the image (or the visible) will lose its perceived naturalness, the production methods will become audible and the split of sound and image made manifest. It is important to note that this ‘naturalness’ is perceived only – the coming together of sound and image are artificial – any rupture which makes visible the construction, is making visible the genuine artifice.

Doane argues that Hollywood has created a compromise between two types of ‘realism’, psychological and visible. Any sound that intrudes upon the visual can be

countered by sound's ability to provide 'psychological realism' – the knowledge of an individual by representing their internal emotion.

Sound in Hollywood cinema, for Doane "...covers that excess which escapes the eye." (1985:61) It has a function that cannot be covered by visual; to maintain an illusion of natural homogeneity between sound and image. K.J. Donnelly references Doane's exposition of the way that sound operates in Hollywood in his book *Occult Aesthetics* and concurs that

The illusion of cinema, and its fundamental perception as something closely related to the real world, has undoubtedly been one of the most fundamental characteristics of the medium. (2014:4)

But goes on to say that "However, it has also militated against certain types of analysis." (2014:4) and this is true to some extent in the way that Doane treats her exposition of sound in cinema.

Whereas Doane believes that sound in practice is not neglected in Hollywood, her paper operates to reinforce the role that sound plays in its own subservience. Without interrogating words such as 'realism' the constructs of 'naturalness' and 'normality' in film production become justifiable, and, more concerning, achievable goals. Doane, rather than strengthening sound's role in film practice, weakens the construct of bourgeois ideology by highlighting the cracks and fissures that technological practices are papering over. It would seem wise, therefore to deconstruct an ideology of homogeneity to understand and proliferate the role that cinema has to play when sound and image can be acknowledged both simultaneously and equally, and the

interplay examined. It seems that rifts in ideological aims are a rich area for raising and changing the status of sound in theory and practice.



## RICK ALTMAN

Rick Altman's essay *Evolution of Sound Theory* (1985) demonstrates the dearth of work or consideration in film theory and practice that is given to sound. Altman attempts to highlight and redress the prejudice that favours image within theory and practice. Altman is keen to point the finger at a body of theory that arose from the synchronisation of sound with image and, as well as documenting the various technological developments, he coins two phrases – historical and ontological fallacies; fallacies that arose in theory and practice and are to blame, according to Altman, for the subservience of sound in film today.

Altman documents the anxiety of silent filmmakers, who, when confronted by synchronisation, were immediately concerned with the fidelity of film as a specific creative medium:

...it is thus hardly surprising that sound should be seen by silent filmmakers more as a threat than as an opportunity. Repeatedly warning against the temptation to return to the theatrical model, represented by the dominance of synchronized sound...(1985:51)

Reactions to this perceived threat lead to a hierarchy of sound and image. Altman terms this hierarchy the 'historical fallacy'; "Instead of treating sound and image as simultaneous and coexistent, the historical fallacy orders them chronologically, thus implicitly hierarchizing them." (1985:51) Image then, becomes superior because, for want of a better phrase, it was seen as having 'got there first', thus cementing its place as the dominant film element.

Altman also argues that from its invention, film language has been dominated by the visual – much is spoken about lighting, depth of field and focus, for example, whereas little notice is taken holistically to sound. This is further reinforced by a history of film theory that has concerned itself with image and visual debates. Montage, continuity editing and also apparatus theory are concerned predominantly or entirely with image. Altman cites Jean Louis Baudry's work on apparatus theory that draws on Lacan's 'mirror stage', adding "...the mirror metaphor could easily be applied to sound as well as to vision (the Narcissus myth includes Echo as well...'" (1985:45) These movements in theory, Altman claims, then lead to the ontological fallacy "...that film is a visual medium and that the images must be/are the primary carriers of film's meaning and structure." (1985:45) Much later, Birtwistle notes this tendency to privilege image in the understanding and analysis of film; he ascribes this to a 'cultural bias' and suggests that this results:

...in the mistaken belief that film is a visual rather than an audiovisual medium. As a consequence of this, sound has often been conceptualised as an add-on of supplement to the cinematic image, and the study of cinema has been, and continues to be dominated by visual concerns. (2010:1)

Again – an example of the historical fallacy leading to the development of the 'ontological fallacy', which is, in many ways, much more immovable.

Altman also details the development of technology that follows a bourgeoisie ideology – developments designed to distance the sound track from the image but also to disguise this process. These technologies facilitated what Altman calls "Sound film's fundamental lie: the implication that the sound is produced by the image..." (1985:46)

Altman commendably provides explanation and evidence for sound's subservience within theory and practice but appears unsure of how to change the current prejudices, he admits "It is difficult to imagine how the auditory dimension of cinema might at this late date be reinstated." (1985:45) He is critical of sound theory that focuses almost exclusively on the time of synchronisation, but it may be prudent to question further the theoretical and practical aspects of that specific time to understand the ontological and ideological possibilities that sound may have in cinema. It is also important to visit the time where synchronisation was introduced to film to explore how the historical and ontological fallacies were developed, and to consider if sound film's 'fundamental lie' is perpetuated from that time period. Rather than dismiss the work of previous theorists and practitioners as being too visually preoccupied, it may be valuable to evaluate their work and the role that sound could have within it, being allowed the same amount of consideration. It is also essential to question the common practice of synchronisation and therefore necessary to investigate its genesis in film.

Altman suggests "In order to deal intelligently with the sound track we need a new beginning..." (1985:52) Perhaps a *return* to the beginning of synchronisation, both in terms of films and archival material, may provide the possibilities for sound that Altman calls for, without relegating it to the status of a sound *track* – merely the two-dimensional strip that runs underneath the image.

## A STATEMENT – SOVIET FILM MAKERS

It is fascinating, with hindsight, to look back at the statement made in August 1928, by S. M. Eisenstein, V. I. Pudovkin and G. V. Alexandrov. This is one of the key texts from another form of cinema that was developing in Russia at the same time that synchronised sound was developing in America. It provides both criticism of synchronised sound and alternative suggestions to the dominant mode of sound film. It is a document that demonstrates opposition to, and evidence against, the smooth trajectory of synchronisation and homogeneity in cinema. Unlike many other articles, *A Statement* offers detailed methods for a different model of sound cinema. This statement accurately predicts the employment of sound in the dominant model of cinema and a rejection of these practices. It is not a rejection of *sound* or a denial of its status but a plea to use it for a different purpose than that of synchronicity.

Rick Altman, in his article, *Evolution of Sound Theory*, holds silent filmmakers responsible for historical and ontological ‘fallacies’, citing their apprehension for the new technology of sound as the reason for the elevation of the image status. S. M. Eisenstein, V. I. Pudovkin and G. V. Alexandrov wrestle with the new technology, but far from simply dismissing its potential argue that: “Sound recording is a two-edged invention, and it is most probable that its use will proceed along the line of least resistance, ie., along the line of *satisfying simple curiosity*.” (1985:83) By this they mean the synchronisation of sound with image. Eisenstein, Pudovkin and Alexandrov concede that synchronising sound and image in the initial period of transition is understandable – that the sense of illusion of heterogeneity in cinema (from ‘talking people’) will be irresistible, but their fear is the progression of this practice into

‘...“highly cultured dramas” and other photographed performances of a theatrical sort.’(1985:83) This aspect of Eisenstein, Pudovkin and Alexandrov’s argument is what Altman describes as the concern of ‘...silent filmmakers ...Repeatedly warning against the temptation of returning to the theatrical model, represented by the dominance of synchronised sound...’ (1985:51) and to an extent this is true for Eisenstein, Pudovkin and Alexandrov. Concerned that the new art of cinema may lose some of its specific potency; they reject a move towards synchronicity. This does not mean, however, that they reject *sound*.

Eisenstein, Pudovkin and Alexandrov are advocates of montage – for them montage is the unique specificity and power of film. Their concern with sound is its potential to make each edit more independent from the next. Initially this concern seems counter-intuitive; theorists such as Mary Ann Doane and Rick Altman described the process of mixing and editing sound as a practice seeking to join and homogenise disparate images, but this homogenisation occurs horizontally across the film timeline through a specific model of classical Hollywood sound. Eisenstein, Pudovkin and Alexandrov saw the addition of sound to an edit as joining the individual image to its sound and reducing the power of juxtaposition with the next edit and image. “To use sound in this way will destroy the culture of the montage...”(1985:84)

Eisenstein, Pudovkin and Alexandrov discuss the development of dominant filmmaking along a path that encourages narrative and increasingly complex exposition. Subtitles and close-ups, they argue, further destroy what they see as the

only strength of cinema; montage. Here, they envisage sound as having great potential for the revival of montage if used in a specific way:

ONLY A CONTRAPUNTAL use of sound in relation to the visual montage piece will afford a new potentiality of montage development and perfection. THE FIRST EXPERIMENTAL WORK WITH SOUND MUST BE DIRECTED ALONG THE LINE OF ITS DISTINCT NONSYNCHRONIZATION WITH THE VISUAL IMAGES. (1985:84)

These are strong words, (intentionally capitalised by the authors for emphasis) that demonstrate alternative thinking that did exist in 1928. Although Rick Altman blames, by name, Eisenstein as one of the silent filmmakers responsible for the subservience of sound, culminating in 'ontological fallacy' it is important to understand how important the Russian filmmakers believed sound could be:

Sound...(as a factor divorced from the visual image) will inevitably introduce new means of enormous power to the expression and solution of the most complicated tasks...' (1985:84)

It is also true, however, that Eisenstein, Pudovkin and Alexandrov *only* saw sounds as important if used for montage, or indeed film as only having potency when engaged in montage. They describe film as:

...working with visual images...has rightfully taken one of the first places among the arts. It is known that the basic (and only) means that has brought the cinema to such a powerfully effective strength is MONTAGE.(1985:83)

Some of the anxiety of the silent filmmakers that Altman highlights can also be seen through this statement. What may initially appear to be a validation of asynchronous sound is also a rather closed opinion of the potential for cinema – they even refer to

subtitles and close-ups as “impasses”.(1985:84) Although Eisenstein, Pudovkin and Alexandrov, as early as 1928, reject sound’s role in synchronised film, their outright refusal to accept any other stylistic device but montage lends weight to Altman’s theories of ontological fallacy.

It is perhaps worth noting the success that Russian filmmakers had had with montage films and the obvious problems that sound film would bring. Early in their statement Eisenstein, Pudovkin and Alexandrov mention “...the success of Soviet films on the world’s screens...”(1985:83), and towards the end of the statement they underline an effect of the contrapuntal sound; they advocate: “Such a method for constructing the sound film will not confine it to a national market, as must happen with the photographing of plays...”(1985:85) This sentence belies Eisenstein, Pudovkin and Alexandrov’s understandable concern for the future of Russian sound films, when the majority of their previous audiences spoke no Russian.

*A Statement* by Eisenstein, Pudovkin and Alexandrov is an illuminating paper, written at the dawn of synchronised film sound. It demonstrates an alternative view of a belief in the smooth transition to sound film, as well as to synchronicity. Strong rejection of any other mode of cinema except montage, however, demonstrates an anxiety of sound, and does even more to close down potential avenues and possibilities for sound. Ultimately though, the statement demonstrates the debate amongst filmmakers of the time about synchronicity and homogeneous cinema as the dominant model.

Charles O'Brien suggests that the 'homogenisation of sound conversion' happened very quickly after the introduction of synchronised sound and this was done by six 'aspects' which impacted not only on American cinema, but on cinema across the world. The six aspects

1. The effect of corporate patent ownership on technological standardization
  2. The worldwide notoriety of the first sound films
  3. The trend toward film-industrial concentration
  4. New exhibition practices
  5. Hollywood's hegemonic capacity to inspire emulation by filmmakers in other countries
  6. The homogenization of film style
- (2005:14)

Go some way to explaining and justifying the reasons for Soviet anxiety; in an environment where technology and standard practice are homogenised (Gomery points out that as early as 1931 "Standardization became the final problem to be resolved." (2005:Chap 8, p.95 of 155, 53%)), alongside an appetite for a specific style of 'sound film', there seems little space for asynchronous, contrapuntal models of sound cinema.



## JOHN BELTON

John Belton, in his paper *Technology and Aesthetics of Film Sound* posits several significant points in a response to theorists such as Rick Altman, Mary Ann Doane and Jean-Louis Baudry. Key in this paper is Belton's argument that although technology and technique in dominant filmmaking practice may be heading towards 'invisibility' of sound, it is an impossible goal. He highlights a paradox in the achievement of 'perfect' sound but also confronts evolutionary theories of technological development, choosing instead to understand cinema as a heterogeneous art form. Problematic aspects of this paper are found through Belton's underlying belief of the image as an "objective reality". Although his argument is convincing, by destabilising the notion of objectivity it is possible to subvert his argument with interrogation of the image. Belton has a clear theory of exactly how sound relates and is different to image in cinema. Key to this argument is the notion of fidelity of the image to the pro-filmic event, and the belief that sound is perceived *through* and because of image.

Belton believes in perception through image because he asserts that sound is an incomplete entity and merely a facet of the visual:

Sound lacks "objectivity" (thus authenticity) not only because it is invisible but because it is an attribute and is thus incomplete in itself. Sound achieves authenticity only as a consequence of its submission to tests imposed upon it by sight. (1985:64)

Whereas image is not divisible into smaller parts, Belton sees each sound in the sound track as an incomplete part. Further still, Belton argues that whereas image corresponds to "...objective reality..." (1985:64), sound only corresponds to the filmed

image (or the filmic rather than the pro-filmic). He believes that "...images guarantee the objectivity of the sounds..." (1985:63)

Belton justifies his belief with examples of common practice and sound technology in film, arguing that synchronisation is a way of tying the sound to the image so that "...the audience now trust what they hear, since it corresponds...to what they see."(1985:64-65) Belton also understands mixing to be a way of constructing a track to 'fit' the image: "...it is built. Sound mixing no longer observes the integrity of any pre-existent reality..." (1985:70) For Belton, pieces of incomplete sound are constructed into images of 'reality'.

Two aspects of this argument on the nature of sound in film need to be interrogated here. Firstly, to reverse the idea of sound as a part of image, and to question image as part of sound. Belton is keen to link image to 'reality' but in doing so must accept the presence of sound, or sounds, non-divisible from each other, in the historical world. The specificity that Belton bestows upon sound, the incomplete attribute, may just as easily be true for image. To accept the construction of a sound track in Hollywood cinema is to accept the construction of the image – continuity editing that separates single images from entire scenes could also be said to be breaking down images into incomplete segments. For example, a close-up image of a clock may also need the sound of ticking as much as the sound of ticking would need the clock. A counter argument of course may be that the ticking could be recorded from *any* clock, but the image is of the 'real' clock.

Andy Birtwistle comments on the conception of sound as 'attribute', basing his arguments on the linguistics of Saussure and translating these to the image/sound relationships in cinema:

If a sound is considered to be an attribute of an object-source, when divorced from that object, sound becomes conceptualised as a signifier of that source....Transposed to the cinematic, this sound-source formulation has a powerful influence on the way in which we think through sound-image relations...But in cinema, sounds are appended not to objects, but to images. (2010:32)

Birtwistle challenges the validity of the 'sound as attribute' concept, by highlighting that the image itself is not *real*, rather it is an *image* – a projection of something 'other' that is projected on the screen. This challenges the 'reality' of the image-object.

The difficulties with understanding sound in the context of its representation of, and attribution to, image, is that this limits film and film sound analysis to what is available to the viewer and auditor in terms of this representation. There is no potential here for analysis of sound that appears dislocated or separate from any concept of source, and if this sound *is* acknowledged, is it further reduced in meaning by this lack of attributable ontology – as Birtwistle says:

...we casually formulate sounds in terms of the objects or events perceived as their source, describing sonic phenomena as the sound *of* something or other. The problem posed by this formulation is that it limits, to issues of representation, the ways in which we might come to terms with these sounds, while simultaneously ascribing to them a secondary status, situating them at the level of attribute, characteristic or effect. (2010:5)

Buhler, Neumeyer and Deemer in the same year as Birtwistle's *Cinesonica* publish *Hearing the Movies*, a book intended for "...students with any background – musical, film studies, film production, or simply avid filmgoer..." (2010:xxiii) which discusses the use of sound in film and sound in general by saying:

Under normal circumstances, sound is closely tied to physical space. The basic human cognition of sound is to "anchor" it in an object – a person speaks, a door creaks, a dove coos, the radio plays. Those objects necessarily reside in some physical space (the space of the real world). (2010:65)

Obviously, the authors go on to discuss sound in a variety of capacities and make clear that the sound in film is *not* "anchored" to an object, but this description of sound is interesting and shows that the belief in sound as 'attribute' is still at the forefront of the ontological consideration of film sound pedagogically. It would be entirely unusual to preface the discussion of *image* in film with the fact that what you see on the screen usually corresponds to something in the 'real' world (a person, a dove, a radio etc) – it is *not* with this ontology that the image is framed.

Belton, however, without any investigation into the ramifications of conceiving sound as 'attribute' or interrogating the term *reality*, posits that images relate to 'objective reality'. Returning to the example of the clock – rather than state that the visual clock is the real one, it could equally be said that the clock that is *recorded* is the real. Of course, this argument could slide rapidly into relativism but there is an alternative. Equalising the possibility that both clocks (visual and audible) are 'real' or, more accurately, that they are both constructed facets of cinema. Through this approach it

should be possible, not to negate the specificities of sound or image, but to consider both as essential parts of a heterogeneous cinema.

Belton's argument detailing the ability of sound to be invisible produces an interesting paradox that occurs with technological development. Belton sees synchronisation as the attempt to reconcile the image and the audio in cinema. He quotes Jean Renoir's belief that "Dubbing is equivalent to a belief in the duality of the soul." (1985:65)

Belton asserts that a rupture of sound and image cause "...a crisis in their credibility." (1985:65) Yet Belton also sees the potential of synchronisation as a narrative device, a prolonging of the moment of synchronicity used to cause enigma in the story – he give the example of *The Wizard of Oz* (1939) where the reconciliation of the wizard and his voice result in the resolution of the narrative.

Belton details significant technological and stylistic developments in sound, believing the ultimate goal of sound design is invisibility. Crucially, however, unlike Baudry, Belton does not see the goal as achievable and he blames technology such as the Dolby system for this: "...the nearly total elimination of noise, the goal toward which sound technology has evolved...results in a final product that is too perfect, that is ideal to a fault." (1985:67)

Here the paradox arises – according to Belton; sound that is 'perfect' loses realism, whereas sound that has background noise or disruption has not achieved the goal of invisibility. This paradox is an avenue through which to question the role of synchronisation in Hollywood cinema and also notions of 'reality'.

Belton also attacks the use of radio microphones and multiple stereo track mixes in contemporary cinema – he argues that, as there is not a limitless number of tracks (or microphone positions) available, limited tracks only serve to highlight the spaces and absences of sound – their own limits become audible. Radio microphones, he argues, also provide limited perspectives “...which play havoc with more traditional, illusionistic notions of space.” (1985:69)

It is difficult here, to understand what Belton is advocating – more recent technologies appear to destroy notions of space and ‘realism’ but the goal of sound to become completely invisible without disturbance, also becomes unrealistic. Belton does commend what he considers the ability near ‘perfect’ sound to create a ‘psychological realism’ and here Doane and Belton agree about the emotional quality of sound. This sound, says Belton

...has become artificially quiet, pushing beyond the realism of the outside world into an inner, psychological realism. The sound track duplicates...the sound one hears in one’s head, a sound that has not been marked by any system noise nor by transmission through any medium, such as air, that might alter fidelity to an ideal. (1985:67)

Belton sees film sound, then, as becoming more and more ‘true’ to the image (and therefore objective reality) to a point where it achieves ‘fidelity to an ideal’, whereupon it takes on the quality of psychological realism. Sound cannot, for Belton, ever achieve complete invisibility and he rejects the evolutionary theories of Bazin, citing Heinrich Wolffin’s argument: “It is a mistake [for art history] to work with the

clumsy notion of the imagination of nature, as though it were merely a homogenous process of increasing perfection.” (1985:71) Belton suggests understanding cinema as “...the phenomenological art par excellence, wedding, if indeed not collapsing, consciousness with the world.”(1985:71)

Belton rejects the notion of cinema as a homogeneous event as he does not believe sound has the ability to become truly invisible and cinema cannot hide its means of production. His notions of impossibility for sound to become ‘perfect’ provide an interesting area, rich for investigation into the ideological aims behind the beginning of synchronisation. Some of Belton’s notions of ‘realism’ and sound as an incomplete attribute are problematical. A more useful approach would be to understand sound as having an equal status to image and to investigate the relationships and possibilities that may arise from this elevation.

JEAN-LOUIS BAUDRY

In Jean-Louis Baudry's article *Ideological Effects of the Basic Cinematographic Apparatus* (1986) he attempts to explain that the very apparatus used to in filmmaking operate to uphold and strengthen the dominant ideology of idealism in film. This is only possible, he posits, through the concealment of these apparatus in the finished product. The world re-presented, Baudry argues, is a closed and homogenous one. Baudry's article is of interest for several reasons. Firstly, many of his conclusions directly mirror the poststructuralist standpoint and this will prove useful in strengthening later film analysis. Secondly, although the title of his article describes basic apparatus, this does not include sound equipment, and little is made of it throughout the paper. The very absence of sound apparatus also highlights two things – a need to revisit the work, as the very notion of cinema is an *audiovisual* one, and further evidence of the dominance of image over sound in film theory. There is little evidence in existing literature, of the consideration of the impact of sound apparatus; Helen Hanson, in her book *Hollywood Soundscapes* (2017) does touch upon the ideology of technology, but this is generally focused on the impact of ideology and technicians, rather than the apparatus of sound. Baudry's negation of sound apparatus, it can be argued, is a vast oversight, and I attempt to demonstrate that the integration of sound apparatus into this article can support and uphold its main conclusions.

The intention of Apparatus theory, in general, is to demonstrate the ideological nature of instruments in filmmaking often assumed to have a neutral and scientific base. Baudry expands on this idea, suggesting that the film camera, and in general every



optical instrument has a history that belongs to science that affords it supposed neutrality. What is not questioned, he argues, is the base on which the camera is built – depth of field and perspective are not universal constants, but ideological concerns:

If, for example, one can speak of a restricted depth of field as a limitation, doesn't this term itself depend on a particular conception of reality for which such a limitation would not exist?' (1986:287)

Already Baudry is working to deconstruct and 'make strange' the apparent naturalistic choices behind the camera's operation and technical construction.

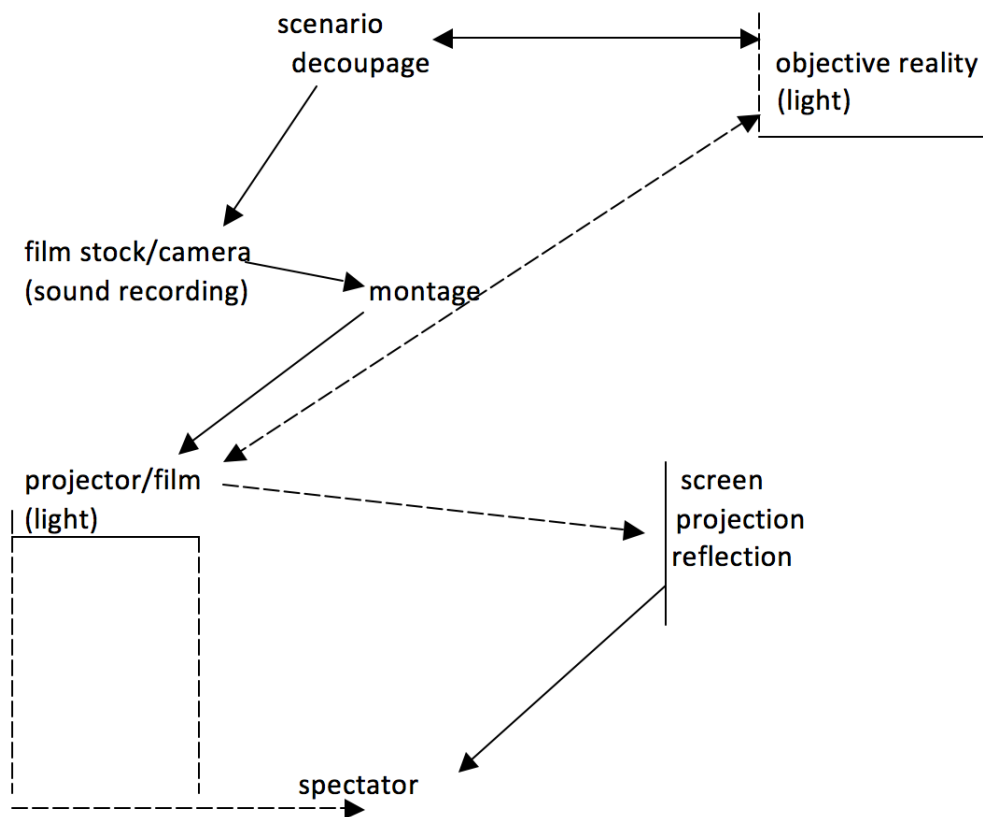
It is interesting in that attempting to address the ontology of music in sound film, Buhler and Neumeyer, in their essay *Music And The Ontology Of The Sound Film: The Classical Hollywood System* (2015), actually do the opposite to Baudry, borrowing James Lastra's term, 'the ontology of recording' (*Sound Technology and the American Cinema* 2000:65). They discuss how the camera remains 'objective' in the process of recording, focussing on the theatre happening in front of it, claiming that an ontological viewpoint...

...construes the camera as a recording device that objectively captures the action that lies before it. That action may represent something fictional, but that fictive status is a property of the action rather than the camera. These films, in other words, were merely recording theater." (2015:19)

Here Buhler and Neumeyer attempt to shift the ambiguity of meaning of the film's content to the action of any specific scene, burdening the *action* with any ontological semantics. This demonstrates how problematic the entire concept of 'objectivity' is

when discussing film and apparatus. To align one element of the filming process to the side of 'absolute' objectivity, will inevitably trouble the other elements imbued with ideology. For Buhler and Neumeyer, their absolute is the camera, for Baudry, it is 'objective reality'.

Baudry, however, continues his argument by situating the camera as a key device in the production of a film from "objective reality" through use of a diagram. (Re-produced here 1986:288)

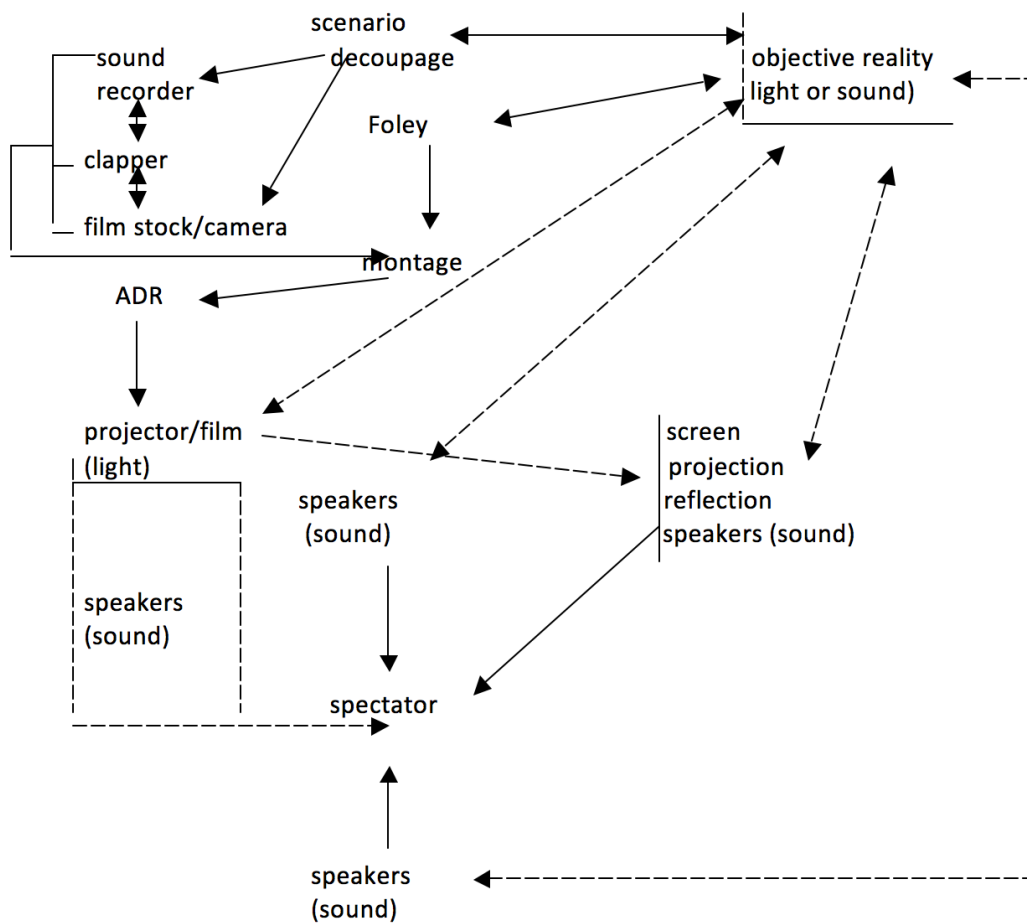


This diagram attempts to show the processes by which an “objective reality” is transformed into a film and the camera’s place within it. ‘Scenario’ and ‘decoupage’ may be better described as script/storyboard, and shot list, and ‘montage’ as editing. It is Baudry’s intention with this diagram to highlight the impossibility of viewing the film as a product as “objective reality” but it is important to consider how a greater concentration on the processes of sound production can further distance any notion of “objective reality” from the practice of film making.

When considering the process of filmmaking (which in this case we will assume, as Baudry does, is the dominant synchronised continuity model) it is important to realise that the camera and the sound recorder are not intrinsically linked during the capturing of light, movement and sound waves. The joining process (which occurs at the editing stage) is facilitated during recording by the use of a clapper – no cables bind camera and recorder and they are operated by different technicians. Therefore, although Baudry mentions sound recording in his model (albeit in parenthesis) he assumes the function to be part of the same process as filming.

Baudry also neglects the role that Foley sound plays in the production. This is the process of recording essential sound for the final product, such as close perspective effects, separately from the camera with the intention of manually matching image and sound at the editing phase. This role can take place either before, during or after the filming process. Automatic Dialogue Replacement (ADR) is another function vital to the production of a Hollywood film. This is where actors return to the studio post-production, to re-record their dialogue in a controlled acoustic environment, free

from extraneous and film set noise (such as tracking and camera noise). Foley and ADR are rich areas to support Baudry's arguments and further distance his notion of "objective reality" from the finished product. It is important to note that whilst the above diagram shows a clear flow of light from reality to camera to projector/screen, it is possible in filmmaking to have little or none of the sound present at the recording stage replayed in the finished product. Sound operates within Baudry's argument to further distance any notion of objective reality from the finished product of the film. It is interesting to attempt to return to Baudry's diagram and integrate sound. In this way, it is possible to see the full impact that a considered view of sound production has on the transformation of "objective reality" to 'product'.



It is clear from the modified diagram that sound greatly dilutes the influence of 'objective reality' on the finished film, and this diagram also challenges the supposed 'naturalness' not just of sound, but, more importantly for this research, synchronicity, by showing the multitude of hidden processes, through by their own concealment, lead to the upholding of a dominant ideology – that of idealism.

Baudry interrogates the notion of perspective in film and its assumed neutrality. He says of the camera

...it permits the construction of an image analogous to the perspective projections developed during the Italian Renaissance. Of course, the use of lenses of different focal lengths can alter the perspective of an image. But this much, at least, is clear in the history of cinema: it is the perspective construction of the Renaissance which originally served as model. (1986:288-289)

Baudry's observations work to deconstruct the perceived naturalistic idea of perspective. He supports his argument by noting Greek and Asian histories of art that has multiplicity as the base of perspective before returning to investigate further the notion of centrality, taking a quote from Leon Battista Alberti "...("Painting is nothing but the intersection of the visual pyramid following a given distance, a fixed center, and a certain lighting...") (1986:289) Baudry uses Jean Pellerin Viator's term of 'the subject' for the centre of the space, and argues that the nature of centrality in film necessitates transcendence – "...the optical construct appears to be truly the projection-reflection of a "virtual image" whose hallucinatory reality it creates. It lays out the space of an ideal vision..." (1986:289)

So Baudry claims that the optical image reflects (from a vanishing point based on Italian renaissance constructs of perspective) back upon its own centre providing a 'complete' world. From this assertion, he claims that transcendence is the inevitable outcome:

The principle of transcendence which conditions and is conditioned by the perspective construction represented in painting and in the photographic image which copies from it seems to inspire all the idealist paeans to which the cinema has given rise... (1986:289)

Rather than considering a spectator as the 'eye' or 'subject' or even 'eye-subject' which is to what Baudry refers, he instead gives this term to the centre of the film and imbues this 'eye-subject' with the capability of transcendence. It may initially seem an uncomfortable idea; more familiar would be the notion of Cartesian dualism<sup>3</sup> and transcendence that places this concept onto a human subject. However, by referring to the centre of the film Baudry constructs an argument that considers specifically the film apparatus in terms of their ideological effect on the product and this is a useful route to consider when analysing the processes of sound in film.

However, it may seem difficult to integrate sound into the arguments put forward over perspective. They have, of course, been based entirely on a history of art and image and whilst it would be over simplistic to simply use the same history to construct a fully rounded theory on sound perspective, for the sake of this review on Baudry's article it may have some relevance. When considering Alberti's quote, it is

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<sup>3</sup> Descartes' view that the mind and body are different substances that relate to each other (Baker & Morris, 1996:7)

immediately clear that, when referring to a 'visual pyramid' (the process by which several intersections produce a vanishing point) he is ensuring that a painting is dominated by the centre – every other line has to become subservient to (quite literally) the bigger picture. It is easy to see how Baudry made the connection in terms of film, but there are other ways in which this pyramid could be appropriated. A product that focuses on centrality necessarily requires sound perspective to do the same. It is clear that Hollywood cinema, as soon as technology allowed followed this model of perspective unless, of course, it contravened the dominance of the narrative. But there is a hierarchical model of sound that closely resembles the notion of a visual pyramid. If we imagine an actor or actors sharing the central point on the screen then we can build up the idea of a sound hierarchy, with dialogue at the top, synchronised spot effects (such as putting down a glass, clothes movement etc.), atmosphere (such as room buzz or traffic) and then other non-diegetic sound such as music. This hierarchy is subservient to the image, which of course, according to Baudry is focused on centrality and transcendence. If the film (by which Baudry means the image aspect of a film) presents a closed world, then the sound (in the dominant model of classical Hollywood cinema) being subservient to the image, must do the same. In post-structuralist terms, the number of options available to the sound and image become restricted, forming, rather than an open world, a closed one, based on the ideology of idealism.

Baudry continues in his article to talk about the nature of transcendence in regard to the specificity of film. He points out that the very differences between each frame shot may appear to contradict the notion of centrality and homogeneity but on closer

examination it is clear that the very differences between the frames construct the unity of the finished film and work to negate their own difference. His argument, that the finished product conceals film apparatus, is a strong one in relation to this point. He claims that the 'eye-subject' (referring to the centrality within the film screen) is now free from any laws of science and its subsequent mobility further ensures its transcendence and unity of the constructed world.

Only at this point does Baudry concern himself with the subject of narration. This could be seen as a serious omission in the earlier part of his article as questions about cutting will have surely arisen as a response to the claim that the film world is a closed and homogenous one. However, he now insists that through editing:

The search for narrative continuity, so difficult to obtain from the material base, can only be explained by an essential ideological stake projected in this point: it is a question of preserving at any cost the synthetic unity of the locus where meaning originates [the subject] – the constituting transcendental function to which the narrative continuity points back at its natural secretion... (1986:293)

In other words, continuity that is difficult to capture from 'objective reality', is only achieved by maintaining the unity created from the centrality of filmmaking inherent in the 'eye-subject', that creates a homogenised and closed world. Baudry is writing about what Bordwell, Staiger and Thompson would have referred to as continuity editing (*The Classical Hollywood Cinema*, 1988). It is incredible then, at this point, not to mention the specific function that synchronised sound plays in this role. It is vital within this research to analyse the history of continuity sound editing, that follows a different set of rules that the editing of image and helps to maintain this unity of the



fictional world. For example, the practice of cutting from image to image is recognised as a signifier of chronological time (with no ellipses); to signify the passing of time the editor might employ a dissolve (where the two images gradually fade in and out over the top of each other). In sound editing it is common to regularly employ dissolves in the atmosphere track to 'smooth' the rupture caused by a direct cut in the film stock. It will be interesting to follow this enquiry further in relation to Baudry's arguments.

The last section in Baudry's article deals with the analogy of Lacan's "mirror stage" in child development and does appear to be an image specific argument. That is not to say that there are equally as convincing analogies to be made in relation to sound in the cinema. These arguments are likely to become further complicated by the placement of speakers in a cinema setting, which do not, as light and image do, originate only from the front and back. It does appear that here, synchronicity in the sound track is a key facet to understanding the role of sound in classical Hollywood cinema and to adhere in these arguments, to Baudry's notion of a closed world.

It is the intention in this research to examine the history of sound in cinema, specifically immediately before its integration with image in 1927 to explore the possibility that it had for disruption of the notion of a closed fictional world. It is important therefore to include it in theories of apparatus. Baudry's conclusions, that cinema upholds a dominant idealist ideology, maintained by the concealment of apparatus, can only truly be completed and strengthened by the inclusion of sound. In his last paragraph Baudry gives the example of Dziga Vertov's *Man With A Movie Camera* (1929) as an example of "...one's own identity collapse simultaneously with

the revealing of the mechanism, that, is of the inscription of the film work.”

(1986:296) But this is not quite accurate. It is impossible to show the very optical apparatus that is being used to shoot the images, not so for the sonic apparatus.

Baudry gives an example of the disruption caused by a projector breaking down –

“...the spectator is brought abruptly back to the discontinuity – that is, to the body, to the technical apparatus which he had *forgotten*.” (1986:291) It is worth considering the impact that a microphone boom in a film image would have, or the mismatch of words and images by a lack of synchronicity.

Baudry’s article provides a strong argument for the case of film apparatus working to maintain a dominant ideology. It is crucial in this argument to consider the impact of film sound, and to appropriate the ideas for incorporation into a deconstructionist analysis of early film sound in cinema.

## JAMES LASTRA

James Lastra, in his book *Sound Technology and the American Cinema* (2000) returns to a moment in sound development that precedes synchronised sound in cinema, and even the moving image. Lastra notes the importance of returning to the moments before the establishment of a new technology in order to understand the contemporary debates and ideas surrounding its purpose. Moreover, Lastra touches upon the perceived *difference* between speech and writing that he sees as mirrored in the debates surrounding the development of recorded sound.

Douglas Gomery is critical of Lastra's approach because it does not include a consideration of the industrial and economic conditions both prior to the introduction of synchronised sound, and during the period, saying that Lastra uses previous assumptions and "...is not an historian, but a theorist who accepts others views of the past so he can get onto what interests him." (2005: Preface, loc 101, 2%) Whilst this is true to the extent that Lastra does not consider these conditions, the ability to consider sound philosophically and ontologically is immensely valuable. To constrain his ideas and writing to a particular set of economic conditions would not allow Lastra to examine the potential meaning in this period; not only is it important to understand the technological and economic aspects of the history of this period, it is important to consider the ontological nature of sound to understand and unlock the potential in sound tests and films of this period.

The difference between speech and writing as a methodology is of great significance as it provides evidence of a method of thinking that is older than recorded sound

itself. This dichotomist thinking will be critiqued in terms of the limitations that it places on film sound, and on the study of film as an audio-visual medium. Lastra's work is effective in highlighting this thinking but does not explore or assess the impact of it on the study of film and film sound. Lastra's first chapter, *Inscriptions And Simulations* deals with the two differing 'imaginings' for the new technology of recorded sound; inscription (or writing and capturing) and simulation (the replication of the real by the mechanical). Lastra notes firstly the connecting of the concept of recorded sound with the technology of the moving image – a connection that is not immediately inevitable. Lastra opens with the well-known quote attributed to Edison upon the filing of his patent for the phonograph in 1888: "I am experimenting upon an instrument which does for the Eye what the Phonograph does for the Ear" (2000:16)

This excerpt demonstrates one of the first instances of the intellectual connection between the two technologies of the moving image and recorded sound. Lastra, however, goes on to question this connection:

What made it appear obvious to discuss the two instruments as if somehow equivalent in effect? Given the numerous incommensurabilities between the visible and the audible, it seems strange to think of motion pictures and the phonograph in the same terms, and as accomplishing the same effects. (2000:16)

This questioning is important because it deconstructs the supposed 'natural' construction between sound and image and leads to an analysis of the ideologies surrounding recorded sound. Lastra gives two examples that provide different predictions and observations on recorded sound. The first is from the French writer

Auguste Villiers de l'Isle-Adam (known afterwards as Villiers) – in his story *L'Ève future* or *The Future Eve* (1886). The story depicts a fictionalised Edison as an inventor who creates a mechanical woman for his friend Lord Celian Ewald – the invention is a replacement for the woman that Ewald loves, who is physically beautiful but intellectually mundane, bourgeois, and only interested in material things. The machine is:

Mechanical to the core, the ghost in this machine is a pair of phonographs cleverly designed to allow her to respond intelligently and with apparent feelings to any number of questions or occasions. (2000:18)

Although obviously not possible, the imagining of an automaton capable of replicating the 'human soul' demonstrates a way of thinking and the direction of recorded sound along the trajectory of simulation of the human.

The other example provided by Lastra is of Edison's essay on the phonograph, published in the *North American Review* on May 1<sup>st</sup> 1878. The essay is a response to the popularity of the phonograph and the way that it has already been appropriated.

Lastra points to the list that Edison provides of the "*faits accomplis*" of the phonograph.

1. The captivity of all manner of sound waves heretofore designated as "fugitive," and their permanent retention.
2. Their reproduction with all their original characteristics at will, without the presence or consent of the original source, and after the lapse of any period of time.
3. The transmission of such captive sounds through ordinary channels of commercial intercourse or as merchantable goods.

4. Indefinite multiplication and preservation of such sounds, without regard for the existence or non-existence of the original source.
5. The captivation of sounds, with or without the knowledge or consent of the source of their origin.  
(Replicated in Lastra 2000:19)

This list is valuable because it provides an insight into the assumptions and pre-conceptions that Edison had for the phonograph. It is entirely 'inscriptive' (rather than simulative) - focusing on the capturing and retention of sounds. It is also clear that the presence of the 'original source' of the sound – the object or entity that created the sound, is not required in the reproduction of the sound. Of course, for sound only recording, the specificity of sound separate from its original source is a key one. It would seem that the 'inscriptive' specificity of sound recording does not require an adhesion to an object or image that replicates the original source – it is not a simulation. This becomes particularly significant when considering film sound – if film sound proceeds along an inscriptive path adhering, or connecting, recorded sound to an original source is not needed.

This is a clearly different imagining of the direction of sound recording from Villiers – the idea of simulation requires the presence of a source of the sound. This presence, in the case of *L'Ève future* is not the original source of the sound, but a constructed one – most importantly, the *construction is concealed* so as to make the mechanical woman appear real. There is a clear precedent here for the development of the dominant sound/image model in film – synchronised sound requires the presence of a source, and that source does not need to be the original one, or produce the recorded

sound, but the film is usually constructed to make the image *appear* to be the original source of the sound. Both imaginings of sound are presented here – inscription – the capturing and retaining of sound, such as imagined by Edison, and simulation, imagined by Villiers –the replicating of the ‘real’ by concealing the construction of the perceived source of the image.

Lastra omits another list by Edison in the same 1878 essay, which is also of interest, where he notes the proposed uses for recorded sound and the phonograph. Edison notes that dictation is one possibility for the future of the phonograph and of:

The increased delicacy of the phonograph, which is in the near future, will enlarge this field rapidly. It may then include all the sayings of not only the witness, but the judge and the counsel. It will then also comprehend the utterances of public speakers. (1878:533)

Edison then provides a detailed list of future potential uses for the phonograph – whilst the essence of the purpose of the phonograph is recorded in the excerpt highlighted by Lastra, it is also conceived in other areas – these do all appear to adhere to the notion of sound as an *inscriptive* medium. Edison’s list includes audiobooks or ‘phonographic books’, specifically for the unwell, people who are using their hands, “...or, again, because of the greater enjoyment to be had from a book when read by an elocutionist than when read by the average reader.” (1878:533)

Edison had already realised the potential that recorded sound had for the preservation of that which would otherwise be lost. He also comments that the recordings of phonographic books could be valuable in preserving language for future

listeners. Edison also puts a great deal of emphasis and importance on the purpose of education through the phonograph – he provides many examples of how the machine could be used as a teaching aid, not only in elocution lessons, but also for music and language teachers. The conservation of languages and music appears to be under the category of inscription, but the emphasis that Edison places on the fidelity of the language places great importance on the original source. This is different to the notion of inscription, or even Edison's own *faits accomplis* which is ambivalent to the necessity for the original source in the retention of the sound.

Edison also suggests that the phonograph be used for the recording of prestigious speeches:

It will henceforth be possible to preserve for future generations the voices as well as the words of our Washingtons, our Lincolns, our Gladstones, etc., and to have them give us our "greatest effort" in every town and hamlet in the country... (1878:534)

It appears then, that although the sound may be discrete from its original source, the connection to the person and this authenticity is what makes the sound valued above the preservation of the speech as text, or if spoken by another. It is as if the essence of that person is preserved within the sound. Therefore, it is possible to understand this sound as also simulative – it simulates or evokes the person, even from the grave.

Within Lastra's own examples the paradoxes of his argument are evident, as inscription is made legitimate and valuable by its simulative qualities.

The problem with categorising sound as simulative or inscriptive, is exacerbated by



Lastra's comparison of Edison's *faits accomplis* to Plato's *Phaedrus*:

It takes but a moment's reflection to recognize these *faits* as classic philosophical criteria, deriving from Plato's *Phaedrus*, for differentiating writing from speech – its relative “absence” compared to the presence of speech, its reuse in new contexts “without the knowledge or consent of the” speaker or its “indefinite multiplication...and preservation” regardless of the existence or nonexistence of the speaker.” (2000:19)

Here Lastra makes the comparison of recorded sound to writing as opposed to speech, or simulation (although simulation by its definition is an attempt to replicate the real). Lastra highlights the problem identified by Plato and Socrates – that writing inherently has an ‘absence’; that of the original source of the speaker. It is useful to refer directly to *Phaedrus* to consider how Plato critiques the written word in comparison to the spoken.

Plato's *Phaedrus* (306BCE) is a written account of a dialogue between Phaedrus and Socrates – both men give a rhetorical speech advocating the idea of the ‘non-lover’ over the ‘lover’; Phaedrus’ speech is a summing up of the arguments of Lysias, Socrates’ speech first speech appears to support this. Socrates’ then gives another rhetorical speech contradicting his first – this one is longer and more complete, providing a definition of ‘love’ and drawing on the notion of the divine in the form of the Greek Gods. He says of the lover:

...when the end comes, they are light and winged for flight, having conquered in one of the three heavenly or truly Olympian victories; nor can human discipline or divine inspiration confer any greater blessing on man than this. (2009:The Internet Classics Archive)

This second speech impresses Phaedrus who concurs that it was more successful in its arguments than the first given by Socrates. Socrates then goes on to explain the value of the spoken word over the written one. Socrates claims that a poor speech can be questioned and clarified – if the speaker is able to defend their argument, then the speech can be improved and justified, if not, it is not compelling in its arguments. A poorly written speech, however, could be delivered by a speaker who is not the original composer (a sophist) who would be unable to defend the arguments and ideas. If the written speech were read by someone they could not question and interrogate the arguments.

These ideas that Lastra evokes form the basis of much post-structuralist argument and are extremely relevant when applied here to film.

MICHEL CHION

AUDIO-VISION

Michel Chion, in *Audio-Vision, Sound on Screen* (1994) begins his introduction with an illustration of the importance of sound in two key scenes in two films; *Persona* (Ingmar Bergman, 1966) and *Monsieur Hulot's Holiday* (Jacques Tati, 1953)<sup>4</sup>.

In both films, Chion presents evidence that the film is understood not solely through the image, but also through the sound, and that this understanding is concealed by the image and the construction of the film. He encourages the viewer to listen to the sound, without the adhesion of the image, and to also view the film silently.

He identifies the moments within the film that are altered, or clarified, by the use of sound. Specifically, in *Persona*, the ability of the sound to place the image chronologically, by linking seemingly disparate images together. In *Monsieur's Hulot's Holiday*, Chion 'uncovers' an audio film, hidden within the film's image: "...another film appears that we now "see" with only our ears...It was all there in the sound, and at the same time it wasn't." (1994:4)

Chion's thesis is that sound within film provides 'added value', his term for the additional value added to a film by the soundtrack. As he explains:

"By *added value* I mean the expressive and informative value with which a sound enriches a given image so as to create the definite impression, in the immediate or remembered experience one has of it, that this information or

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<sup>4</sup> This is the American title; the film was released in France under the title *Les Vacances de M. Hulot* and in the UK as *Les Vacances de Monsieur Hulot*

expression “naturally” comes from what is seen, and is already contained in the image itself. Added value is what gives the (eminently incorrect) impression that sound is unnecessary, that sound merely duplicates a meaning which in reality brings it about, either all on its own or by discrepancies between it and the image.” (1994:5)

For Chion, sound should be identified and recognised as having importance in film – the sound provides extra information that is not present in the image. It is interesting that to demonstrate sound’s importance in film, that Chion advocates an analysis that dislocates the sound track from the image track. He identifies the ability of cinema to disguise the importance of the value of the sound track, as an *illusion*: “This book is about precisely this phenomenon of *audiovisual illusion*, an illusion located first and foremost in the heart of the most important of relations between sound and image...” (1994:5)

So Chion, dedicated to proving the importance of sound within the *audiovisual* medium of film, separates sound from image, to demonstrate their symbiotic importance. He writes specifically about the relations between sound and image, yet deals first with one, then the other. This method is problematic as rather than treat film as truly *audiovisual*, his analysis removes the possibility of dealing with the meanings conjured when both sound and image work together.

There is a tendency, seen with other sound theorists such as Altman or Lastra, to highlight the importance of sound, at the expense of the image. This is understandable as there is a history of subservience that needs addressing, but the impact of elevating the importance of sound appears to lead, however

unintentionally, to the artificial separation of film at the site of sound and image. The *difference* between sound and image is heightened by a belief in the natural construction of film along the site of synchronisation. In fact, this is where Chion claims the most important elements of 'added value' occur:

The phenomenon of added value is especially at work in the case of sound/image synchronism, via the principle of *synchresis*...the forging of an immediate and necessary relationship between something one sees and something one hears. (1994:5)

Chion notes this moment of synchronicity in film as the 'forging' of a necessary relationship; one that the audience requires in order to make sense of the sounds and to locate them in their physical, on-screen space. This allows him to deal with the perceived specific importance of sound in film, and what sound adds to the image, his concept of *added value*.

The term itself is problematic as it evokes a belief in sound as *extra* or *additional* to the film, as if the analysis of sound in film were to provide the film theorist with something not immediately *present* or achievable when studying film. This is to treat sound as separate to film, and to treat film as an entirely image-based medium. The first and according to Chion, most important, aspect of sound that he addresses is the voice. Chion notes the tendency of cinema to be 'vococentric' (centred or focussed around the voice) and then corrects this assertion: "...or, more precisely, a verbocentric phenomenon,". (1994:5) He changes 'voice' to 'word' – Chion is referring specifically to the spoken words of the on-screen subjects. For Chion synchronicity is

at its most important when it occurs between the sound of the subject, and the image of them speaking.

This is an important part of the study of sound in film, because it is here that the most significant *difference* between sound and image is concealed by film production.

Sound and image are recorded on separate instruments and artificially connected in post-production. In addition to this, the majority of films have at least some moments of ADR. ADR is a stage in post-production where the dialogue from the recorded production tracks is replaced by, most commonly, the original actor. This is done to ensure a clear recording of dialogue without background disruption that is frequently present in the production environment, either from the ambient surroundings, or the process of production (camera noise, tracking, etc.).

The synchronicity of the voice in film is highlighted by Altman and is part of his concept of the sound film's 'fundamental lie' "the implication that the sound is produced by the image..." (1985:46) Voice in film is also part of the wider discussion about the introduction of sound into film, which is seen predominantly as the moment when words were heard for the first time. So, the voice is important, but Chion categorises the spoken voice, or more specifically the words produced by the voice, as part of sound's 'added value': "...at the most basic level, added value is that of text, or language, on image." (1994:5) Chion is claiming that sound itself *adds* meaning to the film that is not otherwise present – by treating the sound as additional, he reduces its legitimacy as part of the ontology of film. He then claims that the value, the extra information supplied by the sound of the voice, is in some way *additional to the film*.

This claim weakens the notion of 'added value' as it alters film into a purely visual medium.

Chion's following analyses about words and voice is therefore problematised because it is undertaken with the assumption that the voice is providing an extra element to film. Only by treating film as a truly *audiovisual* medium is it possible to produce analysis that deals with the entire artefact. It is possible to see that 'added value' is a flawed concept as the information gleaned by the voice and word in film is so important to the overall understanding of the narrative and image that it cannot be separate. Chion goes on to highlight the importance of the spoken word in understanding what we see – the most obvious of these is, of course, through language, but he also highlights specific aspects of film that the voice brings 'added value' to. This includes the framing of the image in terms of the content of the voice – the words direct the viewer's attention and gaze. Chion uses a live television example for this which is a flawed illustration – television, by its nature a *broadcast* medium, has the spoken word at the forefront of its specificity.

Chion's concept of 'Empathetic and Anempathetic Effects' (1994:8) is his analysis that film music can "...directly express its participation in the feeling of the scene..."

(1994:8) or alternatively "...exhibit conspicuous indifference to the situation..." (ibid).

One of the examples he provides of the indifferent *anempathetic* music is during *Psycho* (Alfred Hitchcock, 1960) where, during the well-known shower scene, the sound of the shower continues, uninterrupted and indifferent to the murder committed.

This is indeed a powerful effect, creating the space in which the viewer digests and reacts to the unexpected murder (even more so as Janet Leigh was the film's leading female actor and the most well-known name) and also highlighting the complete helplessness of the situation – no one is coming, and no one will notice. This is emphasised, Chion claims, by the mechanical nature of the apparatus of the film itself, which keeps moving forward, indifferent to the content on the celluloid.

This is an important moment, but it is only truly understood and interpreted through the interaction of the sound *with the image*. The 'added value' that Chion claims is present in the scene is an intrinsic part of the film and this can be seen in the choice of shots and how they interact with the sound. There is not only 'anempathetic sound' but also 'anempathetic image' – the film does not rely solely on the sound to create the scene. Immediately after Marion (Janet Leigh) falls out of the shower, dead, the film cuts to a close up shot of the shower from an extremely low angle, but specifically *not* a point of view shot – Marion's body is facing away in narrative space from the shower.





The shot of the shower serves no other purpose other than to create, along with the sound, the very effect of the anempathetic - the shower continues regardless.

Moreover, the shot of the shower helps to identify the ongoing sound proceeding the shot. There is another example of this as the blood is show flowing towards the plug hole of the shower:



The shot not only symbolises the loss of Marion's life, but also serves to once again orientate the viewer in a soundscape of the anempathetic. Neither the shower, nor the plug hole are necessary for the progression of narrative – the scene would make narrative sense without them. They are there purely for the same reason as the sound – to create the feeling of indifference within the scene. This is amplified even more by the following shot of Marion's body:



She now becomes 'unseeing' and indifferent to the sound and the murder.

By analysing sound as an additional and 'added' element to the screen, Chion makes the possibility of an analysis that incorporates the whole film more difficult. The shots and soundtrack interplay, forging connections and meanings that are not 'additional' but intrinsic to the meaning of the film. This one example typifies many of the other claims of sound's specificity in film that Chion makes in *Audio-Vision*. They are all excellent and useful points that rightly highlight the importance of sound in film but continue to inadvertently relegate sound to the position of the additional and do not account for many similar effects that are present in the image, or in the interplay between the two. It is also important to highlight moments where the image is specifically shot and/or edited to take advantage of the soundtrack, or to make the soundtrack most effective. Chion gives the example of rapid cutting in fight sequence:

Why, for example, don't the myriad of rapid visual movements in kung fu or special effects movies create a confusing impression? The answer is that they are "spotted" by rapid auditory punctuation, in the form of whistles, shouts, bangs and tinkling that mark certain moments and leave a strong audiovisual memory. (1994:11)

This is an accurate analysis, but it is possible to subvert this assertion and claim that the images are able to be shot specifically for a rapid visual edit, made possible by the knowledge that the soundtrack can combine with the images to make sense of the scene. The images are not confusing because they were never intended to be watched in isolation, but as part of a medium that includes audio. The sound does not 'make sense' of the film, it *is* the film.

Chion does note this when he comments on similar sequences in silent film:

Silent films already had a certain predilection for rapid montage of events. But in its montage sequences the silent cinema was careful to simplify the images to the maximum; that is, it limited exploratory perception in space so as to facilitate perception in time. (1994:11)

This is an important point, because it demonstrates how film editing and cinematography changes as synchronised sound is introduced, but it also highlights the intention of filmmakers to create scenes of constructed with a rapid pace – this intention is not altered by the introduction of synchronised sound, rather it is more *effective* – the value ‘added’ has not been changed, but has simply been honed.

Other examples in Chion’s first chapter concentrate on sound’s ability to ‘temporalise’ an image, that is, to locate it in a specific time, both onscreen and narratively. Firstly, he notes how sound can place a chronology upon an image that is not present in the image itself. He returns to *Persona*, specifically the opening scene, where the shots of people in the mortuary are only perceived as in chronological order by the dripping sound effect in the audio track which is heard underneath all the images. Chion describes these images without sound as: “...a series of stills, parts of isolated bodies, out of space and time.” (1994:4)





Again, this is an insightful and useful analysis that is effective in understanding the impact of the sound on the screen, but its impact is effective precisely *because* the images have a non-linear and dislocated quality to them. With the combination of sound and image, *Persona* is able to simultaneously create the impression of dislocation *and* allow the viewer to understand the shots as a chronological sequence. This is exactly where film's specificity is demonstrated – in the simultaneous representation of two, seemingly opposing, impressions. Within and between these two readings (dislocation and location) there is a space created for the viewer that cannot be easily defined but is the essence of the film's meaning. It is much more straightforward to deal firstly with the image, then the sound, and then perhaps how the two bring meaning to the whole, but it is important to go *further* in film analysis, and attempt, however challenging and ephemeral the task might be, to look for meaning within the space between sound and image, where the ontology of film lies.

There is one quality of synchronised sound that is undeniable in its impact on the image, and Chion highlights this with the term 'Chronography' (1994:16). Chion notes the possibilities open to exhibitors of early cinema, who were free, to some extent, to choose the length and speed of the film. The necessity of an exact length only became a reality after the introduction of synchronised sound, where it was impossible to alter

the length of the film, or the shots in the film. Chion does highlight that effects such as slow motion or sped up footage are still possible after the introduction of synchronised sound, but the overall time of the film is fixed after this point. This precise difference is important and underscores the necessity of investigating this temporal potential in early cinema. Of course, sound is still present within the environment of the cinema, but the essence of its ontology is considerably altered. This then has an impact on the whole film and the potential for a larger range of meanings to be discerned from it.

‘Vectorization of Real Time’ (1994:18) is the title that Chion gives to the quality of sound to be: “...orientated in time in a precise and irreversible manner. Played in reverse, it can immediately be recognized as “backwards”. Sounds are vectorized.”

(1994:19) Chion is referring to the specifics of sound through time – he notes the ‘attack’ at the beginning of discrete sound, followed by the decay of the sound wave.

Played in reverse the audible sound would be entirely different to the auditor.

However, this can be true of many moving image shots. Chion does comment on this, but calls these types of shots ‘exceptions’:

...cinema has derived amusement from exceptions and paradoxes by playing on what’s visually irreversible: a broken object whose parts all fly back together, a demolished wall that reconstructs, or the inevitable gag of the swimmer coming out of the pool feet first and settling on the diving board. Of course images showing actions that result from nonreversible forces... is clearly vectorized. But much more frequently in movies, images of a character who speaks, smiles, plays the piano, or whatever are reversible; they are not marked with a sense of past and future. (1994: 19-29)

This is an inconsistent assertion – it does not follow that only specific ‘exceptions’ of moving images are located precisely in time. Any shot that consists of an actor walking, driving or in any other way moving in a specific direction will be distinctly different when reversed, due to the very same ‘nonreversible’ forces that Chion mentions. Humans walk consistently forward, cars rarely reverse at speed along a road.

Chion uses a specific aural example for the illustration of vectorised sound – the dripping sound in *Persona*.

The sound of the smallest droplet imposes a real and reversible time on what we see, in that it presents a trajectory in time (small impact, then delicate resonance) in accordance with logics of gravity and return to inertia. (1994:19)

However, within the example, he provides the evidence that proves that the image of the same droplet would be equally as vectorised; the gravity which determines the direction and forces imposed on the droplet would be the same. When seeing a droplet in reverse it would be possible to view the opposite forces to what would be expected – the gradual droplet shape moves upwards as the liquid changes, as well as the direction of the liquid as a whole.

This might be pedantic, but it is important to ensure that in the worthwhile effort to elevate sound from a subservient position in film analysis, that it is not imbued with qualities that are either non-specific or apply to film as a whole. Film *is* vectorised, and

with this assertion it is possible to see that both sound and image are part of this vectorisation.

Chion's section entitled 'Reciprocity of Added Value: The Example of Sounds of Horror' (1994:21) is an interesting section that deals with the ability of the sound to create the necessary 'image' in the mind of the viewer, and of the image to provide the specificity of this to the sound. This is useful analysis as it demonstrates how sound and image work together to form the impression present in the scene of a film. Sound and image are certainly reciprocal within film, although once again, the concept of 'added value' appears redundant, as any value brought to the film by sound or image is intrinsic to the nature of the film, rather than additional to it.

Chion gives an example from *Kiss Me Deadly* (Robert Aldrich, 1955) where Christina (Cloris Leachman) is tortured to death. The only image we see is of her bare legs, which hang down from the top of the screen – it is the sound that places in our mind the specifics of the action. As Chion says:

Of course – as long as it's clear that what makes the screams so terrifying is not their own acoustic properties but what the narrated situation, what we're allowed to see, project onto them. (1994:21)

Chion makes clear that what is so effective is not the specific sound, but the synchronicity of the sound with the image – this is so powerful that we are able to perceive that which is not there. The image is able to locate the sound and interpret it,

as the sound does for the image. It is both elements that come together to produce the specific dramatic moment and the range of ways that it can be interpreted.

Chion's chapter on 'The Three Listening Modes' (1994:25) provides the auditor with several different ways of hearing the sound within a film, and advocates a way of listening – 'reduced' listening, that is designed to focus on "...the sound – verbal, played on an instrument, noises, or whatever – as itself the object to be observed instead of as a vehicle for something else." (1994:29) This is useful in that it allows the auditor to recognise the sound as having its own qualities, that are not connected to the image, and as Chion notes:

Film and video makers, scholars, and technicians can get to know their medium better as a result of this experience and gain mastery over it. The emotional, physical and aesthetic value of a sound is linked not only to the causal explanation we attribute to it but also to its own qualities of timbre and texture, to its own personal vibration. (1994:31)

This is undoubtedly important – whereas the film as a text for analysis must be recognised as an audiovisual artefact, the processes of putting it together, of recording, shooting and editing, must be understood not only as part of a whole, but discretely and for each element's specific qualities.

Reduced listening is a useful tool with which to understand sound – combined with Chion's other modes; causal (for the gleaning of information) and semantic (for decoding the sounds, such as speech) it is an essential way for a practitioner and a theorist to understand the way that sound and image operate together. However,



reduced listening by itself is not useful for the analysis of film because it does not take into account the way that the sound is altered by its adhesion to the image. It is a tool that should be used, but then assimilated and re-shelved in order to understand film audio visually. This mode of listening will be discussed in more detail in the methodology chapter as an approach to perceiving the film texts.

In his third chapter, 'Lines and Points: Horizontal and Vertical Perspective On AudioVisual Relations' (1994:35) Chion discusses the borrowing from music harmony theory of the term 'counterpoint'. He notes that whilst film sound is often considered 'vertically', that is the way in which the image relates to the sound at the same time, that counterpoint is the placement and analysis of the sound *horizontally* – this is sound that is not attached vertically to the image. Chion's concern with the term 'counterpoint' is that it is frequently misused to discuss moments of *dissonance* in the sound, which are actually vertical. These sounds are *synchronised* with the image, but are not necessarily in *agreement* with the image, either in tone or meaning.

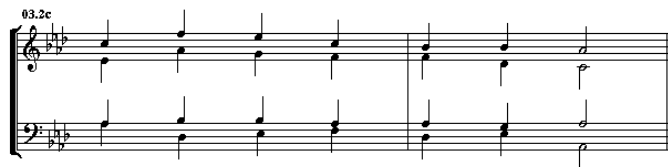
...historically, film studies quickly became muddled by this analogy, often to the point of using it entirely the wrong way. Many cases being offered up as models of counterpoint were actually splendid examples of *dissonant harmony*, since they point to a momentary discord between the image's and sound's figural natures. If we, too, sometimes make use of the musical analogy, we need to be careful: the term harmony doesn't take into account the specificity of audiovisual phenomenon either. (1994:36-37)

This is an astute point that highlights the potential problems of the appropriation of a musical term. We can see this term used in Eisenstien, Pudovkin and Alexandrov's 'Statement':

“ONLY A CONTRAPUNTAL use of sound in relation to the visual montage piece will afford a new potentiality of montage development and perfection.  
THE FIRST EXPERIMENTAL WORK WITH SOUND MUST BE DIRECTED ALONG THE LINE OF ITS DISTINCT NONSYNCHRONIZATION WITH THE VISUAL IMAGES.”  
(1985:84)

However, the Russian film theorists do not compare the term ‘contrapuntal’ with ‘harmony’, but rather ‘synchronisation’. It is clear that by using the term ‘harmony’ the concept of counterpoint is weakened. In musical theory, the two terms are not antonyms. Harmony is the term for a combination of notes/tones that are played or heard together. The notes do not need to be sounds that are pleasant, or within the same scale or chord as each other – they can be dissonant. However, the term harmony has, more generally, been understood to mean the combination of elements that produce unity and agreement. This is where the weakness in the term lies in film theory. Counterpoint can, and does, contain many elements of harmony, and, therefore, agreement; Donnelly explains that “In music, the term ‘counterpoint’ tends not to designate superimposition but rather the independence of musical voices or lines that nevertheless still make sense together.” (2014:56) In counterpoint, the music does not move vertically at the same time, but will *horizontally* have an organisation of agreement.

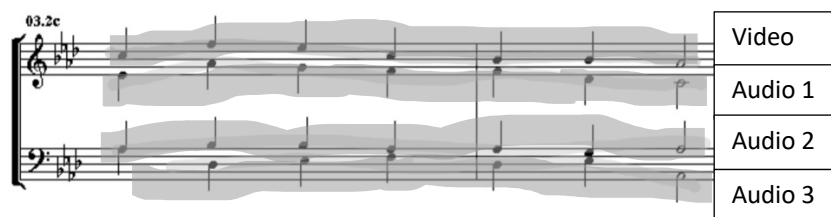
Music that is most closely related to the concept of synchronisation is ‘homophonic’ music – that is, music where each part in the score moves together, the other lines supporting and enriching the main melody, as seen below.

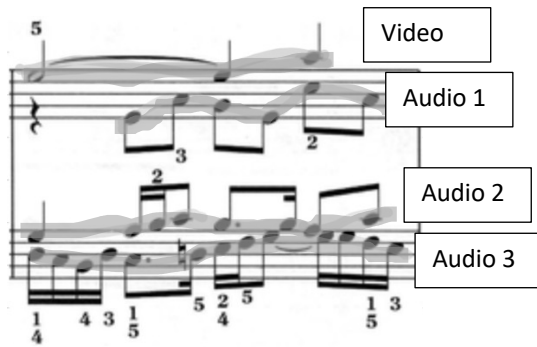


Contrapuntal music does not follow the same vertical direction but is rather composed *horizontally* and is the weaving together of separate but co-existing *melodies* – each part within the counterpoint is of equal importance.



When seen in terms of musical notation, it is much easier to identify the inherent qualities of the ‘vertical’ or ‘horizontal’ in each form. There is some benefit to using the musical terms, if used correctly and with an understanding of the surrounding theory. The notation of homophony and counterpoint does have comparisons with a film track and sound tracks. It is easy to imagine the top line of the notated music as the image track, and the other lines of notation as the sound tracks:





Both film and music are mediums that exist along a direction of time, and therefore the comparison is effective and useful. By using the examples of notation, it is possible to see and think of film as one artefact, combining multiple layers of meaning as opposed to an image based medium with sound a subservient element – one that provides ‘added value’.

Chion’s use of the terms ‘horizontal’ and ‘vertical’ are extremely useful, and probably the most successful way of understanding the differences between synchronised sound that repeats and supports the image, and sound that moves independently, creating meanings, associations and differences that are an inherent part of the film. To omit any discussion of counterpoint, however, would be to discard the usefulness of the term if fully extrapolated and correctly understood.

In Part 2 of *Audio-Vision*, Chion begins with an assessment of the study of the introduction of synchronised sound to cinema. He notes the tendency for some film theorists and critics to question whether the ‘right’ decision was taken to introduce synchronised sound to film. There is, he notes, a belief that sound has not evolved since its introduction to cinema in the late 1920s. There is a need to return to this moment and not to relegate it to a moment in the trajectory of cinema:

Reevaluating the role of sound in film history and according its true importance is not purely a critical or historical enterprise. The future of cinema is at stake. It can be better or livelier if it can learn something valuable from its own past.

So far the history of film sound has almost always been told in relation to the supposed break it caused in the continuum. Everything since is related to the coming of sound. This rupture can be conveniently pinpointed historically...after the coming of sound, you'll find, if you leaf through essays on the subject, it is as if nothing ever occurred since. (1994:142)

This is an important statement that is reflected in other essays and books about sound in film. The identification of a supposed 'moment' in film history, where sound was 'introduced' and an opposition of 'before' and 'after' where sound analysis has not progressed. Other theorists such as Altman have covered the 'fundamental lie' of the introduction of sound to cinema, citing the numerous examples of sound in film since its inception, but it is worth highlighting Chion's assertion that little has been written since that returns in any meaningful way to the introduction of synchronised sound.

Chion uses the word 'continuum' and this is significant, as it assumes a smooth trajectory of film history that was momentarily interrupted by the introduction of sound technology. He calls for a return to this interruption to reevaluate sound practice and theory since this moment. Chion chooses to address this by returning to moments in sound history that he suggests is "...a *continuous* history, made up of more progressive changes that are more difficult to detect..." (1994:142)

Chion intends to revisit the moments in sound history that he believes have had an impact on cinema and film analysis. He does this by visiting specific moments of technological advancement – multitrack sound, Dolby sound etc. and considering how these have impacted on the overall film. Chion's identification of this moment in history is important, and demonstrates the necessity for revisiting this era, but his attempt to elevate the importance of sound historically is in danger of missing the concept of cinema as audiovisual. It is undeniable that a moment of significance happens with the introduction of synchronised sound, but it is here that there is a possibility of examining cinema in its true ontological form – that of sound and image. Chion notes the rupture to the 'continuum' and this is precisely the place where sound and image are not contained in a construction designed to conceal itself. It is here that it will be possible to understand film as *film*, rather than two mediums, one subservient to the other. There is, of course, an understandable compulsion to 'right the wrong' committed against sound in cinematic history, but this should not be done at the expense of the image.

Chion highlights many astute and interesting areas in film sound – it is now possible to move away from a mode of study that favours one medium and attempt, through the use of a specific moment in film history, to treat film as one medium, comprised of sound and image relations.

## WORDS ON SCREEN

Michel Chion, in *Words on Screen* (2017) provides a comprehensive and absorbing account and analysis of all possible examples of words and text that appear in film. Particularly salient to the understanding of the use of words in early cinema, are chapters one and two, which deal predominantly with silent cinema. This is significant to the study of sound in 'silent' cinema, as words are frequently an example of sound themselves. Film that does not use synchronous sound is unable to re-present human voice in an aural medium and uses instead, a variety of techniques to create sound within the film.

As already stated in many texts and taught to many film students, are the most well-known examples of sound in early film; live music, announcers, lecturers, sound effects, etc. but there are also many examples of sound that does not occur amplified through the speakers, and this is pertinent particularly in the two case-studies of silent film in later chapters – *Sunrise* and *The Jazz Singer*. One type of sound is the *imagined* sound of the objects that are seen on the screen. *Imagined* sound, (dealt with in the analysis of Derridean theory as *trace* sound) is the sound that is created in the mind of the viewer, by seeing the evidence of sound on the screen. This could be as simple as a character walking across the room, where footsteps could be imagined, to the explosion of the range in *Mary Jane's Mishap* (Smith, 1903).

Moreover, imagined sound can be off-screen and evidenced by the reaction of on-screen characters (such as the knocking on the door of Yudelson (Otto Lederer) in *The*

*Jazz Singer*). It is impossible for the viewer to ignore this sound or fail to process it as *sound* because it is a causal device in the narrative – it *causes* the characters to move to the door and progress the narrative. I will call this sound, ‘*sound in image*’ it is sound that is present in the image but processed and understood by each viewer as imagined sound. It is worth highlighting that although the imagined sound will be different for each viewer, and processed differently, it is not without boundaries. The sound imagined will connect to the image and the film, and be of, and about, the film world (the diegesis). The range of possibilities for the sound will be curtailed by the narrative and objects.

One aspect of sound-in-image is dialogue. ‘Silent’ film is not film without words – there are numerous examples, in almost *all* early film, of characters talking. We cannot hear the dialogue of the characters, but we can certainly *see* the dialogue. One method of representing this sound is through the use of subtitles, or intertitles (as Chion notes in *Words on Screen*, the term *intertitles* is used retrospectively).

Therefore, subtitles are of overwhelming importance when discussing sound in early cinema – they are the representation of spoken sound, and as seen in later case studies, they can provide aural information about the character, including accent, class, ethnicity, intelligence, etc.

Chion highlights the importance of the subtitles on the screen in this book and gives much of the first two chapters to discussion of the varying ways that subtitles are utilised in ‘silent’ film.



The biggest challenge in Chion's work, is the insistence on the use of lists to categorise types of words found in film. This moves past the point of usefulness, into *over-categorisation*, where Chion frequently finds himself in the position of identifying and unravelling exceptions to his own rules. The danger in lists that over-categorise is that the most salient information can fall through the 'gaps' in the categories. It is often these very examples – the ones that resist categorisation, that are the most useful in understanding and analysing the film as a whole. It is worth noting, however, that Chion himself states that "This book was not conceived to prove a thesis, but rather aims to formulate an inventory of a field as a basis for further study." (2017:9) In that way *Words On Screen* certainly helps to highlight the importance of words to the 'silent' era.

Another danger in the analysis of subtitles in film, is to relate them to the later synchronised films, which is an operation in hindsight. Film makers from the early film period were not making synchronised films without the 'correct' technology – they were making complete films that contained within them both contemporary image and sound. It is understandable to relate subtitles to the practice of speaking, but not to the practice of synchronised dialogue, which is certainly not the same thing, as along with synchronised dialogue comes a wealth of techniques and practices which are constructed, rather than natural (however much they may be presented as 'naturalised').

Important to note, before examining in more detail *Words on Screen*, is that much of this thesis will deal with Derridean notions of *trace* and *hinge*. Derrida's writing on

these issues is concerned with the perceived differences between writing and speech. This thesis does not use these theories to discuss writing and speech, but sound and image. This is liable to become confusing when reviewing a book which discusses writing and speech, and the differences between them – therefore it should be noted that when Derridean theory is referred to here, it is concerned with sound and image, or the construction of difference through binary oppositions. Every care will be taken to ensure that the oppositions described are clearly defined.

Chion begins, in his introduction, with a list of the five main ways that writing appears in film. These five examples are a useful way of thinking of the various types of writing. The first two terms, *porch-writing* and *overlays (or overlaid writing)* (2017:4) deal with the beginning and end of a film. *Porch-writing* refers to the writing that happens on a film at the beginning and end which is not filmed within the diegesis – “This means the titles that might appear against a tonally neutral background, or an abstract or textural background...” (2017:4) *Porch-writing*, then, is a clear category, and is separated by Chion, from the other set of credits and end credits, that appear over the diegesis of the film – the second category of *overlaid writing*. This can also include non-diegetic writing such as place names and times that occur over the diegesis of the film.

It is a useful introduction to the categorisation of writing in film as it helps the reader to understand the entirety of the film, rather than separate the film from the opening credits and end titles. This is important because this practice is not somehow ‘outside’

of the film – it helps the reader to frame their understanding of writing in a film as every single word or letter that is seen.

The problem with the categories of writing comes with the next two definitions – *inclusions* (or included writing) and *inserts*. Here, having set up the two terms, Chion is compelled to spend some time on discussing the difference between the two, and the ability that the words on the screen have, to move between the two definitions. This is extremely problematic, as logically, a word that can move between the two definitions does not, rightly, belong entirely to either category.

*Included* writing is, according to Chion, is words or writing on the screen which is “...part of the setting, in the diegetic space, but is not meant as the central or the subject element of the shot.” (2017:4) This is already problematic, as this surely is dependent on the *type* of shot, as well as the composition and construction of the shot. It is easy to imagine a word written on the side of a building in an extreme wide shot, that is not the subject of the shot, but this definition becomes slippery when considering tighter shots, or shots that are not centrally composed. This type of writing is important, claims Chion, when used to situate the viewer in space and place, often confirming elements of the time period or location of the narrative.

*The written insert* is Chion’s fourth type of writing that appears in film, and is “...a close-up shot of a detail between two other shots.”(2017:4) This is often the detail of a letter, or other note to a main character, where we are given some time to read the content specifically (although, as Chion notes, not always fully). Chion highlights that

there are obvious differences between the *diegetic written insert* and the *non-diegetic written insert* (a sub-category) but that the editing technique is similar and means that both appear "...as if they are ripped from the spatio-temporal continuum of the story."(2017:5)

On a first reading, these two categories (included writing, and the written insert) are significantly different, one appearing within the editing of the narrative, and one separate from the space and time of the film world. However, when Chion describes the potential that the two terms have to 'become' one another, the definition becomes problematic:

It is possible to transform an *insert* into an *inclusion* (and vice versa) via camera movement or focus change – in other words not necessarily through editing but in a continuous shot. (2017:4)

Essentially, a word or sentence that is part of the background of a shot can, through a focus pull, become the subject of the shot. This opens the definition of an *insert* to include those words that are not necessarily in close-up and excluded from the diegesis by a specific cut. These words *are* in the diegesis. This becomes harder to define – if we return to the idea of a wide shot without specific subject focus (a type of shot very common in early cinema), with enough time the eye begins to move around the screen – if the composition is not central it is not possible to categorise the word as subject or not, or as *insert* or *included writing*. The concern is, that if a word defies definition by a named category it can become undefinable, it is *without a name* – as will be seen in Derridean theory later in the thesis, these areas that do not fit

comfortably into a definition can be dismissed, ignored or somehow ‘naturalised’, that is, made to fit into one or other definition. The definitions themselves are artificial constructions, but are designed to appear logical and natural - the very thing that makes the word (in this case) of interest, is its resistance to easy definition. By relegating undefinable words to one category, we lose the agency of the word.

We see a clear example of the attempt by Chion to force the words on the screen to ‘fit’ and comply with his definitions. During his explanation of *included words*, he returns to the definition of *overlaid writing*, claiming that some *included words* may at first appear to be *overlaid writing*:

By definition, *included* written material springs from *diegetic reality*. But more and more frequently during opening credits, we find non-diegetic titles making an appearance as *inclusions* in the *diegetic reality*: they might be very small, or shown in spatial perspective, even peep up behind an element in the setting. This is no longer *overlaid writing*, but neither is it thoroughly *diegeticized*. Generally such credits return to their proper, conventional place in the closing credits. (2017:5)

So, these examples of credits appearing from within the film world and interacting with the elements on the screen, clearly defy categorisation as either completely *diegetic included writing* or *overlaid writing* – their refusal to fit comfortably into either category is actually what makes them most interesting – they are part of the *film* and are not easily categorised as simply part of the *words* of the film. What is even more significant, however, is Chion’s assertion that the words “...return to their proper, conventional place in the closing credits.” The terms ‘proper’ and ‘conventional’ are already operating to uphold Chion’s definition of *overlaid writing* as the ‘natural’ category for these words; a term that has been only just previously

devised, has now become the 'proper' place for the credits to be. This attempt to force the words to fit into the list of categories is not only reductive in terms of the most effective analysis, but also indicates the perceived importance of the film diegesis – the words will, Chion reassures the reader, return to their place, leaving the diegesis free. This is a clear example of 'naturalising' the diegesis of the film world in analysis.

The first chapter of *Words On Screen* is a more detailed and refined list of the different categories of names on the screen. Chion attempts to document each and every category of written name that is likely to occur within cinema. This is useful, as it allows the reader to consider the significance of words within film and Chion encourages the viewer to consider the unusual practice of naming in words, the image of a place – something that can be read as 'natural' when viewing a film. Names in this chapter are broadly defined as place and character, with each definition provided with a comprehensive list of subcategories – cities, towns, and countries for places, and names, initials and gravestones, for some examples of characters.

Written names and places are frequently found in silent and synchronised cinema, but most interesting to this thesis is Chion's next chapter on nondiegetic writing. Chion opens this chapter with a rumination on the uses of white and black in cinema, noting that nondiegetic writing appears most commonly as white writing on a black background, whereas diegetic writing is most commonly the opposite – black writing on a white background. Apart from the numerous examples where this is not the case, this assertion is problematic also because of the use of the colours 'black' and 'white'

often used to imply that there are only two possible choices – one or other. This is an interesting moment precisely because Chion uses the terms ‘white’ and ‘black’ which have binary connotations. As will be seen in Derridean theory, the reductive use of ‘white’ and ‘black’ can operate to inhibit ‘grey’ areas.

Chion’s language shows moments that work to diminish the existence and importance of anything that does not fit the two terms. “Film titles, but also scrolling credits and intertitles, are in almost every case light on dark...” (2013:30) terms like ‘almost’ reduce the importance of the exceptions to the list. Chion does give a couple of examples where the titles differ, such as *Passion of Anna* (Bergman, 1969), but does not go on to consider why these examples might be important; they are merely exceptions to the rule.

Chion returns to the comprehensive list for nondiegetic words, but again, this can only take him so far and the list is descriptive, albeit extremely detailed, which does lead to consideration of many different types of writing. There appears to be little analysis past the creation of the list itself.

Chion’s subheadings on *SUBTITLES IN THE SILENTS* provide a useful set of descriptions of the use of different methods of words in silent cinema. The subheading to the subchapter is titled ‘Aspects of Orality in Intertitles’ which already frames the writing in terms of speech. Chion claims that “Signs of orality [are] abound in dialogue intertitles” (2017:50) and provides examples from several silent films, including *The Big Parade* (King Vidor, 1925) where an American soldier tries to pronounce French –

Chion notes that the French words are written phonetically, giving the impression of a beginner attempting to pronounce the language:

“...and we read in the intertitle: “Gee...aimy/vouwse/boo...coup!” – a mysterious text we have to read phonetically in order to arrive at “je...aime...vous...beaucoup” (loosely: “Me loves you very much”)” (2017:50)

Examples of this type of subtitle – one that indicates accent or proficiency with language, are found in many silent films, including both *The Jazz Singer* and *Sunrise* - as mentioned before, Yudelson’s language, particularly when talking to the performers at the theatre (discussed in the chapter on *The Jazz Singer*) and the lexicon of *The Man* (George O’Brien) and *The Wife* (Janet Gaynor) in comparison to the characters from *The City*.

Chion does nothing more than describe these moments and name them as ‘signs’ of orality, that is, signs of the audible speech of the character. He does not go into any more detail on this but does use the word ‘sign’ which implicitly connects the meaning of the written words with the meaning of the spoken language. This use of a coded written language to indicate spoken language is an area of sound within silent cinema that is rich for analysis. If seen only as a device that is ‘in place’ of the spoken word, we ignore this area of speech in silent cinema and are not able to analyse the film and the speech as separate to that transition to the audible spoken word. This is an area where hindsight – the knowledge that cinema did progress to synchronised dialogue, obscures the potential of analysis in silent film. This demonstrates a pattern of treating silent film sound convention as an ‘incomplete’ technique – its importance is



only framed in that it led to synchronous sound. This is why it is so important to remove silent film from its shackles of chronology in film history and treat each example as a 'text' in its own right.

Chion's subheading '*Reduction, Elimination, or "Naturalizing" of the Subtitle*' is very significant, firstly in the title that Chion chooses. He opens the paragraph with an explanation of the development of the subtitle in silent film:

Various attempts at the end of the silent era to minimize or even totally eliminate title cards are well known. *City Lights* (1931), which Chaplin made in the sound era, reduced intertitles to a minimum but without totally getting rid of them...*The Street* (Karl Grune, 1923) and *The Last Laugh* (F.W. Murnau, 1924) eliminated intertitles altogether but were still obliged to keep several *insert* shots of letters or posters. This tendency toward reduction has an alternative that we can call naturalization. (2017:53)

This is, on the surface, a clear indication that a trajectory towards the reduction of subtitles was evident from the mid 1920s. This can seem logical – if the trajectory towards synchronous dialogue was inevitable, then the reduction and eventual disappearance of the intertitle would also be inevitable. This was, of course, what broadly happened, certainly in mainstream cinema, but this trajectory was not perhaps as straightforward as Chion asserts.

The first example, *City Lights* (1931) as Chion notes, was made in the era of sound film – Chaplin already had the choice of using audible dialogue, and chose, instead, to use subtitles. This choice could be seen as a reluctance to relinquish a form that offered a different and preferable mode of expressing dialogue. Similarly, Hitchcock, compelled

to finish his film *Blackmail* (1929) with synchronised sound opted to make large sections of the film with silent conventions, including subtitles in addition to the newly synchronous sections. Examples of a director's preference for subtitles are seen in both *The Jazz Singer* and *Sunrise*, even if Murnau had a history of preferring what Chion terms 'reductive' subtitles in his films.

*The Last Laugh*, (1924) was filmed before *Sunrise*, so the perceived trajectory that Chion notes with Murnau is not so straightforward – Murnau uses subtitles in *Sunrise* and these are clearly important to the overall representation of the themes of class and of rural and urban spaces. The subtitles in *Sunrise* are not merely a 'sign' of the spoken word, but an expressive form in their own right. Similarly, *The Jazz Singer* uses subtitles in an important way – to relate the most significant moments in the narrative. Although spoken word was an option available to both Crosland and Chaplin, there is evidently a reluctance to move away from the technique of subtitles, even when the spoken word is available to them.

Chion also points to the *naturalization* of subtitles; that is, the inclusion of them in the film as part of the diegetic world and narrative. One of the most significant examples, he claims, is *Nosferatu* (Murnau, 1922), where he says that:

...almost all the title cards are presented as fragments of the diary of the main narrator. Within this diary a manuscript about vampires is leafed through. This allows Murnau to integrate all the written texts into the visual flow, to "naturalize" them... (2017:53)

This is interesting, and *Nosferatu* does indeed contain many examples of written texts that are ‘naturalized’ into the narrative and the ‘visual flow’, however, there are many subtitles also present in *Nosferatu* – it is not a film that contains ‘almost all’ title cards that contain text from a diary or book - there are plenty of examples of dialogue presented in subtitles as well. *Nosferatu* is loosely based on the novel *Dracula* (Bram Stoker, 1897) – a novel narrated entirely through letters, diaries and other written accounts from the main protagonists. Much like the film, *Dracula* contains many examples of diary accounts that are inserted into the narrative, along with spoken dialogue. The use of the diary technique by Murnau is just as justifiably part of the adaptation of the novel’s content as it is a “naturalization” of the subtitles.

It may well be that there were numerous attempts to reduce the number of subtitles in films in the late silent era, but it is not necessarily so directly connected to the introduction of sound, nor the perceived desire for written subtitles to replicate and stand ‘in place’ for the spoken word. Just as likely is the understanding of the form as expressive – the reduction of the subtitle is a reduction of dialogue in favour of alternative visual techniques that rely less on spoken language. The more sophisticated and experienced film makers became with subtitles, the less they are used for everyday dialogue and instead utilised where possible for expression, as well as narrative content.

It is also worth challenging the assumption that the reduction of subtitles is somehow due to the technological development of synchronous sound – the interpretation being of less subtitles as a film that is ‘nearly’ within the spoken word era. This makes

little sense as the reduction in subtitles is a reduction in dialogue, not in 'silent' film technique. Films with less subtitles are not somehow 'closer' to being films with a voice – they are films with no voice.

When the assumption that subtitles are a 'sign' of orality, of the audible spoken word, it is easy to provide an analysis that sees silent film as a journey towards synchronous film. This analysis means that silent films are seen as somehow 'incomplete' and unfinished. The written word, as a sign of language, is reduced to a point until the spoken word is 'discovered' in film technology and becomes available. This naturalises the spoken word and places it at the top of a hierarchy – it becomes closer to the concept of a 'complete' film. We will see that Derrida critiques this entire form of thinking – Derridean theory will allow for the study of silent films as 'complete' in their own right. Removing subtitles from the bottom of a dichotomy that favours the spoken word is to deconstruct the artifice surrounding the development of synchronous film sound. No longer are we required to see film in a historical and technological trajectory towards the joining of sound and image, but analyse and understand each film in its own right – free from the constraints of its place in history.

Chion mentions one key area where the 'silent' film has a multitude of voices when compared to 'sound' film – that of the imagined voice of the characters, although he frames this in terms of writing rather than voice or sound:

In silent film, written text often had the purpose of translating a voice external to our own and that we of course do not hear. In sound film, heard by its very nature, written text often appears as a mute call that asks us to lend it our own

voice, since it has none. The characters themselves rarely pronounce these diegetic written words they encounter along their narrative trajectory. (2017:60)

It is interesting that the potential for silent film to produce many 'voices' that are associated with a character in imagined sound is not really explored here, but the focus of the chapter from this point forward is on the written word in 'sound' films. However, this is a point worth noting – that the processing of a character's voice by the viewer in 'silent' cinema will have many different imaginings and variations, whereas every aspect of the sound of the spoken character's voice is already heard. These differences in specificity between 'silent' and 'sound' film are rarely considered and there are fundamental ontological differences between the two. 'Silent' cinema can be reduced in significance if we assume that the sound is merely technologically primitive or inaccurate.

Chion coins a term – *athorybos* for objects in film that could potentially produce sound but do not – this sound is then imagined or at least noticed in the mind of the viewer.

I have given the name *athorybos* (Greek privative *a* - + *thorybos*, noise) to any object or movement in the image that could – either in reality or in the imagination – produce sound but which is not accompanied by any sound (for example, curls of smoke that in real life do not make a sound could be imagined as doing so.) It is my contention that all the writing we read in a film image that is not accompanied by an utterance, or is not the source or "launchpad" for an utterance, merits this term. (2017:60)

Chion uses *athorybos* and *athorybol sound* when considering grammatical signs and styles of writing, both diegetic and non-diegetic in cinema, but this term is also

significant when considering the concept of sound-in-image, which includes all silent film dialogue as well as any movement on the screen that could be accompanied by a sound (and is processed as sound by the audience). Although Chion does not use the term as such, it is worth noting that Chion too has indicated the importance of cinema in evoking imagined sound, even when no sound is uttered.

*Words On Screen* is invaluable in enabling the reader to understand and notice all elements of the written word in cinema, and in highlighting the significance of the written word in 'silent cinema'. Where the book is more problematic is in the insistence of lists, which only operate to reduce the number of readings possible from any particular set of words. Nonetheless, the inclusion of 'exceptions to the rule' to allow the viewer to interrogate these grey areas, (such as *included* and *inserted* sound) and consider what is possible within the more elusive areas for analysis.

## FILM SOUND HISTORY

The theorists discussed so far provide an overview of key areas in the history of the study of film sound and ontology of various areas of film and sound; the apparatus used, the way of thinking and writing about sound and the use of different techniques, either by use of words on the screen, or synchronous or non-synchronous sound.

Other literature deals more specifically with the historical period of the transition of sound to cinema and recent developments in theory offer either more detailed information of the period, or an alternative model for analysing the elements of the soundtrack, or the relationship between sound and image.

The following theorists will be used within the thesis to provide information on the era of the transition to sound.

## Jay Beck

Jay Beck, in his essay *The Evolution of Sound* (2011) provides valuable discussion on the understanding of the placement of sound in film history. His essay supports a model of film sound that is 'evolutionary', the concept of which is itself imbued with an idea of 'natural' development. Beck generally supports a history of sound cinema which moves in a forward trajectory from early sound, through the transitional period and eventually becomes part of the classical Hollywood system of conventions, saying that early sound cinema had an 'awkward style' but eventually moved towards an "...aesthetic that was in line with the demands of the narrative." (2011:69)

Beck does, however, provide evidence of the existence of film sound from the beginnings of cinema, but sees these tests and early experiments as fragmented and entirely separate from the aesthetic qualities of early image cinema, noting specifically that editing strategies of cinema are disrupted by the convergence with sound in the 1920s.

Despite these claims of disruption and the idea of a model of evolutionary sound, Beck also highlights the problem of the existing literature when thinking about early sound, saying that

General histories...tend to perpetuate an ocular-centricity (emphasizing vision over the other senses) that dates back to the very earliest experiments in "moving pictures" – a term which itself serves to confuse historians. (2011:64)

in other words, the 'historical fallacy' where existing literature prioritises the image over sound.



Beck's work is useful pertinent to this thesis, particularly the insights he provides into the early existence of cinematic sound. However, his understanding of this sound is framed in terms of evolution in cinema and in this sense demonstrates the need for analysis that offers another way of revisiting the period of sound transition. Rather than treat earlier sound as fragmented and 'awkward' an analysis of earlier sound tests will be undertaken that removes the constraints of an evolution.

James Buhler and David Neumeyer

Buhler and Neumeyer, in their essay – *Music and the Ontology of the Sound Film: The Classical Hollywood System* (2015), focus, as the title suggests, on music in the sound film. The tendency to treat music as somehow separate from other sound in cinema is fairly common in sound theory. Film music is a branch of theory that can cross several disciplines and the literature on this area will tend either approach the music in terms of ontology in relation to cinema, or offer score analysis that requires a level of theoretical music knowledge and understanding that place the literature much more in the category of music theory. In this essay, Buhler and Neumeyer offer an ontological approach to film music that is focused on cinema and the impact of this sound on cinema.

The authors are somewhat dismissive of pre-synchronous film sound, seeing it as essentially different, ontologically, and belonging “...to the world of the audience.” (2015:20) For Buhler and Neumeyer, ‘silent’ film sound belongs to the historical world of performance and cannot be discussed in the same way that existing recordings of synchronised music are. Earlier tests in synchronised sound are dismissed as not offering a valid path towards synchronicity and instead the authors point to content that emphasises the ontology of performance. Archival material that evidences silent film sound practice also holds little relevance for Buhler and Neumeyer’s analysis, because the sound that it discusses belongs to that performance-based world.

This approach separates sound into two distinct periods; 'silent' and 'synchronised' and therefore supports the Rick Altman's 'historical fallacy'. For Buhler and Neumeyer, sound, or even music, is not ontologically significant to film until such time that it is synchronous to the image track. This offers crucial insight into the way that early film sound tests, silent film sound and even transitional films can be dismissed as historically and technologically less significant to the understanding of film music or sound.

Moreover, analysis that separates the two period evokes the existence of a boundary between silent cinema and sound cinema, through which it is difficult for analysis or meaning to permeate. This is problematic in terms of the analysis of texts that do not 'fit' comfortably in either the 'sound' or 'silent' categories. It is precisely this creation of theoretical boundaries that this thesis wishes to address through the use of a Derridean approach.

Thinking of the transitional films' synchronised music as ontologically in the *silent era* is problematic in terms of analysis. By their nature, films like *The Jazz Singer* and *Sunrise* transcend the theoretical boundaries, being both silent and sound in their ontology. To 'settle' this anomaly, Buhler and Neumeyer 'resolve' the films by treating them as essentially silent. *The Jazz Singer* is not seen as significant in the sense that it offers "...less direct challenge to the aesthetic of silent film..." (2015:24) because the moments of synchronicity in the film are far fewer than the film passages that adhere to a 'silent convention'. This categorisation, however, overlooks the potential analysis that could have been carried out on the synchronised score of the film, which does

not adhere to the performance conventions that Buhler and Neumeyer suggest are evident in silent film. The authors do concede that the film could be seen as a 'turning point' (2015:25) but in terms of the sound, or music, they do not see it as aesthetically significant.

In an earlier book, *Hearing the Movies* (2010) written by Buhler and Neumeyer, along with Rob Deemer, the moments of dialogue in *The Jazz Singer* are discussed, one moment in particular being described as an "...odd monologue..." (2010:292). This moment, identified by much of the literature surrounding *The Jazz Singer*, is of great significance to the ontology of the film and this thesis will examine the dialogue in detail. It is evident from other literature that the dialogue was a clear part of the Warner brothers' strategy for sound in the film, and the dismissal of it is unusual. By treating transitional films as either belonging to silent or sound ontology, the space and means by which to discuss these moments is reduced. It is this model of categorisation that the thesis wishes to challenge.

The authors also define a moment in *The Jazz Singer*, (immediately following the dialogue scene) where there is no music, speech or sound effects, (either synchronised or non-synchronised) as 'silent'. This is arguable in the sense that, in terms of the usual elements of the soundtrack that are considered; speech, music, effects etc. there is no sound, but there is quite clearly audible sound in the film, emanating from the film apparatus of production. Buhler and Neumeyer do not discuss this sound, and do not have any way of defining it. It does not fall into the categories that they analyse and therefore it is non-existent in their writing. However,

this moment, along with the preceding dialogue, is one of the most significant elements of the film for the understanding of how sound and image operate and relate to each other.

It seems understandable, then, that Buhler and Neumeyer's approach to the apparatus of film production is one that is to see them as somehow objective and related to the pro-filmic 'real' world. For Buhler and Neumeyer, the camera is objective in its recording and the emphasis for the analysis is placed on the live action; this is imbued with ideology and ontology. This also explains their definition of silent film sound as belonging to the world of the audience and not having the same value as the images that are preserved in the film strip. Sound recording, for Buhler, Neumeyer and Deemer, is also based on an event that happens in the 'real' world and sound is necessarily anchored to objects in this world. In their essay Buhler and Neumeyer claim that sound in the film is attributable to an object and "Those objects necessarily reside in some physical space..." (2015:19). By treating film apparatus as ontologically neutral, sound becomes an attribute to the recording from that apparatus; the sound of the apparatus that is evident in the film soundtrack becomes indefinable.

Buhler and Neumeyer provide an insight into the way that film sound can be considered in contemporary literature. By focusing first on music and then on sound more generally, they evoke a boundary between silent and synchronised sound and imbue the action and content of the film strip (and synchronised sound track) as the most ontologically significant elements of the film. The apparatus capture and record image and sound that are directly attributable to real world objects, leaving no space

for the consideration of sound and/or image that does not appear to emanate from this 'real' world. This thesis will demonstrate how it is possible to articulate non-attributable sound and transcend theoretical boundaries between different types of sound, whether they are considered to be different in technological or historical contexts.

## Charles O'Brien

O'Brien's book, *Cinema's Conversion to Sound – Technology and Film Style in France and the US* (2005), examines the era of early sound in Hollywood and considers how this period was influential in shaping sound cinema in France. Although much of the book is concerned with the differences and similarities in practice between the two countries, O'Brien does offer insight into how the Hollywood production process had an impact on film sound.

The most useful moment for this thesis is his description of the homogenisation of sound conversion and subsequent film practice in Hollywood by way of six aspects which cover the technological context of the era, but also the development of new and existing practices. Key in this model of homogenisation is the standardisation of both technology and ideology in the short period of time following the introduction of synchronised sound to mainstream Hollywood cinema. This will prove significant in the discussion and analysis of archival material in Chapter 5 and will help to explain the reduction in various sound techniques and practice that were evident in the film sound tests, which are one of the case studies in Chapter 4.

O'Brien acknowledges the importance that *The Jazz Singer* in particular, had on film practice internationally, noting that it was "...a focus of discussion for national film communities throughout the world." (2005:66) He does not, however, believe that the film is particularly *significant* in terms of film practice, and much like Buhler and Neumeyer sees the synchronised moments as relating to performance practices of

earlier sound. O'Brien is fairly dismissive of any significance of Jolson's performance, noting that he essentially plays himself as an extremely popular vaudeville performer.

O'Brien comments on the critical reception that *The Jazz Singer* received at the time of its release, claiming that these reviews played a large role in the success of a certain type of film sound and subsequent homogenisation. O'Brien notes that there is much literature that defines *The Jazz Singer* as the most important film (in terms of synchronised sound), and that its immediate success was key in the transition to synchronised sound and in the practices and conventions that were developed.

Rather than attributing the success of the film to the content within it, O'Brien notes that it was likely that *The Jazz Singer's* "...legendary impact was a function of media hype..." (2005:66). It will be clear from the archival research in Chapter 5 of this thesis that there is some discrepancy with this assertion, mostly in terms of the timing of the positive reviews for *The Jazz Singer*. Whilst it will be shown that it was clear that the film had a significant impact on the film industry, it is also evident from the research that the reviews immediately following the film's release were not particularly effusive.

O'Brien's book offers a valuable wider context for the integration of synchronised sound into film internationally, and most significantly for the scope of this thesis, offers a model for the homogenisation of film sound that occurred after the release of *The Jazz Singer* in 1927. O'Brien demonstrates the tendency within the literature to place *The Jazz Singer* on the side of silent film sound convention, although he does point to the historical significance of the film. Both of these points make the analysis



of the sound in *The Jazz Singer* difficult, as the film is reduced almost entirely to the performance-based sound of Al Jolson, or the conventions of silent sound. Although O'Brien highlights the significance of *The Jazz Singer* in contemporaneous reviews, this is also problematic as it places the film firmly in a specific place in the historical and technological trajectory of film sound.

## Donald Crafton

Donald Crafton's book, *The Talkies: American Cinema's Transition to Sound (1926-1931)* (1997), provides an almost encyclopaedic wealth of information about the period of sound transition. Within the book he also addresses some of the 'myths' that have been perpetuated in the existing literature covering this period, claiming that a 'legend' is perpetuated where:

The transition was also inevitable: sound was something that cinema lacked, and sooner or later it would have to be added. Unfortunately in the process, the Art of the Silent Film was destroyed. So goes the legend (1997:1)

This is important as Crafton identifies the theoretical work that treats sound as somehow connected to the image intrinsically, as if a simulation of the real world. He also notes that because of this perceived 'naturalness' of the joining of sound and image that there is a danger of analysis of this period treating the transition as 'organic': "The inevitability of sound as an organic metaphor pervades much popular writing." (1997:3) This is evidence of the perpetuation of Altman's 'ontological fallacy' and demonstrates how film sound can be perceived as somehow 'lacking' in corporeality if not attached to the image. Crafton's use of the term 'legend' is crucial, as it implies that thinking and writing around this transitional period is frequently centred around the importance of the image and the development of editing style in the late silent era.

Crafton also discusses the tendency in literature to discuss cinematic sound as either 'on' after the introduction of synchronised sound, or 'off' when discussing silent cinema. This is clearly demonstrated by the work of Buhler, Neumeyer and Deemer,

who consider film sound prior to the transitional period as belonging, ontologically, to a different medium. Crafton describes this on/off sound as a binary opposition; “Few demarcations are so sharply drawn, so elegantly opposed, so pristinely binary.” (1997:1) and this will be extremely useful in understanding the importance of Derridean thinking, which will allow entrenched oppositions to be exposed and interrogated. Crafton’s historical knowledge of the period also helps to explain how and why such oppositions may have occurred, and this will be explored more fully in Chapter 5.

Crafton’s historical information provides valuable context for the two key case study films; *The Jazz Singer* and *Sunrise*, and more specifically, the conditions immediately preceding their release. Crafton helps to unpack the intentions of the Warners, and the importance of *Don Juan* (1926) in the development of *The Jazz Singer* as a film conceived as one with synchronised dialogue. In attempting to refute the ‘legend’ permeating the literature of film history, Crafton uses this knowledge to evidence that there was no one ‘key’ moment in the transition of sound; not one event that separates ‘silent’ from ‘talkies’.

Crafton’s discussion of the ontology of synchronised sound recording also points to the impression of ‘presence’ and the *present* of the performer, and this will be particularly illuminating when considering how this impression also operates when the performer is not filmed with synchronised sound, demonstrating that the *presence* and *presentness* of the performer can be conversely read in those silent images.

Crafton's work is invaluable in its historical detail and rigour and his ideas provide useful points of reference when working with a new model using a Derridean approach. His archival work will also be discussed in more detail in Chapter 5.

## Helen Hanson

Helen Hanson's book, *Hollywood Soundscapes* (2017) discusses the period of sound transition and sees this as fairly short chronologically, compared to some other theorists who extend their definition and discussion of sound transition into the early 1930s. Hanson is interested in the ideology of sound and film technicians of the era and focuses her writing on this, rather than the limitations or possibilities of the apparatus.

A key idea in Hanson's work is the acknowledgement that the transitional period is an era that is constructed retrospectively by subsequent literature, and the impact of this construction reaches further than simply that period of time:

In the existing critical literature of film sound histories, the transitional period is constructed precisely *as* a period of change, and consequently, the period "beyond", in which changes are less pronounced, has been constructed as one of comparative stability. (2017:3)

This is a key concept because it identifies how the construction of the transitional era is often used to perpetuate the concepts of historical and ontological fallacy. This identification can be used to demonstrate not only the processes and evidence of construction, but also to comment on the perceived status and state of the following period of 'stability'. The concept of construction will be essential when applying Derridean concepts to film and film sound.

## ONTOLOGY

Literature that attempts to describe and articulate elements of film that do not readily fall into frequently identified categories of sound are key to this thesis. The following theorists discuss problems arising from too frequent and intricate categorisation of film sound and film more broadly, highlighting the difficulty of discussing sound and film elements that do not fall neatly into these categories. This sound – the imagined, or non-attributable, is evident in all case studies and serves as a vehicle for analysis that attempts to bridge the rift between silent and sound film, and sound and image.

■

## Andy Birtwistle

Andy Birtwistle, in *Cinesonica* (2010) highlights an imbalance in film studies literature that favours the visual elements of film, but also points to a tendency within film sound literature to discuss the soundtrack in relation to specific, denoted, elements, such as speech, effects, music and occasionally silence. For Birtwistle it is important to articulate the relationship *between* these various elements and also between these and the images in film. This approach to analysis will allow for a much richer and wider spectrum of meanings to be available to the viewer and also helps to reject the construction of categories of sound elements that resist interrelation. Birtwistle is concerned with sound/image relations, rather than the operation of discrete sound elements in film. This approach is one that is important in the case studies in Chapter 4, where an analytical method that considers how various sound techniques relate to the image is essential for proliferating meaning and articulating new readings of the films.

Birtwistle is critical of sound theory that treats sound as a *signifier* of the image; sound that is valid only when it is attributable to an image. Birtwistle notes that if sound is considered ontologically as an attribute to the signified, (image), it loses critical value in analysis. Birtwistle also points out the incongruity of treating sound as an attribute, but image as somehow 'whole' when "...in cinema, sounds are appended not to objects, but to images." (2010:32) In other words, sound is not connected to a 'real world' object in film, but to an image or projection of a 'real world' object, and is therefore no more an attribute of image, than image is an attribute of object. This is

clearly an approach that is in opposition to Belton and provides a method for treating sound as legitimate and valid for analysis, whether or not it has a 'visible' or identifiable cause. This analysis does not only provide more credence to sound elements, but it allows the reading of sounds that are not otherwise identifiable within the soundtrack.

Birtwistle describes sounds that create 'affect' on the viewer/auditor, but are non-attributable, as 'cinesonic'; saying that they are not able to be connected to another image or sound source in the film but are nonetheless present and audible in the context of the film and create affect. This is a valuable description and it provides a word with which to describe sound in film that has this quality. This is particularly useful in the scope of this thesis when 'cinesonic' sound is so vital to the understanding of sound/image relations in the case studies. When this is used alongside a Derridean approach, the proliferation of meanings becomes possible.



K. J. Donnelly

K. J. Donnelly considers the impact on film of literature and analysis that insists on connecting and relating the 'real world' to the screen and sound. In *Occult Aesthetics*, (2014), Donnelly critiques analysis that is too concerned with notions of objectivity and the 'real'. For Donnelly there is potential within the text of the film, without referring to connections of the 'real'. Donnelly also notes that traditional film and sound theory can be reductive and that "Critical theory...in its best form...grapples with unknowables." (2014:viii). It is precisely the articulation of these 'unknowable' qualities of sound and image, and the relationship between these, that this thesis wishes to address.

Donnelly also critiques theory that attempts to categorise elements of the film and image tracks, identifying a key danger with this approach; this theory:

...has tended to atomize analysis – reducing activities and objects to minute subcomponents, while avoiding the 'bigger picture'. Such reduction has been happier dealing with narrative development than with more general aspects of the film experience. (Donnelly, 2004:x)

It is not that Donnelly wishes to frame all of his assertions in terms of the 'bigger picture', but by not keeping the text of the *film* in mind, as opposed to the smaller subcomponents, it is impossible to discuss sound and image in relation to themselves and each other.

Donnelly agrees with Birtwistle that sound should not be seen as attributable and is interested in the articulation of sound that has previously resisted definition or description. He is interested in the “...space between the sound and the image...” (2014:1), a concept that will be extremely important in the analysis of the films, sound tests and archival material in this thesis.

For Donnelly, this ‘space’ *between* sound and image is where the ‘hidden’ and ‘mysterious’ sound operates; the sound that is non-attributable and causes affect, rather than denotation. Donnelly asserts that this sound has the quality of the ‘occult’; it is sound much like Birtwistle’s ‘cinesonic’; it defies traditional definition but is key in the understanding of connections between various elements of the film text. Categorisation that theorists such as Chion and Lastra apply to sound are useful but are problematic when those categories become defined by their limitations.

Donnelly and Birtwistle help to define the ‘indefinable’ sound in film and are consistent in their approach to the film text, rather than sound *or* image. Donnelly uses this approach to investigate predominantly moments in the text that are either synchronised or non-synchronised, and this is where *Occult Aesthetics* is somewhat limited. The book discusses film sound in terms of synchronicity but does not give much space to the consideration of other elements within the track. This is not the scope of Donnelly’s work here, and therefore the book is a useful platform for further exploration into ‘occult’ sound.

As his emphasis is on synchronised/non-synchronised sound, Donnelly has limited discussion of either of the case study films, framing the spoken dialogue in *The Jazz Singer* in terms of the music in the film, rather than the interaction between the different sounds. For Donnelly, earlier film sound tests are “...a historical dead end.” (2014:16) and this is disappointing because there are many possibilities here for the examination of ‘occult’ sound.

Donnelly and Birtwistle provide alternative ontological models for sound that resonate with the application of Derridean philosophy. Their work is key literature in the articulation of sound that defies categorisation and provides justification for the appropriation of deconstructionist philosophy.

## Claudia Gorbman

Gorbman's book *Unheard Melodies* (1987) will be discussed later in the chapter in relation to film music more specifically, but it is worth mentioning here her thoughts in the understanding of oppositions at work in film music.

Gorbman sets out in detail a list of qualities that she believes film music in the classical era to have and alongside this list she suggests two lists of opposing narrative qualities; one that the image itself can serve, and one that is best served by film music. The first of these oppositional lists is as follows:

Logic	The Irrational
Everyday Reality	Dream
Control	Loss of Control

And the second list:

Man	Woman
Objectivity	Subjectivity
Work	Leisure
Reason	Emotion
Realism	Romantic Fantasy

(1987:80-81)

In each case, music is, according to Gorbman, providing the qualities in the right-hand column whereas the absence of music (the use of image), belongs to the qualities in the left.

In the subsequent chapter, the problematic nature of binary opposition will be discussed in more detail in relation to Derrida's theories of logocentric thinking.

However, it is worth mentioning here the impact on the understanding of film music that Gorbman's oppositions create.<sup>5</sup> Music, in this format, is relegated to a 'side' of film that is ambiguous and imprecise. It is a quality that formulates *feeling* rather than meaning; it connotes rather than denotes. Gorbman's tendency to describe film music in this way is not helpful when approaching film as audiovisual artefact, as it sets image up in opposition to music (and sound), which means that the film is working against itself. The images become carriers of meaning – the signified, and the music becomes the signifier. When attempting to analyse a film for meaning, and understanding its nature as inherently representational and connotative, to set these oppositions up gives the image the position of dominance. Far better, here, to treat film, and the elements in film, in relation to each other, rather than in relation to a 'truth' a concept that can be taken and 'decoded' from the image. Sound and image are *film* and are either all signified or all signifiers, or even better, removed from this codified system and instead examined in terms of interplay.

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<sup>5</sup> It is impossible to continue without tackling the concerning alignment with 'woman' in the right-hand column, as non-logical, emotional and without reason. This is not *Gorbman's* belief of the qualities of women, rather the belief of how women are represented in classical film. Although this area is not part of the direct issues at hand, it is problematic if left unchallenged. The theory that applies to film analysis in this thesis has been successfully applied to gender studies by other theorists, in particular, how the binary structure operates to maintain constructions which perpetuate the dominance of the of the male gender.

## FILM MUSIC

It is the intention of this thesis to focus on the way that elements and sound in the image track interrelate, and to avoid categorisation of sound and image components that prove reductive to this analysis. However, there is literature that deals more specifically with film *music* in the period of transition, and this literature can help to inform analysis and offer insight into the key areas of thinking in film music specifically.

Katherine Spring

Katherine Spring's focus in her book, *Saying it With Songs* (2013) is the historical context of both the film and music industry at the time of the transition to sound in film. Spring provides immense detail on this area and this information is useful for providing suggestions for the specific form and content that early film sound took.

Spring describes, with support from archival material, the context of the music industry in New York City prior to the transition of sound in the area of the city dubbed 'tin pan alley'. Spring describes the change in sales from sheet music to recorded sales and the subsequent ability for cross-promotion between the music and fledgling film sound industry. This is useful, not only for background information, but to understand why the Warner brothers may have chosen to use Al Jolson and chosen specific songs. This will be explored in more detail later in the thesis.

Spring describes the physical movement of the New York music studios to Los Angeles, and contracts that tied together the promotion of specific stars, musical numbers and music studios. Spring reveals an interesting first-hand account of a performance by Jolson, which, for her, mirrors the key dialogue scene in *The Jazz Singer* and leads to the implicit assertion that Jolson is, to some extent, performing as himself rather than the character. The case study analysis of *The Jazz Singer* will challenge this assertion, but nonetheless the account that Spring relates, and the historical context of the industry are extremely useful.

Spring is interested in the way that songs; which she defines as diegetic performances with singing, are integrated into films that are not musicals. Particularly of interest is the term that she calls 'narrative plausibility' – or how the narrative can integrate the song into the film without causing disruption to the flow of the story. Spring notes that the effectiveness of the plausibility tends to increase as the transition continues, whereas earlier film synchronised song often operates as 'star-song attraction' – which is where she places the emphasis on Jolson.

This categorisation of songs in early sound film is limited by the omission of analysis of other sounds, and the scope of genre that excludes the musical film. However, Spring's historical context and thoughts on how these songs operate is interesting and relevant to the research.



## Claudia Gorbman

Claudia Gorbman's text, *Unheard Melodies* (1987) is a key resource in the understanding of film sound and music specifically in classical film. The book contains several chapters of specific film music analysis and also offers information on modes of thinking for the application of music in classical film. Gorbman also discusses the transition to sound film in Hollywood and considers the ontology of film music specifically where it operates as non-diegetic sound. Gorbman's questioning of this ontology is important in reminding the reader that non-diegetic sound is not a 'natural' outcome of film music, and its placement is very much connected to the use of sound in silent film.

Let us imagine for a moment that the commercial narrative cinema had developed a bit differently: let us imagine movies having no background music. Raised in this hypothetical tradition, we are thoroughly accustomed to a cinematic world in which sounds (seem to) issue solely from the depicted narrative space. This cinematic world resembles the "real" world, more or less, in its conventions of depicting sonic space. (1987:1)

Here Gorbman asks the reader to imagine a cinema which does not have non-diegetic music conventions – having 'made strange' the function of non-diegetic music, she points to the perception that other sound in the film becomes, more or less, 'real' – that is to say attributable a sound-source in the 'real' (pro-filmic) world. This is useful when thinking about the qualities of different elements in the sound track, but the comparisons of non-diegetic music as 'other' compared to the 'realness' of the diegetic sound is somewhat limiting when approaching an analysis of interrelations.

The title of Gorbman's book hints at her framing of non-diegetic music in film as 'unheard' – she asserts that we do not hear music when it is "working" (1987:1) but only when it is unsuccessful. This is useful in that it offers a method for the viewer/auditor to approach the film soundtrack by specifically listen for what is 'unheard'. For Gorbman, cinematic music follows not only the codes and conventions of music harmony, but also the cultural and cinematic musical codes. She claims:

...music differs from lighting and other elements of film in several important ways. First, we hear it, we don't see it. Hearing is less direct than visual perception; to see something is to instantaneously identify the light rays with the object that reflects them; in hearing, we do not as automatically identify a sound with its source. (1987:11)

This approach demonstrates how an ontological discrepancy between the perception of sound and image can be constructed and maintained. Donnelly uses Gestalt psychology to provide a model of perception that considers the relationship between different elements in the film in relation to each other. Gorbman, conversely, focuses on the *differences* between the specificities of sound and image – this approach does not allow the articulation of the 'occult' or 'cinesonic' sound of Donnelly and Birtwistle; sound that will prove significant in the analysis of the case study films.

However, Gorbman does use a term; 'structural silence' for the description of music that when "...previously present in a film is later absent at structurally corresponding points. The film thus encourages us to expect the (musical) sound as before, so that when in fact there is no music, we are aware of its absence." (1987:19) This term is useful for understanding some of the sound in the film *Sunrise*, where the presence

(or ab(pre)scence) of the leitmotif is key in evoking meaning. It is telling that Gorbman refers to this as 'silent' as it evidences her belief that when there is no music, speech or effects, there is no sound – or at the very least, no *words* for the sound.

Gorbman considers the existence of music in dramatic performance prior to the invention of the moving image and notes that it had a place in many forms of artistic expression, leading back certainly to the theatre of the ancient Greeks, continuing through every era and stage production until the birth of cinema. Gorbman says of extravagant 19<sup>th</sup> century stage productions:

...reviews of these elaborate productions read like descriptions of silent film spectacles. An organ of orchestra was nearly always present for big-city productions, to set moods and underscore actions. (1987:34)

She points to production of *Romeo and Juliet* (1892) that was designed with a score composed by Sir Julius Benedict: "...the words had lost their necessity. Everything had been done visually with pictorial settings..." (1987:34) and this does seem to support the claim of music in early cinema via the influence of theatre. It is interesting that music and the melodrama appear to develop alongside each other, however, this trajectory is not as straightforward as it may appear, because theatre always had the opportunity and option to have the human voice and dialogue in the scenes.

She points to the arrival of the voice in cinema as having with it a "...surplus of reality..." (1987:41) and this had implications for other sounds in the film, such as live effects, which became subordinate to the dialogue. However, a film such as *Sunrise*

has a synchronised score, but no audible synchronised dialogue. Gorbman gives some indication to how she views the use of the synchronised score in early sound film when discussing *Don Juan* and *The Jazz Singer*, saying that:

*Don Juan* did not appreciably innovate any changes in the disposition of representation...*The Jazz Singer*...is famous in the discourse of film history...It inaugurated a dramatically new relationship between spectator and film. While its soundtrack consists mostly of the *Don Juan* type of recorded continuous silent-film musical accompaniment...(1987:46)

In other words, for Gorbman, the synchronised score offers little more than the earlier film sound, which seems unusual, because these films contain valuable evidence of prior silent film sound practice, with the addition of the specificity of synchronicity; any analysis could include confident assertions on the relationships between sound and image.

It appears that Gorbman imbues early film sound with an expectation of a trajectory of technology that has not yet been implemented and her writing often speaks of *absence* in the score of early films that do not have the models of music and sound of the classical Hollywood period. An expectation is placed on sound in early film of practice and conventions that have not yet been devised or invented.

Gorbman creates a model for the understanding of classical film sound -a model that had yet to apply to early film sound, but still interesting in the ways in which film music is classified. In *Unheard Melodies* Gorbman suggests a list of principles for

composition, mixing and editing of film sound.<sup>6</sup> This list of principles, although not applicable to early film music, (which was unable to become many of these principles by reason of technology – for example, it is impossible to become invisible or inaudible if there is no means by which to insert other soundtracks) demonstrate the way that Gorbman is framing film music; that is music that is entirely subservient to the narrative.

This model of classical film music still permeates our understanding of the function of film music today, and it is interesting to see that a *modus operandi* for music is framed in terms of its subservience. In Gorbman's model the sound fills in gaps, cues more important narrative elements, tells the audience what emotion to feel, and does all of this without being explicitly heard or seen.

It is important to resist the urge to place on earlier film sound and film music, the restrictions of this model which is based on later film practice, nonetheless, the model

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- I. <sup>6</sup> *Invisibility*: the technical apparatus of nondiegetic music must not be visible.
  - II. *Inaudibility*: Music is not meant to be heard consciously. As such it should subordinate itself to dialogue, to visuals – i.e., to the primary vehicles of the narrative.
  - III. *Signifier of emotion*: Soundtrack music may set specific moods and emphasize particular emotions suggested in the narrative...but first and foremost, it is a signifier of emotion itself.
  - IV. *Narrative cueing*:
    - *referential/narrative*: music gives referential and narrative cues, e.g., indicating a point of view, supplying formal demarcations, and establishing setting and characters.
    - *connotative*: music "interprets" and "illustrates" narrative events.
  - V. *Continuity*: music provides formal and rhythmic continuity – between shots, in transitions between scenes, by filling "gaps."
  - VI. *Unity*: via repetition and variation of musical material and instrumentation, music aids in the construction of formal and narrative unity.
  - VII. A given film score may violate any of the principles above, providing the violation is at the service of the other principles. (1987:73)

can prove useful as a reference for how sound developed and what conventions and practices were abandoned in the earlier sound period.

Gorbman's work is extensive and she has developed models for the articulation of film music and the analysis of that music that are used widely. It is important to acknowledge this work but identify its limitations when discussing the film as a text, comprised of interrelated and connected moments.

## Royal S. Brown

Royal S. Brown writes extensively about music in his book *Overtones and Undertones* (1994). He acknowledges that his work on film music is to an extent cross-disciplinary, in that it may well be placed in the music section of libraries, but he is keen to reiterate:

It is not, however, intended primarily as a book on music, and it does not presuppose any major, technical knowledge of music on the part of the reader. Nonetheless, just as various technical elements such as editing and photographic composition play a significant role in how we “read” a cinematic text, certain tools of the composer’s trade cannot be ignored when considering film/music interactions. (1994: Introduction, loc 63 of 6048, 1%)

Brown’s work is useful in providing the means to approach music in film from a film studies perspective, whilst also acknowledging the importance of musical techniques and terminology. Brown’s book is able to provide detailed explanations of some musical terms, in particular, Western tonality (the diatonic scale system), which will be of great use when analysing the music in *Sunrise*. Brown limits his explanation of the scale to the diatonic (seven-note) scale; *Sunrise* departs from this framework, but it is interesting to see how this departure has an impact on the viewer.

Brown is concerned almost entirely with synchronised music but does discuss the use of music in early, non-synchronised film and these moments are interesting as he describes an approach for the choice of music:

In silent film, pre-existing musical cues were taken from just about any source – popular, semiclassical, classical, or whatever – that, for one reason or another, struck the compiler as useful for a particular mood, scene or sequence. Nonetheless, a large proportion of the music came from classical sources...and semiclassics...” (1994: Chap 3, loc 811 of 6048, 13%)

This is evident in both *Sunrise* (to a lesser extent) and *The Jazz Singer* as it is clear that in the non-diegetic soundtrack there are sources of classical<sup>7</sup> music which would be immediately recognised by the audience. Similarly, in *Sunrise*, the score provides instances of folk music and dances that would be recognised as belonging to a certain area of group of people.

Brown notes that the use of music in film, and the technology that had been used to promote that music (the same technology that led to the music-film industrial cross-over that Spring discusses) “...all but killed off the art, except in the filmed musical.” (1994: Chap 3, loc 915 of 6048, 15%) and that the period of time where diegetic and non-diegetic music in film were both common (such as *The Jazz Singer*) was very short and transitory and the resulting sound was “...a kind of realist aesthetic...” which reduced sound to non-diegetic music. 1994: Chap 3, loc 888 of 6048, 15%)

For Brown, more generally, the placement of sound in film happens from the period of synchronisation, and he is most interested in how sound operates in this period.

Brown sees music as being a key element in film that supports the dominance of the narrative and operates to ‘lead’ viewers in a certain direction and to a certain story:

In one of history’s great paradoxes, the cinema managed to become principally an art form-entertainment medium...and music was one of the principal means via which it pulled off this major piece of sorcery. By reinforcing significant moments in a cinematic succession of images, whether held together by an apparent narrative or not, music has, via its tendency to narrativize, helped

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<sup>7</sup> Brown suggests that for the purpose of discussing film music, ‘classical’ can be used to describe a wider selection of music than simply the strictly ‘classical’ period, which sits in between the baroque and the romantic era. For the purpose of this thesis, Tchaikovsky will be referred to as ‘classical’ music.



lead “readers” of the cinema’s iconic language(s) away from history and towards story. (1994: Chap 1, loc 299 of 6048, 5%)

This is interesting because it shows again a tendency with music theorists to treat music as something that is beyond the ‘reality’ or physical world of the screen. It gains an almost supernatural quality – it becomes the magic by which cinema is specified and it has the ability to add temporality to the image – what Chion calls the ‘Vectorization of Real Time’ (1994:18) However, this is the case if the image is treated as somehow *different* to the sound – it is problematic to have the belief that music embodies the ‘occult’ and cinema the science and physical nature of photography and the pro-filmic.

Film is sound *and* image, science *and* art, there is as much science in sound as there is in projection and capturing of light. Only when this binarism is challenged is it possible to accept that there are solid, corporeal moments in the soundtrack, and ephemeral, non-temporal moments in the image; furthermore, it is in the interplay of the two that even more analysis can be gleaned. This way of thinking about sound mirrors Gorbman’s list of the two sets of ‘qualities’ that sound and image imbue, and it is just as problematic for approaching the film text as an audio-visual artefact.

Brown uses the term ‘consummation’ frequently in *Overtones and Undertones* to refer to music’s ability (or lack of ability) to resolve a moment in film, or within itself. For self-resolution, Brown says that the use of the diatonic scale is important; its directional path helps to orientate the listener – this will be discussed in more detail in the case study chapter of this thesis. More generally, Brown sees music has having an

inability to 'consummate' a scene or event in film, and places this quality alongside the image:

...most music can also be considered to be unconsummated affect, as such it is ripe as an art form for the consummation provide by the representational nature of the moving picture and/or of the specific, narrative situation. Whereas the cinema's visuals, whether stressed as stills or presented in relational contexts developed by montage, can likewise have the quality of unconsummated symbols when presented outside of a narrative context, their representational qualities provide at least the illusory quality of being consummated in history – in physical space and chronological time – that music does not have." (1994: Chap 1, loc 455 of 6048, 8%)

Here, Brown is in danger of enhancing image's importance and position in the film track, and also of leading the reader to a mode of analysis that places importance on the perceived 'resolution' or understanding of the scene. This form of thinking can simultaneously reduce the importance of sound in film and create a method for understanding film that does not allow for analysis of those elements that do not contribute to a 'resolution' or 'consummation'. This (logocentric) mode of thinking will be critiqued in the methodology dealing with the application of Derridean philosophy.

Brown's work is interesting and useful, certainly in terms of the explanation of music theory which can then be used to support and add value to the analysis of the film score. It is also valuable to consider how his approach to film music can operate to isolate this element in film, and in doing so reduce its ability to offer meaning to the film as a whole.

The theorists that deal more specifically with film sound history, music and ontology will be important throughout the thesis in providing context, understanding and information about the period of the transition to sound and the ways in which sound and music can be understood as operating in the film text.

Archival research and literature will be considered in Chapter 5 of this thesis, as the importance of these texts is twofold – firstly it is important to use the archival material as a source of research; in this way it will be possible to understand how practitioners, theorists and exhibitors understood and thought about music at the time. Secondly, the archival material itself works beyond a simple review of the literature. Rather than provide simply background and information, this material can also generate and proliferate meaning that will operate alongside the film case studies.

## CHAPTER 3 - METHODOLOGY

### AN OUTLINE FOR DERRIDEAN THEORY AND FILM

#### ANALYSIS

##### THE USE OF DERRIDA

Derrida's concept of trace is an important seam that runs through his work in the deconstruction of linguistics and 'the text'. With this concept Derrida seeks to undo the logocentrism of Western metaphysics, a way of thinking that he believes is wrongly concerned with a paradigm of time and notion of 'the other' (*logos*) that can never be accessed – this 'other' can be thought of as a perfect truth, centre or end. This, Derrida believes, means that any analysis of the text, using a logocentric approach, is flawed - the analysis will *de facto* lead to a reduction of ideas and possible outcomes. The result of this will be an attempt to situate the analysis in terms of an unknowable 'whole'.

Derrida seeks instead, through the mercurial notion of trace, to proliferate the possible outcomes of any analysis, and rather than artificially reduce analysis, extend it by highlighting and celebrating the separate parts that constitute the text. It is between and within the combination of separate parts that Derrida believes the richest analysis can take place. Implicit in his work is a critique of binary oppositional thinking, a way of artificially hierarchising aspects of a text and disguising the construction as natural. As Birtwistle notes, in the study of linguistics "...the most

important thing in analysis is the role of the oppositions..." 2010:4) This construct of oppositions, along with logocentrism also contributes to the reduction of analysis.

It is precisely this reduction that can be so harmful to the analysis of sound in cinema. If we are to fall into the trap of 'Sound Film's Fundamental Lie' (Altman, 1985), that the sound we hear is in some way *naturally* attached to the image that we see at the same moment, our analysis will treat sound as an attribute of the image. Jay Beck highlights how this has happened with the study history of sound in cinema when he discusses the 'evolution' of sound in cinematic history, but even this title hints at a conceptual framework for sound that is somehow 'natural'.

General histories of the relationship between sound and image in cinema tend to perpetuate an ocular-centricity (emphasizing vision over the other senses) that dates back to the very earliest experiments in "moving pictures" – a term which itself serves to confuse historians. (2011:64)

Sound, therefore becomes subservient to the image because without the image it has no independent meaning, it is not the 'centre' of the understanding of film. Sound and image have been ordered into a binary opposition, a hierarchical structure - with image situated on the side closest to the *logos*, the perceived centre or truth, which Derrida argues is the unattainable goal towards which all of Western Metaphysics strives. Sound, however, is only understood in terms of the image, without image it becomes untrustworthy, its veracity is in flux. Therefore, when we analyse cinema, we are inclined to only consider sound in terms of its perceived *truthfulness* to the image – even if this truth is interpretative or psychological, rather than historical. The problem with this understanding of sound is that there is no intellectual space

allocated for the understanding of sound that has *no* attributable aspects, the sounds that Birtwistle calls the 'cinesonic', sounds that "...are not isolated sonic phenomena, but are heard in the context of films and videos." (2010:17) This demonstrates the importance of having the tools and analysis available to discuss non-attributable (cinesonic) sound, but to maintain their connection to *film*, which is their context.

We can see another significant binary opposition at work in cinema, specifically in the understanding and analysis of film history and the point of the emergence of synchronised sound. Donald Crafton, in his book *The Talkies* (1997) explains that despite the transition of cinemas and film to a model of synchronicity, there perpetuates a belief that this transition was almost 'instantaneous' with the release of *The Jazz Singer*. This belief leads to a binary opposition between 'sound' and 'silent' cinema in the discussion of early film, "Silent and Sound Cinema. Few demarcations are so sharply drawn, so elegantly opposed, so pristinely binary. In the movies, sound is either off or on." (1997:1) Opposition between sound and image, and synchronised sound and silent sound, are prevalent in film studies; by exploring this idea and interrogating the validity of such oppositions it is possible to increase the potential meaning and analysis surrounding them.

The Derridean concept of trace, *celebrates* the moment of the simultaneous fracture and joining of sound and image, proliferating the possible meanings that both sound and image can possess. Rather than assigning meaning or attributes to one 'side' or the other – in this instance sound or image, trace is the moment of ambiguity

between the two. A binary opposition is a structure that not only reduces ambiguity, but also operates to disguise its own construction as natural. Once we are able to highlight the structure, we can dismantle it.

Trace allows and gives permission to examine the moments in any text that resist simple definition or situation on either side of a metaphorical opposition. In the presence of one idea exists and, at the same time does not exist, the *trace* of all other related ideas that were not used. It is the examination of the *trace* of these (non)ideas that allows an analysis which highlights the construction of a text which is situated *within and from* the text, rather than an analysis based on the interpretation of text as if from a privileged 'exterior'. By engaging in this analysis, we are released from a path that leads us inexorably towards an irreducible, closed, artefact.

At the very moment in film history where synchronised sound was introduced exist a handful of films that use a combination of synchronised and silent film sound techniques. These films are analysed in terms of their historical significance in a perceived trajectory towards synchronised sound in cinema. It is my intention to revisit these films, not from the perspective of a point along a trajectory of cinematic history but by situating my analysis within and from the text. This era is particularly significant because it can be seen as the very moment when cinema attempted to reconcile the irreconcilable – sound and image, as if a 'perfect' representation of the historical world could be achieved.

The Derridean concepts that I intend to appropriate and apply to the analysis of film are not an arbitrary choice but rather one that provides an opportunity to examine those moments in film, and film sound, which are explained as technological interruptions to a perceived trajectory towards an irreducible 'whole'. This is what permeates and perpetuates film analysis and it is this that I not only want to challenge, but to demonstrate that as the outcome is not possible, it should not be entertained.

This method of analysis will liberate the text from the constraints of context, by which I refer to Derrida's appropriation of Heidegger's term '... "vulgar concept of time."' (1997:72) – a concept that situates analysis within a similar 'perceived trajectory'. A concept

...which determines all of classical ontology, was not born out of a philosopher's carelessness or from a theoretical lapse. It is intrinsic to the totality of the history of the Occident, of what unites its metaphysics and its technics. (1997:72)

So, Derrida claims that classical ontology follows a linearist trajectory, and that this is intrinsic – analysis is always heading towards the ideal of a truth, centre or *logos*.

Derrida, in *Of Grammatology* is concerned with the perceived difference between writing and speech, a difference that he identifies as originating in the dialectical approach between Socrates and Plato. Speech has, within Western philosophy, been imbued with those metaphysical concepts of life, truth and unambiguous meaning. As



if, by its physiological generation, speech enjoys an elevated status that places it closer to the *logos*. It is a *sign*. It points directly towards the centre.

Writing, conversely, is seen in Western philosophy as a *signifier* – open to misinterpretation and not attached to a living individual. Its sole purpose is to act as an indication that requires analysis to unlock the sign.

Derrida complicates this structure of the signifier and the sign effectively by removing the difference between speech and writing, naming them both as *signifier* without possibility of ever accessing *sign, other or logos*.

The hinge [*brisure*] marks the impossibility of the sign, the unity of a signifier and a signified, be produced within the plenitude of a present and an absolute presence. That is why there is no full speech, however much one might wish to restore it by means or without benefit of psychoanalysis. (1997:69]

This idea of the ‘hinge’ is perceived by Derrida to be the joining of language and writing, although translator Gayatri Chakravorty Spivak uses the word ‘hinge’, the original French ‘*brisure*’ also translates as a break, gap or fracture. The dual meaning of the word conjures not only the idea of joining, but also of the inevitable break between the two. By identifying the fracture, but also the hinge between writing and speech, Derrida effectively removes the possibility of ever reaching a *sign*, placing both writing and language as signifier. Most interesting here, is the assertion that there ‘...is no full speech...’, and when we apply this concept to cinema it is immediately relevant to the relationship between sound and image.

If we accept the image in cinema as occupying the top position of a hierarchy which subordinates sound (the 'fundamental lie') taking the position of speech in Derrida's analysis, then sound occupies the position of writing, the *signifier*. This is a justifiable comparison and we need only to refer to Belton's paper *Technology and Aesthetics of Film Sound* for an indication of how film sound occupies the position of the signifier.

Sound lacks "objectivity" (thus authenticity) not only because it is invisible but because it is an attribute and is thus incomplete in itself. Sound achieves authenticity only as a consequence of its submission to tests imposed upon it by sight. (1985:64)

Belton sees film sound as an 'attribute' or signifier to the image, the image being indivisible, whereas the soundtrack is composed of discrete parts. A position identified by Jakobson, in his paper for the *American Mathematical Society*, entitled *Linguistics and Communication Theory* (1961) highlighted by Derrida –

Linguistic analysis, however, came to resolve oral speech into a finite series of elementary informational units. These ultimate discrete units, the so-called "distinctive features," are aligned into simultaneous bundles termed "phonemes," which in turn are concatenated into sequences. Thus form in language has a manifestly granular structure and is subject to quantal description. (1961:245)

Language, however, is seen as a 'continuous stream'. It may seem problematic, initially, to apply a concept based on the importance of sound in linguistics, to cinema, and attribute the same perceived importance to image, rather than sound. This is resolved, however, when understanding that the established hierarchy and

imbue ment of the sign and the signifier to image and sound respectively is intrinsic to the historical analysis of film.

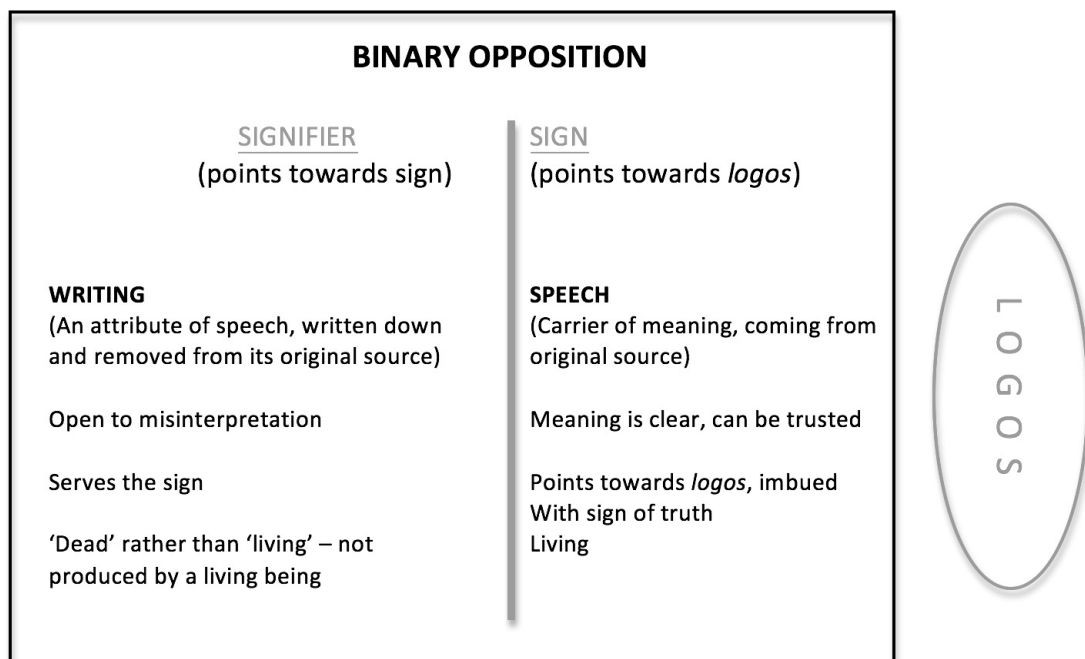
THE HINGE

This understood we can return to the idea of the ‘hinge’. It is clear that sound and image are both a site of fracture and joining within film, just as writing and speech are both a site of fracture and joining of meaning in linguistic analysis. As soon as we can recognise the hinge and understand that both sound and image are signifiers, we can begin to examine the trace, free from linearist analysis which reduces meaning.

This may best be explained graphically – if we first consider the Western metaphysical model of analysis that Derrida is critiquing, it is clear how relevant this is to the analysis of cinema.

WRITING AND SPEECH LINEARIST MODEL

(Critiqued by Derrida)

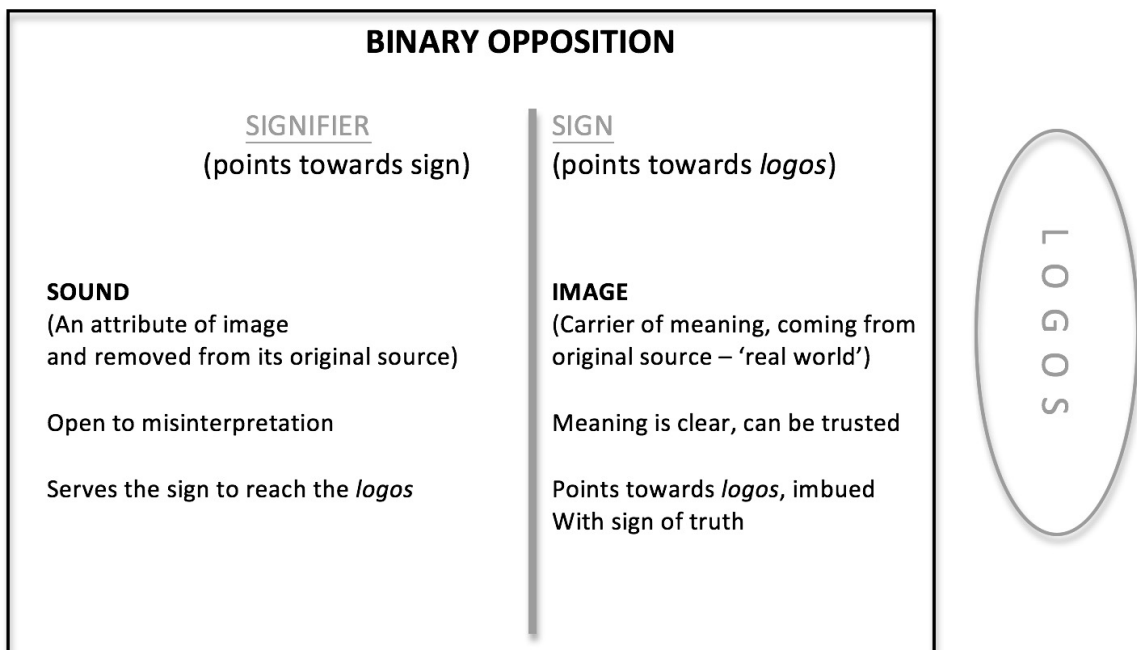


This structure of a binary opposition leads to a linear trajectory in analysis towards 'the other' (*logos*) – the very thing that we cannot ever reach.



It is possible to replicate this model to demonstrate how this structure has been used in film analysis

SOUND AND IMAGE (CINEMA) LINEARIST MODEL

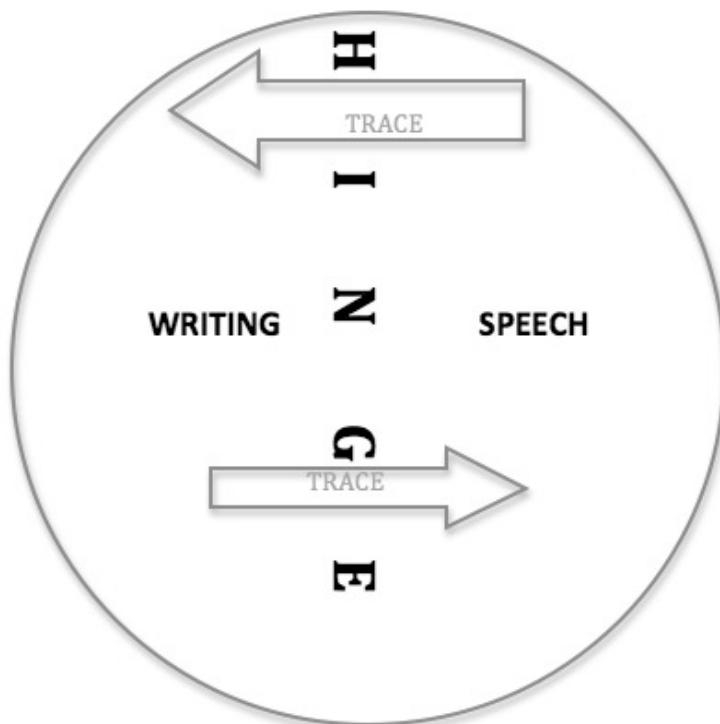


This structure of a binary opposition also leads to a linear trajectory in analysis towards 'the other' (*logos*) (the very thing that we cannot ever reach) in the case of film we could consider this to be the 'real' world, the reattachment of image and sound, re-creating for example, a human being.



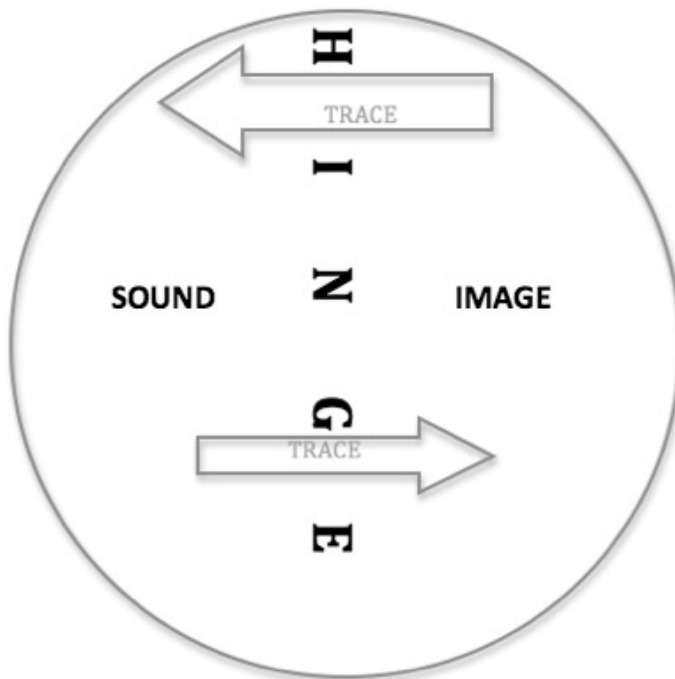
It is important to remember that the notion of *logos* as the centre or 'truth' is a concept that can never be accessed – it comes from an imagined and privileged position that is outside of the text. There is an assumption, in this model of analysis, that the reader already has access and knowledge of this 'truth'; again, an impossibility. The entire model relies on and moves towards a position that is unattainable.

Derrida instead asks the reader to re-imagine the un-breachable barrier in a binary opposition, as a hinge, joining and, at the same time, marking the break between the *signifier* and the *sign*, making both aspects signifiers.



The hinge is also the situation of trace, it joins and signifies a break between writing and speech and allows the two to merge together and both be *signifiers* – not pointing outwards towards a *logos*, but within the text. As Derrida claims – “The hinge [*brisure*] marks the impossibility of the sign...”

This also has immediate relevance to film analysis – without the restriction imposed by the structure of the binary opposition, sound and image are free to each have traces of the other – without the need to look towards the *logos*, a proliferation of analyses is available.



The hinge, therefore, enables the simultaneous presence and absence of *trace*. This is not possible, in the previous linearist model as Derrida explains:

All dualisms, all theories of the immortality of the soul or of the spirit, as well as all monisms... are the unique theme of a metaphysics whose entire history was compelled to strive towards the reduction of the trace.

The subordination of the trace to the full presence summed up in the logos, the humbling of writing beneath a speech dreaming its plentitude, such are the gestures required by an onto-theology... That is why, if this movement begins its era in the form of Platoism, it ends in infinitist metaphysics. (1997:77)

By 'dualisms' Derrida refers to binary structures, those structures that lead towards

*logos* and accompanying theories of the immortal soul. Similarly by 'monisms' he

refers to the metaphysical theory that all things are reducible to one substance.

When analysis suggests the presence of the *logos* there cannot be trace, it is reduced

by the linearist structure. Infinitist metaphysics is a branch of philosophy that follows a

chain of logical reasoning, another example of linearist thinking.

### TRACE

Trace is an extremely difficult concept to define; its very existence is ephemeral, and it

seems as if even Derrida is reluctant to provide a straightforward definition – trace is

always referring to something that is not there and at the same time evoked by the

very thing that it is not.

Trace in the context of writing and speech refers to the way that we understand what

is being said or written down through a series of differences. Every word (whether

spoken or written) has the *trace* of other words and sounds that it is not. We can only

understand the word and meaning by simultaneously evoking and discarding other

words and meanings that are not there.

An example would be the word 'pen'. When we hear or see the word, we understand it by realising that it is *not* 'pin' or 'den' – we hear, and at the same time *do not* hear, the traces of other words that it is not in order to understand the word.

From this word then comes meaning (writing, ink, inscription, object etc.) but the word has already become a *signifier* to other words that it is not. Trace is all the other words that are present/absent:

Peg	Men
<b>Pen</b>	
Den	Pin

Derrida chooses the word '*trace*' precisely because the word defies the idea of an absolute presence. It is the print of something else. Derrida explains:

Why that of *trace*? What led us to the choice of this word? I have begun to answer this question. But this question is such, and such the nature of my answer, that the place of the one and the other must constantly be in movement. If words and concepts receive meaning only in sequences of differences, one can justify one's language, and one's choice of terms, only within a topic [an orientation in space] and an historical strategy. The justification can therefore never be absolute and definitive. It corresponds to a condition of forces and translates an historical calculation. (1997:75)

So, trace is a word that is itself constantly in movement and understood only as its difference to other words. It carries with it the *trace* of 'print' and 'track'. Spivak, in her introduction explains her choice of translation from Derrida's French:

Derrida, then, gives the name "trace" to the part played by the radically other within the structure of difference that is the sign. (I stick to "trace" in my



translation, because it “looks the same” as Derrida’s word; the reader must remind himself of at least the track, even the spoor, contained within the French word.)...Derrida’s trace is the mark of the absence of a presence, an always already absent present, of the lack at the origin that is the condition of thought and experience. (1997: Xvii)

The very word that Derrida uses contains the philosophy that he believes is so important – the absence of an origin. He also notes that trace operates within the specific historical context and discourse of the particular language that one is reading at the time. Therefore, trace will alter with the reader and the historical context – this allows the reader to operate within and from the text, rather than referring to an ‘other’ or attempting to reach an impossible place of objectivity from the text.

#### Trace and Film Analysis

The hinge, in cinema, is the place where the sound and the image are artificially joined – the very nature of cinema must include the hinge, although much of film analysis concerns itself with how the hinge is invisible, with both sound and image operating to forward the idea of the ‘other’. Because the hinge is so readily visible, film is steeped in trace. By highlighting this we are freed from analysing film, especially film before fully synchronised sound, as technologically incomplete. We can start to examine the text as if everything needed to draw meaning was already (non)present in the text. So how does trace operate in cinema? In writing and speech, we can (not)see trace in the differences between words.

In cinema, we can *hear* the trace of sounds that are not directly present in the text. So, in the case of inter titles replacing dialogue, we evoke and at the same time

cannot hear, the actual speech of the characters – we imagine speech as we see the words on the screen and at the same time understand inter titles through the absence of sound. The same is true of *seeing* a sound on the screen – the image of, for example, a kettle boiling will evoke the (non)presence of the sound of a kettle boiling at the same time and performed or synchronised sound or music has within it the trace of other sounds. But it is even more than this – it is impossible to have either synchronised or non-synchronised sound without the *trace* of the pro-filmic sound. Cinema itself is all trace, just as the very word trace *implies* presence and absence.

Spivak, in her introduction to *Of Grammatology* suggests a method for the reader to approach the analysis of *trace*. She claims that the reader must search for the location of the fracture, or of the hinge. Often the very part of the text that defies analysis from a linearist approach as the different constituents cannot be placed on either side of a binary opposition.

The deconstructive reader exposes the grammatological structure of the text, that its “origin” and its “end” are given over to language in general (what Freud would call “the unknown world of thought”), by locating the moment in the text which harbours the unbalancing of the equation, the sleight of hand at the limit of a text which cannot be dismissed simply as a contradiction. 1997: xlix

These moments, she claims, as indeed does Derrida, are ones of great discomfort and are frequently dismissed in other methods of analysis. There are the moments where parts of the text become, in the words of Christopher Norris, in his book *Derrida* (1988) *undecidable*:

...the good is whatever is lined up on the side of reason, spirit or soul, while the bad is either what rejects that alignment or – worse still – renders such distinction simply *undecidable*. (1988:88)

The moment in *The Jazz Singer* where the sound and image pause, and ‘hang’ (with the hiss of technology opening a rupture within the structure of the film) is not a contradiction. It is the very moment where the structure is exposed, we can see the form and the method and understand the attempt at the transcription of thought. We can understand the difficulty in ascribing speech to the narrative climax of the film, and also the difficulty of providing a suitable score. In this moment, the initial ‘nerve stimulus’ is not ‘discovered’ but shown as trace. The trace of speech, the trace of music, the trace of technology. The horror of this moment is etched into The Cantor’s (Warner Oland) face, the awkwardness and the desire to move the narrative forward. To paper over the exposed fissure in the structure of the film and of sound and image.



This is the site where analysis of trace can begin.

## APPLYING DERRIDA TO FILM THEORY: SCREEN/PLAY AND THE CLASSICAL HOLLYWOOD CINEMA

Very little application of Derridean theory has reached the film world. During the 1970's, models of psychoanalysis and Marxist theory were dominant in the new avenues of film analysis. Much of this analysis focused on the exploration of 'self' through protagonists, and alternative readings of 'self' and psychoanalysis generally through feminist standpoints. *Screen/Play, Derrida and Film Theory* (1989, Peter Brunette and David Wills) is a retrospective investigation into the reasons for the lack of Derridan theory in film studies. It is one of the only publications that considers the application of Derridean, and deconstructionist approaches to film studies.

Brunette and Wills do not offer, unfortunately, an example of a Derridean analysis, clearly stating in the preface to the book that

...despite the fact that America has been primarily concerned with the interpretation of texts, we have not been especially interested, at least not in the present volume, in producing a series of deconstructive readings of films...We wish rather to begin the process of "translation" of Derrida's work to Anglo-American film theory by offering a certain reading of his texts...(1989:ix)

However, *Screen/Play* does offer many useful passages, beginning in Chapter One (the Introduction) with clear explanations of some key Derridean theories, such as the negation of logocentric thinking, Western Metaphysics and the associated analysis.

Aspects of Derrida's writing and work are comprehensively explained and Brunette and Wills then consider why this theory has not been previously used for film studies. Screen/Play justifies the use of deconstructionist theory, both in the wider terms of theoretical study and logical thought and also in the more specific area of film studies. Most useful in Chapter Two (Derrida and Contemporary Film Studies) are the critiques of the categorisation of film, including historical, generic and thematic classifications. This provides justification for the analysis of film case studies, where the position of the text in film history, genre and thematic movements, can be removed from the analysis of the text. This is of utmost importance when applying Derridean theory to case studies in this thesis, as it frees the films concerned from the constraints of previous models of analysis, which particularly link both *The Jazz Singer* and *Sunrise* to historical and technological timelines.

Chapter 2 also deals with the key film studies text, *The Classical Hollywood Cinema: Film Style & Mode of Production to 1960* (Bordwell, Staiger and Thompson, 2002). Brunette and Wills look in more detail at the methodology that the authors use to choose the selection of films studied in the book, and this moment provides a good opportunity for consideration of how *The Classical Hollywood Cinema* treats film sound, and how deconstruction of the method used can uncover a construction of film history that can repress the importance and historical timeline of synchronised sound.

Brunette and Wills begin by clarifying their position that generally the Derridean thinking that they are advocating is not the only theory or method of utilising deconstructionism, but that rather than be concerned with whether or not they are

reading Derrida, and his method of deconstructionism ‘correctly’, they should note that Derrida himself was not concerned with a ‘correct’ reading. To follow Derridean thought, if the analysis can be born from the text, it cannot be ‘incorrect’ in any case.

The fact that there is never a final true reading – certainly not by an author of her or his own work – in no way reduces our reliance on, our managing of, and our playing with a complex system of protocols of reading. By reading “loosely,” “against the grain,” “parodically,” or “irresponsibly” – some of which deconstructionists might claim to do, and all of which Derrida might be said to have done within the limits of a carefully developed logic and for certain strategic ends – one is nevertheless reading and calling for the reply of yet another reading. (1989:5)

This is the one of the many passages where Brunette and Wills confront the possible criticism of a deconstructionist reading. The terms they use are to demonstrate the criticism levelled at deconstructionism – “loose,” “irresponsible,” etc., but they point out that however loose or ‘anti’ their reading might be, it is still within the boundaries of a specific logic and this by itself makes the reading legitimate and justifiable.

#### Logocentric Thinking

Brunette and Wills outline the main criticism that Derrida has with the concept of *logocentric thinking* – a way of thinking that is inextricably connected to Western Metaphysics and the history of critical thought and writing in the Western world. *Logos* or ‘truth’ is seen as the centre of all analysis and criticism of text – there is a concept of a ‘truth’ and a ‘complete ending’ that is always just out of reach, but is nonetheless strived for, in logocentrism. This means that within any analysis there is inherently a direction towards a ‘truth’, or a ‘truthful’ reading. Derrida does not agree

with this principle as the proposed centre must, in this model, sit outside of the limits of our own writing and analysis. There is instead a justification, or even stronger, an *imperative*, of removing the notion of the centre of truth and working instead towards a better understanding of the text, from the oppositions and apositions present *within* the text.

A Derridean examination of logocentric thinking uncovers the implicit binary oppositions that exist within. Every centre of 'truth' must have within it the concept of 'lie' in order to define itself (without the opposite of the 'positive' aspect, it would be impossible to define it).

Also called into question is the attendant logocentrism of this metaphysics, which is that system of concepts such as "truth," "good," "nature," and so on, which are regarded, throughout the entire history of Western thought, as being whole, internally coherent, consistent, and originary. Invariably these concepts are seen to have opposites ("falsehood," "evil," "culture") that are always presented in some way harmful, deficient, deformed, or secondary, in short as a falling away from the fullness and self-sufficiency of the primary term. What Derrida has done is to show that...these concepts can only function *because* of their opposites, which then must inevitably be seen as constituting them. (1989:6-7)

So, thinking that includes a method of driving towards a centre, must have an opposite of all things seen as 'close' to that centre. All of these oppositional qualities are also part of the construction of the text.

This is an effective account of the Derridean critique of Western Metaphysics and logocentric thought, although Brunette and Wills do, at times, venture too far into the

definition of 'opposites' in their examples where it could be argued that in doing so, they themselves are in danger of constructing binary oppositions that Derrida critiques. The critique of logocentric thinking should include the proliferation of meaning that is present within the text, as well as the revelation of the oppositional forces that form the construction of a direction towards the logos. This is covered in more detail further into Screen/Play but it is certainly worth highlighting that in this passage, the setting up of the oppositional concepts is not challenged by notions of 'hinge' or 'trace'.

Brunette and Wills cover many aspects of Derridean writing in great detail and this is extremely useful, not only in terms of having another source that can explore the, often labyrinthine, writings of Derrida, but it is constructive to see what the authors have determined is relevant to the application of these ideas to film. The authors explore the critique of the written word, noted by Derrida as beginning with Plato's Phaedrus (370BC) and later in work by Rousseau and Saussure that it is "...a derivative corruption of the natural language that is speech..." (1989:9) The written word then, has been considered in Western thought, as an 'artefact' of speech and therefore containing less of the meaning and intention that are contained within the spoken words. As Derrida concerns himself with literacy criticism, much of his work leads directly from what he sees as a falsely perceived difference between writing and speech. This is with an assumption, claims Derrida, that speaking is the closest expression we have to thinking, and thinking "...has always been implicitly or explicitly tied to the *logos* or spoken word." (1989:9)



## WRITING AND SPEECH

There will always be a challenge when choosing to use Derridean analysis to study, specifically in this thesis, that I am writing about the perceived differences between sound and image, and Derrida writes about the perceived differences between writing and speech. I am acutely aware that 'sound' in film contains both elements of writing and speech, but I am choosing to appropriate the theory to examine the dichotomy of sound and image. Nonetheless, there are moments in Derrida's writing about the spoken and written word where a direct comparison can be made. One such example is provided by Brunette and Wills. They state, in regard to the model of an opposition of spoken and written word:

In this model, a speaking subject has the illusion of forming speech in total simultaneity with thought, thus apparently collapsing the space between the signifier and the signified in a self-contained fullness. Similarly, these thoughts are instantly conveyed to the listener in a manner that once again promotes the illusion of directness, appearing to suppress the gap, however minute, of representation. (1989:9-10)

What Brunette and Wills are claiming about this model (where speech is considered as closest to thought) is that there is an assumption that thought and speech take place simultaneously, that speech is an outward expression of direct thought (and therefore truth); this includes the interpretation and processing of the listener, who must instantaneously understand and realise the thought of the speaker. This is, of course, impossible with the constraints of both language and aural processing, but it is

particularly interesting when it is compared to the thinking surrounding subtitles in film.

In *Words On Screen* Chion claims that subtitles in silent films have within them “Signs of orality...” (2013:50) in other words, they contain within them, the signs of the spoken language. His comprehensive explanation of the use of inserts for subtitles in silent film, allows us to see that there is a definite gap between what we read and what we see (what words are formed in the mouths of the actors), whereas implicitly there would be no gap in synchronised film between what we hear and what we see. The spoken word in this example is again seen as the intended outcome of the subtitles – however imperfect the attempt is; *signs of orality* imbues the subtitles with the *intention* of being spoken words. This can be compared directly to the point that is made by Brunette and Wills – there is an assumption that speech and, in this case, *image* can happen simultaneously, but that simultaneity is a fallacy in two ways – firstly, that the sound of speech in film is actually coming from the mouths of the actors, untreated and unhindered, to the ears and minds of the audience, and secondly, that the audience are able to process instantaneously the *meaning* of the words spoken. Of course, neither of these scenarios is possible.

Although in this case in *Screen/Play* the theory presented is not directly linked to film studies, this is an example where the importance of outlining the flaws in a model that exalts the spoken word can be related directly to a relevant area of this thesis’ content – the use of subtitles. This is where the usefulness of *Screen/Play* is incontrovertible; the reworking of Derridean theory here enables the association between the

proposed simultaneity of word and thought with the proposed simultaneity of sound and image.

It is easy to see where criticism of Derridean theory and deconstructionist approaches would occur. By critiquing the current model of logocentric thought, there is implied an ability to 'step outside' of this mode of thinking and reposition oneself. This is, of course, impossible, but the usefulness of re-examining modes of thinking from within the logocentric framework will allow a widening and 'loosening' of the framework.

Brunette and Wills note that Derrida addresses this concern in regard to this critique – he claims that there is no possible way to step outside logocentrism. Brunette and Wills explain that:

What that leaves for the deconstructionist is a range of strategies designed to work on the edges of logocentrism, for in an important sense it makes meaning possible while reducing its range of operations. (1989:11)

This excerpt deals with two potential problems levelled at deconstructionism – that it cannot operate from outside of logocentrism, and that it will lead to a nihilistic standpoint of ever proliferating meaning – essentially with multiple and increasingly multiplying meanings, everything is in danger of becoming meaningless. Instead the authors point out that deconstructionist theory must operate within logocentrism (as there is no 'outside' of logocentrism) and will therefore be reduced in terms of operations available. If one is working within a specific model, even to destabilise that model, one is bound to operate within the constraints of the model itself. Any danger

of ever-increasing readings is eradicated by the very restrictions created by the model for critique.

#### THE JUSTIFICATION FOR DECONSTRUCTION

The method for using deconstructionist critique within the confines of logocentrism, is, claim Brunette and Wills, with the concept of Derridean 'play' – which in this sense is the way in which slippage can be created within the Western model of philosophy:

Play in the sense that Derrida uses it should also be understood as the “give,” or margin of movement, that exists within the system of logocentrism as in a well-worn machine. This is its own space of play that it would have confined to the margins but that Derrida exploits or finds active within the central workings of the system itself. (1989:14-15)

It is vital that we are able to produce meaningful work whilst using a Derridean model, and 'play' is one way that a model designed to provide one 'reading' can be used to provide a variety of related and connected meanings (many of which will be oppositional but still constituted by the model). In this thesis, two key Derridean concepts, *hinge* and *trace* will be the means with which alternative readings can be generated, but both of these are examples of Derrida's 'play'; they provide the “margin of movement” within the model.

The overview of Derrida's work is necessary at the beginning of *Screen/Play* as when working with such cyclical and complex ideas, an outline is required to ensure that the reader is familiar with the areas in particular that Brunette and Wills intend to use, and also the way in which the authors have interpreted these ideas. Having provided

this outline, the authors go on to write in more detail about film theory, and both historical and contemporary film theory (this is of course theory that is contemporary to 1989). Here is where the authors claim that ideology in the seventies belonged almost entirely to psychoanalytical models, such as Lacan's reading of Freud, although they do note the few exceptions of theorists who dealt with previously 'hidden' aspects of cinema with a deconstructionist method (such as Baudry's analysis of the apparatus of film).

A psychoanalytical model of film analysis will focus on 'self' and this can be, according to Brunette and Wills, very useful in film theory, especially when combined with ideological exploration of apparatus theory. They claim that:

Probably the most fruitful use of Lacanian psychoanalysis has been the challenging of the myth of the unified, coherent, intentional self. Out of this investigation a powerful critique of the dynamics of the spectator's assumption of cinematic realism has evolved, complementing the critique of the ideological determinations of the apparatus mentioned above. (1989:17)

This is of course a valuable model of film theory, but it requires, according to the authors, the subjects to be "...positioned and constructed through the representation of reality as unproblematic and given..." which is extremely problematic. A focus on 'self' inevitably requires the critic and spectator to accept as 'given' the film diegesis as 'real' – at least accurately naturalistic.

This is important and an important overview in the psychoanalytical models of analysis. A film world that is constructed as 'natural' and is 'naturalised' is not allowing

the full potential of film criticism to emerge. The film world is not, and can never be, 'naturalised' because it is entirely a construct – every frame, every object of mise-en-scene, every character, movement and word spoken. A film analysis that 'forgets' this construction is not an analysis of film, but an analysis of a constructed character within a constructed world. In addition to the construction of the word, the apparatus that capture it are also ideological in intention.

Brunette and Wills consider why a deconstructionist approach has been suppressed from universities and their proposal is that it is seen as non-political, whereas notions of psychoanalysis are more easily seen as political, especially when read through other analytical methods, such as various feminist standpoints. Derrida, the authors note "...argues that "obscurantist irrationalism" and "nihilism," [are] the sort of epithets often attributed to deconstruction..." (1989:25) and it is important to counter these criticisms with an outline of the benefits of a deconstructionist approach. Brunette and Wills quote Derrida from his essay *The Principle of Reason: The University in the Eyes of Its Pupils* (1983:3-20) where he attempts to underline the importance of the 'double gesture' that is possible in deconstruction:

They [deconstructionists] may continue to assume *within* the university, along with its memory and tradition, the imperative of professional rigor and competence. There is a double gesture here, a double postulation: to ensure professional competence and the most serious tradition of the university even while going as far as possible, theoretically and practically, in the most directly underground thinking about the abyss beneath the university..."Thought" requires *both* the principle of reason *and* what is beyond the principle of reason, the *arkhe* and an-archy. Between the two, the difference of a breath or an accent, only the *enactment* of this "thought" can decide. That decision is always risky, it always risks the worst. (17, 18-19 in *Diacritics* 1983) (1989:25)

There is a lot here to unpack, but the most important meaning to be gleaned from this is that it is possible, within the confines of a university, to adhere to the professional standards of the university whilst at the same time going as far as possible to operate *against* those standards. It is only, Derrida argues, in anarchy, that we can fully understand the *arkhe* – in other words, the beginning and the system of governance within that university and governance of the accepted methods of analysis. Between the two it should be possible to operate in a deconstructionist manner. This the ‘double gesture’, that we need to operate both within and at the margins of the system.

Brunette and Wills move on to discuss the issue of deconstructionist thinking as political, (as opposed to being apolitical) and argue that the very notion of the ‘undecidable’ makes deconstruction, and Derridean theory, political. Operations such as ‘trace’ and ‘hinge’ ensure that there is always room in the margins of an oppositional argument, and this act in itself is political and radical.

Currently too many leftists seem to combat the absolute presences of oppressive systems with other absolute presences that are really only their symmetrical opposites and are therefore involved in the same constricting economy. Deconstruction demonstrates that specific interventions in political struggle must go hand in hand with attempts to rethink the ways in which political problems themselves are conceived. (1989:31)

Brunette and Wills explain that the reason that Derridean theory was not appropriated by the film theory world is because of its supposed apolitical stance.

This is at a time in theoretical study where the political was of great importance, following the feminist and Marxist movements in theory and analysis. Although the political stance of a deconstructionist approach is not the predominant reason for using Derridean theory to consider sound and image in cinema, I do believe that the removal of film from its historical and technological chronology, and attempting to frame sound not only in relation to image, but in relation to the film as an entire text, is a radical act in film studies. The 'undecidable' is an uncomfortable notion, precisely because it resists resolution.

#### DERRIDA AND FILM

Chapter Two (Derrida and Contemporary Film Studies) deals more specifically with the application of deconstruction to film studies and this is invaluable in supporting the justification of using Derridean theory to interrogate sound/image relations in film.

Other theorists do articulate the idea of 'space' in the audiovisual film, between the images and the soundtrack, and these can be helpful in understanding what is needed for an approach to sound/image relations in early film.

K. J. Donnelly, in his book *Occult Aesthetics* (2014), discusses his wish to use critical theory to approach the study of film and sound, saying in his preface that:

Critical theory...in its best form, it grapples with unknowables, making them into something more tangible – although never quite making them unproblematically understandable, in other words, never making them into a simplistic reduction. (2014:viii)



This ability or framework with which to tackle 'unknowables' is exactly why the appropriation of Derrida for film applies so well. Donnelly uses Gestalt psychology for his framework for thinking about sound and image synchronisation – the ability to treat perception as a 'whole' is valuable for his analysis and understanding of film as audiovisual.

The brain increasingly has been understood as a parallel processor, where brain sections might deal simultaneously with different sensory information, but not in a totally separate manner. These sections are also intimately connected, so that one can influence the other (such as odor and taste), so the brain's functions are not compartmentalized or fully separated. (2014:17)

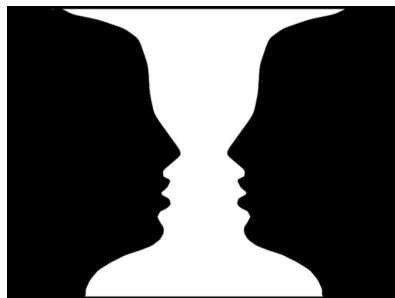
For Donnelly, this understanding of the perception allows for the consideration of the 'occult' aspect of film, by which he means 'hidden and mysterious', much like Birtwistle's 'cinesonic' sound; the unknowable that cannot be quantified by the more recent film theory that:

...has tended to atomize analysis – reducing activities and objects to minute subcomponents, while avoiding the 'bigger picture'. Such reduction has been happier dealing with narrative development than with more general aspects of the film experience. (Donnelly, 2004:x)

This is something that I have found problematic in much of the theory surrounding film sound and film; the complex and increasingly reductive lists that Chion, for example, uses in *Words on Screen* and the difficulty in attempting to understand and articulate the inevitable and frequent examples that do not 'fit' into the particular

category. As Donnelly claims, this type of thinking, whilst useful as a way of compiling information, becomes reductive when attempting to understand a medium that is made of many parts but consumed as a whole.

Donnelly's approach for his approach at revisiting the concept of synchronisation which he says can help to explore the "... 'space' between sound and image." (2014:1) and this appears a promising approach to sound – however, his focus remains solely on the moments in the film that are synchronised or non-synchronised, his book wishes to have a "...foot on those concrete moments of synchronization..." (2014:13). Donnelly gives the example of the Rubin Vase, devised by psychologist Edgar Rubin – for an example of an illusion that allows the viewer to examine the concept of changing perception and the process of this.



This approach does allow articulation of this 'space' but does so entirely in relation to synchronicity. The vase, whilst useful, provides the viewer with *two* alternating views; whilst not truly binary, in the sense that the view is constantly changing, the vase, much like Donnelly's approach, allows examination of only two elements. For the purposes of understanding early film sound, with a variety of different sound and

image elements, the use of critical theory that allows for a model of transience between these multiple elements requires a model that identifies the hidden constructions and provides a method for transgressing boundaries of classification.

Brunette and Wills see Derridean theory as most useful when it allows them to challenge the way that films are categorised historically or clustered in other thematic and generic groups. The authors do not wish to offer an entirely new way of analysing film, but rather to use the theory to question certain assumptions within film theory.

They begin with claiming that:

...film history and film interpretation, especially, rely on the assumption that both the body of films to be classified historically and the individual films to be interpreted are in some way comprehensible wholes, complete unto themselves. It is understood, of course, that the goal of a "complete" description will always remain virtual, never truly attainable; yet the assumption that such a description is at least theoretically possible provides the motivating force for much work in film studies. (1989:33)

The concept of a 'complete' film is problematic because inherent within the notion of 'whole' is the notion of 'centre' or logos. Film theory that treats a film as, at least theoretically, entirely decipherable, must rely on the theory of a 'complete' film.

There is a danger that this thesis will use the concept of a film that is its own complete text, but this is in the context of allowing the analysis to come from within the film itself, rather than the film as an artefact being 'complete'.

Brunette and Wills do claim that films tend to be grouped historically, and this is of vital importance to understanding how to attempt to re-visit historical films and remove them from their historical categorisation. Derrida denounces this type of categorisation of texts and Brunette and Wills justify why categorising films in history is just as problematic:

In film history the inchoate mass of details of nearly a century of filmmaking, including thousands upon thousands of films, are reduced and fitted to the Procrustean bed of historical narrative. Certain recurring themes, motifs, patterns, or structures are found to run through the gross, random particulars of the last hundred years in ways that “make sense” of these particulars. Those films and those events in filmmaking finally deemed important are those exemplifying the same patterns and their underlying structures. (1989:36)

The authors claim that grouping films historically, or in terms of similarities of themes, motifs and patterns etc. is an arbitrary and detrimental exercise – many films, out of the thousands made, do not fit the ‘group’ or ‘type’ and are in danger of being discarded, or alternatively seen as less important or ‘other’, but they are ‘other’ to the dominance of an arbitrary classification.

Early cinema was not a straightforward development of filmmaking styles, leading inexorably to Classical Hollywood – it is not even entirely clear where filmmaking begins as a technology – embryonic examples of cinema can be found in the magic lanterns and Zoetropes of the 1800s. It is justifiable to call these examples ‘undecidable’ in that they cannot clearly be defined as film or not film; magic lantern shows included complex editing, image movement, sound and narrative that was found in early cinema, and the most complex magic lantern shows are not easily

defined as simply slideshows. This is one demonstration of the impossibility of classifying films, as with every classification that is constructed there are moments of undecidability; *The Jazz Singer* cannot be easily classified as 'silent' or 'sound' cinema, for example. Examples like this are found at the point of every limit of film categorisation throughout history.

Brunette and Wills give the examples of movements such as Soviet Montage or the French New Wave, where they state much has been written that attempts to define specifically the absolute boundaries of the movement, where in actuality, many films are not so easily classified. One example they provide, that of German Expressionism, is not a movement born from an empirical study of all films that were produced by Germany between 1919 – 1925, because that is not possible – many films are lost, or not included for a variety of reasons. The films that remain, do so precisely because they 'fit' a certain set of constructed techniques and content that create the concept of 'German Expressionism'.

Interesting to note is the concerns that Brunette and Wills highlight from Jack C. Ellis' book, *A History of Film* (1985) where he is not convinced of "...articulating film history's "parts in relation to its whole"" (Jack C. Ellis (1985: xxi) in 1989:40) precisely because film history cannot be 'whole', not only in the ontological sense of previous technologies crossing into 'undecidability' but in an empirical sense:

...since over half of the 21,000 American films made before 1951 have, by Ellis's own count, already been destroyed...Are these missing films also a part of film history? Furthermore, of the thousands of films that remain, only a

small percentage are chosen for discussion or even mention. But on what basis? That of quality, however it might be measured? (1989:40)

This statistic demonstrates vividly the problem of categorising films in terms of their chronology. Any sample of films that exist can never be an accurate representation of all films made in a specific period. This may seem like another exercise in pedantry, but it is of immense importance when applying Derridean theory to film analysis, because it is a clear and statistical reason why any film and film analysis should not be restricted by the categorisations, either in genre or historical movement, that are placed upon it. Historical and technological classifications are the very reason why films such as *The Jazz Singer* and *Sunrise* become so inextricably connected to the perceived moment in film history and technological development in which they were made. Of course, there are numerous examples of ‘sound films’ and ‘sound tests’ that do not fit neatly into the technological or historical chronology.

#### CLASSICAL HOLLYWOOD CINEMA

Much of film studies has centred around the concept of the Classical Hollywood Cinema – a term coined by David Bordwell, Janet Staiger and Kristin Thompson in their key text, *Classical Hollywood Cinema: Film Style and Mode of Production to 1960* (2002). Contemporary film analysis, even now, often depends on referring to this constructed period in Film History to compare and contrast techniques and narrative structures of film. Analysis will often begin with Classical Hollywood Cinema or the Institutional Mode of Representation as the nucleus from which all assertions and denials are based. Film analysis of early cinema tends to focus on those techniques

which are discarded or developed into 'Classical Hollywood Cinema', whereas analysis of films since 1960 will highlight the 'developments' or differences from this movement. It is not possible to exaggerate the significance of this text in film studies. Brunette and Wills spend some time in Chapter Two of *Screen/Play* considering the method by which Bordwell, Staiger and Thompson chose a specific era in cinema, from 1917-1960, quoting them and the claim that Hollywood filmmaking is:

...from 1917-60 as a unified mode of film practice" produced within "a coherent system" whereby aesthetic norms and the mode of film production reinforced one another"" (The Classical Hollywood Cinema, 1988:xiv in 1989:41)

Brunette and Wills highlight the importance of empirical research in asserting that Hollywood cinema is a 'unified mode of practice'. In order to investigate the methodology of Bordwell, Staiger and Thompson, they quote Bordwell's explanation in the preface, that:

...some 15,000 films were made between 1915-1960, and out of these 100 were chosen for close study: "To construct a model of the ordinary film, we have selected, *in an unbiased fashion* 100 films from this period" [emphasis Brunette and Wills] (1989:42)

But Brunette and Wills state that on turning to the appendix of *The Classical*

*Hollywood Cinema*, the reader discovers that:

...the random method employed by the authors actually yielded 841 films, of which only 100 could be found in various collections and archives. They then admit – in the appendix – that:

This was not, strictly speaking, a random sample. Every film made American studios did not have an equal chance to be viewed, since not every film has survived. None the less, our selection procedures represent the closest a researcher can come to random sampling when dealing with historical artefacts. The point remains that our choices were not biased by personal preferences or conceptions of influential material or masterful films. (1988:388) (quote sample chosen by Brunette and Wills) (1989:43)

This admission does not, of course, negate the work of Bordwell, Staiger and Thompson, and the importance of *The Classical Hollywood Cinema* is undiminished, despite decades of theory since *Screen/Play* but the admission that the choice of films is severely limited, does challenge the legitimacy of a dominant 'mode' of filmmaking, or, at the very least, allow the analysis of a film to concern itself more with the film text, than the movement or mode of production of a genus of apparently 'similar' films.

As Brunette and Wills assert, the films that are archived become the films that constitute the 'history' of cinema, whether or not they are actually an accurate sample of the overall history of cinema if every film were available. These archived films, the authors state, are actively not a random sample; the decisions to keep and preserve them:

...are not made on a random basis, and it is those decisions that will inevitably determine the raw data out of which "film history" in general, and the contours of the "classic Hollywood cinema" in particular, may be constructed. (1989:43)



This 'construct' of classical Hollywood cinema as the 'dominant mode' of filmmaking, operates to 'naturalise' films that adhere to the collection of techniques and practices, and to make 'other' those films that do not. Brunette and Wills highlight examples of this, such as Film Noir, which has a different set of practice and has been given a specific generic name in retrospect; no director ever made a 'Film Noir' film. In addition to being 'other' some films may not even survive and will not be archived – no record of them will remain.

Classical Hollywood cinema's most significant practice is 'invisible editing' a system of editing designed to disguise the mode of production of the film, thus drawing the viewer into the narrative. Every cut, a potential disruption, is concealed by a complex system of film grammar and sound conventions that operate to 'smooth' and 'bridge' the rupture. Invisibility editing is, in itself, a construct designed to artificially naturalise the editing process. The 'dominant mode' of classical Hollywood cinema can uphold invisibility editing and strengthen its own claim to naturalism. This must be challenged, and the construct revealed if any film is to be released from its place in history, relative to the dominant mode. This is the case for early cinema and post-1960s cinema as well, as early cinema can be pigeon-holed as a set of practices and techniques that are eventually honed into the 'naturalistic' form, and more recent cinema can only be analysed in relation to the dominant model. Freeing film from these constraints will allow a reading that can consider all practices and techniques in the text as an area for meaning.

*The Classical Hollywood Cinema* is such a key text that it is important at this point to mention how the authors deal with the introduction of synchronised sound, and sound in cinema. Quite simply, in very little detail. The book is divided into seven parts, each separated into chapters, with thirty-one chapters in total. Of these thirty-one, two chapters mention sound in the title; chapter 23, *The introduction of Sound* (Bordwell, 2002:v) and chapter 29, *Widescreen processes and stereophonic sound* (Bordwell, 2002:vi). This is significant in two ways – if it is possible to argue that the reason sound is not mentioned specifically because Bordwell, Staiger and Thompson deal with sound as part of film, then it would not be necessary to include two specific chapters on it - once accepted that dealings with sound in the book are discrete, it is astonishing that only a few pages of the book cover sound in cinema. Cinema is ontologically an audio-visual medium, and *The Classical Hollywood Cinema* is perhaps the biggest example of the disservice done to the study of sound in film. *The Classical Hollywood Cinema* operates to put narrative at the centre of a film's structure and construction – all other techniques, argue the authors, operate to serve the narrative and to disguise any potential disruption to the smooth exposition of the narrative. This is, of course, logocentric thinking.

In a model where narrative is seen as the most important force, all other filmmaking aspects are *signifiers* to the narrative as the *sign*. Invisibility editing now makes sense, as disruptions to the smooth telling of the story are now somehow 'unnatural' and pull the viewer out of the film world. Any technique that exposes the mode of production is exposing the *construction* of the film – the biggest potential disruptions to the film are the biggest 'problems'. Sound is, generally, in *The Classical Hollywood*

*Cinema* treated as a great source of potential disruption, particularly during the period of the introduction of synchronised sound to film.

David Bordwell, who authors chapter 23, *The Introduction of sound* (2002:298) opens the with a quote from the Secretary of the Academy of Motion Picture Arts and Sciences, Frank Woods, in 1928, less than a year after both *The Jazz Singer* and *Sunrise* were produced. The quote states:

The talking pictures of the future will follow the general line of treatment herefore developed by the silent drama. They will be motion pictures in which the characters will talk by audible speech instead of printed subtitles. The talking scenes will require different handling, but the general construction of the story will be much the same. (In 2002:298)

Bordwell has taken the quote from a journal, *The Sound and Motion Picture Engineers* (Vol. XII, No. 35, 1928) which has transcribed Wood's speech at a convention for Sound and Motion Picture Engineers. The quote serves the opening of the chapter on sound in *The Classical Hollywood Cinema* very well, as it summarises the overall content – synchronised sound was introduced to cinema, it was 'inevitable', it was initially problematic, but nothing would change.

The introduction of sound is treated, by Bordwell, as an additional technical element of cinema, most notable due to the initial problems that it brought to other elements, such as cinematography, editing, lighting and writing. It is interesting when reading the original transcription of the quote to note that the opening sentence is part of a longer sentence, where Wood attributes his first words to another speaker – William

DeMille the director and screenwriter “Only one point seems fairly well settled and that is, in the words of William de Mille [sic], the talking pictures of the future...”(SMPE, 1928:629) in this context it can be seen the speech, which is mostly completed by this point, has actually covered many aspects of the introduction of sound where a more nuanced approach is taken. Wood speaks of many positive and negative implications of sound technology and expression, including new generic hybridisation of written forms:

We have proceeded on the theory that the personnel of the industry, the directors, players, writers, technicians, and even the producers must educate themselves in the new form of art, which William de Mille [sic] has pronounced the marriage of silent drama and the stage, with the resulting infant an unknown quantity. Bad talking and sound pictures may easily prove a disgrace to the whole industry, while good pictures of this class may be its salvation. (SMPE 1928:627)

Interestingly, despite writing a number of films prior to the introduction of synchronised sound, DeMille only wrote a very short number afterwards, so however successful the introduction of sound was, his own contribution was less so. This is an interesting excerpt of Wood’s speech – the changes to the medium seem a lot more significant, and certainly his assertion that ‘talking pictures’ may be the industry’s ‘salvation’ is very different to the accounts of problems that plagued the film industry during this period. The end of the excerpt by Wood that Bordwell chooses to include in his chapter is also followed by an interesting statement:

...but the general construction of the story will be much the same. This will not, however, preclude reproductions of stage material, particularly short sketches and acts, and possibly occasional plays or operas. (1928:629)

This proviso is important, and here is where a deconstructionist based on Derridean theory can really provide more information and different readings to the era of the transition of sound. Bordwell's quote selection finishes on the sentence from Wood, that the construction of the story (which the narrative relays) will remain "...much the same." From this we can reasonably deduce that Wood does not expect the broad narrative direction of cinema to change, and Bordwell claims that this is what happens – apart from a 'transitional' period, the trajectory towards classical Hollywood film was relatively smooth. When we see the sentence that follows the excerpt it shows that Wood considered that musical sketches, opera and other stage plays may well be introduced to cinema; the possibility of synchronised sound making these genres more achievable. Wood is talking in 1928 – he is not aware of a trajectory towards a dominant mode of cinema, rather than cinema is established and will continue in the same way, but additionally he sees the potential for a proliferation of forms – as he says earlier in his speech, he does not know yet what quality of 'infant' this new material will produce.

It is easy to look back with hindsight at the development of film and synchronised sound and retrospectively order the events into a timeline that prioritises the image and the narrative, but this timeline is a construction. This is logocentrism, where the 'journey' of film is striving towards an unattainable, yet still conceived 'truth' – both of 'perfect' sound and narrative film making. Bordwell outlines broadly the timeline for the development of sound in film:

Attempts to synchronize sound and image were part of Edison's research program, and several firms introduced technologies through the early 1920s. Invariably, synchronization and amplification systems proved inadequate, and exhibitors failed to adopt the equipment...the decision by Warner Bros and Fox to introduce sound in the mid-1920s eventually forced the major firms to compete. (2002:298)

Bordwell outlines briefly the various technologies, patents and film companies that adopted the technology and then concludes:

With the shift to a new technology came adjustments in film style. This chapter first examines how the technology was standardized through the efforts of Hollywood's institutions. Once we understand this process we can consider the logic of image/sound relations that adjusted sound to classical norms. Finally, the chapter considers how certain stylistic devices, such as editing schemata and camera movement, changed with the introduction of sound. (2002:298)

This passage shows two clear attempts to relegate the development and technology of sound to a trajectory that favours image and narrative and upholds the inevitability of the classical Hollywood form.

There is an example of Altman's assertion of 'the historical fallacy' in that sound experiments were started in the 1920s; this is evidently not accurate, as experiments in recorded sound pre-date the moving image, and William Dickson, who worked with Edison, was experimenting on synchronised sound and image as early as the late 1890s. Secondly, Bordwell sets up the dominance of the classical model by suggestion that sound and image are adjusted to 'classical norms' – this is an example of the naturalising of the classical Hollywood model, in order to dismiss as 'other' or exception, and technical or creative device that does not serve the purpose of the constructed trajectory.

The rest of the chapter deals almost entirely with the technical aspects of synchronised sound, changes in lighting, cinematography and editing and the changes that this caused to the established filming practices. These are generally seen as issues that prevent the established, or certainly developing, mode of continuity editing, and technological advancements, such as multi-camera shooting, are seen as ‘resolutions’ to these problems. The concluding paragraph to this chapter sums up the overall standpoint – that the introduction of synchronised sound somehow ‘interrupted’ a smooth flow towards continuity editing, but this disruption was combated by developments in technology and practice:

The differences between silent and sound visual style, then, can be seen as issuing in large part from attempts during the transitional years 1928-31 to retain the power of editing in the classical style. Slightly longer takes, with more camera movement, emerged as functional equivalents for controlling spatial, temporal and narrative continuity. Technical agencies worked to make these equivalents viable and efficient. It is during this period that basic premises of the classical style were transmitted into the sound cinema. (2002:308)

The overarching message here is that silent film editing has an agency that was in danger of being reduced during the ‘transitional’ years, but this power of the edit was ‘retained’ by technological techniques.

Helen Hanson discusses the treatment of the transitional period of sound in Hollywood cinema by existing literature, and explains how this period can also be seen as a ‘construction’:

The temporal definitions assigned by historians to the transitional period have been part of a conceptualisation of change; period boundaries necessarily mark not only a distinctive break at their boundary points, but simultaneously construct an internal consistency within and between these boundaries. In the existing critical literature of film sound histories, the transitional period is constructed precisely *as* a period of change, and consequently, the period “beyond”, in which changes are less pronounced, has been constructed as one of comparative stability. David Bordwell, Janet Staiger, Kristen Thompson, and Donald Crafton, adopt 1931 as the date marking the end of major technological and stylistic changes. (2017:3)

It is clear here that the danger of defining specific time periods, even periods of change and instability, lead to the framework of a construction that ultimately shuts down, rather than opens up, analysis. As Hanson claims the construction creates ‘consistency’ and a construction of ‘stability’. In attempting to define specific chronological periods by their technological advancements, the potential for analysis is reduced and the movement in meaning between the boundaries of the construction is limited or entirely blocked.

*The Classical Hollywood Cinema* is a key text for any student of film studies, and to a large extent has informed film analysis since its publication for the first time in 1985. This book is in no way responsible for the construction of a ‘naturalised’ dominant mode but drew together pre-existing ideas in an extremely effective way. Continuity editing remains one of the most successful ways to discuss film academically, and this methodology works well with other established modes of analysis, such as psychological methods born from Lacan and Freud. This thesis intends to offer the reader an additional way of understanding image and sound relations, and in order to do this effectively it is essential to approach *The Classical Hollywood Cinema* with a deconstructionist stance, to interrogate and expose the ‘naturalised’ construction of



the dominant Hollywood mode, and the suggested historical and technological trajectory outlined. Brunette and Wills offer a way to do this, via a focus on logocentrism and the exposition of logocentric thinking in film literature.

Brunette and Wills in *Screen/Play* offer a great deal to the justification for the use of Derridean theory and the deconstructive process in film analysis. Although they stop short of offering a model for film analysis, they pave the way for this to exist.

*Screen/Play* outlines key aspects of Derridean thought, most significantly, the resistance to logocentric thinking which helps to clarify and support my own reading of Derridean theories. Brunette and Wills also offer justification for removing a film text from its 'place' in film history and genre which supports this thesis' assertions; that the case studies are not only worthy of re-visiting without consideration of their historical significance but call into question the validity of the significance that they might have.

## APPROACHING THE FILM TEXT

The analysis of the case study films will use Derridean concepts applied close text analysis. It is worth exploring the approach to the films in more detail, firstly, how to apply analysis as democratically as possible to the film text, as opposed to separate elements. Secondly to consider approaches to listening and watching the text.

V. F. Perkins' book, *Film As Film* (1993) was first published in 1972, prior to the introduction of much of the French philosophical theory to film academia. The book is an approach to the film as text; that is, as a combination of elements that inter-relate, rather than various categories of elements that carry their own meaning. The Da Capo print of the book contains a foreword from Foster Hirsch, who says:

*...Film as Film* confronts the large, perennial questions of theory in a language of refreshing clarity, directness and simplicity...Written before the French heavy-hitters had inundated the academic marketplace, here is film theory cleansed of jargon and making no attempt to be intellectually hip...it...does not invoke the latest buzz words of the semiotics, deconstructionists, post-modernists, linguistics, Marxists, psychoanalysts...is innocent of the contributions to intellectual debate of Barthes, Bataille, Baudrillard, Foucault, Derrida... (1993:i)

Hirsch highlights what he sees as the intrinsic value of Perkins' approach to analysis, and it may seem strange to use both the text, and the specific quotation from the introduction here. However, it is my belief that analysis should be written in a way that is (as far as possible) clear, concise, understandable and readable. It should immediately make sense when applied to the film at hand. Close textual analysis should, at its best, work with the film as text, rather than allow the work of

philosophical, critical theory, to overshadow what is evidenced and justifiable from what is seen and what is heard. Perkins approach is to offer analysis based on *what is seen and what is heard*. It is from and *within* the text.

Of course, this thesis is using concepts from Derrida, and the deconstructionist approach to form analysis and generate meaning, but it is doing this from what is in the film text itself. It is important, when approaching close textual analysis, to remember the close text. Whilst the thesis will invoke precisely the theory of which Hirsch is so critical, it also aims to keep in mind the precision and simplicity of Perkins' approach to analysis. Deconstructionist theory is about operating within spaces in the text that are not immediately visible, but it is certainly concerned with the text, rather than with the *truth*. In this way, the thesis will deal with analysis with one eye on the simplicity of Perkins, and the other on not directing analysis towards an 'answer'.

Perkin's takes the area of editing theory and analysis as an example of an element of film that is at the forefront of much academia, resulting in analysis that places editing in a dominant position in terms of the importance placed on it. The binarisms within film theory also exist outside the boundaries of sound and image, but this is an example of the prioritising of one element to the expense of others, but also the expense of the amount of meaning that can be generated.

A useful theory will have to redirect attention to the movies as it is *seen*, by shifting the emphasis back from creation to perception. In order to arrive at a more accurate and inclusive definition of film as it exists for the spectator, it will need to concentrate not on the viewfinder and the cutting bench but on the screen. (1993:27)

Here Perkins advocates an approach that focuses on the film, rather than the creation of elements within it. Much like Donnelly, he is concerned with the perception of the film, rather than the categorisation of various elements. Perkins claims that this structuralist approach creates a bias of focus.

Perkins discusses Pudovkin's view of the parallels between words on a page that create a sentence and the images on the screen; he claims that the use of editing can construct a 'sentence' through what is now termed as film 'grammar'. Perkins can see that this approach is in danger of breaking down elements of the film into categories:

The more complex the content of a shot, the less relevant the verbal parallels become. That is one reason why established theory requires the recorded event to be broken down into relatively simple units. (1993:21)

The problem is in the simplicity of the units – if the approach taken is to examine various elements, it becomes much more difficult to understand how those elements relate to each other, or to define and articulate moments in the film that do not fall readily into the various categories or units. Perkins' extrapolates:

If we isolate cutting from the complex which includes the movements of the actors, the shape of the setting, the movement of the camera, and variations of light and shade – which change *within* the separate shots as well as between them – we shall understand none of the elements (and certainly not the editing) because each of them derives its value from its relationship with the others. (1993:23)

Perkins does not specifically mention sound here, but this approach does include sound. It focuses the viewer on what is within the screen and as a result, what is between the elements.

Perkins does mention sound, and specifically the reaction of the Russian montage theorists to the introduction of synchronised sound, saying that their belief was that:

...the silent cinema was virtually a complete instrument; 'at the very most sound would be able to play only a subordinate and complementary role: as a counterpoint to the image.' (1993:36)

With this approach, film is seen as somehow 'complete' in the mid 1920s, and the introduction of sound was an additional element, not intrinsic to the specificity of film.

Perkins says that the focus on cinema as a visual art saw the most important process as the...

...definition of the image and the sound-track as distinct formal 'elements' was the source of the theorists' difficulty. Arnheim went furthest in this direction – image and sound were 'separate and complete structural forms' – and was quite unable to reconcile the two... (1993:37)

There is still evidence of this struggle now in film studies with an inability to satisfactorily reconcile sound and image, not as a naturalist structure, but as part of the same filmic text. Perkins suggests that synchronised sound is not a move towards 'realism' but "...a vitally significant extension of the medium's formal opportunities." (1993:52) and this is exactly how sound can be used to proliferate meaning.

Perkins warns against an application of codes and conventions on a specific film, or the aspects of a specific technology, if that technology does not yet exist; we cannot imbue the medium with expectations or contexts that are not yet realised. He gives the example, “Only with colour as an available resource can we regard the use of black-and-white photography as the result of an artistic decision.” (1993:54) This is extremely useful as an approach to the case study films in this thesis; it is important not to apply models of classical film sound to sound that does not yet have the capacity of various techniques such as mixing, dubbing and microphone direction. It is also a justification for approaching the films as, to an extent, outside of their historical and technological context. Whilst the thesis acknowledges theory that applies to classical Hollywood sound, it is key to approach *The Jazz Singer* and *Sunrise* specifically, as films that contain sound techniques available at the time, rather than suggest trajectories that are not yet set. As Perkins notes: “The weakness of much criticism is its insistence on imposing conventions which a movie is clearly not using and criteria that are not applicable to its form. (1993:188)

One area of *The Jazz Singer*, specifically, that draws criticism, is how the moments of synchronised sound affect the cinematography and editing. Much is made of the increase of the average shot length and the static camera during the moments of Al Jolson’s synchronised singing. Perkins points to several films where the use of a temporally long shot is of value to the meaning, rather than detrimental to the ‘art’ of the film. He points to two films specifically – *Nanook of the North* (Robert Flaherty, 1922), and *The Navigator* (Buster Keaton & Donald Crisp, 1924). In *Nanook*, Perkins says that the scene of the ice fishing and the capturing of the seal would have lacked

impact if the scene was divided into discrete shots. Similarly, the moment in *The Navigator*, where Keaton inadvertently ties his foot to a small canon, is best presented as a wide shot; “No amount of cutting between Buster and his cannon...could have improved the treacherous precision with which the weapon traced the moments of the hero’s leg.” (1993:34-35)



Perkins gives the viewer permission to see the scene as valuable, even if the editing choices are not the most significant thing in the scene. This is an avenue where it is possible to analyse scenes in *The Jazz Singer* for what is present in the scene, and the meanings that it brings. It allows an analysis that uses what is there and considers how the shots work in related ways to the sound, the narrative and other elements.

Some of the criticism levelled at early sound films, and *The Jazz Singer* in particular, is that it is not ‘filmic’ or ‘art’ and this will be seen in the analysis of the archival material in Chapter 5. This is precisely because of the static moments of synchronisation. When compared to *Sunrise*, *The Jazz Singer* is considered a much weaker film because the conventions of silent film editing are somehow jeopardised by the sound. Perkins

makes clear that “What matters here is not...film’s debatable quality but its method and effect.” (1993:63) and this is very important. When approaching the case study films, it is important, whilst acknowledging historical and technological context, to release these concerns from the analysis and instead concentrate on what is on the screen and what is audible in the soundtrack.

Perkins gives an example of how this can be done in the analysis by considering non-diegetic music in *Exodus* (Otto Preminger, 1960). The music is audible in the background of the scene and other sounds and elements are more prominently featured. Rather than consider why the music has a relatively subservient position, Perkins focusses on the *effect* of this on *meaning*. He claims that it produces several responses from the viewer; a lack of emotional pathos, the portrayal of the humanity of a terrorist, the creation of a tense atmosphere. There are many ways in which the music interacts with the other elements in the scene. Perkins notes that:

This variety of conflicting reactions is possible because the music is kept in the background. There it can work by suggestions, to colour our response to the action. More assertively used, it would have captured the event by imposing a single statement of meaning and suppressing all but one of the possible interactions within the scene. (1993:97)

If we focus only on the subservience of the music, or the way that the invisibility of the music helps to support the editing and composition, we miss the point that the very placement of the music as audibly in the background can *add to the analysis*. It does not matter why it is there, it is *there*, and we can discuss its effect in the scene in relation to the other elements of the scene without concerning ourselves questions of



method. This approach is of vital importance to all the case studies in this thesis as there has been an imbalance in the consideration of technological method in their analysis, rather than the content and effect of the film elements.

Donnelly and Birtwistle discuss sound that affects the viewer, rather than is attributable to a source. Gorbman notes that there are elements of 'structural silence' in film music. These elements can be considered in terms of their method, (the technological limitations, or the intentions of the composer) but far more productive to consider them for the meaning they generate. Perkins' advocacy for effect is a justification for examining the inter-relations between elements on the screen.

Perkins' concern with an imbalanced view of technology is that it leads inexorably towards a concept of what he calls 'total cinema' (1993: 45) where technology leads to a version of film that is entirely immersive "...completing the illusion of reality." (1993:44) and the problem with this perceived trajectory is that "Speculations about total cinema are entirely hypothetical." (1993:45). We cannot move towards an idealised version of cinema any more than we can unpack meaning and analysis to reveal a complete 'truth'. Perkins' rejection of this technological evolution mimics Derrida's rejection of logocentric thought; a journey towards the unreachable 'truth'. As neither are possible, they should not form the main concern of the analysis.

Perkins advocates a 'synthetic' approach to film – that is the "...claim that significance, emotional or intellectual, arise from creation of significant relationships that form the presentation of things significant in themselves." (1993:107) For Perkins the

relationships between elements in a film work in a balance of cause and effect, and not (only) in a causal narrative sense. Whether the character's emotion becomes more intense because of the music, or the music becomes more intense because of the character's emotion, is not relevant; it is only relevant that these relationships happen, and they affect each other. "Synthesis here, where there is no distinction between how and what, content and form, is what interests us if we are interested in film as film." (1993:133)

It is this approach that I wish to take in the analysis of the case study material. It is not one that is easy to articulate, but it is one that is appropriate for the application of Derridean concepts and, through this application, new meaning can be generated. The approach taken in the following chapters is to, first and foremost, consider the relationships between various elements on the screen and in the soundtrack and to suggest a variety of meanings that can be generated. Derridean concepts will allow for the proliferation of that meaning and allow for more fluid relationships to form *in between* the various elements. Whilst the historical and technological context will be referenced and considered, it will not be the main focus of the analysis. The ability of the elements at play, and their effect on meaning and each other is the primary concern.

#### MODES OF LISTENING

Chion, in his book *Audio-Vision* (1994) discusses three 'modes' of listening, and in approaching the case study films and tests, it is important to have these modes in mind. This is done with appropriate caution, as to focus on one area of the film is to

lose focus on another area. That said, the thesis is concerned with the area of sound within film, so there is an acknowledgement here that sound will hold a more dominant position in the researcher's mind; most obviously because it is an area of film theory that is often neglected, and certainly so when considering its relationships with the image.

Chion's first two modes of listening are most specifically connected to the idea of attributable sound – sound that has a visible or explicable source, whether that specific source in the image is (in the pro-filmic world) actually the source of the sound; we are dealing “...not with the real initial causes of sounds, but causes that the film makes us believe in.” (1994:28) Firstly ‘Causal’ listening, which Chion says is “...the most common, listening to a sound in order to gather information about its cause (or source).” (1994:25) Chion points out that there are two ways that the sound can give us information – either we do not know what the sound is and can glean information by listening to it, or if we can already see the (supposed) source of the sound, we can take even more information about an object from the qualities of the sound – for example, if a wall is hollow, or if a can is full. Chion notes that, even if we are not sure entirely what the sound is (pointing out that only the human voice appears to be uniquely identifiable), we can *categorise* – noting if the sound is mechanical, human, animal etc.

Clearly in film, we operate in a mode of causal listening without being consciously aware of the process, but this mode of sound appears linked inextricably with the concept of the ‘real world’. We listen to a sound in the film to see its source in the

image, much as we would listen to sounds in everyday life, and either understand what the sound is (a voice on a phone, or a siren coming nearer), or receive more information about the sound. It is important to constantly be vigilant against a type of listening that becomes passive and to be mindful of film sound's 'fundamental lie'. Causal listening is based on the supposed attributive quality that sound has to the image. In early film, if we can see synchronisation, we can be more confident that the sounds that we hear are caused by the sources that we see, but it is still the case that they are recorded on equipment that is selective about its capturing of sound, and the quality (or timbre) will be different to the source because of the apparatus of recording.

Chion's second mode of listening is 'Semantic' listening, and as the name suggests, it is the listening to sound to gain meaning from the content and "...refers to a code or a language to interpret a message; spoken language, of course as well as Morse and other such codes." (1994:28). This type of listening relies on the knowledge of the auditor; for the sound to have semantic quality and content, the listener must have an understanding of the specific code. Semantic listening does not focus on the timbre of the sound. It is a necessary part of listening in film when decoding dialogue. Where a film has several different types of dialogue (the inter-title, the lip shapes of the performer and the audible sound), different semantic modes are in operation – viewing, or more overt decoding, for example.

In early film, the inter-title has a specific role to play in the understanding of semantic content, including evidence of the mimicking of audible sound, including the timbre of

that sound; loud or soft, accents etc. This will be explored in the case study films and tests.

Chion's final mode – 'Reduced' listening, is a mode that...

...focuses on the traits of the sound itself, independent of its cause and of its meaning. Reduced listening takes the sound – verbal, played on an instrument, noises, or whatever – as itself the object to be observed instead of the vehicle for something else. (1994:29)

Chion notes that the term was first used by Pierre Schaeffer, who highlights the importance of the mode for articulating the quality of sound without being concerned with where it may come from; this will allow the auditor to describe and consider the sound in terms of its qualities. Chion suggests that there will be a difficulty in describing sounds when first undertaking this mode of listening and the language of the verbs used may be ambiguous; this is because the descriptors will not be attached to a cause or source. This means that when listening in a reduced mode, it is possible, and even likely, that the auditor will initially change their mode to causal listening. As the danger in listening to sound in this way is to search for a source, Chion advocates repeated playing of the sound, which means that the sound cannot be 'live' but must be recorded.

The advantages of this mode of listening are clear:

...reduced listening has the enormous advantage of opening up our ears and sharpening our power of listening...The emotional, physical, and aesthetic value of a sound is linked not only to the causal explanation we attribute to it but also to its own qualities of timbre and texture, to its own personal vibration. (1994:31)

The approach taken with the case study films will include a 'reduced listening' form of perceiving the films – this will be achieved by listening to the films without watching the image and noting down the specific qualities of the sounds, separated from their audible 'sources'. However, the films will not be initially watched in this mode for two reasons; firstly, as Perkins notes, the film is *what we see and what we hear* and as an audio-visual medium, the films and tests should first be audited in this way. Secondly, there is a danger with this type of listening that the compulsion for causal listening becomes overpowering. Chion defines 'acousmatic' listening as:

...a situation wherein one hears the sound without seeing its cause, [which] can modify our listening. Acousmatic sound draws our attention to sound traits normally hidden from us by the simultaneous sight of the causes – hidden because this sight reinforces the perception of certain elements of the sound and obscures others. The acousmatic truly allows sound to reveal itself in all its dimensions. (1994:32)

The specific listening to sound without having previously identified its cause (acousmatic sound), rather than separate us from the source and heighten our perception can lead to the opposite effect which "...occurs, at least at first, since the acousmatic situation intensifies causal listening in taking away the aid of sight." (1994:32) It is clear that the tendency in the listener is to evoke a 'source' whether seeing a representation of it or not.

Chion's modes offer several ways with which to perceive sound in film; firstly, by watching the film a number of times, to allow the causal and semantic modes to diminish and the consideration of the quality of the sound to emerge. Secondly to listen to the film without watching the image and allow the acousmatic sound to

emerge, unfettered by a connection to the causal. Chion also suggests that there is an awareness and active style to the listening of the sound in the film.

These approaches bear some consideration before being appropriated as a method for viewing the case study films and tests. There are several issues at hand, both with the films themselves, and the suggestions by Chion when taking into account Perkins' assertion that we should look and listen to film *as film*. The sound film's 'fundamental lie', that sound emanates from the image of the screen, should never be forgotten as it allows the researcher to treat all sound in the film as intentional in terms of placement. Causal listening can only operate if there is an alignment to the fallacy that sound is emanating from the image. The source should be noticed and noted but treated as part of the relationship between sound and image, rather than a direct and 'natural' link, which presupposes dominance of the image, as the sound creator.

Semantic listening is not a straightforward mode when watching silent film, as much of the semantic content is happening in the image track. Actor movement, intertitles and reaction to sound are all part of the semantic decoding of the film. There will, of course, be an element of semantic listening, especially in the film tests of early cinema, but this will not be the predominant focus of the two case study films, *The Jazz Singer* and *Sunrise*.

Reduced listening will help with the detection of acousmatic sound, and the timbre of the sounds in the films. The notion of the acousmatic should not just be taken as sound which has not yet been connected to an image but should be sound that is *not*

connected to an image, as this allows for the articulation of the 'occult' or 'cinesonic' sound in the films.

#### PERCEIVING THE FILMS

The case study films and tests will be watched a number of times. Initial watchings will attempt to keep a focus on the film *as film*, that is, to maintain a concentration on, and explore the relationships between, the elements on the screen. Limited notes will be taken, and no particular consideration will be given to sound, rather to the moments in the film where *trace* and *hinge* are operating. The films will not be paused or stopped during the viewing, note taking will be minimal. Subsequent viewings will be more rigorous, and the films will be paused and re-examined as notes are taken. Perkins' notion of method and effect will be kept in mind and attention will be paid to moments where relationships between the various elements of the films, and particularly between sound and image generate effect which can be analysed using Derridean concepts. Rather than attempt to focus on a different element of film during each subsequent watching, more focus will be paid to how elements interact with each other in different scenes.

The films will also be listened to with some focus on the 'reduced' listening mode for acousmatic sound. Here attention will be paid to the sound that is 'occult' or 'cinesonic'. Rather than attempt to disconnect *all* sound from its perceived source, will be a focus on moments of acousmatic sound without evident source. This process will also work in reverse; after identifying moments of acousmatic sound, analysis will take place on the relationships that this sound has in the context of the film.



## CHAPTER 4 - CASE STUDIES

### THE JAZZ SINGER SUNRISE EARLY FILM SOUND

This chapter will examine the case study films and tests to explore how Derridean applications can be successfully and justifiably applied to early sound film. It is the intention to use these films as examples where the application of a Derridean model can most easily be applied with the intention of demonstrating its value in future film analysis. The analysis will focus on the content in the films, rather than the status of the films' placement in an historical and technological chronology.

## THE JAZZ SINGER

It is intended to appropriate the deconstruction theories used by Derrida, in particular 'trace' and the 'undecidable' and consider how these concepts could be applied to the analysis of a film. *The Jazz Singer* is an appropriate example for several reasons.

Historically the film is credited as being the first full-length feature to include synchronised sound: "The introduction of synchronized sound is usually dated from 1927, when Warner Bros. released the enormously successful *The Jazz Singer*" (1994:213). This (as has already been indicated) is important to the research as the introduction of synchronicity is relevant to the logocentric nature of film.

Jay Beck, in his chapter *The Evolution of Sound Cinema* (2011) discusses the (questionable) way in which *The Jazz Singer* has been retroactively considered the 'defining moment' in the introduction of synchronised sound; the existence of other, shorter, tests, before this film,

"...supported the popular myth that sound cinema emerged fully grown from the mouth of Al Jolson in *The Jazz Singer* (1927) when he uttered the now-immortal expression, "You ain't heard nuthin' yet!" (2011:64)

It is this 'myth' that simultaneously needs to be challenged and revisited, but also helps to support the analysis of this specific transitional film – one that is key in understanding the construction of perceived trajectory of sound towards classical Hollywood practice.

*The Jazz Singer* is a mainstream Hollywood film that was tremendously successful in cinemas at the time of its production. This is crucial to the application of

deconstruction theory, as the aim of destabilising 'naturalised' constructs requires the examination of them in the form of key literary and philosophical texts. Crafton says of this period of sound transition that there is a danger of seeing the move towards sound as 'natural' and organic, the idea that the "...talkies succeeded silents because that's how nature is. Little seeds grow into oaks. The inevitability of sound as an organic metaphor pervades much popular writing." (1997:3) This persistence of writing that attempts to 'naturalise' the relationship between image and sound, and to highlight the 'inevitability' of the transition is the reason why studying film with the concept of deconstruction is important, as it is within these mainstream texts that the process and evidence for destabilisation arises.

O'Brien also discusses the importance of *The Jazz Singer* to the impact of film internationally:

American sound films served as exemplars for putting the new technologies to artistic purposes. They were concrete examples of what cinema's future might amount to, and they functioned, in one respect or another as reference points for virtually anyone making a sound film during this time. Certain films – such as *The Jazz Singer* (dir. Alan Crosland, 1927) – served as a focus of discussion for national film communities throughout the world. To study the reception of these films is to study the conceptual commitments and the interpretive outlooks of the communities that formed around the films" (2005:65)

This demonstrates the importance of the text, but also demonstrates how impacted *The Jazz Singer* is by its 'place' in film history. Study tends to focus solely on the impact of the film on the various industries, and the success of the technology, but without analysis in any detail of the content of the film itself.

The introduction of synchronised sound was a relatively short period in cinematic history. Although experiments with sound film were taking place from the invention of the moving image, more widespread application really began in the mid to late 1920's. *The Jazz Singer* was one of the very few examples that incorporated both synchronised sound sequences and the early cinematic conventions of inter-titles. *The Jazz Singer* also has a synchronised score. The combinations of sound technologies used makes *The Jazz Singer* particularly rich for analysis in terms of 'trace' and the 'undecidable' as several cinematic conventions are at work in the same text. For the purposes of this research it is intended to examine the effects that this amalgamation has upon the film, without relegating the non-synchronous sections to the level of a soon-to-be redundant technology. It is intended to consider the choices made between what is synchronised and what is not, and the possible outcomes.

It is the case that historically *The Jazz Singer* has often been reduced to essentially a 'silent' film with a few moments of synchronicity within it – Buhler and Neumeyer make the point that these moments are not particularly significant when considering ontological shifts in sound and image relations:

...*The Jazz Singer*...offered a less direct challenge to the aesthetic of silent film than a means of supplementing it. Indeed, many critics at the time wrote of the film as "vitaphonized," meaning that it merely had Vitaphone sequences dropped into what was otherwise seen as a relatively mundane family melodrama exploring themes of entertainment and assimilation. (2015:25)

But the problem here is the concentration on two opposing categories of sound – the ‘silent’ sound and the ‘synchronous’ sound; *The Jazz Singer* has a number of different elements of sound within it, that do not fit entirely into either ‘side’ of the silent/talking dichotomy. These ‘grey’ areas, or *undecidable* area are precisely what makes the film so significant for analysis.

*The Jazz Singer* is also significant in terms of the casting of the main character, Al Jolson, an established vaudeville performer who had already been involved in early experiments with synchronised sound, both in recordings of his vaudeville act, and with the Warner Brothers and their experiments with synchronisation. Katherine Spring, in her book *Saying it With Songs* (2013), suggests that the content and format of early transitional films was informed by the simultaneous rise of cross-promotional activity between the music industry, the stage and cinema. As the phonograph and sound recording began to impact negatively on the sales of sheet music, deals were made between the music industry and stage and screen producers to promote specific songs and companies by using popular stars at the time. The intention was to increase sales of phonograph recordings, sheet music and provide a platform for the exposure of specific stars. In the last decade, the movement of composers and music studios from New York City (Tin Pan Alley) to Los Angeles was well underway. As Spring says,

“By the time the major motion picture companies prepared to convert to sound, both the music and the film industries perceived motion picture theme songs as commercial products.” (2013:40)

Gomery also comments that “No longer was a hit song measured in terms one million sales of sheet music; the yardstick became hundred thousand record sales.”

(2005:Chap 2, p.17 of 155, 15%)

This is significant as it helps to understand the choices of music and songs within *The Jazz Singer* and goes some way to explaining the success of the film when compared to the other case study feature film in this thesis; *Sunrise*.

Prior to *The Jazz Singer* the Warner brothers had already gone some way in their experimentation with sound in film. Various experiments had taken place in the early 1920's – most notably from Theodore Case and Lee DeForest, who between them invented the sound-on-film system (a method of photographing sound and printing it onto a filmstrip). This, whilst successful was hampered by two key problems – firstly the amplification system, which was inadequate, and secondly the subject matter of the tests, which was often uninspiring.

The other key sound system of the period was sound-on-disc - a technology was developed by Western Electric called the Vitaphone – sound was recorded onto a wax disc whilst film was shot at the same time. The two were then played back in synchronisation. Although sound-on-film eventually became the dominant technology, the Warner brothers purchase of the Vitaphone system yielded popular results which lead to the production of *The Jazz Singer*.

There was a tension between the ongoing development of 'established' cinematic form; the mid to late 1920s 'silent' film, and the integration of synchronised sound shorts and experimental film at the same time. As Beck explains, "The presentational aesthetics of the single-take sound shorts and hybrid "part-talkies" contrasted with the highly developed narrative logic and editing strategies used in the late silent period." (2011:68) The Warner Brothers were experimenting with the new technology and arguably attempting to reduce the contrast between the two forms with experiments that focused on both dialogue and singing synchronised scenes in shorts, and longer films with the inclusion of a synchronised score.

In 1926 the Warner Brothers released *Don Juan* (Alan Crosland, 1926) which demonstrates both approaches – the feature film had a fully synchronised score and accompanying the film were eight fully synchronised shorts (mostly demonstrating orchestral music). Crafton discusses the presentation of the film upon its release:

The program had the look and feel of the typical movie presentation, as well as a radio revue. There was a speech, operatic numbers, a monologue, a novelty skit, an orchestral number, then the feature."(1997:76)

Vitaphone was very much still considered to be supplementing the main event – the feature, and the use of the technology within the feature film was confined to the orchestral score. However, it was reaction of the audience to the musical shorts that accompanied *Don Juan* that demonstrated to the Warner brothers the potential in

synchronised features. Crafton provides a description of the moment when audience members heard the musical shorts:

“Giovanni Martinelli’s *I Pagliacci* created a sensation. For the *Times* correspondent, the tenor’s filmed image was an effigy of the real person: “Those who first heard and saw the pierrot of ‘Pagliacci’ in the person of the moving likeness of the living Martinelli fill a great hall with the vibrant sound which moved the audience as the presence of the singer could not have done more effectively, perhaps not as affectingly, were present as at the performance of a seeming miracle in which the tongue of the dumb image was made to sing.” Barrios argues that “this single three-and-a-half minute performance...was crucial to the successful entry of sound film. (1997:77, 79)

The reviews and accounts of the evening perhaps hint at the origins of the myth of the ‘sudden’ or ‘overnight’ transition to sound. It was this reaction to the shorts that led to the continued development along the lines of synchronicity of live music (singing) and the introduction of dialogue.

This release allowed Warner Bros to observe the audience reaction and perhaps act accordingly. The success of the shorts meant that Warner intended to experiment further with feature films that included some form of dialogue:

...Harry Warner repeated his promise that the company would be experimenting with talking features for the 1927-1928 season. Accordingly, Warners announced that this would “be the first picture [*The Jazz Singer*] into which Vitaphone will be introduced for dramatic effect. (1997:108)

The term ‘dramatic effect’ refers to the shifting use of the Vitaphone sequences to have *narrative* significance – the above quotation from Crafton demonstrates that the



Warner Bros. did intend to include some speaking lines within the film. A moment discussed in more detail further in this chapter.

*The Jazz Singer* was released in 1927 and in quick succession there followed *The Singing Fool* (Lloyd Bacon, 1928), another Warner Bros. production using the Vitaphone system – this was about sixty percent synchronised (in comparison to *The Jazz Singer's* twenty percent). Within a few months Warner Bros. produced *Lights of New York* (Bryan Foy, 1928) which was fully synchronised. It is clear, then, just how unique *The Jazz Singer* is in terms of the sound technology used, and this is part of the reason that the analysis of it through deconstruction is so relevant.

Later chapters will look in more detail at the period prior to *The Jazz Singer*, and it is clear that despite the film's apparent symbiosis with the transition to synchronised sound in cinema "...there is no unanticipated landmark event or watershed film which separates the golden age of silent from the modern age of the talkies." (Crafton, 1997:4) The film is, however, a rich site of analysis for the various sound techniques that it employs, both in terms of the image and sound in the film.

*The Jazz Singer* follows the story of Jakie Rabinowitz (Al Jolson), a talented singer who, it is hoped, will follow in his father's footsteps and become the Cantor at their synagogue. As a child, however, he is caught singing jazz songs. Running away from his wrathful father (Warner Oland), he grows up to become an extremely successful jazz singer on Broadway. When finally reunited with his father as an adult, he is torn between returning to the synagogue to replace his ill father as Cantor and sing the Kol

Nidre, or singing at the opening night of a show that will cement his career. Jakie finally decides to sing at the synagogue, allowing his father to die peacefully having heard his voice. Jakie is able to return to the postponed show and continue his successful career as a jazz singer.

This story provides plenty of opportunities to demonstrate Al Jolson's singing in synchronised sequences of the film. Robert L. Carringer quotes the play's original author, Samson Raphaelson's reaction to the premier:

...They put a lot of songs in that were bad, and badly placed. They didn't develop the relationships so that you could feel the characters...Just a line here and a line there, and boom; into a phony café background, the most routine kind of backstage musical sort of stuff. Then Jolson would sing a song...(1979:20)

When considering the film's content, especially in terms of the synchronised sequences, it is easy to understand Raphaelson's reaction. The songs are crammed somewhat awkwardly into the film, appearing to be moments designed to showcase Vitaphone, Warner Brothers and Jolson. However, it is not in these terms that the researcher wishes to examine the film, taking instead audiovisual specificity of the medium, however, it is significant in the terms in which *The Jazz Singer* has been considered previously, by other theorists.

The placement of songs in *The Jazz Singer* and the performance of Al Jolson is important because it goes some way to explain the film's initial reception, and the subsequent reduced implied importance by film and sound theorists. There is a

temptation, with the film, to concentrate on one of the most noticeable and explainable sound strategies – the synchronised song. I argue that to do this is to do a disservice to the film, and the potential for analysis and meaning within it.

Spring, 2013, categorises the songs in *The Jazz Singer* as operating as ‘star-song identification’ – that is, that the songs are sung by recognisable performers from the stage, and whilst the ‘star’ may (arguably) stay in character, the song is useful in the sense that the audience identify with the performer and the song through cross-promotion. The problem with this categorisation is that frequently in *The Jazz Singer*, it is the moments *in-between* the different types of sound in the film, the transitions, that make the sound so interesting and rich for exploration.

Buhler, Neumeyer and Deemer describe *The Jazz Singer* as a ‘turning point’ for film sound (2010:290), but they also claim that aside from the various Vitaphone moments

the film did not mark a definitive break with silent-film practice, however, although it is often portrayed that way. Indeed, even a casual look will show that *The Jazz Singer* was conceived as a silent with a few synchronized sound sequences added. (2010:290-291)

This desire and approach of categorising *The Jazz Singer* as ‘mostly’ silent, again makes analysis of the synchronised sequences difficult as they cannot be considered in the context of all the various sound and image techniques present in the film. By ‘settling’ the film either on the side of ‘talking’ or the side of ‘silent’, its inherent potential is reduced.

There are many different 'types' of sound in *The Jazz Singer* and it is important to note and consider them all. The film begins with the conventions that we might expect from early cinema. An overture introduces the music and the action begins with the use of title and inter-title cards. Early cinema was most certainly sound cinema – it was just not *synchronised* sound cinema, but sound permeates every aspect of the screen, just as surely as the image. This can be better understood if the idea of 'trace' is taken into account.

After an orchestral overture and accompanying credits, the film opens with a title card. "In every living soul a spirit cries for expression - - perhaps this plaintive, wailing song of Jazz is, after all, the misunderstood utterance of a prayer." The title card is displayed on top of a background of a static photograph (that appears to be of the curtains of a stage in silhouette). It is clear from the outset that sound is introduced, not only through the non-diegetic music, but also in the language of the title card, the: "...plaintive, wailing song of Jazz..." will inevitably lead the viewer to imagine a sound that is not there. It is possible to differentiate between the words describing sounds, and the sounds themselves through the very absence of those sounds that they describe. Already this is an example of sound within the film – it is the *trace* of sound – just as one can understand that the word 'pig' is not the word 'peg' because the 'i' is not the 'e', (and hence 'hearing' the absence of the 'e') it is possible to hear the absence of the very sound called to mind by the title card. Immediately the film, through the use of inscribed language and photographs, contains within it both the absence and presences of the "...plaintive, wailing song..." Without a single frame of synchronised speech, the film is already truly audiovisual.

When John Belton writes about sound as “...an attribute and is thus incomplete in itself...” (1985:64), he is creating a binarism between sound and image, putting on the one side, image, with all the positive aspects of presence and completeness (hence being on the side of the *logos*), and sound on the other, as simply a *result* of the presence of the image, thus having connotations of absence and negativity. Derrida would argue that by constructing this binary system, Belton is complicit in his own critique of the construction, by drawing attention to the trace of the image within the presence of the sound. Christopher Norris succinctly describes Derrida’s argument in relation to Saussure’s binary phonocentric construction of the spoken word, and written language:

...Saussure denounces writing precisely on account of its unsettling effects on the logic of his own argument. After all, what could be the ‘natural bond’ between sound and sense if language is a system without ‘positive terms’, its structure (as Saussure tells us) entirely a matter of differential contrasts and relationships? (1988:88)

Birtwistle also refers to the limitations of Saussure’s model of structural linguistics when applied to film:

The relationship between sound and source...relates directly to the signifier/signified mode proposed by Saussurian linguistics. If a sound is considered to be an attribute of an object-source, when divorced from that object, sound becomes conceptualised as a signifier of that source..(2010:32)

In other words, notes Birtwistle, the sound becomes something that is negative force and an ‘imprint’ of image, rather than an aspect to be analysed in its own

right. It is signifier, rather than signified - it is structured into a binary opposition that places it at the bottom.

Belton can be seen to be denouncing his own argument in precisely the same way – by imbuing sound with negative connotations, he is denying any ‘natural bond’ between sound and image. We can see in the opening title card, that there is the *trace* of sound in the written image, the static photograph and the moving film. This fluidity between the senses creates slippage between the two terms, sound and image

...the good is whatever is lined up on the side of reason, spirit or soul, while the bad is either what rejects that alignment or – worse still – renders such distinction simply *undecidable*.’(1988:88)

So, it is possible to see that the film in its entirety is already behaving as an *undecidable* before there is any introduction of synchronised speech. Following the logic of this argument it is possible to understand that synchronicity may, indeed, be part of the construct that helps to maintain the binary ideology, by appearing to create a natural bond between sound and image in film.

An orchestral, non-diegetic, but synchronised score, plays underneath the opening shots of a montage of New York. It is important to realise that although the music is synchronised to the image (in the sense that it is pre-recorded on a disc and will *always* be the same in every viewing), it is not synchronised to the action of the image – so footsteps, voices, movement etc. are not heard, instead non-diegetic music accompanies the images. Audiences in 1927 would be familiar with music playing

whilst a film was being projected – this would usually take the place of an organist or orchestra, and many films would also send out an accompanying score to be played, so this music follows the conventions of early cinema. As we see a merry-go-round with children playing onscreen, the music plays an upbeat melody using woodwind instruments. There are two types of sound operating in the first few minutes of the film – the non-diegetic score, and the sounds present/absent in the title cards.

The first scene begins in the Rabinowitz's house with a conversation between the Cantor and his wife, Sara Rabinowitz (Eugenie Besserer). This conversation uses inter-titles and follows the conventions of early cinema. These conventions are extremely interesting and were developed from the earliest use of inter-titles. Inter-titles are different to title cards – whereas the title cards indicate the presence of a narrator (and may take the form of a voice-over in sound film), title-cards represent the diegetic spoken words from the characters onscreen. In *The Jazz Singer* title cards are always displayed over the top of a static photograph, and inter-titles are in plain white writing (in a different, less intricate font) over a black background and the words are always contained within speech marks. This appears to conform to Chion's assertions in *Words on Screen*, that diegetic words are written in white over black, and non-diegetic words are written in black over white. However, it is more significant to examine how this diegesis is integrated into the scene.

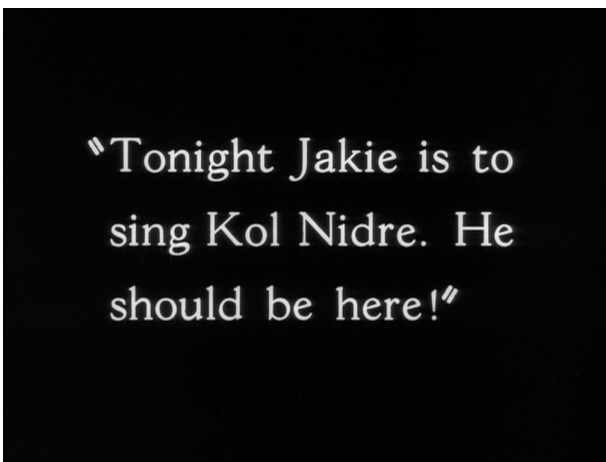
In early cinema, an ongoing conversation or speech was usually indicated in the following manner. A shot of the actor about to speak would show the beginning of the sentence (including the actor moving their lips), the film would then cut to an inter-

title that would show what they were saying. Another shot would follow the inter-title where the actor would be shown finishing the sentence. It is usual to see some passage of time indicated from the first shot to the last shot (the implication being that the actor had continued to speak and move whilst the inter-title was displayed to the audience).

An example of this is demonstrated in the first words spoken by Cantor Rabinowitz – as he walks into shot from the left of the screen, he begins to speak, gesturing with his left hand in clear agitation – the last frame of this shot occurs at 06:24



In the very next frame, the film cuts to an inter-title that explains what he is saying – this shot is held from 06:24 – 06:29, giving ample time to be read by an audience.





As the film cuts to the next frame, the Cantor is shown again:



This time he is gesturing with his right hand, his facial expression and lips have moved – it is clear that time has passed for the character, as well as for the audience.

There is no reason logically to change the shot or cut out any frames at all from the first image of the Cantor, to the second one. Any acting or expression has taken place off-screen, and it is obvious that the inter-title has not in any way inserted itself into the diegetic world of the film. It would make as much sense for the film to pick up exactly where it had left off, on the same shot of the Cantor. There is however, an understanding in this construction of shots, that time has passed, and that the Cantor has been performing the lines that the audience has read. Here again is the notion of *trace*. We can *see* the Cantor beginning to speak, and through the movement of his lips, the absence of his sound is clearly manifest. We can also (not)hear the sound of the Cantor's voice whilst the inter-title is displayed onscreen. The absence becomes presence – this is a difficult concept to grasp, as clearly there is slippage between the notion of absence and presence. This slippage is exactly what Derrida means by *trace*. In every frame of the film it is possible to (not)hear the sound of the Cantor's voice.

The film is already audiovisual, but in terms of film theory this inter-title speech would be described as being a 'silent' film moment.

*The Jazz Singer* relies on inter-titles for most of the dialogue that takes place within the film. When watching the film, it is possible to very quickly adapt to the inter-title system, a process of waiting takes place, where the viewer sees the beginning of the dialogue, and waits to understand the content until the inter-title appears – there usually follows ample time to witness the reaction and end of the sentence from the actor.

It is very clear that the actors often say much more in the shot, than is transcribed onto the inter-title, indeed, in some cases there is no inter-title at all for the words that have been spoken onscreen. At 07:00 into the film, Sara Rabinowitz clearly replies to the inter-title from the Cantor “What has **he** to say? For five generations a Rabinowitz has been a Cantor - - he **must** be one!”. Sara clearly moves her lips, agreeing with the statement and quite obviously saying ‘yes’ (following with something else that is not clear), but no inter-title follows this shot. It is clear from the actor’s facial expression and reaction that she agrees and supports the statement – although words have been spoken, it is not considered important for the audience to know exactly what these words were, rather that Sara’s agreement is understood.

This is an interesting phenomenon of early cinema – in synchronised speech films it would be extremely unusual to see an actor speaking, but not hear what they are saying. The sound hierarchy that is in place in mainstream Hollywood cinema, would

usually favour dialogue, as Doane comments in her essay *Ideology and the Practice of Sound Editing and Mixing*:

The risk lies in the exposure of the contradiction implicit in the ideological polarization of knowledge. Because sound and image are used as guarantors of two radically different modes of knowing (emotion and intellection), their combination entails the possibility of exposing an ideological fissure...Practices of sound editing and mixing are designed to mask this contradiction through the specification of allowing relationships between sound and image. (1985:56)

This is the compromise between psychological and narrative effect that Doane mentions and is a convention that is often unnoticed in synchronised sound films, especially in terms of naturalistic perspective. An audience would expect to hear an actor, even if the scene was filmed in, for example, heavy traffic, and not question this hierarchical structure – a structure that maintains the binary system of sound and image. It is important in *The Jazz Singer* to note that there are moments of synchronised speech (almost exclusively from Jolson) and these moments are *not* key narrative points within the film – an area that will be discussed in greater detail later.

When first considering the conventions of inter-titles it is easy to question the relevance of filming the actors speaking at all. It is easy to imagine a convention where the camera would focus on the character about to speak, and then display the inter-title. However, when subverting this consideration, an interesting point arises. It may, in synchronised sound film, not be necessary to *hear* all the dialogue that an actor speaks – we are, in effect, *hearing* the words spoken by Sara Rabinowitz and at 07:00

into the film, and *not hearing* them at the same time, through the concept of trace. It is clear that *The Jazz Singer* does not use synchronised dialogue for the conveyance of meaning, but turns instead to the conventions of inter-titles, non-diegetic music, cinematography and facial expressions. This is not to say that *The Jazz Singer* does not employ *sound*, simply that sound is not operating within the conventions of *synchronised sound*.

*The Jazz Singer* is a key text, however, precisely because it begins to use synchronicity, although it does so in an extremely interesting way. Firstly, there are several moments in the film where the images of objects are synchronised to the sound of them. It appears to be a demonstration of synchronicity and the Vitaphone system. A good example of this occurs at the beginning of a montage sequence that follows the title card 'Years later - - and three thousand miles from home.' The montage is of a jazz club in San Francisco. After an image of the flashing lights of the club, the film dissolves to a close-up of stacked plates being placed off-screen (16.58), as the plates are put down one by one into the off-screen space, the noise of this accompanies the image.



The scene then dissolves again into an image of small wooden hammers being hit against a table (a sign of appreciation), again in synchronisation.



It is an interesting moment in the film. Some synchronised segments have already been witnessed – the Cantor singing at the synagogue and (maybe less successfully) Jackie as a small boy (Bobby Gordon), so this moment in the film is not a key point of synchronicity. The effect, however, is not what one may expect from synchronicity in later sound films – the images are in close-up and are shot clearly to demonstrate that the actual objects in the shot are responsible for the sounds heard (or alternatively, that the sounds heard are responsible for the objects onscreen). It is a deliberate attempt to draw attention to the phenomenon of synchronicity. The sound becomes, at this point, equally as important as the image as the film almost calls the viewer to look and listen. This is an example of synchronicity that is operating to destroy the binary system of sound and image – both are functioning together to display the phenomenon of a truly audiovisual sequence. It renders the film as an *undecidable* - not able to truly place itself on the side of image or sound.

It is when comparing this sequence to other parts of the film that do not have synchronised sound that the phenomenon becomes even clearer, as *The Jazz Singer* does not always synchronise such moments. In another example of *trace*, we see Moisha Yudelson (Otto Lederer), a family friend to the Rabinowitz's, knock at the door of their apartment (09:11) in a medium shot. We see the image of Moisha knocking (without hearing any synchronised knocking noise) and then cut to a two-shot inside the apartment of the Rabinowitz's, who react to the (non)sound of the door, a full two seconds later. The sound is being used as a narrative device in a cause/effect manner to further the story – Moisha knocks at the door, which results in the Rabinowitz's moving to answer it, whereupon Moisha reveals that he has seen Jakie singing jazz songs. Although there is no synchronous sound attached to the image of the knocking, there is, as discussed before, the existence of trace within the shot. When Moisha knocks at the door, the audience see the trace of the sound, they both hear the absence and presence of the sound in the images on the screen. This provides an example of *trace* sound, not synchronised sound, furthering the narrative.

*The Jazz Singer* does not choose to use synchronicity to perpetuate a binarism of sound and image – rather the opposite is at work – this film uses the early cinematic conventions to further the narrative and has moments of narrative suspension whilst synchronicity is demonstrated. In considering the two previous examples it is clear that whilst the knocking, non-synchronous moment is operating in a linear cause/effect manner, the synchronised sequence of the dishes and the hammers is not – it is part of a montage, where the images are placed next to each other to, arguably give an impression of space and place, and certainly to provide a background

to showcase synchronicity. Synchronised moments are drawn attention to in the film, meaning that rather than relegating the sound to the status of an 'attribute', image *and sound* are operating together, drawing attention to the *undecidable* nature of film as audiovisual.

This effect can also be seen in the majority of the songs performed by Al Jolson. An interesting example is the one that occurs at 18:18 – this is the first time that Al Jolson sings in the film – he is introduced by an inter-title, walks from his table to the stage and begins to sing *Dirty Hands* (Jolson, Clarke & Leslie, 1927). Throughout the song Jolson is centrally framed in a medium shot – the film does cut away to show the entrance of Mary Dale (May McAovy), but the song itself, nor the time taken to watch it, does not further the narrative. It is a moment of stasis within the film's narrative to allow the viewer to watch and listen to the synchronised sound and image. Compared to the non-synchronised moments in the film there is little camera movement and the average shot length increases significantly. This is in large part due to the technology; it was simply not possible to use multiple shots to record synchronised sound as all sound was captured on one disk that ran at the same speed as the single camera. When discussing the impact of synchronised sound on film, the reduction in cinematic techniques, such as shot composition, shot length and editing are usually highlighted. It is worth noting, however, that Gorbman discusses the use of music with lyrics in classical film, saying that song lyrics threaten to split the viewer's attention between the narrative and the words:

The common solution taken by the standard feature film is not to declare songs off limits – for they can give pleasure of their own – but to defer significant action and dialogue during their performance. (1987:20)

In other words, there is a pausing of other filmic elements, including the narrative, to allow audience to focus on the song and lyrics. It is interesting that the relative cessation of other film elements is a convention that is retained in classical film sound, whilst a song is presented. Despite the technological constraints, Gorbman's assertion shows that these choices may well have an impact on the subsequent conventions of film music.

After the song is finished, after a cut to the audience, the film returns to the medium shot of Jolson as he speaks for the first time

Wait a minute...wait a minute...you ain't heard nothing yet! Wait a minute I tell ya, you ain't heard nothing, wanna hear Toot Toot Tootsie? Alright, hold on...

After discussing the key that the song is in, the music is played in with the pianist, (whilst the film cuts to a close-up of Dale), Jolson is once again shown in a medium shot and sings 'Toot Toot Tootsie' (Erdman & Kahn, 1921) in its entirety. Again, as in the example of the montage sequence, synchronicity is drawing attention to its construction and to the audiovisual nature of the film.

Buhler, Neumeyer and Deemer discuss this moment of dialogue (you ain't heard nothing yet) from Jolson in the film, and say that:



This is in fact the only actual piece of spoken dialogue in the entire film. The other spoken lines consist of Jack addressing the audience at *Coffee Dan's* and his odd monologue to his mother (including Jack sitting at the piano vamping) that immediately precedes this scene... (2010:292)

Which seems an extraordinary way to dismiss both this moment, but also the monologue that is yet to come and is one of the most significant moments of the film in terms of sound and the interplay between various sound techniques. There is immense analytical potential in the monologue. To dismiss the moment as 'odd' is an attempt to resolve the film as 'mostly silent' and in doing so negate the moments that do not sit comfortably within a dichotomous construction.

It is precisely because *The Jazz Singer* uses different types of sound technology, from both early and sound cinema, that the idea of the film as an *undecidable* is so easy to notice. It is especially interesting when both types of technology are juxtaposed in the same scene and the best example of this is the scene between 42:22 and 46:56. It will be relevant to examine this scene in some detail to uncover the various uses of sound and the effect that these have.

This is the most important part of the story so far – Jackie has just been reunited with his mother after many years and is about to meet his father again. The meeting was depicted with the use of inter-titles until the moment that Jackie decides to play a tune on the piano. A synchronised sequence begins as Jolson sings the song 'Blue Skies' (Berlin, 1926). As the song finishes, an extensive piece of synchronised dialogue takes place:

**Jakie:** Did you like that Mama?

**Sara:** Yes

**Jakie:** I'm glad of it, I'd rather please you than anybody I know of. Oh darling, will you give me something?

**Sara:** What?

**Jakie:** You'll never guess. Shut your eyes Mama, shut 'em for little Jakie (laughs), I'm gonna steal something

(He kisses her and she laughs, he continues to speak whilst laughing)

**Jakie:** I'll give it back to you someday too, you see if I don't. Mama, darling, if I'm a success in this show, well, we're gonna move from here...oh yes! We're gonna move up in the Bronx. A lot of nice green grass up there and a whole lot of people you know, there's the Ginsbergs, the Guttenbergs and the Goldbergs, oh a whole lot of Bergs – I don't know 'em all. And I'm gonna buy you a nice black silk dress Mama...you see Mrs. Friedman, the butcher's wife? She'll be jealous of you...

**Sara:** Oh no...

**Jakie:** Yes she will, you see if she isn't...and I'm gonna get you a nice pink dress that'll go with your brown eyes...

**Sara:** (protesting) Jakie, no...I...I

**Jakie:** Whatta you mean, no? Who is...who is telling you? Whatta you mean, no? Yes, you'll wear pink or else...or else you'll wear pink (laughs) and darling, oh, I'm gonna take you to Coney Island...

**Sara:** Yeah?

**Jakie:** Yes, I'm gonna ride on the shoot-the-chutes, and you know in the dark mill? Ever been in the dark mill?

**Sara:** Oh no! I wouldn't go...

**Jakie:** Well, with me it's alright, I'll kiss you and hug you, you see if I don't  
(Sara half protests, half laughs)

**Jakie:** Now Mama, mama, stop now...you're getting kittenish! Mama, listen, I'm gonna sing this like I will if I go on the stage...you know...with the show? I'm gonna sing it jazzy...now get this!

It is quite clear that the dialogue is improvised and that it bears absolutely no relevance to the narrative. Katherine Spring, in *Saying it With Songs*, suggests that this moment is an example of 'star-song attraction' the moment when the audience relate both to the *performer* and the song. That is, to the *narrative* and the pro-filmic event of Jolson singing, rather than Jakie. Spring provides an account by David Erwen, of his experience at a revue (La Belle Paree) from 1911 at the Winter Garden Theatre. This is

the moment, she argues, where Jolson, one of the performers, realises the potential he has as a star, separate from the narrative. Erwen says:

“[Jolson] stepped out of character, went to the edge of the footlights, and began to talk flippantly and informally to a few spectators scattered through the theatre. “Lots of brave folk out there,” he remarked, peering through half-closed eyelids into the dark auditorium. “Come to think of it,” he added, “after the reviews we got, there’s a lot of brave folk right up here on the stage!” The audience started to chuckle. “That’s better folks! What do you say we get a bit better acquainted?” The audience applauded. “Tell you what I’m gonna do. I’m gonna sing some songs for you, if you’ll listen.” The applause grew louder. Then, for the following half-hour, the performer sang his heart out.” (2013:75)

O’Brien claims of the film that “Instead of incarnating a fictional character, Jolson was said to have played himself...”(2005:72) It could be argued that it *is* Al Jolson, speaking to Eugenie Besserer (Sara) and as he plays his well-practised role of entertainer, she responds as an uncomfortable audience member, but to dismiss this moment in *The Jazz Singer* as a moment of simply ‘star-song attraction’ is to dismiss the differences to the account given by Erwen. Jolson *does not* address the film audience – he does not ‘break the wall’, look at the camera or refer to Eugenie as anything other than her character. This is a different phenomenon and one that acts as a key device in a film that is transitioning. The audience may react and read the scene as Jolson, but there are elements that are not removed from the narrative, in the way that Erwen’s account happens. This is something else, and what is powerful and of significance, is the interplay between different sound devices. This is why it is some important to consider *The Jazz Singer* as something other than a collection of songs.

This specific moment of dialogue is one that may at first appear to be spontaneous, but there is a great deal of evidence that shows that the Warners had been planning a scene with some dialogue prior to the film. As referred to above, they had already announced that films of the 1927-28 season would include Vitaphone sequences for 'dramatic effect' and Crafton argues that:

Though the myth is that Jolson spontaneously blurted out his famous speaking part, all summer Crosland had been telling the press that THE JAZZ SINGER would have some talking. (1997:109)

Gomery also notes that in the previous year "Harry Warner proclaimed that Vitaphone would add talking sequences to some of its feature films – the first of which would be *The Jazz Singer*." (2005: Chap 3, p. 42 of 155, 28%) Donnelly also acknowledges that ...*The Jazz Singer*...concentrated more on the synchronized performances of songs and particularly dialogue. (2014:45) (emphasis mine).

According to Crafton there is some dispute who actually suggested the idea of Jolson speaking in the sequence; Jolson himself, Crosland or producer Darryl Zanuck. In any case, the significance of the dialogue was recognised at the time – this was not a film that was devised to have *only* singing and musical Vitaphone moments. It is what happens during and after this dialogue that is of significance in the analysis of the scene.

As the dialogue continues, is an acceptance of the synchronised speech as if it is somehow directly linked to the idea of a pro-filmic event. Although this synchronicity

is working to showcase Jolson and the phenomenon of the 'talking picture', it is also beginning to work as a construct to uphold the binary system of sound and image – the sound appears to become an attribute of the image. There are no changes in perspective from either the image or the sound, and the impression is given of an improvised 'naturalistic' performance. The French filmmaker and theorist Rene Clair comments of the reaction to early sound cinema:

I have observed people leaving the cinema after seeing a talking film. They might have been leaving a music hall, for they showed no sign of the delightful numbness which used to overcome us after a passage through the silent land of pure images. They talked and laughed, and hummed the tunes they had just heard. *They had not lost their sense of reality.*  
(1985:95)

This is an interesting quote, as we might now associate the 'delightful numbness' with the concealment of production that occurs with synchronisation, however, Clair here uses the phrase to describe the conventions of early (or what he calls 'silent') cinema. It is more likely, however, that the conventions of early cinema were working to disguise the means of production, whereas synchronised musical sections were drawing attention to their own production and phenomenon. This is seen in *The Jazz Singer* in most synchronised sections, but in the above example we begin to lapse into the 'delightful numbness' of synchronicity disguising the binary construction.

Crafton also discusses this effect of sound cinema on the audience in terms of *presence* of the character on the screen:

The resulting [sound] film blended the most popular ingredients of the current entertainment mix of vaudeville, live musical accompaniment for silent films, lectures, public address and radio. Filmmakers capitalized on cinema's

capability to suggest a *virtual* presence, an imagined being-there, in order to bring performer and auditor together in the space of the filmed performance. (1997:63)

This demonstrates, again, the impact of a sequence that draws attention to itself in terms of the sound, and there is certainly a perception of *presence* in the character of Jakie on the screen. The talking and singing bring Jakie much more into the present tense of the film world; somehow with the audience and part of a performance that exists for the time that it is on the screen. However, the result of this ‘presence’ is the heightened sense of *absence* in the next moment.

The film then changes the sound technologies it employs as Jakie is interrupted by the entrance of his father.

At 45:00 the Cantor walks into the room and shouts ‘Stop’ – it could almost be seen as a direct order to the synchronicity of the film, as immediately afterwards, silence ensues. For twenty seconds the film is *completely* silent, that is, in the traditional sense of silence. There are none of the elements of sound that are usually discussed – ambience, music, dialogue and sound effects. Buhler, Neumeyer and Deemer describe of this moment of pause after Jolson’s singing that the film “...plunges the sound track into more that 20 sec worth of pure silence.” (2010:293)

There are, of course *traces* of sound, most noticeably at 45:13, where the Cantor mouths the words ‘Jakie’, but no sound is heard. This is an extremely strange and

jarring moment – for two minutes and thirty-eight seconds the audience have been exposed to synchronised sound and then, suddenly, for no apparent reason, characters are seen to speak and move, and no sound is heard that could be attributable to them.

What *is* heard, is what Birtwistle describes as ‘cinesonic’ sounds, sound that have no attribute but are nonetheless clearly audible and create impact in the context of the film. The sounds of the hiss and crackle in the technology is heard, and the audio changeover between the synchronised film and the ‘silent’ film conventions is clearly noticeable. This hiss and crackle of technology is particularly prevalent in early synchronised sound when the actors are speaking audibly. Birtwistle describes these sounds when listening to, in particular, early sound film:

While at some point, when listening to film, we might consciously acknowledge the presence of ground noise, we nonetheless listen through it, usually become less aware of the sound as it gradually migrates to the borderline of conscious perception. Similarly, while we recognise the limitation of early sound film’s reproduction of speech, the extreme compression it imposes on the human voice is nevertheless soon forgotten as we attend to the semantic content of a film’s recorded dialogue. (2010:92)

Whilst the auditor would *usually* ‘listen through’ these sounds, the very specificity of *The Jazz Singer* – this moment where the synchronicity ‘stops’ and other elements of sound are yet to come in, removes the other layers of sound that are ‘listened through’. Chion may call this technological sound ‘anempathetic’ in the context of, for example, *Pyscho*, where both the shower and the technology carry on regardless of Marion’s (Janet Leigh) death. However, here the sound does not carry on regardless –

it is not listened through, it is intensely noticeable, and this awareness changes the impact of the sound in the film. This moment is only possible in *The Jazz Singer* precisely because it uses different elements of sound and moves between the modes of 'silent' and 'talking' cinema. In doing so, these cinesonic, unnoticeable sounds are explicitly revealed. The value of the film is in the technology that so often relegates it to an 'unfinished' moment in technological history.

As the film continues at 45:20 the non-diegetic synchronised score begins, and the confrontation between Jakie and his parents is depicted by the use of inter-titles. These inter-titles follow the conventions described earlier – at times characters say much more than is depicted on the cards, and continue to move, unseen, whilst the card is shown. This is an astonishing moment and the effect is dramatic – we can now no longer accept any notion of 'delightful numbness' either from the images and inter-titles, *or* from the previous synchronised section of film. There is no longer the present-tense 'presence' of the characters.

Buhler, Neumeyer and Deemer claim that this moment when the music returns...

...in the form of a synchronized orchestra music...in this way the score seems to follow Jack's father in rejecting the sound of Jack's (synchronized) singing, and the old fashioned values of the melodrama also seem to accrue to the sound of the silent-film orchestral score." (2010:293)

Which is an interesting analysis – certainly the dramatic reuniting of the father and son is accompanied by a synchronised score that follows the conventions of earlier cinema, but the use of the word 'Stop' to divide the film into its constituent parts of



'silent' and 'sound' operates as a point of opposition – impassable. The true value of the scene is in treating this moment, and the following 'cinesonic' sounds, as a site of the 'hinge' a site where meaning can travel *between* the two supposed conventions.

It is here that construction of film as an audiovisual medium is explicitly depicted. It is impossible to 'forget' the synchronicity of the previous section of film – whilst the inter-titles are displayed, and the characters' mouths move we can *hear the absence* of the sound. The juxtaposition of these two technologies positions the film in-between the two systems of sound and image. The film becomes both sound *and* image and by refusing to settle on the positive or negative side of this hierarchical structure, becomes inherently *undecidable*.

Gorbman describes this moment as 'structural silence' – she uses the term in relation to music in classical film, but it is a useful term to highlight the ability of the viewer/auditor to explicitly *notice* an absence.

*...structural silence* occurs where sound previously present in a film is later absent at structurally corresponding points. The film thus encourages us to expect the (musical) sound as before, so that when in fact there is no music, we are aware of its absence. (1987:19)

The ability to notice the absence evokes presence of what is not there. The ab(pre)scence of sound alongside the cinesonic.

In deconstructing this scene to highlight the undecidable nature of film, the logocentric journey towards image (sound – image – truth (logos)) is ruptured. John Sallis quotes from Derrida in his paper *Doublings* (1996) where Derrida describes the moment when a construction (in this case a text and the various concepts within the discourse) is deconstructed to reveal an alternative to the logocentric trajectory:

Within the closure...it is necessary to surround the critical concepts with a careful and thorough discourse, to mark the conditions, the medium, and the limits of their effectiveness, to designate rigorously their relationship...to the machine whose deconstruction they permit; and, by the same stroke, designate the crevice through which the yet unnameable glimmer beyond the closure can be glimpsed.(1996:125)

*The Jazz Singer* operates to 'designate the crevice' by which film need not be considered in a logocentric framework. By analysing the very concepts and practices that are operating in the film, it is possible to highlight their own limits of expression when they are fixed in a binary system. By allowing the possibility of a fluidity of meaning, through concepts of trace and undecidability, film itself, and certainly sound, is not relegated to stasis, instead the way is paved to consider the medium as being in a state of flux and examine more closely the symbiotic nature of sound and image when combined in the specificity of cinema.

## SUNRISE

*Sunrise* is an example of a film uniquely placed in the film history of sound.

Chronologically it was released less than two weeks before *The Jazz Singer* and was one of the first feature films to use a fully synchronised score and sound effects. There are a few examples of the representation of spoken voice in the film, but these are not synchronous, leading the film to have a less prominent place in film history than the film coined as the first talking film - *The Jazz Singer*.

If *The Jazz Singer* demonstrates a bridge between the forms of early non-synchronous film and 'talking' film, *Sunrise* attempts no such connection between 'old' and 'new'. Whereas *The Jazz Singer* can be usefully applied to the study of the specificities of so called 'silent' cinema, present in the text and awaiting acceptance or rejection from the classic form of cinema yet to come, *Sunrise* uses sound in an extremely precise way, that would not be possible without the technology of synchronicity, but does not sit fully in either form of 'silent' or 'talking' cinema.

The use of sound in *Sunrise* so disrupts the fallacy of a technological progression to 'talking' films that its very inclusion in the study of film history is limited. Kristen Thompson and David Bordwell, in frequently used text *Film History, An Introduction* do cite the film, but relegate it to "...The Late Silent Era in Hollywood..." (1994:174) and note that: "*Sunrise* was perhaps too sophisticated to be really popular, and its huge city sets...made it so expensive that it did only moderately well for Fox," (1994:174) In terms of its significance, Bordwell and Thompson mention the film as "...full of Germanic mise-en-scene with expressionistic touches..." (ibid)

They do not once mention that the film has any synchronised sound in it. Where *Sunrise* is mentioned, it is usually in terms of the future success of Murnau, and the European influences in the film, such as German expressionism. These elements are, of course, noteworthy, but the sophistication of the sound, at such a specific time in Hollywood film history, has been largely ignored.

*Sunrise* uses music and image in a complex multi-layered way, that enriches the text for the viewer, and at the same time, makes the audience active in their own analysis. Although one of the first synchronised scores, and certainly one of the first films to make such frequent use of sound effects, *Sunrise* resists the temptation to use these effects as spectacle, or wallow in the newness of the technology. Only by taking a new approach to the analysis of the score and the effects, is it possible to see an example of a film that is at times astonishingly audio-visual, using every form possible to create new readings and expression. Derrida's theories of *trace* and *hinge*, so useful in analysis of *The Jazz Singer* can be used to uncover the multitude of readings and fluidity of sound and image present in *Sunrise*. This approach can remove the film from its awkward placement in film history and analyse the film for the power and potential of its sound.

In terms of *Sunrise's* placement in film history, Brown discusses the period as:

...a short-lived, intermediary stage in the mid-twenties during which various sound-recording technologies were developed, not to provide "talking" pictures but in order to make the synchronized musical score a permanent part of a given film. (1994:Chap 3, loc 902 of 6048, 15%)

This is the period in which *Sunrise* is made, and the choice was made to make the film with the synchronised score as the predominant audible sound (aside from the 'occult' or 'cinesonic' sounds which exist within the expression of the technology). Of course, with a Derridean analysis there are also moments of *trace* and sites that can perform as *hinge*, meaning that image and sound can both be 'heard', but in terms of the soundtrack, there is a synchronised score. Brown says of the film score that it is important... "...not simply to hear the film score but to see it, not simply become aware of the presence of music "behind the screen" but to scrutinize its interactions with the other arts that contribute to the cinema." (1994:Introduction, loc 37-48 of 6048, 1%) and this is a vitally important approach when analysing the sound and image in *Sunrise*.

The musical score in *Sunrise* works in symbiosis with the frequent sound effects to create a complex soundtrack that, in turn, cannot be separated from the image. In many ways, this is what makes *Sunrise* so difficult to analyse in traditional terms. The expressionism in the image is heightened by the music and the actors are directed to behave in a way that seems startlingly modern in comparison to the melodramatic style of contemporary films. The insistence in film theory, of studying either the soundtrack *or* the film, does *Sunrise* a disservice.

This disservice can also be problematic when attempting to categorise *Sunrise* as either an early synchronised film, or a late 'silent' era film, because to do so brings into question the ontology of, specifically the music, in it. Buhler and Neumeyer (2015), discuss the difficulties in treating early (non-synchronous) film music as

ontologically similar to the image, pointing to the perceived difference in the origin of the sound from the image:

If music substituted for the missing voice of the silent cinema, it did so as allegory rather than symbol: it stood precisely for a failure of the voice to pass the membrane of the screen (Buhler 2010, 38). The shadows that flitted across the screen remained deaf to the sounds of the screen, and this negative reciprocity established an absolute, unbridgeable distance between two worlds. Music of the silent film belonged to the world of the audience, the world of live performance, rather than the world of the film. Sound effects, though often “synchronized”, were also performed in the theater; they were understood as representations of screen sound rather than mimetically related to it. Diegetic music, too, although sometimes synchronized, was understood fundamentally as cue music, not as source music in the manner of sound film. In this sense it was not yet “diegetic”: it was a sound effect, and like other sound effects it was not mistaken for part of the apparatus. Its sound belonged to the theater rather than the image. (2015:20)

*Sunrise* uses music in a sophisticated and multi-faceted way to clearly *symbolise* the human voice – something that Buhler and Neumeyer argue is impossible without synchronicity – but these techniques did not ‘suddenly’ appear, complete and complex in *Sunrise*. The film allows the viewer to understand the use of music in film in an historical place that is not sharply divided between ‘silent’ and ‘talking’, and therefore allows legitimate renegotiation of the ontology of the music, and other sound, within it.

Buhler, Neumeyer and Deemer discuss the use of the commissioned score in early sound film and the late silent era in their book *Hearing the Movies* where they say that:

By the 1920s, any film with ambition – one where an extended run was expected, or the film was to be distributed through a road show – would likely

have a commissioned score of some sort. Fully original scores were relatively rare until the coming of sound..."(2010:273)

And they discuss *Sunrise* in these terms: "...the first Movietone feature was *Sunrise* (1927), a silent film with a synchronized score by Risenfeld." (2010:289). This is useful in terms of contextualising how the authors view *Sunrise* – as a silent film – the same as *Don Juan* – but it is useful to consider these films as something ‘other’ that ‘silent’ because to do so limits their potential for analysis. The score can tell us a lot about the musical approach in late ‘silent’ film; Hugo Risenfeld, the composer for *Sunrise* was an experienced composer for silent films and also conducted cinema orchestras and a theatre manager. The music that he devised will certainly have been in the traditions that he experienced in these roles. Gorbman suggests that the use of the synchronised score in films like *Don Juan*, had a “silent film mentality” (1987:47). It is justified to expect the score for *Sunrise* to be based on these experiences and traditions. However, to treat *Sunrise* as merely a ‘silent’ film denies the specificity that the synchronised score has – it does not sit comfortably in either the ‘silent’ nor the ‘talking’ film.

*Sunrise* operates as Derrida’s notion of the *undecidable* the object that sits between, and exposes the construction of two opposite quantities in hierarchy. *Sunrise* exposes two separate binary oppositions, through its place in history and its treatment of sound and image. The first – *Sunrise*’s tenuous place between ‘silent’ and ‘talking’ films is, traditionally, *decided* by either leaving out of a study of film sound history, or placing it firmly in the ‘silent’ camp. The second, the supposed difference between sound and image, is less easily decided. Placing the film in the

'silent' era does, of course, settle the argument, but this is not satisfactory –the film so evidently has a synchronous sound track. Focussing instead on the elements of expressionism does ignore the sound, or relegating it to a small handful of films with a synchronous sound track, settles it firmly in its historical context. So, *Sunrise's* uncomfortable, *undecided*, situation is frequently ignored.

Hugo Riesenfeld and Ernö Rapée's collaborative score is a key element of the success in *Sunrise*. It is responsible for directing the audience, and also the image. It works in collaboration with the sound effects and is often indistinguishable from them.

Through careful direction, the score is able to guide the audience to not only specific areas of the screen, but to one of many specific emotions that are happening at the same time. Their use of leitmotif is effective; evoking themes and characters who are not necessarily onscreen but are nonetheless (not)there through the idea of *trace*.

*Sunrise* is broadly organised into three sections; the first is the seduction and betrayal of the Man (George O'Brien) by the Woman From The City (Margaret Livingston), and the subsequent planned murder of the Man's Wife (Janet Gaynor). The second is the redemption of the Man and the second symbolic marriage of the Man and the Wife. This is set in the city and is a somewhat jarring section, filled with humour centred on the naivety of the country couple in the city. The final section is the return to the village, the boat wreck and the rescue of the Wife.

The soundtrack immediately announces its importance in the film from the very first shot of the film. A drawn image of a train, with the title "Summertime...vacation time"



painted onto it, is dissolved into a shot of an actual train, in the same space. As this dissolve happens, a cymbal roll matches the movement – not only does this represent the sound of the train pulling away, but it works to *highlight* the transition – the dissolve, used so frequently to ‘smooth’ and disguise the cut. Immediately, both image and sound are working together to make the viewer active – the cymbal, like the drawing, is not actually the sound of a train pulling away (any more than the drawing is actually a train), but it *represents* it, and the audience are made aware.



The train begins to pull to the left of the screen and the sound effects of a train, and the whistle and bell are heard, at the same time as the strings and woodwind in the score. The representation of the train has changed to the sound of a train, it is no longer an instrument. The score and the sound effects have equal weighting in the soundtrack, along with the image. Not one element of the film has dominance. The low strings and woodwind of the score are equally matched with the action onscreen – the result is not a confusing one, but rather a complete impression of the station, the movement, the city and the train. The next shot is of the train picking up speed and is superimposed with another train exiting a tunnel. The two trains cross diagonally in the screen whilst the orchestral trombones slide, signifying the

movement, the speed and dynamics of the train – at the same time the sound effects of the train continue at an equally weighted volume.

The following shot in the film is from two different shots placed together. On the right of the screen, a seaside scene, with people swimming and sunbathing, close to the camera stands a woman in a swimming costume – she represents the inherent sexuality and seduction of the city and its inhabitants. The left of the screen is dominated by a low-angled looming shot of a ferry. The ferry is angled to the right, giving the impression of a skewed dissection of the screen.



The sound of the ferry's horn is heard; a deep boom in the sound effects, whilst the score continues is rapid punctuated tone. All the sounds are of equal dynamic in the soundtrack mix. The impression of these opening three shots is significant. It is impossible to identify if the feeling of rapidity, claustrophobia and destabilisation is due to the image or the sound. It is not possible to say if the sound is *of* the image, or the image is *of* the sound. John Belton's assertion that: "Sound achieves authenticity only as a consequence of its submission to tests imposed upon it by sight.' (1985:64) is not applicable – the sound is not generated by the image, any more than the image is generated by the sound. The four elements of the film at this point – split screen, specific images, score,

sound effects, cannot be separated or listed in terms of importance or significance. Here is an example of Perkins' 'synthesis'; all elements of the film are operating to create meaning – to consider them separately, or in terms of importance, does not identify the relationships between them:

Synthesis here, where there is no distinction between how and what, content and form, is what interests us if we are interested in film as film.” (1993:133)

It is here that the traditional analysis of sound in film is not effective – even with a focus on the sound as opposed to the image, we do the film a disservice.

Chion's notion of the sound as 'added value' (1994) for example, would not be appropriate. It is impossible to separate the audio from the image as both combine to create the overall effect. This is extremely unusual in film sound – as soon as synchronised sound occurred in cinema, it was frequently read as being subservient to the image. *Sunrise* demonstrates in its opening three shots, the potential of the soundtrack to work with the image and successfully add a dimension to the screen.

These shots allow the viewer to at once understand and hear/see (experience) all the elements but read the film as one object, the film *as film*. To analyse film in this way is to attempt to resist the temptation to write about the image or the sound, or to focus on the cinematography or the editing. Each aspect is part of a greater whole. This is another example of the *undecidable* and it can be uncomfortable to acknowledge. The soundtrack in *Sunrise* frequently operates

in this way – the orchestral score is mixed with the sound effects and helps to portray the narrative and the psychology of the film. These first few shots are relatively straightforward – each element is working to portray the same idea – that the city is loud, dangerous and confusing.

Later in the film, the multi-layering of the soundtrack and effects operates to give the viewer information that would not otherwise have been present. It allows the viewer to simultaneously experience two or more elements of narrative or psychological realism.

The ‘seduction scene’, for the purposes of this analysis, is the moment in the film where the Woman From the City<sup>8</sup> and the Man meet by the lake at night to discuss the plot to murder the Wife. This scene is a significant one, for many reasons and will be revisited later in the analysis – the musical score and sound effects will be considered first.

The technique of the leitmotif is used in *Sunrise*, most specifically for the Woman’s character. The leitmotif, a repeated musical phrase that is connected with a character or less frequently, an idea, is a technique used extensively in classical music but most explicitly linked initially to the composer Richard Wagner, and his frequent use of the leitmotif in his four epic operas known collectively as *The Ring Cycle* or *Der Ring des Nibelungen* (1876).

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<sup>8</sup> Afterwards referred to as the ‘Woman’

Eisler and Adorno describe the use of the leitmotif in cinema, saying that “They function as trademarks, so to speak, by which persons, emotions, and symbols can be instantly identified.” (1947:4) However, Eisler and Adorno are also intensely critical of the use of the leitmotif in cinema, referring to its function as being “...reduced to the level of a musical lackey...” (1947:6) Despite their relative ease to create in terms of musical composition. Leitmotifs, Eisler and Adorno argue, only work effectively when they are:

...paralleled by the heroic dimensions of the composition as a whole. This relation is entirely absent in the motion picture, which requires continual interruption of one element by another rather than continuity” (1947:5)

In other words – according to the authors, the leitmotif is only effective when used in Wagnerian style operas or other epic compositions. Eisler and Adorno also argue that, rather than simply denote the specific elements in a film, Wagnerian leitmotifs were supposed to represent wider metaphysical themes, and they do not operate in that manner in film. “The leitmotif was invented essentially for this kind of symbolism. There is no place for it in the motion picture, which seeks to depict reality.” (ibid) This is a questionable statement, even in 1947, where there is plenty of evidence of the understanding and consumption of film as representative and expressionistic art, rather than a depiction of ‘reality’, but Eisler and Adorno are writing their book in the middle of the era of Classical Hollywood’s studio system; their opinions are based on the product of this system, including the use of music.

Gorbman refers to Eisler and Adorno, and also points out that the use of the leitmotif in Wagnerian opera was very specific; the audience needed to have heard the theme before in direct connection with a specific character; for the leitmotif to operate in film, central themes do not count:

Numerous film scores are built on one central theme, which may or may not accrue associations in the manner I have described...In many cases, the theme's designation is so diffused that to call it a leitmotif contradicts Wagner's intention. (1987:29)

According to Gorbman, *Sunrise's* use of the leitmotif is applicable – rather than a 'central theme' the leitmotif is used to depict specific characters, and specific symbolism. Eisler and Adorno's concerns with the use of the leitmotif are understandable and valid, but the specific use of the technique in *Sunrise* does have merit, precisely because it is not reduced to the level of a 'lackey'. Rather than simply accompany the image of the character, the leitmotif in *Sunrise* is sometimes present when the character is not and is used to *evoke* the character, and alongside this, a wider metaphysical concept.

The Woman has her own leitmotif that represents her attributes and actions. In the seduction scene, the leitmotif is introduced and used repeatedly. At the beginning of the meeting by the lake a whole tone scale is heard on the harp – this becomes more prominent and transferred to the flute and muted trumpet.

The whole tone scale is a series of six notes, separated from each other by a full tone – this is different from the major or minor (diatonic) scales of seven notes that

are comprised of a specific combination of semi-tones<sup>9</sup> (the smallest discrete interval in music) and tones (an interval of two semi-tones). Where the major and minor (diatonic) scales are distinctive and have notes that are given more importance in the scale (notably I and V)<sup>10</sup>, the whole tone scale places no such importance on specific notes and as such, each note carries equal importance. The impact on the listener is significant – as each note carries the same importance it is harder to orientate oneself in the scale – the notes are not as distinctive, at any point one could be listening to any part of the scale. This is unlike the function of the more commonly used diatonic scale; Brown describes this function of this in music:

One of the gimmicks of Western tonality,...is to constantly move away from its tonal center in ways that cause the listener to anticipate the return, sooner or later, of that tonal center. Psychologically and aesthetically speaking, tonality sets up a certain order, creates a sense of loss and anxiety in its various departures from that order, and then reassures the listener by periodically returning to that order, which will generally have the final word.  
(1994:Introduction, loc 63 of 6048, 1%)

So, if a diatonic scale's function is to provide resolution and closure, the whole-tone scale conversely removes this aspect. It is a rejection of a clear direction through musical tonality, and a rejection of a process of Western logocentrism. The specificity

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<sup>9</sup> 'Tone' and 'semitone' are used in the U.K. to discuss the smallest intervals in Western music; the terms 'step' and 'half-step' are used in the U.S.

<sup>10</sup> Royal S. Brown discusses the approach of tonality in the major and minor (diatonic) scale in Western music. He says that music can be divided up "...the dividing up of a given tone-block into twelve equally spaced tones (half steps, or half tones), that form the chromatic scale, which repeats at either a higher or a lower pitch level after each twelfth note; c) the hierarchical valorization of these twelve tones through the formation of a seven-note series whose individual tones are labeled, in English, with letters A to G. This series skips over five of the half steps to produce a scale of five whole tones and two half tones that repeats at either a higher or lower pitch level after each seventh note. A scale can be formed using any of the basic twelve notes as the point of departure to create the key for a given work of music.  
(1994:Introduction, loc 63 of 6048, 1%)

of the whole tone scale is what makes its use frequent in film to represent dream-like states. In the opening of this scene the whole tone scale enhances the surrealism of the mise-en-scene, but even more than this, it denies the viewer a clear tonal and audible direction. The scene is enhanced in its meaning by this compositional choice, much like the choices made by the cinematography.

The location of the The Man and The Woman's tryst operates as an in-between place, separate from the village and certainly not part of the city. As the Man walks towards the meeting spot, he is frequently obscured by trees and bushes and the fog that is on the ground.



This location is constructed as *unsafe*, obscured and a place where the sin of the Man occurs. As the Man walks through the final trees and comes across the woman, the whole tone scale begins. As the view is unobscured, the obstruction remains in the music – the viewer is able to see the action on the screen but is still disorientated by the use of the whole tone scale; a scale specifically designed to have no discernible beginning or end. This unsafe, 'in-between' space is represented in the music and image; it is a place that is not 'settled', being neither part of the city nor the rural. Brown notes the compulsion for



resolution in moments of unsettledness in music, writing specifically about moments when a musical melody is not resolved, but used for affect:

...affect in its pure state is neither linear nor does it have a beginning, middle, and an end. There may be points at which one starts and stops having a particular feeling, but that feeling itself is synchronic and does not invite a structural sense of closure. The necessity for such a sense of closure derives from a need, inherent in the psychology of the occident, for emotional release and/or consummation. (1994: Chap 5, loc 1501 of 6048, 25%)

Brown goes on to say that the tendency in Western music is to eventually lead the viewer back to a resolution (he calls the term consummation) where the tonic note (the beginning and end of the scale) is played. This is not the case in the whole-tone scale in this scene. This is clearly an example of the desire for the resolution of a binary opposition; either to place the characters in the city or the country, and the Man with either the Wife or the Woman. Although the film does eventually resolve and settle these moments, the 'in-between' space in the film operates as a site of hinge; where image and sound can represent *both* or *neither*.

The image operates to create the impression of secrecy, disorientation and obstruction by use of night time shooting, obscured shots and fog. The music is able to maintain this impression as the scene clears, enabling the viewer to concentrate on the action but *retain* the previous impressions. Now the image and the music are able to provide different meanings to the viewer; both important and both contributing to the overall dislocation of the space of the film, whilst still providing relative narrative information.

As the Man enters and meets the Woman and her leitmotif begins – as well as specific to her, the theme connotes the wider idea of seduction and betrayal. The leitmotif is introduced by a single note and followed by a descending glissando (slide) on the strings, played in their lower register. The descending note starts on a perfect fifth but quickly drops a semitone to an augmented fourth, before sliding to the bottom note. The significance here is evident – the first two notes are clearly played and distinct from the rest of the glissando – the augmented fourth, or *tritone* is what makes the leitmotif distinctive.<sup>11</sup>

In Medieval church music, the tritone was banned – being in the middle of the two most commonly used intervals (the perfect fourth and the perfect fifth), its sound was extremely discordant – it was known as the *diablous in musica* or the devil in music. It was understood to be unsettled or *undecided*, being neither a perfect fourth or fifth (incidentally, the tritone could also be described as a diminished fifth, being one semitone flatter than a perfect fifth – it sits precisely in the middle of the two intervals).

The use of the tritone interval in the Woman's leitmotif is effective and deliberate – whilst the use of intervals by the twentieth century had expanded widely, most specifically in jazz, the distinctive use of the tritone connotes not only the dangerous lure and seduction of the city, but also the 'evil' inherent in

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<sup>11</sup> An augmented fourth is one semitone higher (sharper) than a perfect fourth, which is a four-note interval from a major scale made up of five semitones – the augmented fourth has six semitones and is also called a tritone, because the interval is made up of three complete tones.

the Woman, and what she embodies. Her attempt to convince the Man to kill his Wife is not only an incitement to murder, but also an attack on the sanctity of marriage.

There have now been two distinct *undecidable* musical techniques used, the whole tone scale (that has no demarked beginning or end) and the tritone interval – a discordant note in-between the perfect fourth and perfect fifth. This mimics not only the *undecidable* nature of the location, a place that cannot be defined as the village, nor the city, but also the Man's struggle to resist the temptation of the Woman – his own *undecidable* moment – a moment that returns to him throughout the rest of the film. His indecision here is the causal device of the entire narrative.

The music of the seduction accompanies much of the scene but there are notable other sounds that enrich the scene. As the woman makes the suggestion, via title card "Couldn't she get...drowned" the whole tone scale once again makes an appearance, accompanying a short flash forward to the Man throwing his Wife from a boat. As the film cuts back to the Woman, she laughs and the trumpets mimic this with siren like minor thirds. The flash forward is much rarer than the flashback in film. Unlike its more common antonym the flash forward does not always present a future that is *certain*, but a *possible* rendering of what might happen.

In the case of *Sunrise*, the Man never does throw his Wife from the boat; he chooses later to save her. This moment is something that equally does and *does not* happen. It is there on the screen and seen overtly by the audience and in the mind's eye of the Man; it *has* happened. Equally true is the future narration, where the Man chooses not to murder the Wife. At this point in the film, the audience do not know whether the Wife will be dispatched or not. The language of the title card also adds to the uncertainty – by using the word “Couldn’t”, a modal verb, this implies something that *might* happen in the future, but is not certain.

The image is obscured by masking around the edges of the image, and by more fog, this time the fog operates more explicitly as a device to imply potential, rather than certainty. The fog also denotes the scene as a flash forward, separate from the present tense of the main text. In addition to the image, the music returns to a quiet whole tone scale on the harp, another *undecidable*. This scene is both happening and not happening at the same moment – the *undecidable* moment is not heard or seen, but both heard *and* seen.

When the Woman urges the Man to “Come to the City” the film cuts to a horizontal split screen of the lovers on the bottom half, and the city in the top half. At the same time, sound effects of car horns and bells start; at the same time the seduction theme continues in the score.



As the screen becomes cityscape only in the image, the bells and horns continue at the same dynamic – initially it might appear as if there has been some attempt to synchronise the Foley sound, it now becomes apparent that they are not, and were not, intended to be synchronous – much like the music track, the sound effects are a part of the overall soundscape of the film and indistinguishable from the other sounds, or the image.

A shot of the brass band in the city is shown on the left of the screen, and dancers on the right. Whilst synchronous music of the band plays, the other sound effects of the city continue, and underneath all of this, the film music score still continues to play. The split screen is directly horizontal but the camera moves in a circular motion – the combined effect is a dizzying disorientated one.



The film does not seem to need to demonstrate its synchronous qualities, which is highly unusual in a film of this time, but rather uses the sound tracks to construct an intricately woven audio-visual track. Meaning is fluid between each

layer and the audience is an active viewer and auditor in this. These moments are truly *audio-visual* – the combination of two different shots, filmed through a constantly circling lens and accompanied by many different sounds, provides a representation of the city as a loud, confusing and impersonal space. In *addition* to this reading the audience is also aware that this is an impression, conjured by the Woman for the Man, and the present time is still with those two characters by the lake. The seduction continues.

This scene is rich with the Derridean concept of the *undecidable*, and therefore is a site of *trace*, facilitated by the *hinge* between the sound and image, rather than the separation. Narratively the scene provides moments of undecidability – the Man is not certain of his future actions; the Woman works hard to convince him of a certain direction. Geographically the location is not within the village or the city – rather both characters appear to bring their own attributes and locations to the scene – the Man (village) comes together with the woman (city) and we are shown, through split-screens and multi-layered sound tracks, both locations at once. The flash forward disturbs the present tense of the film, offering a future (present) that both *has not*, and *has* occurred. Most importantly, the sound and image *together* create the overall impression of the scene. The split screen is also split sound, the uncertainty of the future is present in the whole-tone scale, as well as the fog and masked image. The scene is not distinguishable in terms of sound and image. We *see* speech, we *hear* uncertainty.

In *Of Grammatology* Derrida claims, in relation to the differences between writing and speech, that "...there is no full speech..." (1997:69), by which he means, it is impossible to identify speech as 'complete' and therefore 'superior' to writing. He says of speech: "Before thinking to reduce it or to restore the meaning of the full speech which claims to be the truth, one must ask the question of meaning and of its origin in difference." (1997:69-70)

The difference he refers to is of *trace* – it is how we identify speech (through what is not (is) present. If we apply this to the seduction scene, it is possible to see that it is not appropriate to attempt a full analysis using the image alone – there is no *full image* or 'complete' film available by just this analysis. The meaning of the scene is heard as much as seen. The interplay between the two elements of sound and image (the fog and the whole tone scale, for example) is essential for the variety of meanings and differences available. Much of this interplay is achieved through the soundtrack that does not operate as merely an accompaniment to the images, but as part of them. By allowing the concept of the perceived idea of a 'complete' film, we are able to let go of the search for an idealised notion of 'complete analysis'. The journey through analysis can be made in terms of the slippage in meaning and interaction between sound, image and soundimage. The analysis is no longer *logocentric*, the image and the sound both become *signifiers*. We do not need to search, first by decoding the sound as a *signifier*, and then the image as a *sign* for the *logos* (a linearist approach) but can instead treat imagesound as *signifier*.

The soundtrack of *Sunrise* does not operate along a line of synchronicity.

Murnau situates the soundtrack in an asynchronous place, at a time when a distinctly synchronous sound track, particularly when using effects, might have been expected. *The Jazz Singer* uses a few sporadic effects, and all of these are related to clear distinct synchronous movements in the image – the hitting together of plates on the table, for example, which are shown in a close-up shot.

There are several examples of these shots and they are included only to demonstrate the ability of the new technology to adhere a specific sound with a specific image. The frame will be tightly composed in a close-up that allows the audience to see clearly the movement of the image whilst they hear the synchronised sound. A clear example of this is the tapping of the hammers on the table in the Jazz Café:



Murnau, instead, allows the sound effects in *Sunrise* a space that does not adhere them to the image, but allows them to work in a more horizontal direction across time, rather than a vertical direction attached to the image. This horizontal editing (or contrapuntal editing) is the technique advocated by Eisenstein, Pudovkin and Alexandrov, in their 1928 Statement:



...for every ADHESION of sound to a visual montage piece increases its inertia...and increases the independence of its meaning...THE FIRST EXPERIMENTAL WORK WITH SOUND MUST BE DIRECTED ALONG THE LINE OF ITS DISTINCT NONSYNCHRONIZATION WITH THE VISUAL IMAGES. (A Statement in Belton and Weiss 1985:84)

*Sunrise* demonstrates that the ability and the ideology to produce asynchronous sound was present in the early synchronous sound films – it is a text that does not ‘fit’ the perceived trajectory of film sound, but it does show that an alternative to the emerging classical film sound model was possible.

Much of the film’s sound techniques are established in the seduction scene, including the most distinctive leitmotif. A subsequent scene the following morning shows the Man sitting on his bed, wrestling with the idea of murdering his Wife. As he sits, the film cuts to his point of view – a medium shot of his Wife feeding chickens at the door of their cottage, the music in the score comprises of warm strings and woodwind; her own leitmotif. As the film cuts back to a reaction shot of the Man, he remembers the Woman – we hear the Woman’s theme, and see a superimposition of the Woman with her arms around the Man.



As she fades, we *continue to hear the leitmotif* with its distinctive tritone interval. This is a clear example of *trace*. The sound evokes the presence of the woman, *already a ghostly (non)presence* in the screen it is now impossible to hear the sound without (not)seeing the trace of the woman. In the image alone, there is no such trace:



It is only when we see the image accompanied by the sound of the leitmotif (or hear the sound accompanied by the image of the man) that we can evoke the Woman. Only by considering the sound and image as part of the entire film are we able to make this analysis. Trace is absolutely evident in the scene, first by the superimposition and secondly by the leitmotif in the soundtrack. The audience still remember the superimposition and the music allows them to (not)see it, even when it is not present on the screen.

This is also an example of the leitmotif operating at the level of the metaphysical, evoking not only the character, but the concepts of betrayal, seduction and temptation. The leitmotif is operating, here, in a Wagnerian style, rather than fulfilling the concerns of Eisler and Adorno of simply acting as “lackey”. Brown notes that moments in the film that operate to link to other characters and metaphysical ideas

can be considered 'mythic' and that music is able to operate alongside the image to create this. Myth, he says, is evoked when...

...a given character, object, or situation escapes from the moment in time and piece of space in which he/she/it appears in a given narrative...to link with other characters, objects, and situations from other narratives, and the degree to which that character, object, and/or event escapes from a causal or historical determination of that time and piece of space." (1994:Introduction, loc 164 of 6048, 3%)

At these points, the music and image are not serving the direct needs of exposition of narrative, but are instead operating to expose the *mythic* – the connections, in this case, of the Man, the city and the concepts of marriage, betrayal, seduction, temptation etc. As Brown says, "...instead of the term *narrativize* to describe what music tends to do to the cinematic object-event, the term *mythify* seems at this point more appropriate. (1994:Introduction, loc 497 of 6048, 8%)

There are numerous examples of the richness of the soundtrack contributing to the precise reading of the film or are precise in their combination to provoke disorientation or *imprecision*; most notably moments in the city, where location sound and musical score combine to provide confusing and disorientating landscapes. This is always combined with an equally rich image track, frequently using split screen and superimposition to further complicate and enrich the representation.

The other most significant musical theme in the film is the one that represents the renewed love and marriage of the Man and the Wife – this is heard many times but is first heard after they exit the church in the city, having witnessed a wedding and symbolically renewing their vows. The theme is played in the mid strings, accompanied by a harp. The tune in this case is a major (diatonic) one and the harp creates an ethereal mood, symbolic of the marriage. This theme *does* provide the listener with resolution or ‘consummation’ to use Brown’s particularly appropriate term. As the theme begins, the busy road into which the couple walk, fades away and is replaced by a field with trees and flowers –this is achieved by rear projection.



We are not supposed to believe that the couple have been physically transported, but that they psychologically in a different space to the reality of the traffic around them. As they embrace, the pastoral scene fades once more into the traffic, which has now been forced to stop. Shots of traffic jams, rearing horses and falling cyclists are accompanied by sound effects of car horns, bike bells and indistinct shouting. At the same time, the ‘marriage’ theme continues.

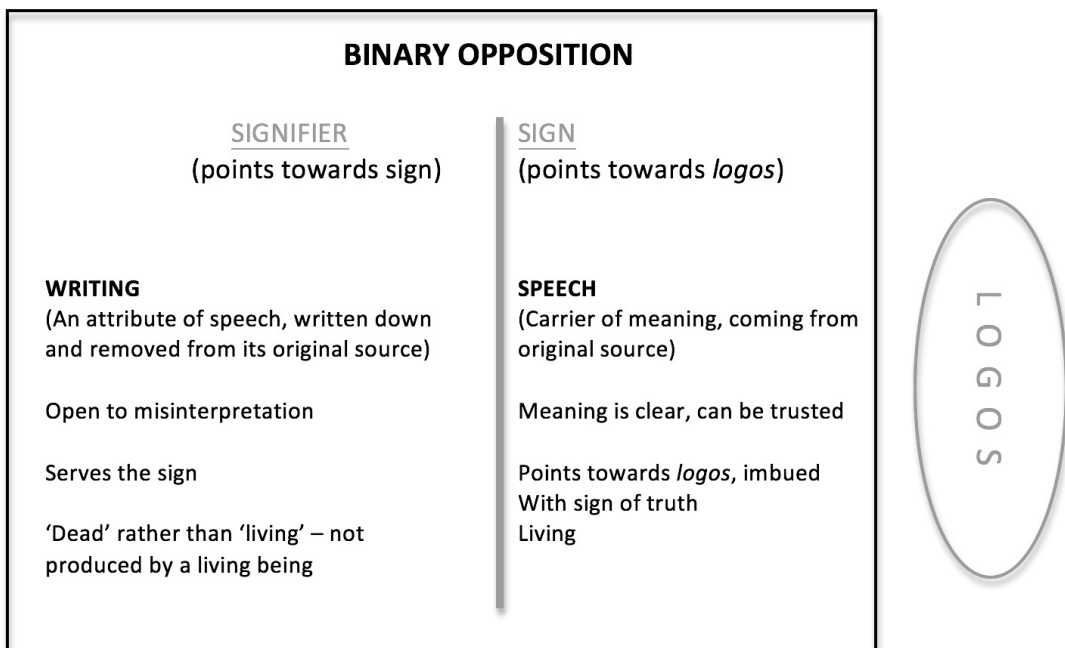


Although it is no longer possible to see the rear projection of the field, the audience understands that the couple are still psychologically unaware of the physical location of the road. The sound effects of the traffic are combined with the love theme, portraying two different spaces and emotions at once. The image track is focussed on the road. The establishment of the leitmotif in the rear-projection has allowed the audience to use both sound and image to understand fully the psychological and physical/temporal space within which the shot is situated. The sound evokes the field that is now not present on the screen.

The soundtrack in this film is difficult to separate from the image in terms of representation and analysis. The soundtrack itself, rather than acting as a site of separation between the sound and the image, instead operates as a *hinge* – the very place and moment where representation and meaning can traverse between sound and image. Within these moments, the audience is fully aware of the construction of the film – the rear projection in the road scene is technologically imperfect and as such is impossible to ignore. The evocation of the Woman in the shot of the Man on the bed is overt. The sound effects are clear and distinctive and frequently coupled with innovative special effects in the image track. Rather than disguise the construction of the film, Murnau uses the construction as a site through which

meaning is fluid between sound and image. Only with both elements (or all elements) can the viewer/auditor truly understand all representations possible.

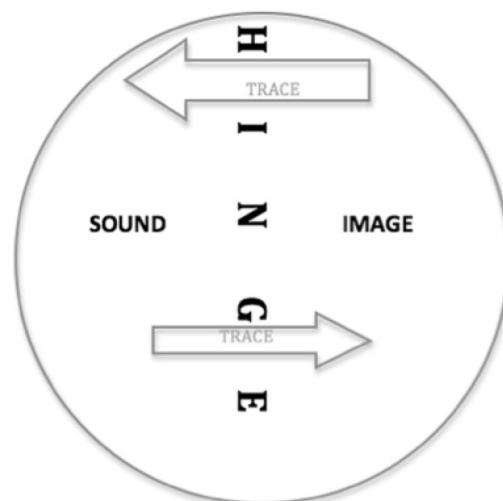
If we think about film sound analysis in a traditional linearist structure, it occupies the place of the *signifier*, pointing towards the *sign* (or image), which is considered superior to sound in its position as closer to the unattainable *logos*.



In *Sunrise*, the sound carries as much or as little meaning as the image. The leitmotif evoking the fields, or the Woman, is as important to the scene as the projection of the fields, the superimposition of the Woman, or the image of the traffic. Removing one element from the film at these points, has a significant impact on the reading of the scene. If, for example, the soundtrack of the 'love theme' was removed, the image that remains is of the couple surrounded by cars on a busy street. We can see that they are concerned only with each other, but the ethereal quality is missing. If we remove the sound effects, the image is much less effective at permeating the viewer's

and the characters' consciousness. Removing the image, conversely, would have less impact at this point, as the theme of love and the sound of the cars and traffic are still evident, but we would have little information about their specific predicament in time and space.

The site of difference, therefore, between sound and image is no longer relevant or even present. Instead the difference between sound and image becomes permeable – the meaning flows between both elements and cannot be separated. Everything represented is possible to be read within the scene as a whole. The use of the idea *hinge*, then, becomes more relevant.



Derrida notes: “The hinge [*brisure*] marks the impossibility of the sign, the unity of a signifier and a signified, be produced within the plentitude of a present and an absolute presence...” (1997:69) Without being troubled by the idea of an unattainable quest for *truth* through analysis, each element in the film, both sound and image, can be treated as *signifier*, leading to greater (but not infinite) possibilities of meaning.

Claudia Gorbman, in *Unheard Melodies* treats the use of music in early cinema as a technique that operates in a binarism with film image. For her, the use of music is a way for the audience to connect more effectively with the image in the present tense.

She says of silent film:

The impression of reality gained from watching moving figures on the screen, a realness brought on by cinema's origin in photography, made the actors' silence all the more notable and strange...Thus first, music came to replace, or at least compensate for the lack of, speech. Second, all sound exists in three dimensions; music as sound gave back, or at least compensated for the lack of, the spatial dimension of the reality so uncannily depicted in the new medium. (1987:37)

This is an interesting concept; that, as film has a shared history with photography, the resulting images are connected directly with the 'real' (or profilmic). However, on the screen they were in a two-dimensional space, only brought into a more corporeal existence by three-dimensional sound. Gorbman goes further, quoting Adorno and Eisler's thoughts on this, saying that they described...

...in anthropological terms the need that brought music into cinema. Music took on a *magical* function, counteracting the lifelessness of the moving figures on the screen:

The pure cinema must have had a ghostly effect like that of the shadow play – shadows and ghosts have always been associated. The magic function of music...probably consisted in appeasing the evil spirits unconsciously dreaded. Music was introduced as a kind of antidote against the picture. The need was felt to spare the spectator the unpleasantness involved in seeing the effigies of living, acting, and even speaking persons, who were at the same time silent. The fact that they are living and nonliving at the same time is what constitutes their ghostly character, and music was introduced not to supply them with the life they lacked...but to exorcise fear or help the spectator absorb the shock.



...earlier critics described the film image as dead, empty, or unnatural, and saw music as providing life, immediacy, or a magical antidote to cinema's ghostliness...(1987:39)

Immediately it is tempting to apply this theory to *Sunrise*, which initially seems to be an excellent text to consider the ontology of the 'ghostly' image – particularly where the film offers a scene (with the superimposition of The Woman) where this concept can be seen explicitly. In this scene The Woman is conjured into existence entirely by the music, existing in a corporeal state, only by the leitmotif, whilst her image is insubstantial. However, the danger in succumbing to the binarism inherent in this methodology is exposed by applying a Derridean approach. Firstly, there is something much more interesting in the words from Eisler and Adorno, where they state that the image is at the same time “living and nonliving” – this apparently unresolvable state is far more rich in terms of analysis – we can think of the image as both ‘presence’ and ‘absence’ and understand the role that sound and music play in relation to this, without feeling it necessary to solve the state.

Examining in more detail Eisler and Adorno's words, they do not say that music entirely reincarnate the image, rather that it helps to support the viewer's confusion or fear at the unresolved state. Here is the 'grey' area – where image and sound exist on a plane where both are noticeable, and their functions are exposed. The construction of perceived 'naturalness' between sound and image is brought into the foreground and the understanding and perception of this makes all elements in the film immediately demonstrate their efficacy and potential. Here, again, we can use

Derrida to understand both the image and sound as operating in a model that allows the concept of the *hinge*; the application or understanding of either element as signifier or signified, becomes irrelevant and unhelpful and furthermore reduces meaning.

To further destabilise Gorbman's assertion, is it worth considering how Roland Barthes describes the photograph's ontology in *Camera Lucida* (1981) thus: "Death is the *edios* of that Photograph." (1981:14) By which he means that the metaphysical quality of death is inherent in the photography, mostly because the photograph freezes a moment in time; a precise specificity of *photography*, not *moving* image. If we consider, for a moment, the application of theory that deals with the specificity of film when compared to photography, it is possible to see an entirely different opposition in play:

On one side, there is movement, the present, presence; on the other, immobility, the past, a certain absence. On one side, the consent of illusion; on the other, a quest for hallucination. Here, a fleeting image, one that seizes us in its flight; there, a completely still image that cannot be fully grasped. On this side, time doubles life; on that, time returns to us brushed by death. Such is the line traced by Barthes between cinema and photography. (Bellour, 1984:119) *The Pensive Spectator*

Here, Raymond Bellour constructs another binarism that places *film* on the side of the living, and photography is aligned with death<sup>12</sup>. These various binary oppositions demonstrate how structuralist approaches to film are not successful as they require

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<sup>12</sup> Bellour does go on to examine the greyer areas that occur when the photograph is viewed within the moving image of film.

further explanation and categorisation. Rather than apply theories of ever increasingly complicated oppositions, it is better to examine how the image and sound exist in a state of interplay.

Gorbman's characterisation of the silent film image is one that initially appears to 'redress' the disservice done to film sound – she reverses the importance of the image and the sound and highlights how sound could be perceived as *more* important than image, certainly in silent film. However, this does not address the medium of film, rather it places elements of film into a binary opposition; the fact that this opposition is in favour of *sound* (at least, music) does not make it any more useful – it continues to maintain a construction that is attempting to be seen as 'natural'. *Sunrise* operates far more effectively with the application of the concept of *hinge*.

Another key element in the film are the moments of silence (or at least, Gorbman's definition of 'structural silence') that are carefully placed at specific moments. *The Jazz Singer* also has a significant moment of silence, but whereas this seems to be a fortuitous (in terms of analysis), yet serendipitous moment, *Sunrise's* moments of silence are carefully implemented.

The first moment comes in the seduction scene, where the Man realises the predicament of his Wife in the Woman's suggestion that he sells his farm and move, with her, to the city. He exclaims via title card "...and my Wife?" as the title card

appears, there is a moment where the music continues (presumably to provide the viewer with time to read the card), and then all music and sound effects stop. There is a sudden and very noticeable pause (save the 'occult' hiss of the technology). The film cuts back to the couple, and the Woman throws back her head in laughter – at the same time there is *absolute silence* in the soundtrack. There are plenty of moments in the film where the human voice is replicated by instruments or sound effects, so this is no mistake or technical inadequacy. The laugh in the image is so prominent, that as a viewer, in the absence of any other sound, it is impossible to not hear the *trace* of the laugh – the silence and absence is deafening. The silence operates to make both viewer and characters aware of the significance of this moment, but also makes the laugh more shocking because of its (non)absence in the sound track. In the same way that the superimposition of the image is still (not)present on the screen after it fades, the laugh is (in)audible at this moment. It is impossible to be an inactive auditor at this moment and the impression of shock comes from the silence.

The other moment of silence in the film works to bookend the first. After the boat capsizes and the Man is looking for his Wife, we see a point of view shot of the reeds that he tied to his Wife to prevent her from drowning. As the shot appears, the music and sound effects stop completely. The pause allows the audience to recognise the significance – the Wife must have drowned. These moments of silence, in an otherwise rich and sophisticated sound track, operate very effectively to convey shock, and in the first example, *trace sound*. The silence provides a space in the film track where audience analysis and interpretation can occur; the continuing movement of the image is another element that works in combination with the silence. This is in

complete contrast to the use of silence in *The Jazz Singer*, which is predominantly accidental or incidental.

Some sounds in *Sunrise* take on their own characters or become aspects of character themselves. The most significant of these is the sound of the church bell. This is first heard when the Wife is sitting in the boat, waiting for her husband to join her and row out to the lake. The bell is heard before any shot of the church, for a moment dislocating the sound from its perceived origin. This then works as an omen – a warning of impending doom that has been increasingly evident to the Wife since the insistence of the family dog to come with them, to the actions and demeanour of the Man. Once we see a shot of the village church, the sound of the bell returns initially to connotative diegetic sound, reassigned to the church and working as an attribute to the image. However, the second time we hear the bells it is clear, both from the perspective and the context that they are operating on a symbolic level.

As the Wife realises that her husband intends to murder her, we see a shot of her backing towards the edge of the boat and clasping her hands in a praying action. The shot is high angled, making her appear smaller and submissive. In the score the strings play an increasing crescendo of tremolo and the image cuts to a low-angle shot of the Man, his hands outstretched towards the off-screen space that his Wife inhabits. The Man suddenly brings his hands up to cover his face, at *exactly* the same moment the bell rings loudly.



This represents his conscience – there is no specific sound source now. The perspective, the relative loudness of the bell, is exactly the same as it was on the shoreline. This initially diegetic sound has become the representation of the sanctity of marriage. Synchronicity here plays an important role. Had the Man put his hands up after the bell began ringing it would have been in *response* to the sound – the church bells would have been a reminder of his marriage. If the bell had rung afterwards, the symbolism would have been much less powerful, rather than being horrified by his actions because of the implications to the significance of marriage, he would have appeared to have stopped his attack only in the moment, in response to his Wife's pleas. Murnau uses synchronicity with the image but this does not relegate the sound to an *attribute* of the image – it is synchronised with the movement of the Man, not to the church bells – the action is then interpreted with greater symbolism than would have been possible without this synchronisation.

The next time church bells are heard is at the church in the city where the Man and Wife witness a wedding. As they walk down the street after the Man buys his Wife flowers, all other sound fades out and church bells are the only sound heard on the screen. The images continue to show the spatio-temporal position of the characters, but the sound evokes the memory of the previously heard church bells.

As the Man guides his Wife to the doorway of the church, the musical score begins to fade up again, with long pads of strings in minor chords. We then see a shot of the church in the bustling street and the music fades away again – the bells are the most psychologically important sound. This distinguishes them from other diegetic sound – there are no sound effects of the traffic (sounds that we have previously heard), or music. This elevates the importance of the bells and removes them from their adhesion to the image and the diegesis of the scene.

The bells in this scene are different to the bells of the village church, playing two separate pitches with an interval of a descending perfect fourth, the notes IV and I in a major scale. Interestingly the diatonic chord progression IV – I in music at the end of a piece of music is a *plagal cadence*<sup>13</sup>. The plagal cadence is often referred to as the ‘amen’ cadence, due to its frequent use in church music. Subconsciously this would be recognised and internalised as part of the sacred meaning of marriage. The bells continue to play a key role in the entire marriage scene, culminating in a close up shot of the church bells as the couple exit the church, as if they are the newly married husband and wife, which symbolically, of course, they are.

This psychological synchronicity is a technique that transcends the historical context of *Sunrise* and should be analysed without the boundaries placed upon the film by the position it occupies in cinematic history. This demonstrates another way in which

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<sup>13</sup> A cadence is the formal closure, or end of a piece or section of music, it consists of two chords. In traditional western music, there are several different recognised cadences.

analysis that concerns itself only by what is present within the film is able to uncover meaning that may have otherwise been considered unrelated to the historical context and therefore unimportant.

There are other moments within *Sunrise* of synchronicity of sound that is not an attribute to the image. The bells are, by far, the most significant example, but one that is also interesting is the placement of the French Horn over the Man's shouting, near to the end of the film. After the boat capsizes in the storm, the Man, washed ashore, scrambles onto the rocks to look for the Wife. As he calls out on the image, a French horn is heard playing two descending notes, mimicking the 'calling out' sound of the voice.



This sound is heard several times, always synchronous to the actions of the Man calling out. It is possible to see him breathe in, as if to shout loudly, and then hear the horn play, as if in time with his voice. As the man scrambles up the rocks, the pitch of the horn rises, as if to signify rising panic. This is very effective as the underscore of strings maintains its pitch, so the relative rise of the horn is even more noticeable.

The next scene shows the villagers coming out of their houses, lamps in hand, ready to join the search. They have reacted to the Man's voice, or more specifically the French



horn. As this scene continues, the intervals and pitches first played on the French Horn are played by the strings in the underscore. This operates to remind the listener of the voice and to hurry the villagers to the shoreline. As the search party set out on rowing boats, the Man, at the front of the leading boat, continues to shout, his voice represented by the horn. The pitch continues to rise, as does the dynamic, culminating in a high-pitched shout in the horn, and a close up on the Man's face:



This is another example of the sound and image operating together to provide meaning that is reliant on both mediums. The sound is not providing 'added value' and is not an 'attribute'. The decision here to place the French horn in place of the human voice is an attempt to create the increasing feelings of panic and despair.

However, the meaning in this synchronisation is even more significant. It is impossible to watch this scene and mistake the French horn for the Man's voice; it is evident that the instrument is being used to *represent* the Man's voice and the emotion in it. This is a moment that highlights the construction of the film itself. The audience are immediately aware that the sound and the image are not constructed 'naturally' together. This is particularly noticeable because the French horn is taking the place of

diegetic sound, rather than non-diegetic sound – it is separate from the rest of the orchestral score.

This is evident, not only due to the precise matching of action of the Man shouting, but also because of the reaction of other characters in the scene – they are clearly reacting to the *sound* of the Man. The audience are able to identify the represented sound, understand it as such and also see and interpret the image, each element overt and unconcealed. In this moment, sound and image are operating together but are simultaneously representing the main narrative and emotion of the film and revealing its construction. It is impossible not to (not)hear the *trace* of the Man's voice within the horn – by listening to the music we know what it is *not* – a human voice. We also hear and understand the horn as a musical instrument and, knowing this, are aware of the act of recording and synchronising the sound to the image. We also see the Man clearly shouting and see his mouth move, showing us in the image the sounds that we cannot hear in the audio track.

It is an extraordinary moment and one that demonstrates the sophistication of techniques available and the potential for film to avoid the perceived temptation of the inclusion of the human voice. Although *Sunrise* is released a few weeks before *The Jazz Singer* it is clear that the decision not to include the human voice was an ideological, rather than technological one. *The Jazz Singer* portrays the human voice in many different ways, such as the written letter, intertitles and written dialects and the synchronised human voice. It is clear from these techniques that Crosland intended to

evoke the human voice, and the particular qualities of the human voice, in numerous instances throughout the film.

Murnau, in contrast, actively avoids the inclusion of the human voice, even at a time in history where synchronised sound was relatively new. Brown notes that music in early film operated as a signifier of the image:

Music in fact has the advantage of a system of signifiers that by and large serve that art exclusively; musical notation...musical tones...musical timbres...[the] human voice, of course, is used in ordinary parlance as well as in singing. But the way in which the voice is used for singing ordinarily differs substantially from the talking mode..."(1994:Chap 1, loc 313 of 6048, 5%)

The use of this system of signifiers, claims Brown, was so sophisticated that it was used to great effect by the mid 1920s. The introduction of the human voice, according to Brown, reduced the way that non-diegetic music could operate as signifier for film image as *art*, instead changing the signifier to direct dialogue information. He comments that, "It is no wonder, then, that music has been held in awe by those who would escape the "trap" of naturalistic representationalism." (ibid)

Murnau's use of the voice as *trace* allows both the image and sound to act simultaneously as signifier and signified; each are reflexive of the other. This reciprocal relationship provides space for the viewer to consider the representation of the voice knowingly, and with trace, whilst still understanding the music and image as representing the narrative.

Murnau's resistance to the human voice is demonstrated not only by the use of instruments and the score in place of the voice, but also with the amount and type of intertitles. There are very few intertitles in the entire film, and even less that represent speech. Murnau limits the title cards to necessary narrative detail and does not use the cards to achieve a simultaneity of speech and image, in the same way that other contemporary films do.

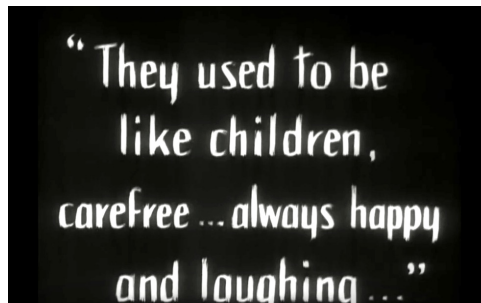
The first title card with speech that occurs in *Sunrise* happens at 09.16 minutes into the film – by this time in *The Jazz Singer* there have already been eight speech title cards, and the film does not start until 05.40mins as there is an overture at the beginning - there has also been a dubbed song that lasts for 2 minutes. In *Sunrise* by this point there have been three narrative title cards – this is a relatively high number for the film but does include the opening introductory cards. By contrast, *The Jazz Singer* by the same point has used five. There is a 37-minute interval in *Sunrise* where no title cards are used at all, either narrative or speech – this is an astonishing amount of time for a narrative Hollywood film. *The Jazz Singer* never runs for more than 2 minutes without a title card unless a synchronised song is playing, and the film can be seen as a 'talking film'.

We do see characters talking to each other in *Sunrise*, but the content of the dialogue is rarely displayed onscreen. When characters do speak, and we see a title card, the established pattern of shot beginning speech – title card – shot finishing speech is not used. There is little attempt by Murnau to simulate the spoken voice, either in text or

sound. The film is often content to provide the *impression* of speech, without the specifics of the words; this is frequently achieved by a combination of images and sounds that do not represent specific speech, but rather overarching meaning. When intertitles are used, they are used for very specific information – the first card, is spoken by one village woman to another:

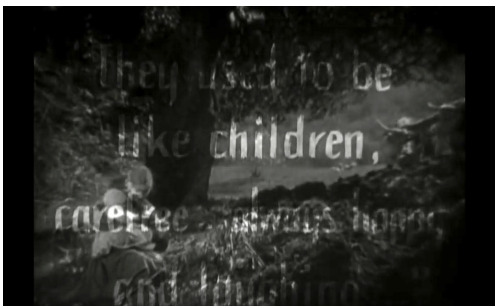
“They used to be like children, carefree...always happy and laughing...”

The previous shot is of the two women in discussion – this cuts to the card:



At the same time that the woman begins to speak, two flutes play in quick, fluttering staccato quavers, giving the impression of whispered gossip. As with the French horn, the flutes are clearly placed in exact synchronisation with the woman’s speech in the image.

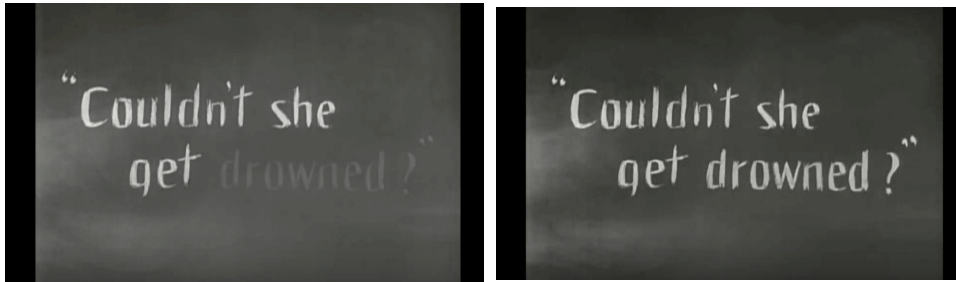
The card then slowly dissolves into a flash back of the Man and the Wife in a rural idyllic scene:



This dissolve is not an unusual technique to denote a flashback, but it *is* unusual to not return to the women speaking. The speech is used predominantly for specific narrative purpose – to guide the audience into a necessary flashback. Tonally the flashback scene is very different to the film’s tone so far and this scene appears necessary to promote the nostalgic notion of ‘village’ as opposed to ‘city’. It is clear, however, that Murnau has no interest in creating the circumstances for the representation of synchronised speech. What the sequence is able to show the audience instead, is an audio representation of the voice, which whilst synchronised is not naturalistic.

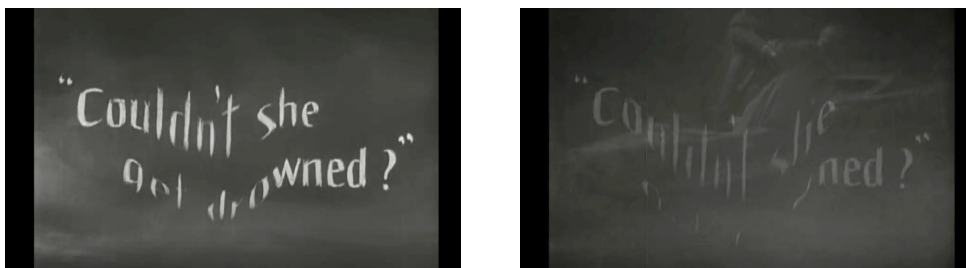
Murnau takes the possibilities of the intertitles even further, by allowing them to take part in the narrative of the film. Rather than a necessary evil, used in film up until the point of synchronisation, Murnau’s title cards call attention to themselves and allow the viewer to understand and overtly notice the meaning.

During the seduction scene, the intertitles play the role of not only the Man and the Woman’s voices but are also a technique that changes the scene to the flash forward. Timing is important for these cards and rudimentary animation provides pacing for speech which is seen and not heard – it is here that it is impossible not to notice the *trace sound*. The timing allows for the audience to imagine the pause in the Woman’s voice as she tentatively suggests the murder of the Wife. The card appears with the words “Couldn’t she get”, after a moment the word “drowned” fades in:



This momentary suspension of 'drowned' is effective as it achieves the effect of withholding the information from the audience as if the Woman had spoken it. It is more effective than if Murnau had used two different cards. We feel the pace of the Woman's voice through the text. The *trace* of her voice is present within the image on the screen – we have heard her as much as if the soundtrack had included her voice and yet Murnau has not needed to interrupt the complex orchestral layers in order to use her voice; the layers of the seduction scene continue uninterrupted.

The text on the screen then changes and animates as if in water – this 'drowning' effect is the technique that moves the scene into a flash forward – the slow dripping of the words dissolves into the possible future of the Man throwing the Wife from his boat.



This is a sophisticated use of title cards, at a time when many short films had already achieved success with the synchronised spoken word. It is evident that Murnau

wanted to use the voice in a different way – the image of the character speaking has made the necessity for the spoken voice redundant in *Sunrise*. Instead moments of dialogue are used as devices to forward the film or to transition between ellipses that allow the specific words of the time gap to take the audience into the next shot. Here is an example of where Chion's categorisation of words on the screen is not helpful. His assertion that inter-titles are diegetic, and words on a letter are non-diegetic, does not provide an adequate categorisation of the 'drowned' title card. Here the words operate as part of the *film*, offering meaning that transcends the semantic content of speech, however it is represented.

*Sunrise* uses both sound and image to represent the human voice, often at the same time and in very different ways – like the multi-layered musical tracks, the synchronised diegesis of the voice is impressionistic, rather than specific and naturalistic. Murnau achieves a 'smoothness' of editing of both image and sound that is not present in *The Jazz Singer* – Crosland's film is full of moments of potential precisely *within* and *because* of the disruption – it is the site of the possibility of the *hinge* and therefore the *trace*.

Murnau's smoothness of sound and editing demonstrate a possibility of a future of film that does not include the human voice but as an innovative alternative offers a variety of techniques for portraying the spoken word. It is clear that Murnau never intended the film to be vococentric. This does not fit the supposed trajectory of film sound history – the assumption by practitioners and theorists that film strives towards the spoken voice is challenged by this film. Chion comments in the introduction of



*Audio-Vision*: “Why speak of language so early on? Because the cinema is a vococentric or, more precisely, a verbocentric phenomenon.” (1994:5) Yet *Sunrise* is not ‘verbocentric’ – the story is told through image and sound, but not predominantly through language. For sound theorists, the use of the spoken word is a great claim on the importance of sound to cinema. Prior to synchronisation efforts are made to highlight the inclusion of the spoken word by emphasising barkers and lecturers as part of the film’s performance. *Sunrise* demonstrates a mainstream film, at the very moment of synchronisation, choosing to represent the spoken word through music, animation, text and editing, but even more importantly, to limit its use in the film. This does not make it a predominantly image based medium but offers an alternative model of sound to the one so quickly followed in *The Jazz Singer*.

*Sunrise* is a film that benefits greatly from an analysis that does not seek to separate sound and image and deal separately with each one. From the opening scene, the film uses sophisticated and intelligent techniques such as split screen and multiple music tracks to create an audio-visual impression. To attempt to prioritise either sound or image is to discard the most powerful moments – those with ones of the greatest potential for meaning. By removing *Sunrise* from the constraints of its historical context the analysis is not forced to comment on the *success* of the synchronised sound, or the impact that this has had on the image. *Sunrise* has many moments that are *undecidable* – they are not easily categorised as possible or not possible, spoken word or music, seen or unseen and this is because *Sunrise* itself is an *undecidable* film – not truly a ‘silent’ or ‘talking’ film it belongs in neither camp and therefore to both. This is why a traditional analysis has been so unsatisfactory and therefore not

attempted. The film is truly *audiovisual* in a context that is firmly historically either visual or audible. The film offers a potential of technique and meaning that deserves to be revisited and redressed.

## EARLY FILM SOUND – TESTS AND SHORTS

It is important to analyse the sound tests created by practitioners who were innovators in the development of synchronised sound technology, (such as William Dickson, Thomas Edison, Lee DeForest and Theodore Case) and investigate how these early examples of synchronised sound can challenge the dominant historical model of sound in cinema. It is also important to consider how, through a Derridean approach, they can be justifiably removed from their historical and technological constraints and investigated for their potential value as discrete examples of early sound, not dependent on their relation to what comes after.

Sound tests for cinema were conducted as early as 1888 and sound recording technology was first introduced in 1877 – this is far earlier than the dominant re-telling of the history of the introduction of sound in the 1920s. David Bordwell, in *The Classical Hollywood Cinema*, for example, provides this account:

Attempts to synchronize sound and image were part of Edison's research program, and several firms introduced technologies through the early 1920s. Invariably, synchronization and amplification systems proved inadequate, and exhibitors failed to adopt the equipment...Warner Bros formed Vitaphone in 1926 and embarked on a strategy of step-by-step introduction of sound films. (2002:298)

Avoiding any mention of earlier tests and sound experiments does not only banish these examples from film history but works to maintain the fallacy that synchronised sound experiments offered *after* the experiments with moving image.

Donnelly suggests that early sound tests “...did not culminate in talking films but became something of a historical dead end.”(2014:16), effectively killing the potential that the tests may have with their historical context. Jay Beck, similarly, in *The Evolution of Sound in Cinema*, also discusses how early sound tests and experiments existed, but does not consider them to be directly relatable to the to the eventual model of sound and image that is present in later cinema.

The earliest experiments to add synchronous sound to films had failed outright or met with little success with exhibitors; however, in the second half of the 1920s, an alignment of specific determinants allowed sound film to take root and flourish. (2011:67)

The ‘specific determinants’ Beck explains, are technological; effective amplification and the ability to synchronise with more reliable methods. Beck’s use of the words, ‘failed outright’, however, demonstrates the difficulty in contemporary film analysis, of separating historical moments of film sound from their place in an historical and technological trajectory. ‘Failed outright’ is a call to dismiss these earlier tests as unimportant and insignificant to the understanding of film sound. Gomery also agrees with Beck that the experimentation, although evident early in cinematic history, was ‘unsuccessful’, certainly in commercial terms:

The idea of adding sound to then silent motion pictures was not new to any of the entrepreneurs who headed the major motion picture firms in the 1920s. The history of attempted innovation began as early as 1892. By 1905, systems appeared on the average of one per year. All failed. (2005: Chap 11, p. 151 of 155, 82%)

But it is worth considering in which capacity the tests had ‘failed’; technological restrictions are in danger, here, of supressing the potential meaning uncovered in

early sound tests. These stark assertions support both the ‘historical fallacy’ and ‘ontological fallacy’ of sound, and maintain an artificial construction, portrayed as ‘naturalised’ that cinema was firstly an image-based medium, certainly in terms of ‘success’ or ‘failure’. This operates to obscure the early ontological experiments in film sound.

A Derridean approach will allow the viewer to see(hear) within early tests, the philosophies and ideologies present in cinematic sound at the time. It is reasonable to expect practitioners to attempt to fulfil a ‘fault’ that has been lacking in ‘silent’ or non-synch film – by analysing the perceived need, it is possible to re-think and reverse this approach, arriving at an educated guess as to what early non-synch film was like. This can work together with archival material, which provides accounts of non-synch sound to create an impression of the sound in cinema immediately prior to film synchronised sound. Even more than the ability to produce insight into early film sound that is lost, these film sound tests should also be approached as a document separated from their historical significance. Much like the disservice done by relegating *The Jazz Singer* and *Sunrise* to their historical ‘place’ in film studies, the same is even more true of film sound tests.

Any mention of these early sound tests is usually done fleetingly, particularly when acknowledging their place prior to 1927, and their significance in terms of technology used. Discussion of the content of the film sound tests is minimal if present at all. Content is not seen as a legitimate area of discussion because these films are not seen as complete or *finished*, rather they are steps on a path towards the completed article

of the synchronised sound film. They are the ultimate *signifier* on a journey towards the *sign* and when thought of in this logocentric way, the agency of them is lost. Even when a theorist does discuss the earliest film sound tests (prior to the 1920s) this is in terms of technological or economic developments rather than content. Technological development is a much clearer logocentric route as it can be placed, neatly, into a timeline of failed attempt after failed attempt to 'complete' the challenge of synchronised sound. Douglas Gomery, in *Film Sound* (1985) gives this account in his essay *The Coming of Sound: Technological Change in the American Film Industry*. Even the title of this essay suggests that the account will be mostly technical, and is in terms of film in general, rather than the content of sound tests.

Attempts to link sound to motion pictures originated in the 1890s. Entrepreneurs experimented with mechanical means to combine phonograph and motion pictures. For example, in 1895 Thomas Alva Edison introduced such a device, his Kinetophone. He did not try to synchronize sound and image: the Kinetophone merely supplied a musical accompaniment to which a customer listened as he or she viewed a "peep show." Edison's crude novelty met with public indifference. Yet at the same time, many other inventors attempted to better Edison's effort. One of these, Leon Gaumont, demonstrated his Chronophone before the French Photographic Society in 1902. Gaumont's system linked a single projector to two phonographs by means of a series of cables. A dial adjustment synchronized the phonograph and motion picture. (1985:6)

As with his later book, there is no mention here of the types of film that were included with these inventions, and this is true also for the later tests that were carried out in the 1920s. Content is limited to the briefest of descriptions and the focus is on the technology – no consideration of shots chosen, cinematography, editing, lighting, mise-en-scene etc. is given. These examples are not seen as films, merely as 'prototypes' or embryonic examples. Interestingly, the equivalent early image centred

films are regularly scrutinised for content, as well as the technological apparatus used for their capture. Much has been written, for example, on the early films of the Lumiere brothers, *Workers Leaving the Lumiere Factory* (1895) and *Arrival of a Train at La Ciotat Station* (1896) are regularly discussed in terms of content as well as technology. Georges Melies' *Trip to the Moon* (1902) is hailed as the beginning of the science fiction genre, and much is discussed in terms of the content of the film. The same is not true of early sound tests, which are generally not afforded the title of 'film'.

The proliferation of technologies and inventions from the 1880s onwards of film technology, and sound technology, is significant. Many different inventors and technologies were developed, and discussion of this time in terms of sound is limited to descriptions of these varying types of technological innovation and the 'success' of these innovations in achieving synchronicity. Altman, in his book *Silent Film Sound* (2007) demonstrates this focus on synchronisation in these inventions – he writes about Dickson experiments with synchronicity:

...the illustrations of simultaneous recordings in the Dickson's article are so fanciful as to suggest that synchronized sound was never achieved during this period. Yet the aspiration to produce synchronized sound never wavered. The desire for synchronized reproduction of the sounds produced by image activity may be traced to the early history of phonography. Early phonographs were exploited as recording devices, capable of playing back a recognizable copy of sounds produced on stage. The first traveling phonograph shows typically involved some visible production of some sound (speech, music, barking dogs), followed by phonographic repetition of that sound. The quality or interest of any particular sound was less important than its match to the original. (2007:79)

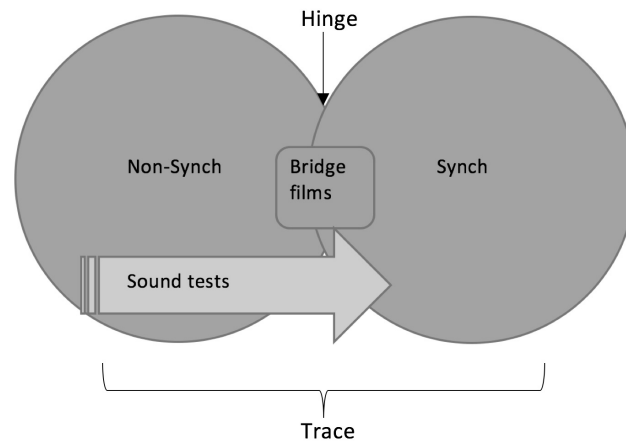
The focus on the success of synchronicity, sound fidelity and the type of invention used helps to conceal the content and the agency of these early films in a way that is not done with image-based film tests. Relegating content to brief descriptions is another way that the ontology of early sound film can be re-written, (the ontological fallacy of sound) and any potential disruption to the dominant model of image development and sophistication, followed by sound development is perpetuated and 'naturalised'.

By liberating the early film sound tests from their place in sound and technological history, one is able to analyse the content of the film with a Derridean approach. These films are 'grey' in nature, inhabiting the world of *trace* and in the construction of the film historical timeline (the historical and ontological fallacy) they sit awkwardly out of place, neither synch or non-synch film. Many of the tests have within them the presence of the film maker, most are 'rushes' including moments that would have been edited out of other test footage.

Additionally, the sound of the film is not only the audible sound perceived but is also the presence of the (non)sound or (sound in film) and the potential of what might have come and what never happened. The tests expose the seam of image sound relations in a way not commonly seen apart from in the bridging films such as *The Jazz Singer* and *Sunrise*. In their own way and even more than these 'bridge' or transitional



films, these tests can operate as a 'hinge' between the synch and non-synch film world, stretching much further back in time.



Derrida's concept of *trace* is significant within this analysis, whereas the hinge offers the site of a previously impenetrable boundary – the limits of a binary opposition (in this case, silent and sound film), trace is the potential within the material that can travel through and beyond the hinge, and the existence of sound tests from the very beginning of film history (and arguably before that) provides even more examples and time where trace is available. Not only can we examine silent films for sound, with the presence of sound-in-film, but we can examine audible sound throughout this period. This strengthens the argument for the study of film as a sound medium since its inception.

Prior to the invention of moving images in film (although not prior to experiments such as the Zoetrope and the magic lantern) was a device that enabled the recording,

capturing and playing back of live sound. The phonograph was invented and revealed by Edison in 1877 – the cylinder system of recording sound and inscribing it on a foil cylinder for playback remained unchanged for a long period of time. Retrospection enables us to see the phonograph as the earliest example of a record player – a purely audio based device, but at the time Edison was keen to develop moving image to work alongside the phonograph. It is curious that the early attempts at recording and playing back moving image are seen unequivocally as being the first experiments in film, but the recording and playing back of sound is not. Altman highlights Edison’s intention for the phonograph, close to its inception, quoting him as saying:

“In the year 1887,” he claimed in 1894, “the idea occurred to me that it was possible to devise an instrument which should do for the eye what the phonograph does for the ear, and that by a combination of the two all motion and sound could be recorded and reproduced simultaneously.” While the first half of this famous statement is regularly quoted in connection with the invention of moving pictures, it is the latter half that offers insight into the expected role of sound in the new medium. From 1888 to 1895, the Edison team, headed by W.K. Laurie Dickson, labored to create a system whereby “motion and sound could be recorded and reproduced simultaneously,” culminating in the introduction of the Kinetoscope and Kinetophone. (2007:78)

It is clear to see that the development of film could be argued to have come in a large part from the development of the phonograph – the development of recorded sound. The Dickson experiments occurred during the time that the Edison team were working towards creating a system for synchronised sound. The experiments in early sound film ran for a few years in the 1890s. *The Dickson Experimental Sound Film* (1894 or 1895) is the earliest example of a synchronised sound film.

## THE DICKSON EXPERIMENTAL SOUND FILM

It is significant to consider how this clip is presented by the YouTube channel *Below Line* (Accessed 27 January, 2017). The channel is a specialist early film sound channel and the description of the video clip demonstrates the way in which the film is presented in historical and technological constraints. On the screen, words appear and attempt to contextualise the clip – “It was a test for Edison’s “Kinetophone” project, the first attempt in history to record sound and moving image in synchronization.” The text attempts to emphasise the importance of the clip by its place in history as the ‘first’ synchronised sound clip. In the description for the video on the YouTube page, there is an attempt to explain the ‘success’ of the clip in terms of the success of the synchronisation: “Unfortunately, this experiment failed because they didn't understand synchronization of sound and film...”, later an explanation as to how the clip is shown on YouTube:

By digitizing the media and using digital editing software, Murch was able to synchronize them and complete the failed experiment 105 years later. This 35mm film was generously made available to the Internet Archive by Walter Murch and Sean Cullen. (Below Line)

The meaning here is absolutely clear – the test was ‘successful’ if the sound and image appeared to be synchronised, and a ‘failure’ until that point. The use of the word “complete” is also telling – there is a presumption that the film is ‘finished’ once it is synchronised.

This way of thinking about film sound tests is problematic – Derrida critiques the sort of thinking that becomes linear – moving towards an impossible sense of *logos*. The sense in which this clip can be considered ‘complete’ is also the sense in which the film can be considered no longer relevant. Having done its ‘job’ in terms of the progression towards film synch sound, it can now be relegated to a place in history that maintains its ability to collude to the ontological fallacy of film sound relations.

A short piece of film shows a man (thought to be Dickson), slightly back and right from the front of the frame playing a violin directly into the large conical microphone to his right. Two men dance together in the front of the frame and a man, possibly Edison, walks from the left to the right of the screen at the end of the footage. The entire section is twenty-one seconds long. The sound from the violin is slightly tremulous, but clear – the tune is discernible – no sound can be heard from the other figures in the frame. The technological ‘hiss’ is loud and the repetitive ‘click’ of a cracked disk is heard underneath the entire sound track.



Several things are significant in this short section of film – firstly, the men are all on a stage that has been set with a blackout curtain around three of the sides. They are all evenly lit and, apart from the last figure, on-screen at all times. There is an awareness of the frame line of the shot – the two dancing men do not move out of shot at any point. This immediately demonstrates the importance of the image within a film devised to demonstrate sound. Of course, in order to demonstrate synchronous sound, it is necessary to have a clear enough picture to be clearly ‘in-synch’ – a poorly lit set would not allow the viewer to follow the movements of the subjects and evaluate the timing of the sound.

This is demonstrated in a review article from *The Times* newspaper in 1921. The article reviews an attempt by inventor Claude Verity to create ‘talking pictures’ at the Philharmonic Hall. The article comments:

On Saturday he showed two sketches, and they certainly seemed to substantiate his claim. The films themselves, however, did not give the invention a very fair chance. Mr Verity disarmed criticism before showing them by apologizing for their poor quality, but in parts they were so indifferently produced that it was difficult to see the lip movements of the characters at all and consequently impossible to judge the merits of the synchronization. (1921:8)

It is clear that a visible image is necessary for demonstrating the effectiveness of synchronised sound. This in itself, rather than an obvious assertion, involves the collusion in a construction that attaches image to sound. Moreover, the ability to create synchronised sound film lies both with image and with sound – at the heart of every experimental footage clip is the unspoken necessity for film to be audio-visual;

the success of the sound is dependent on the success of the image, and vice-versa. This symbiosis ruptures any possibility for thinking of film as a mostly image-based medium and returns it to its audio-visual form. In removing the binary opposition in film of image as the higher order and sound as the lower, we are able to return all aspects of the film to the site of trace. The concept of the 'added value' of sound, and the presumption that sound is an 'attribute' of the image ignores the logic that the reverse is also true. This is where film shows itself to be an *undecidable* – it is impossible to separate the sound from the image, even in the very earliest experiments, or before the advent of synchronised sound.

The Dickson film's image content is also interesting. Firstly Dickson, who plays into the gigantic suspended microphone. It is obvious from the care taken over the stage and the lighting, that this footage was carefully planned, yet there is no attempt to conceal the microphone, the means of production. Dickson is far enough away from the microphone, that with careful placement, he could be stood at extreme screen left, and the microphone could be just off-screen. The choice was made to include the early type of microphone in the shot – it is as big as any other character in the screen.

The placement of the microphone is perhaps understandable in an experimental film, but there is no reason that the majority of the cone could not have been off-screen to the left, if we think of film as, at this early stage, being a forerunner to continuity and invisible editing, but it clearly is not – the mode of production is obvious and an inherent part of the image. If given such a prominent place in the frame, why are the dancing men included? Even at this early point in synchronised sound it seems that

the decision to include something to *see* as well as something to *hear* was important.

The men are not there to provide additional sound; they are not audible, but there is a concept of the *filmic* that includes image/sound symbiosis. The sound accompanies the men and the men accompany the sound.<sup>14</sup>

Donnelly's concept of sound that is 'occult' or Birtwistle's 'cinesonic' sound are less relevant here, as the placement of the microphone and the noise of the technology provide a sense of attribution, or at least evidence in the image track of the manifestation of the technological sound. The hiss is overtly part of the film; we listen intently to the sound to hear the violin, but in doing so we also hear the technological sound that is later 'hidden' from the process.

The music itself is poorly played – there is no attempt at vibrato, which provides a more polished tone to the notes, and the tune is frequently under or over pitched. This footage has many unusual moments – the choice of music over any other sound appears significant, but the music itself is of poor quality. The stage and set have been carefully built and the frame lines considered, but the action on the stage is clearly ad-libbed. Nonetheless it is possible to see many assumptions within this footage – the use of music and the inclusion of accompanying action provide a model that allows us to see assumptions in film sound already taking place. This is not quite 'infallible

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<sup>14</sup> It is worth noting also that two men dancing together was not unusual at the time, and the all-male environment of the test laboratories would have precluded women's involvement although the two males have been commented on, in the documentary *The Celluloid Closet* (Epstein and Friedman, 1995) as the earliest filmic example of a gay couple.

synchronicity' but the absolute necessity of film to require both sound and image is clear.

The battle for the most successful technology for synchronised sound took place in the early to mid 1920s. Two main technologies eventually emerged – a system of recording onto a disk, much like the Kinetophone, was known as the sound-on-disk system, and the process of photographing the sound waves as light onto the film strip was known as the sound-on-film system. This was at a time where successful test footage could grant the inventors lucrative deals with production companies. Two names emerged as leading in the technology of the time – Lee DeForest and Theodore Case.

#### THEODORE CASE – SOUND TESTS

Case set up laboratories designed to test, develop and improve his system of sound-on-film in direct competition with DeForest. As a result, two different sets of test footage exist which provide a great deal of insight into the ideology of sound film at the time. Both inventors travelled to production companies to demonstrate their technology, along with the footage that they had shot for demonstrations. Between 1924 – 1925 Case produced a series of sound tests that still exist. They are presented in chronological order on disk 6 of the DVD set *Unseen Cinema, The Amateur as Auteur* (Image Entertainment, 2008)

The first four tests in particular show a clear progression towards a specific model of sound cinema. To reiterate, they are not seen usually as examples of 'film' but only of



'tests', but this logic is not upheld when comparing the tests to the earliest Lumiere films; themselves tests of the new image-recording technology. It is important to provide an analysis of these films that utilises aspects of Derridean theory and allows for the content and the various techniques of the films to be considered, such as cinematography, lighting, mise-en-scene etc. to provide an analysis usually reserved for early 'image centred' films.

Test 1 is a shot of Case facing the camera, he is situated in the lower third of the screen. Behind him are a pair of curtains, opened enough to show a framed painting of a woman - a light source is seen clearly reflected in the glass of the painting. Case is dressed in a suit.



Immediately several things are clear, predominantly there is an attempt to present the footage as if a performance. Case is smartly dressed and there is some attempt to present a pleasant view. The set has clearly been constructed for the purpose – there is no reason for the painting in the shot apart from to add an element of mise-en-

scene to what would otherwise be a bare set. The tests are all shot at Case's house on a purpose-built sound stage.

The static shot and the theatrical staging (Case facing the camera and roughly centred) would be unusual for film in the 1920s. There is an opposition in the shot between Case as practitioner and inventor, and Case as film subject. As a result, the film style appears to mimic early cinema of the 1890s – 1900s. The purpose of the shot is to demonstrate synchronised sound, but the reason for the set choices is unclear. This first shot operates to destabilise the dominant narrative model of film already prevalent in the 1920s –as such a proliferation of possibilities and meanings are present.

As the film begins, the hiss of technology is the loudest sound and Case's voice is more distant. He begins with a technical note of the film speed of 80ft per minute and then continues to speak: "...err...I'll read a little from the Lincoln Speech..." He then breaks into coughing for a few seconds and then continues by reading out loud an excerpt from the Gettysburg Address (Abraham Lincoln, November 19<sup>th</sup>, 1863). He reads from a script, just visible in the bottom of the screen, but repeatedly looks up into the camera. The impression is of a public reading. As soon as he finishes the Lincoln excerpt he continues: "...now..err..here's the test words I want to try...cheese...crisps...cheese...crisps..." During the reading of the test words he enunciates in an exaggerated way, forming the shapes of the words clearly with his mouth. Case then whistles a short tune before waving at his off-screen assistant, clearly embarrassed and calling out "shut it off!" and the test ends.

The sound in the test is as unusual as the image. The footage commences before Case begins his test sound, meaning there is a moment of awkwardness before he begins to read from the Gettysburg Address. Whilst reading from this his manner is very much of a public speaker and he immediately appears more confident. The choice of the Address is an interesting one ideologically. Only 52 years old at this point, the address was already an iconic speech and in the living memory of many people. The attempt to record it seems to fall under the ideology of capturing and collecting sound – the *inscription* route that Lastra refers to which has its history in the dichotomy of speech and writing first discussed by Plato and critiqued by Derrida. Lastra himself notes this connection when he discusses the concept of the collecting of ‘important sound’ as: “...classic philosophical criteria, deriving from Plato’s *Phaedrus*, for differentiating writing from speech – its relative “absence” compared to the presence of speech...” (2000:18)

This ‘collecting’ of sound can be seen as somehow differentiating the sound from its problematic ontology of the non-recorded speech, its ‘absence’. This is precisely why Buhler and Neumeyer reduce the ontological importance of early cinematic (non-synchronous) sound to an element belonging to “...the performance, rather than the film per se.” (2015:20) The ‘collecting’ of important sound can be seen, therefore, as a way of *reducing* its ‘absence’ and ontological alignment with the ephemerality of performance.

Already the footage is a significant departure from Dickson's experiments as there is a purpose behind what has been chosen to be recorded. The process of reading the speech, of turning the written word back into the spoken word is important. There is a sense that the speech should be (and is) *performed* by Case. This performance itself becomes *inscribed again* – permanently captured by the recording. It is important here to note the different case study to which the Derridean concepts are being applied. Derrida spoke of the perceived difference and priority that the Greek philosophers gave to speech as opposed to writing. Arguments of trace, binary opposition and the potential for a 'hinge' between the two were made with the concept of a hierarchy that placed speech at the top.

Writing, a mnemotechnic means, supplanting good memory, spontaneous memory, signifies forgetfulness. It is exactly what Plato said in *Phaedrus*, comparing writing to speech as *hypomnesis* to *mneme*, the auxiliary aide-memoire to the living memory. Forgetfulness because it is a mediation and the departure of the logos from itself. Without writing, the latter would remain in itself. Writing is the dissimulation of the natural, primary, and immediate presence of sense to the soul within the logos. (*Of Grammatology*, 1997:37)

Here Derrida describes the perceived problem with writing (as opposed to speech) before later in *Of Grammatology* moving on to deconstruct this concept. He claims that there is no 'natural' or 'immediate' presence within speech, as there is the trace of speech within writing and the (non)presence of writing within speech. In examining film sound it is important to remember that the binary opposition to be deconstructed has been repositioned – in this instance, the speech is the equivalent of Plato's writing; more removed from the logos or a *signified*.

Case's use of sound to record Lincoln's speech has repositioned the sound as the most significant aspect on the screen. Whereas the Dickson experiments attempted to provide the *filmic* along with the sonic, Case focusses almost entirely on the audible. This subversion is significant as it hints at the role that he perceives sound to play in the future – that of inscription. The subversion does not reverse the opposition, rather it provides more scope and area for analysis, within the text it is now possible to offer a more radicalised analysis whilst remaining within the boundaries of the film itself.

This re-joining of the sound with its source is imperfect and incomplete – it is not that of Lincoln, but that of Case. The impossibility of Lincoln re-voicing the words is inherent in the screen. By referencing Lincoln, evoking him in the speech, and speaking the words in his voice, Case evokes the *trace* of Lincoln – the *trace* of the 'original' sound. Every word that *is not* Lincoln, also *is* Lincoln simultaneously – it contains the trace of him within it, as the speech contains the trace of him. Rather than this operating to distance the speech from the *logos* it operates to inform the viewer of the impossibility of reaching *logos*, and, hence, proliferates meaning and relationships between the sound and the image.

The more stable and unequivocal the relationship between the sound and image in synchronisation (the mouth moving and the words forming audibly) the more unstable the connection to Lincoln's initial speech as the closer the words are adhered to Case. Trace is everywhere. The 'hinge' is the entire test – the ontological nature of the sound and image, the changeability and fluidity of meaning between the two, is

proliferated. Meaning and definition can flow through the film, and sound, image and soundimage are interchangeable.

When Case announces “cheese” and “crisps” he takes care to make very clear and apparent mouth shapes.



The exaggerated shapes ensure that the image is as important as the sound – without *seeing* the sound, there is no significance to it. The function of the sound within the clip has now changed – rather than the significance being on the content of the speech, it is now on the fidelity of the sound quality, and the ability to match the synchronicity to the image. Whereas the Lincoln address is about the *re-attribution* of sound to its ‘original’ source (the words and the speech). Almost as an afterthought, Case whistles a short tune – the sound is distorted, although pitch is discernible – after calling for the camera to be “shut off” the film ends. This is a moment that would not be present in non-sound films of the same time and as such exposes the

awkwardness of the moment even more. A director of a non-sound test would be able to direct the technicians to stop the film without having their words recorded.

The second test shows some obvious changes to the first, made presumably after viewing this first test. Shot in the same set as the first test, the composition is tighter and the man framed in the centre is more evenly lit, with an area of over-exposure on his forehead. The lighting is important as the subject (a harmonica) is smaller and less discernible than a mouth shape and voice, and the synchronicity must be shown.



The portrait remains – it has no relevance to the sound or image in the scene but serves to focus the perspective and eyes centrally onto the subject. We hear an awkward “...anytime now?” from the man, and after a brief moment he begins to speak, haltingly: “I’m gonna play a...piece on the mouth organ.”

The address is one of a performance – the specificity of film sound has yet to be developed although from archival articles and accounts of early film sound, cinema

was more similar to music and theatrical performances than contemporary cinema. The programme would most likely be introduced by a musical director or cinema exhibitor, and the orchestra or organist would frequently perform by themselves at some point during the screening – either at the interval, as an extra performance, or as an overture or exit music to the film itself (this being seen clearly in *The Jazz Singer* with the synchronised score).

As synchronised sound was introduced the specificity of cinema changed – any fluidity in terms of temporality was reduced and eventually diminished entirely. The practice of removing ‘inconvenient’ reels, hence altering the length of the show, or of scheduling extra performances with the spare time, ended. Even with the playing of the same piece of music every night, the performance would never be exactly the same – each screening was unique, not recorded and never repeated. Multiple viewings would provide subtle differences in the same cinema, and entirely different experiences in different cinemas. Early cinema was a performance, synchronised sound was not. These tests show a hybrid of the two forms – the trace of the early sound through performance. The impossibility of this form changing on a second viewing is highlighted by the awkward and informal way in which the scene is introduced.

The man’s performance is awkward and anxious – he begins to play, and we hear the hiss of technology, but less this time – this is probably due to the tighter shot and the ability to place the microphone closer to the source and still out of the frame (a difference to *The Dickson Experimental Film*) the technological sound has begun to be



'hidden' and takes on a different ontology, as something to be listened *through* (Birtwistle, 2010). As the man plays his eyes dart about – he is not sure where to focus. Without an audience (apart from the technicians) he is uncomfortable. The camera is not yet a 'natural' place for him to look. This conflation of two mediums (the music stage and film), previously impossible to combine, poses a problem. The established convention of avoiding eye contact with the camera (not 'breaking the wall') is in conflict with the established convention in musical performance of communicating with the audience. It is interesting that all subjects so far appear incredibly awkward in front of the camera, as if the 'liveness' of the event is more so that with image only recordings. This highlights the unusual nature of the scene and the attempt to combine the two technologies of recorded sound and moving image.

It is important to remember that this combination is not 'inevitable', not 'natural' and this is borne out by the look in the man's eyes. After he has performed a couple of verses, he remembers to put his other hand over the harmonica to produce a 'vibrato' effect, changing and refining the sound. The test is at odds with itself as two differing agendas are at work; the purpose of the test for Case is clearly to refine and develop fidelity of sound and synchronicity of image – any concept of narrative, aesthetic, performance or character is not important (although there is an acknowledgement of *mise-en-scene* with the portrait – something that would not be seen as important in a musical performance on the theatre stage). The purpose of the musician is to produce a high-quality performance – he is, no doubt, aware that the recording will be permanent, and the anxiety and the awkwardness demonstrate the seriousness with which he takes the test. Once he has remembered the vibrato technique, it is

important to him to include it, even if half of the performance has happened without it.

This difference of agenda creates a fissure between the two – the awkwardness is obvious in the man’s actions, the importance of fidelity obvious in the closeness of the shot, and the lighting and focus on the man’s hands and mouth. As with the fissure between synch and non-synch sound in the ‘bridge’ films, this fissure enables the viewer to see what is frequently concealed. Rather than impassable, the gap becomes the very site of the bridge or hinge allowing the viewer to understand and investigate the traces and shadows inherent within the test. These moments allow the viewer to examine what is happening and to ‘see’ the invisible gap between the sound and the image.

Test three is in the same space, but the camera angle has changed again, allowing a man with a harp to sit on the small podium. The curtains have also been drawn; the background is now a uniform colour.



This third test marks a clear departure from the speech of Case towards musical performance. The subject is no longer facing the camera directly, but is facing left, seemingly oblivious initially to the audience. He also holds a small trumpet like instrument. The light is now strongest on the harp, the site of synchronicity, where the hands will meet the strings. This time the performance commences without any words – this demonstrates another change – there is immense value in watching these tests in order, as the slight changes and adjustments made by Case and his team give insight into what is important in terms of the test, and what changes and developments have been made.

The performance has started, presumably, with an indication from the technical team, but this indication is not a vocal one. Until this point in film there would be no need to use hand signals or avoid using voice to direct action – directors were off-screen with a loudspeaker, calling the action from the side-lines. Now there is an understanding of the beginning and end of the shot, and of the performance – a non-verbal cue has been given. The facing left of the subject, and the non-verbal communication gives a level of artifice to the test, there is a sense of performance and of a different specificity. This reduces to some extent the awkwardness of the beginning and end of the shot and the nerve-wracking sense of ‘liveness’ seen in the subjects.

The content of the performance itself is more unusual – rather than Case himself, or the relatively common sight of a mouth organ, Case has found a harp player. Like the Lincoln speech, there is the attempt to record something for posterity, something less ‘everyday’. At the end of the performance, the man raises and faces the camera – he

bows awkwardly as if to an imaginary audience. There is a pause and the film cuts as the man begins to sit down again – there are no verbal cues – there is no voice that calls ‘cut’ and the subject doesn’t speak. This is a move again towards an artifice of performance – the imagined audience are acknowledged at the end, as if applauding. During this bow, the absence of the applause becomes the *trace* of applause – within the shot there is the (non)sound of clapping. This moment, not seen in later in film sound convention, is a rare one that hints at both the conventions of a musical performance that is live, and a film performance that is carried out without the assumption of an audience. This is a convention that remains only for a short time in sound film experimentation. Gomery notes that later towards the 1920s, sound shorts that would have previously used the conventions of ‘liveness’ in the performances became:

...unlike “canned” vaudeville, as Sam Warner and his assistants eliminated mandatory bows...and extremely long takes, employing more traditional styles of camera work and editing. (2005:Chap 3, p.40 of 155, 27%)

The approach of the imagined audience is only present for a short time, but it provides an interesting moment for a Derridean approach; much like Derrida’s zombie, two conventions should not be able to exist at the same time – the live and the recorded. The awkwardness of performance and bow demonstrate the moment where both are possible and itself is a site of trace and a hinge between the two forms – the artifice of the construction is unveiled at these sites and in knowing and *seeing* the construction, it is possible to understand the film without the logocentric logic of

applying 'success' or 'failure' of the experiment, or how much the film is imbued with the notion of *sign* rather than *signifier*.

Test four in the series shows a significant departure from the first three, although is again filmed in the same set. This is the first test to have two shots edited together and is a much tighter performance with much less of the awkwardness of the first three. This mimics the earlier films that contain the first examples of editing and it should be noticed that when these films are analysed, the content of the film, as well as the technology of the film is considered. The vaudeville act, Gus Visser, performs with his 'singing duck'. The performance starts in long shot of Gus and his duck on a pedestal to his right. Gus walks across the stage, feeds the duck and picks it up, walking forwards to announce the song *Ma, He's Making Eyes At Me* (Clare and Conrad, 1921). The duck quacks on the word "Ma". Both the duck and Gus are audible over the loud hiss of the technology, but Gus' footsteps are not. A decision has been made to cut closer to Gus for the performance itself. The cut is at an angle less than 30 degrees, creating a discernible 'jump' and the eye line of Gus does not match – he appears to look fleetingly at someone off stage before focusing forward.



The shot, now being closer to Gus, allows his voice to be heard more clearly.

Instruments, a piano and violin start playing – they are audible and live, off camera and to the left (based on Gus' glances. The mix is not particularly effective and the instruments sound as if they are at a great distance to Gus. He begins to sing, looking deliberately to the left and right, addressing an imaginary audience. These 'looks' would appear naturalistic in a theatre, and good practice by the performer, to include and involve all members of the audience. In this setting it appears unusual, as if Gus is colluding with the filmmakers to evoke an audience.

Gus' performance is much more polished than the previous tests on the sound stage – he is more comfortable and follows clearly the 'stage' and performance conventions. The extremely unusual subject and content, however, creates an obvious 'gap' in the performance – this performance, if in front of an audience, would evoke a verbal reaction, and/or laughter. Without this, the performance seems unusual – the extreme and loud vocal techniques employed by Gus are not reciprocated by the sounds that one might expect to hear. At the end of the performance the film cuts quickly – there is, again, an awareness that the viewer should not see the finishing of the act, putting the duck down, walking off stage etc. There is much more in this performance that suggests conventions to come in film sound, and the editing shows a desire to connect the visual appeal with that of the sound. Again, without clear image the sound has no ability to demonstrate synchronisation.

This set of four tests, the first seen in Case's sound studio, operate as a microcosm for the wider development of sound in cinema – moving from a static screen and a focus

on the spectacle and ability of sound and moving image to operate together, the films develop into a focus on music, and vaudeville performances, and the camera begins once more to move. Within these four tests the development of film sound conventions also appear – the non-verbal communication, the evocation of an audience and the sense of performance. As well as these first four, there are other tests where Case is checking equipment and developing and testing technological aspects of the sound recording.

#### LEE DEFOREST FILM TESTS

In contrast to Theodore Case's tests, DeForest appears to have made greater attempts to produce more polished short films. Many of these were shown in cinemas that had been specially adapted for the sound shorts. It is clear that, initially, that DeForest was not convinced of the capability of synchronised sound to become part of the established cinema of the time; Douglas Crafton (1997) quotes from a *Film Daily* article where DeForest makes it clear that he wanted to integrate the technology carefully and to provide narrative causality for sound.

It is not De Forest's idea that the ordinary pantomime [*sic*] drama is adapted to the "phono-film," but he expects scenario writers to write stories around the acoustic idea to work in the voice and music to the greatest possible advantage.

(*Film Daily*, 7 April 1923, pp. 1-2) (In Crafton 1997:65)

DeForest was interested in the potential that synchronised sound could bring to film, and tried a variety of tests to explore that potential.

DeForest's very first experimental sound films – from 1920-1922 were clearly to test the technology but were still produced with an audience in mind. One of these was the *Barking Dog* circa 1921. In many ways, an unsuccessful test in terms of film sound synch, but an interesting one for the ability it provides to see the inherent *trace* in the film. It opens with an intertitle – “There is no bark in a movie dog.” There is the clear hiss of technology on the film, and ‘pops’ from it, there is no synch sound or any other sound other than the hiss, we listen intently to the *absence* that has already been highlighted – *there is no bark*. This ‘cinesonic’ sound again becomes evident and noticeable, within the sound of the technology is the (non)sound of the bark. We then see the image of a dog in a medium shot, against a wall, barking.



We *do not hear* the sound of the dog, even though the film is clearly capable of producing sound. The impact of this is that we (do not)hear the *trace* of the dog's bark



– this has already been framed for us by the intertitle. By using words to describe the *sound* of the dog and when hearing the technology, we are already primed to hear this sound. It does not matter that we have been told that there is “no bark” because we have *seen* the word bark. The moving image of the dog barking provides the image of the sound. It is impossible to not have the *trace* of the bark within the film. The absence of the bark has had attention drawn to it.

The film cuts again to an intertitle – “Unless he is Phonofilmed” the film then returns to the shot of the dog, and after a clear ‘pop’ in the soundtrack, barking and howling is heard. Significantly, this is *not in synchronisation with the image of the dog*. We are presented with sound and image of a dog, presumably, (although not inevitably) the same dog, but without synchronicity. It gives us the *impression* of the synchronised and the possibility of the synchronised, but remains distinctly non-synchronous with the image, or just as legitimately, the image is not in synchronisation with the sound.

This sound test has great potential for the understanding of the impact of sound in film, and the significance of film (an audiovisual medium) as a site of the *hinge*. By pre-empting the dog bark, both in words and the image of the dog barking, the mismatching of the image and the sound is even more pronounced. Not only are we hearing the sound of the dog and seeing the movement of the dog, but we are (not)hearing the *trace* of the dog’s bark at the moments where the bark would be in synchronisation, and (not)seeing the dog bark when we hear it.

Laid bare is the artifice of synchronization. The construction, hidden so effectively in synchronised sound films, is unveiled. The sound and the image are *not* evoked by each other, but are separate, and the potential for meaning, and fluidity between the sound and the image is proliferated. This reading and the potential that film has for these meanings, is only possible by analysing this sound test in a way that liberates it from its role in history and technology. It does not matter *why* the sound is as it is (the technological reasons) but by viewing content only, viewing the film *as film*, the power in the clip is exposed.

DeForest's later tests moved between ideologies of inscription and simulation and provide some illuminating insights into different ways of thinking about film and film sound and image relations. The short films produced in the few years prior to *The Jazz Singer* can be broadly categorised into three separate groups. The first, the recording of significant speeches and people, the second – entertainment clips of performers and musicians and the third, the 'spectacle' of synchronised sound. Whilst the first two categories have within them the recording of the 'spectacle' this third group have this as the main intention of the film.

In order to interest potential investors DeForest uses this variety of methods to appeal to different audiences and buyers. He collects a number of recordings of famous people, recreating speeches or readings that they have written and/or orated previously. One such example of this is the recording of *President Coolidge, Taken on the White House Grounds*, (1924). This made Coolidge the first President of the United

Sates to be recorded on sound film and followed his radio broadcast made live at his second inauguration the same year.

Recording Coolidge was a way of collecting and keeping a copy of the president speaking – much like Case’s recording of Lincoln’s speech, there was a sense that sound here was being used to retain that which had previously been unobtainable – the spoken word. The spoken word is given a double importance here; firstly, that it is Coolidge himself who is speaking, and secondly, that it is attached to a synchronised image. Again, two seemingly conflicting aspects of sound, the live and the recorded, exist at the same time. The speech that Coolidge gives is about the importance of a frugal approach to the economy and the need for all American people to support each other and the government. It is relevant to the contemporary audience.

The film is introduced with a title card introducing the president and situating the film within the grounds of the White House. Coolidge begins his speech without any audible cue – the film has been cut to remove extraneous material. Coolidge’s performance is very wooden, particularly when compared with recordings of politicians in the twenty-first century. His unfamiliarity with the subtleties of the medium are evident. He reads from notes, something that would be unusual now, and he reads without a podium or lectern. He is focused almost entirely on his notes, only occasionally and fleetingly glancing around, mostly ahead to his left, where he is clearly focusing on a single person.

At one point he raises his hand, as if to emphasise a point about the economy, but the move looks rehearsed and awkward, and this awkwardness is increased by his failure to look up from his notes. This gesture is reminiscent of an actor during rehearsals where the script has not yet been learned.



When the speech finishes, Coolidge walks off screen to the right before the camera cuts; there has obviously been an attempt to create a slick short film. The technology has greatly improved, and the sound fidelity is good. There is much less background hiss and the main focus is on the content of Coolidge's words and the timbre of his voice. The film operates as a stand-alone fully finished short of a presidential speech.

The importance of the synchronisation is negligible when considering the content of the speech. Coolidge's performance is underwhelming, and whilst the sound and content of the words is effective the image does not provide an additional dimension, apart the confirmation that this is definitely Coolidge. This may explain why the

practice of recording and retaining speeches that are not orated in front of an audience is not continued. The presence of an audience may have improved the performance and provided some visual and audible feedback and content. Without this, there seems little reason why the recording was not of audio only. Any evocation of an audience that Coolidge may create is made redundant by his consistency of glancing only in one direction. Off-screen space does not provide an imaginary space for an audience.

Another earlier recording of *George Bernard Shaw*, by contrast, appears more ad-libbed. Similarly, the film is introduced with a title card that names Shaw and gives the date – 1922.



The film opens with a fairly long shot, showing most of Shaw, standing in a garden. The technological hum is extremely loud, and although Shaw's voice, at a much higher pitch, is clearly audible, the hum competes for the attention of the viewer, it is

certainly not 'hidden' in the soundtrack but is overt. Shaw speaks without notes on the opening of a new theatre and the performance of some of his plays. After a few sentences, the film cuts to a different shot which is tighter on Shaw. This has no impact on the quality of the sound, although it does provide the viewer with more detail of his face and of the obvious synchronicity of the words.

Shaw pauses several times, clearly searching for words to enable him to keep speaking. He does not read from notes and seems much more relaxed and comfortable speaking when compared to Coolidge. The speech operates as an advertisement for his plays and the new theatre and is therefore operating on several different levels at once – the content of the words is significant, as is the technological accomplishment that the sound is synchronised. This, then, makes the exposure of the site of the hinge much harder to find, as the artifice of the sound (as if coming from the image) is much stronger. The hum, however, negates this to a large extent.

DeForest's films of vaudeville acts and musicians appear to fulfil a slightly different purpose to Case's. Whereas Case seems to be more interested in the perfection of the technology, DeForest's priority seems to be to produce a 'finished' product that can be shown at a cinema. The same could be said to be true of earlier films in the late 1800s and early 1900s – the purposes of them were often different depending on the film maker.

The 1922 recording of *Eva Puck and Sammy White* shows two Vaudeville comedy stars running through their routine. There are two shots in the film, the first introduces the pair in close up, to accommodate a physical gag with a fence and garden gate, and

then the film cuts to a wide shot of both performers. Both actors are clearly comfortable with each other and the routine seems well rehearsed. There are several elements, however, which make this an awkward performance. The first is a notable lack of audience – once again it seems that both actors initially glance offstage right, as if looking at one person. This complicates any notion of a wider audience. The specificity of the recorded film is at odds with the performance of a ‘live’ sketch. Without verbal feedback and laughter from the audience, the jokes fall flat; some of White’s gags rely on observations from the audience. When Puck leaves the stage, White seems more comfortable in addressing a wider audience space, and reacts as if hearing comments (his braces have come undone).



He also relies on the space as if it is a theatre, and the film audience as located as static as a theatre audience. When he turns around to adjust his braces, the humour derives from the presenting of his backside to the audience. Film, even early cinema,

would have more naturally cut to a different shot to keep the actor in the frame – the specificity of theatre – that the audience are in a *fixed* position, changes the way in which the film is shot. Clearly to maintain synchronicity the film is unable to cut, which may be why performances were an obvious choice for early sound tests.

The awkwardness, however, of turning away from the camera, compounded with no laughter track or verbal cues, lends a static, stilted quality to the overall short. This gap again, between the expected audience reaction in theatre, and the lack of reaction in film, creates yet another moment of trace – the viewer is poised as if straining for the sounds of an audience that never existed. This *undecidable* moment is where meaning can be generated, and the impact of sound and image relations examined. Once again, this does not rely on an awareness of where the film is situated historically, or technologically but only an awareness of how the sound and image destabilise the dominant model of sound image hierarchy in film.

Derrida attempts to explain how difference can be a site of both joining and fracturing at the same time – this gap, for him between writing and speech and in this case between the live and the recorded, is at the same time a gap and joining of concepts.

Derrida quotes from a letter by Roger Laporte in *Of Grammatology*:

*You have, I suppose, dreamt of finding a single word for designating difference and articulation. I have perhaps located it by chance in Robert[’s Dictionary] if I play on the word, or rather indicate its double meaning. This word is brisure [joint, break] ‘-broken, cracked part. Cf. breach, crack, fracture, fault, split, fragment, [breche, cassure, fracture, faille, fente, fragment.] – Hinged articulation of two parts of wood- or metal-work. The hinge, the brisure [folding-joint] of a shutter. Cf. joint.” – Roger Laporte (letter)*



Origin of the experience of space and time, this writing of difference, this fabric of the trace, permits the difference between space and time to be articulated, to appear as such, in the unity of an experience (of a “same” lived out of a “same” body proper [*corps proper*].” (1997:65-66)

The hinge is a word that allows for the concept of separating yet joining at the same time, and allowing the passing through of themes, ideas, objects through one side to another. By treating differences within these sound tests as a *hinge* it allows the viewer to, simultaneously, accept and understand the difference but see that the entire artefact is united and performing both identities at once (that of performance and recording). By accepting this, one can allow for a variety of meaning to move through the film, without the need to categorise it according to one identity or the other. The ‘success’ of early film sound tests is frequently held in terms of their ability to achieve synchronicity, but this is only significant in the historical and technological context. It is entirely acceptable to alter the purpose with which these films are used and allow the potential within the sound to come to the forefront. Most of DeForest’s vaudeville recordings have the same moments of awkwardness which allow for the exposure of the construction of synchronicity as ‘natural’ film sound.

The third group of sound tests focus more specifically on the purpose of recorded and synchronised sound and are an attempt to record events that would already have been taking place but have a relevance to sound. DeForest recorded and produced several shorts of actors using their voice; these show an early glimpse into the processes of a film sound actor. This experimentation demonstrates that DeForest has

moved more decisively towards the concept of sound in the narrative film. This is of course a new phenomenon at the time and many of the actors had come from radio or Broadway. One example of this is of Helen Menken, whose career straddled the introduction of synchronised sound in film, and she went on to star in many sound films. The short is edited and produced as a stand-alone film, but the content is more that of an audition tape or show reel – Menken acts out scenes from an unknown script, one after the other, and ranges from despair to happiness. The purpose appears to be to demonstrate her ability to act a range of emotions, and to demonstrate the effectiveness of the technology.

The film starts with an opening title introducing Menken as a “Dramatic Actress” but gives no context to the words that she is going to perform.



The film consists of a single medium shot in which Menken is centrally composed. The set is of a room with a single painting on the wall behind Menken. The room seems to have little relevance to the content of the monologue in the scene and is similar to Case's sound stage; there is no immediate connection to the action being filmed. If anything, this makes the dialogue even more puzzling – when the shot starts, it is possible to think that this scene is going to make sense narratively and this expectation is compounded by the presence of a naturalistic set. An audience used to seeing fictional narrative film would also be used to filmic conventions of the time which included multiple shots and the reaction shot of another character. Menken starts to speak – her voice is clear and discernible above the hiss of the technology that is audible in a hiss, but not loud. She faces consistently towards screen right – addressing an invisible person in front and to the left of her.



She begins with questions; “What are you doing here?” “Why didn’t you stay away?” and there is no answer to these. As she gets gradually more agitated and upset in the

scene(which appears to be a narrative of the separating of her and her baby from her lover). She acts out her sadness and despair reaching a crescendo before, two thirds of the way through the 2 ½ min short, breaking off and pausing for a second. When she begins to speak again the script has clearly changed – she addresses another character and moves her gaze around the frame as if following them – at one point asking them to “lean on me” and opening her arms. There is no one else in the scene, she is acting to another imaginary character. This becomes particularly apparent as she moves her head and looks down to her right.



The short ends and fades to black at the end of her sentence. The overall impact of the short film is a strange one. It is clearly the intention for Menken to demonstrate her acting ability by performing a range of different emotions and responding to apparently different characters. There is, however, no context or explanation of what scripts are being used, and in a stand-alone short, the narrative holds little significance or meaning. What is left, therefore, is an examination of the quality of the sound that

she produces; the timbre and tone of her voice and the fidelity with which she is heard.

DeForest has chosen a narrative script, actor and set with which to test his synchronised sound. The impact is startling as the traditionally 'important' elements in the film – narrative and image, are replaced by the importance of the sound quality and the range of emotional representation. The importance of the sound is as important as the image. This short is truly audiovisual – the film has the trace of the image within the sound (are Menken's lips moving at the same time as the sound is heard) and the sound has the trace of the image. It is impossible for the two to be separated or to analyse and consider the short without either element being integral to the understanding of it. Many of DeForest's shorts have this quality about them – vaudeville acts or voice actors are taken out of context, and whilst they can appear extremely confident and comfortable in their performances, the anomalous context in which they find themselves, and in which the audience encounter them, make the consideration of sound image relations unavoidable.

#### THE VITAPHONE CORPORATION SHORTS

Taking the chance with a new technology the Warner Brothers had invested significant funding into the development of the Vitaphone system – the system of recording sound onto a disk that ran at the same time as the moving image. This

system different from the technology of Case and DeForest, who had developed film with a photographic method of capturing sound attached to the track.

Initially, the Vitaphone technicians and founders had not considered the technology would replace established cinematic norms of the time and envisaged its impact most specifically in music. Crafton (1997) quotes again from *Film Daily* where the intention of the Vitaphone system as a supplementary element to cinema was discussed, as late as 1926:

The invention is in no sense a “talking picture” but a method whereby a film can be accompanied by the music cue and other musical and vocal numbers given by what means of what is now known as the recording machine, for want of a better name. The invention is expected to bring audiences in every corner of the world music of the symphony orchestra and the vocal entertainment of the operatic, vaudeville and theatrical fields. (*Film Daily*, 26 April 1926, pp. 1, 6)

As with Phonofilm, Vitaphone was intended to supplement the regular film program. It would replace the orchestra, but not the traditional silent feature. (1997:71-72)

Prior to *The Jazz Singer*, and in addition to the experiments with the synchronised score, the Warner Brothers had experimented with several short films, one of the most significant starring Al Jolson, called *A Plantation Act* (1926, Roscoe). The success of this film would lead to *The Jazz Singer* but unlike its predecessor, in many ways *A Plantation Act* is less significant in terms of the potential for the exposure of the construction of sound and image, even though it was made a year before.

Nonetheless, it is significant in terms of the combination of styles and approach, the shot choices made and the potential that exists in terms of subsequent films with synchronization.

Jay Beck discusses the 'two-pronged' approach that the Warner Brothers took with sound in the mid 1920s, following a merger between the Brothers and AT&T (telephone and telegraph technology):

...two divergent paths of sound usage were followed: the first concentrated on recording sound and images live for the shorts, while the second confined itself to adding semi-synchronized musical scores to already completed feature films. Through this two-pronged approach, Warner Bros. was able to test their new equipment in the lower-priced shorts, incorporate technological advances into their feature films, and market the Vitaphone equipment by ensuring smaller theater owners the same program quality and content as higher-priced venues. The new Vitaphone team conducted several tests to perfect the art of live recording in which, unlike the films of DeForest, they understood that cinematic elements were equally valuable as the sound recording. (2011:68)

*A Plantation Act* is one of these live sound and image shorts, where the focus was equally on the integration of new technology *and* the importance of the image and quality of the film recording, although Beck does claim that "...most of the shorts filmed were either musical or theatrical performances which created an **aesthetic** that foregrounded sound synchronisation often at the expense of visual expressiveness." (ibid). Whereas *The Jazz Singer* is mostly a film that adheres to so called 'silent' film conventions, *A Plantation Act* is a fully synchronised short including speaking as well as singing. Unlike DeForest's tests, the film opens as a narrative fictional story, introducing "Al Jolson in A Plantation Act" on a title card, before fading from black to an interior set long shot of a cotton field, a small wooden shack and Jolson striding from behind the shack to stand in front and stage left. The film cuts to a tighter mid-

shot of Jolson, who then begins to sing *The Red Red Robin*, (Henry Woods 1926).<sup>15</sup>



After the first song, Jolson addresses the audience; “Wait a minute, wait a minute, you ain’t heard nothing yet, you ain’t heard a thing...” The line “...you ain’t heard nothing yet...” is more famously known from *The Jazz Singer* but was first uttered in *A Plantation Act*. It demonstrates the ‘knowingness’ with which Crosley and Jolson used the phrase, and this lends credence to the idea that the line used again in *The Jazz Singer* is not to further the narrative of the story, but to showcase both Jolson and synchronised sound. Jolson is not merely addressing the audience that he is imagining in front of him, but the viewer in the cinema – he is out of character. It can be argued that *A Plantation Act* and *The Jazz Singer* follow a linear development towards fully synchronised sound, but there are many techniques in each that demonstrate the flexibility of sound within this period. Firstly, Jolson, in *A Plantation Act*, is performing as if in the theatre, rather than the cinema. The narrative is minimal, and both songs and speech are delivered directly into the camera, to the invisible audience. There is a

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<sup>15</sup> Jolson, performing in ‘blackface’ evokes the history of slavery in the United States, and demonstrates the importance of the influence of African-American music on the industry at the time. Entirely commonplace in this period of American performance, it is deeply uncomfortable viewing in the 21<sup>st</sup> Century.



feeling of 'liveness' about the performance, as if it is happening in front of an audience that are present.

The two different camera angles provide an aspect not possible on the stage. The cut and repositioning of the camera allows the audience to see Jolson more closely, but also the medium shot is the one that has synchronised sound recorded alongside it. The wider shot does not. This is not immediately afterwards until Jolson returns for a 'curtain call' and quite obviously speaks to someone offstage (screen) – it then becomes obvious that there is no sound attached to his voice.



This 'liveness' is common to many of the early film sound tests and shorts – the process of filming had changed, and the inclusion of recorded sound meant that the rest of the film crew had to be silent during recording. This would have given the impression of performance. In addition, much of the initial material filmed was of vaudeville acts and other musicians, who behaved as if in their usual environment of the theatre (and often were in a similar if not the same environment). Many of the performances suffer from the removal of a live audience – pauses inserted into the acts for laughter and applause are eerily quiet (although audiences did applaud in the

cinema at the time) and awkward. The performers, not receiving the feedback which they are used to, frequently become more wooden as the scene continues.

Jolson is one of the most effective musicians of the Vitaphone shorts and appears at ease and comfortable in front of the camera. Still, the unusual curtain call does change the specificity of the short. Once Jolson has finished three songs, the film cuts to the wider shot, as he begins to head back across the screen towards the back of the shack. The film fades to black, but not before we see the figure of Jolson turn around and head back in the opposite direction. Once completely black, the film fades up once more and Jolson continues his return to his initial singing position. Time passes between the two fades, but no time passes for Jolson – when the film fades back up, Jolson continues his walk in exactly the same place he was before the cut:



This is unusual and it would be expected that any fade in the film, already connoting a passing of time, would be accompanied by an appropriate 'jump' in the physical space of the character. It is here that two competing conventions are occurring at once – that of the live performance – where Jolson is reacting to the idea of an audience calling him to come back for a bow, and the narrative film time, where time would have passed as the fade took over.

This unusual moment is compounded by the movement of Jolson's mouth as he talks to someone offstage:



We cannot hear him, nor are we aware of any live audience either in image or sound.

This moment has the same impact as the moment in *The Jazz Singer* where Jack's father returns. Unremarkable if not for the previous shot of synchronised sound – now we have heard Jolson's voice we are incapable of not imagining it.

This film short demonstrates a multitude of overlapping 'conventions' and possibilities for the development of sound in film, as well as offering many examples where trace sound can be (not)heard. The construction of film in even these more developed shorts is overt for the viewer – it is not possible to watch the film without being aware of the mode of production. This operates to destabilise the narrative and continuity trajectory of the film – it is not clearly in line with a smooth trajectory of film and film development towards the classical Hollywood mode.

## CONCLUSION OF EARLY FILM TESTS AND SHORTS

The re-visiting and analysis of these early film sound examples is essential for considering how film sound can operate to destabilise and expose the construction of film and image and sound from its trajectory towards a synchronised sound film. More than this, however, it provides us with the chance to find easily the sites of 'hinge' within the films, and this being found it is possible to re-evaluate the significance of film as a sound-image medium. Developments in sound recording technology pre-date filmed moving image by several years, and the continual development of sound and image recordings continued alongside the development of the silent film history, however, this development is rarely discussed.

Any writing on the early film sound tests tends to do so with a focus on the 'success' or 'failure' of these tests in terms of achieving 'perfect' synchronicity, which is in itself impossible, or it focusses on the development and rejection of many forms of technology and inventions. By relegating early film sound to technological and historical developments, there is a vast opportunity missed to consider them as films within their own right; in doing so we are able to extend the same level of analysis that is given to early non-sound cinema.

The earliest films with recorded sound demonstrate a clear intention to create audio-visual films, and at the same time offer alternative methods for film sound production, including the mode of production being present in the film. Theodore Case's series of sound tests offer a valuable insight into the development of techniques in early sound film, but it is when the character action, content, mise-en-scene and cinematography

are also considered, that the true agency in the films is revealed. In every awkward movement, trace appears, and the viewer is able to simultaneously hear and (not)hear sound and see and (not)see off screen space and audiences. These tests are extremely valuable and are directly comparable to the early films of the 1890s-1900s.

Lee DeForest films offer even more proliferation, where different purposes and intentions for recorded sound are provided, from the inscription of speeches by notable people, to the potential of film for dramatic performances or vaudeville acts. The trace available in these films is significant, particularly in the actor taking part in dialogue to a (non)present other character, and President Coolidge's speech, highlighting the unnatural experience of recording live sound alongside the moving image.

By the time we move to films that were direct precursors to *The Jazz Singer* we can see a move towards a more 'closed' representation of sound in film, but this is nonetheless still imbued with potential trace, as, indeed, *any* film is. Jolson's lack of movement during a fade, his theatrical performance to a non-existent audience and the words seen on his mouth but not heard in the soundtrack are all examples of this.

It is possible to see that an entire and alternative early film sound history exists and has great potential for even more analysis. *Synchronised* sound has been a part of film since its earliest incarnation, and arguably even before this, yet these films are not afforded the same level of analysis that early film is given. The tests have often been described as 'failed' attempts at synchronisation, and this perception of failure has

prevented their analysis even being considered in many cases. This alternative history should not be used to 'overthrow' or replace early film but should be considered as *part* of early film. Only when considering these tests in terms of the *image* as well as the sound, can their potential be uncovered, and the proliferation of readings made possible.

# CHAPTER 5 - ARCHIVAL RESEARCH; REVIEW AND ANALYSIS

## The Literature

There are two theorists who offer significant comment or research whilst specifically making use of archival resources. The approach to the archival research here will be discussed below, but as this chapter operates between two different areas; part literature review and part analysis, it is pertinent to refer to relevant theory before unpacking material further.

### Douglas Gomery

In his book, *The Coming of Sound* (2005), Gomery focuses extensively on the industrial and economic climate surrounding the introduction of sound in film. For Gomery, the way that sound and cinema should be understood must be motivated by a knowledge of the choices made by the film and music industries and a context of the economics and climate of the time. To do this, Gomery carried out extensive archival research; his focus, however, was almost solely on the economic factors at play during the time of the transition to sound.

This focus leaves Gomery with very clear thoughts and evidence of the direction and motivations of the industry when implementing synchronised sound in production and exhibition. For Gomery, the coming of sound was an evolution and “...not chaos.” (2005: Chap 12, p.153 of 155, 83%), but this assertion is based on economic factors, rather than artistic decisions, technological issues or choices of content.

For Gomery, homogenisation of cinematic form is actually *caused* by the introduction of sound, like O'Brien's aspects of homogenisation, Gomery sees the practice that happens during the transitional period as being important to the creation of a dominant model, he claims that "Standardization became the final problem to be resolved." (2005: Chap 8, p.95 of 155, 53%) However, in the examination of the research below, there are plenty of moments where there is evidence of alternative paths, and it is clear that this is not the intention during the transitional period. By seeing sound and cinema as moving in a trajectory, there is a danger of imbuing the transitional period with ideology and intention that came afterwards.

Gomery is dismissive of the early sound tests and experiments that came before the mid 1920s – for him, these had no impact on the transition of sound into cinema and were not economically successful, and he uses evidence within his archival research to dismiss these tests. By concentrating on the trajectory towards standardisation, Gomery misses the opportunity to consider these examples in any detail.

This chapter will explore the contemporaneous reaction in review and exhibitor's papers to the case study films in this thesis. Gomery is particularly dismissive of *The Jazz Singer*, pointing out that not only were the reviews and reactions at the time fairly lukewarm, but more importantly the box office statistics show that the film was not the most 'successful' ones of the time (in terms of revenue). Gomery's strong reaction to this, evidences his insistence that film and sound should be studied according to its impact economically.



Gomery is strongly critical of sound theory that does not consider the impact of sound on the industry or economics of the time at hand. In particular he is critical of Lastra, claiming that he accepts others' views of the historical period so that he can discuss different issues. This leaves little space for ontological and philosophical study and whilst it is, of course, important to have an awareness of the economic context of the historical period and consider how this may have impacted on form and content, it is also important to separate context in order to approach film in terms of sound and image relations. By being unreceptive to other considerations there is no space to study the impact of the art itself. Gomery's work follows a very strict form and is guided by his beliefs in the importance of the industry.

Gomery's work shows an extensive variety of sources and provides substantial information on the period, gleaned from his research of trade papers of the time. The information he provides is extremely valuable for an understanding of the period. However, Gomery's focus on industry and economic considerations, coupled with a belief in the trajectory of 'successful' film sound technology means that it is important to revisit archival material to search, not only for context of the period, but context of the *ideology* of sound.

This research will investigate a variety of archival resources from exhibitors, practitioners and fan literature to consider not only the information about the historical period, but how ontology and ideology were evident in the material. More than this, the thesis will also attempt an analysis of this material with the Derridean

approaches of *trace* and *hinge*. The literature will form part of the research into the period and, freed from a focus on technology, history or industry, new ways of understanding the sources will be evoked.

Donald Crafton

Crafton's book, *The Talkies* (1997) refers to his archival research and he quotes frequently from a trade paper of the time. His thoughts on the period are interesting and he refers to the case study films of this thesis, as well as his belief that the trajectory of sound in film was to some extent inevitable. It is worth mentioning Crafton here, not only for his ideas, but also for the criticism that is levelled at him by Gomery, who questions the extensiveness of his sources and therefore the assertions gleaned from them. As will be seen in this chapter, Crafton refers to *Film Daily* which began in 1915, but this appears to be his *only* archival resource. As Gomery notes, the paper is extensive and covers a large historical period, but there is limited usefulness in applying one source to the historical period, as various choices in content will have been made that are dependent on the ideologies and beliefs of the editors and consumers of the paper.

Nonetheless, Crafton does provide useful insight throughout the thesis, and is also pertinent in this chapter. It would, however, be remiss to omit the concerns regarding his archival sources.

## The Archival Research

It took 'em fifteen years to learn that naturalism is the secret of success in pictures. It took 'em three centuries before that to learn that artifice is the secret of success on the stage. One is truth, the other illusion. One is like a oyster on the half shell – raw, naked, and real. The other is like a fancy ice cream, the skilled blending of a dozen ingredients. Each is good in its proper use. But mix 'em and you get an oyster sundae – which is a good parallel for what we're in for in talkies if somebody doesn't pull an unexpected miracle. (Synder, S. E. (ed.) 1928: 37)

The above quote is taken from *American Cinematographers* and is penned by an unknown writer, taking on the persona of 'Jimmy The Assistant' – an invented camera assistant who, despite his inability to speak/spell correctly, provides wise words about the state of the cinematographer's experience. It certainly isn't the only view of what is called 'talking pictures' or 'talkies' in the 1920s, but it does provide a good example of the deep suspicion of the impact that synchronised sound could have in cinema. It also demonstrates an immediate dichotomy between sound and image, and cinema and stage. One that is prevalent in the overwhelming majority of trade magazines and journals of the time.

This thesis aims to provide a method and reason for the re-examination of sound and image relations in cinema and argues that a reliance on the historical and technological trajectories of film and film history can be detrimental to an understanding of film as ontologically sound and image. It may seem counter-intuitive, in which case, to return to historical documents that are part of this trajectory. However, much like the films *The Jazz Singer* and *Sunrise* offer a moment in film history where the relationship between sound and image was exposed, the same

is true of much of the archival documents of the time. Technicians, exhibitors, practitioners and audiences of the late 1920s are not writing with the hindsight of the comprehensive success of synchronised sound in cinema. As a result, the responses from the authors of the rapid and far-reaching changes are of great interest.

Immediately it is clear that film makers of the 1920s did not see themselves as being in a period of 'early' cinema – the technology was thirty years old; many publications had been established for decades and their ruminations on the history thus far and the changes ahead are based on their knowledge of in many cases, the entire working life of the authors.

Crafton (1997) notes that there is a 'legend' that the impact of the transition to sound was immediately noticed and its impact immediately understood:

The transition was also inevitable: sound was something that cinema lacked, and sooner or later it would have to be added. Unfortunately in the process, the Art of the Silent Film was destroyed. So goes the legend (1997:1)

It is possible to see from this archival material that this was not always the case, and that the transition was in many instances a slower and more ambiguous process.

Here is where the criticism of Crafton's archival research seems most important, and

Gomery says that Crafton has

...lots of citations from a single trade paper – *Film Daily*, Although its annual yearbooks contain scores of data, the *Film Daily* was a headline service, a *USA Today* for the film business. Again he tells the usual tale of industrial change, and gets down to what the goal of the book really is – how the new talkies were received. (2005: Preface, loc 137, 3%)

This is important in that Gomery highlights an important point about archival study – it is possible to manipulate the methodology of archival research to find the meaning already previously hypothesised; or to limit the research to publications that concentrate on the areas that deal specifically with the research topic at hand.

The approach in this thesis is to attempt an analysis of various different types of archival material and acknowledge this and the differences between them. It is also the intention to use the archival material in a different way – not only to provide evidence, information and new knowledge, but to attempt an approach that releases the various articles from their historical and technological trajectory. This includes analysis of the articles for the content within them, rather than the history surrounding them.

Whilst it is now possible to re-visit and analyse articles with the hindsight of a further eighty years, it is still important to allow these articles to operate, to some extent, in the same way as the films that have been case studied; as separate from a place in film history. Released from a trajectory that places sound as subservient and inevitable it is possible to understand these articles in a different way.

The possibilities for sound are much more fluid within the pages – potential for differing lines of development are offered and, in some cases, assumed to be inevitable. Considering these alternative paths provides greater potential for the understanding of sound and image relations today and also helps to redress the

historical and technological assumptions, manipulations or inaccuracies that are present in film studies.

The magazines and journals studied fall into three broad areas, although there is plenty of crossing over of roles and authors between these. The intended readers are either technicians, exhibitors or audiences of cinema, with some journals giving over pages to the amateur film maker as well. Technical journals such as the *Society of Motion Picture Engineers*<sup>16</sup> are filled with scientific papers on contemporaneous development of a number of film technologies including cameras, film stock, lighting and editing apparatus, but also cover the apparatus of the cinema; projectors, screens, audience lighting, seats, auditorium acoustics as well as others. These journals offer papers with an astounding depth of scientific detail but also offer articles that discuss film in a more ontological nature and frequently acknowledge the medium of film as being both 'science' and 'art'.

Magazines that focussed more on the exhibitor, such as *Motion Picture News* (1913 – 1930) include some technical articles but these are usually shorter and more focused on the exhibition technology as opposed to the production technology. These magazines will also include film reviews of current productions, but focused on the exhibitor – they might, for example, recommend a film based on its ability to draw an audience, but also acknowledge that the film is not technically or artistically 'good'. Trade magazines are very useful in offering a glimpse at the condition of the film

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<sup>16</sup> later to be the *Society of Motion Picture and Television Engineers* 1916 -

industry at the time and also offer predictions of how technology may change theatres or audience numbers.

Audience magazines or 'fan' magazines, such as *Photoplay* (1911 – 1980) contain little or no articles about the apparatus of film production and focus instead on the finished films and the audience's reaction to them. Stories and articles about the most popular actors are also prevalent, and advertisements are based on the finished films that are currently in the theatres – this is particularly useful when considering how and why films were marketed to the public – any technological advantage, such as sound or colour is clearly advertised.

These three areas (technicians, exhibitors and audiences) are invaluable in providing a wide-ranging variety of opinion on the introduction of synchronised sound to cinema. Articles covering many aspects of sound, from the technology of the apparatus in the theatre and the film set, the ontology of sound films and the audience reception of them, give the reader a comprehensive picture of the key arguments and thoughts of the time. What is immediately clear is that the introduction of sound in cinema was neither inevitable at its inception or production and generated a multitude of varied writing on the perceived future of its place in the industry.

It is also important to note that despite the release of *The Jazz Singer* in 1927, many audiences and theatres did not experience synchronised sound until much later, and this is evident in the perceptions of some exhibitors at the time. Buhler and Neumeyer point out that:

Even when commercially viable sound film did emerge in the late 1920s, silent film did not immediately disappear. *The Jazz Singer* (1927) did not constitute a radical break in the terms of filmmaking. The production of pure silent film basically stopped in Hollywood by the second half of 1929, but studios continued releasing silent versions of most films through at least 1931 in order to service those theaters, both international and domestic, not yet wired for sound. These silent versions included intertitles and often contained separate footage, different direction, and occasionally even different stars. (2015:21)

Therefore, it may appear that some exhibitors and film makers are unable to see the 'inevitable' rise of synchronised sound, even after 1927, but the context of the technological integration into cinemas is important.

It is worth highlighting that the role of the exhibitor in this period of film history was significantly different from today. Exhibitors wielded much more control over the films shown in their establishments and the manner of their screening. Cinema at the time was often part of a bigger performance that included many live acts and short films that accompanied any 'feature'. A typical evening would see a first half of vaudeville acts, musical performances (either from the house orchestra or visiting musicians) news reels and short comedies, and the second half would comprise of a main 'feature' or several shorter films. This format was precisely why synchronised sound had such a far-reaching impact and varied reception by exhibitors and film makers; sound did not simply appear on one film in the evening, but, with a range of different technologies available, made an impact on all parts of the performance. Within a few years many of the vaudevillians and live musicians disappeared from the cinema, but in these few years of fluidity, exhibitors were balancing the economic benefits of many new technologies with the benefits of live acts and musicians, as



William A. Johnston, the editor of *Motion Picture News* considers in his summing up of the year of 1927:

On the positive side, we believe the reshaping of entertainment by the "sound" pictures and devices is a development second to none in its importance. In fact, we place it first. It is really just beginning, but it is great in its possibilities. Sound effects in photoplays; the audible news reel; musical accompaniment to the picture, whether the music is on the film or furnished by an easily operated device – these hold big promise for the future. (1927:2014)

A short article from New York in *Variety* magazine (1905-) also shows the potential for sound to have a place in a programme that included different short films and other acts:

A canned musical disk carrying the score for a feature picture on one side and music for the complete picture program otherwise on the other side, is being made in this city...The claim is made that the new arrangement can play an entire picture show without adjustment or attention...While the limit of extension of continuous playing is 88 minutes to one record, the discs are made according to the requirements of the feature or program. (7<sup>th</sup> December, 1927:12)

Exhibitors also made quite astounding choices in the buying and screening of films for their theatres, including manipulating and editing the films themselves for various reasons. It was common practice to cut reels or sections out of overly long films, or films that did not fit the programme length of the evening, in order to fit everything else into the schedule. Exhibitors were making creative/business decisions that required them to have a detailed understanding of the impact of their editing.

Johnston writes for the *Journal of the Society of Motion Picture Engineers* on this topic as well:

Because of the present great interest in the new kind of movies, the large first runs cannot do otherwise than book them. In the long run, however, the sound picture would seem to be the logical attraction of the smaller house, especially the small town house, and at the same time its salvation.

To this the studio people reply: Yes, but silent pictures, the better ones, are now cut in length to fit the small theatre program; and how can you cut talking pictures?

To which there is the ready reply that there will be no talking pictures as long as our so called special silent pictures... (Johnston, W. A. 1928:618)

This evidences the wide spread practice of cutting films to suit the programme of the evening, especially in this case in the smaller theatres where a variety of acts was essential to ensure the financial buoyancy of the cinema. The quotation also indicates the assumption, even in 1928, that the silent film would be a dominant force in cinemas for the foreseeable future – an assumption that was overturned in just a few months by the phenomenal success, financially, of synchronised dialogue films.

The Exhibitor, then, had control of the films that he (and it was always 'he') purchased and exhibited, the music and other associated acts that were presented on the same programme, often with the help of a full time Musical Director, and the upkeep and purchasing of all manner of equipment in the theatre, including ventilation systems, seats, fire safety technology, cinema screens, projectors and a wealth of other items and factors that contributed to the running of the cinema. The Exhibitor would also hire and employ musicians on full time contracts to work for the theatre. Magazines and journals of the time devote many pages to the Exhibitor as the main purchaser of cinematic equipment and products. It was also assumed that exhibitors had a great

interest in the artistic qualities of individual films and would make decisions based not only on the financial return of a popular film, but on the artistic merit.

All of the roles of the Exhibitor, apart from the associated musical acts and performances, are still in place today, but they would never come under the control of just one individual. Independent cinemas were commonplace in the 1920s and this gave the Exhibitor overall control and power of every aspect of the performance. Journals and magazines aimed at exhibitors provide an invaluable insight into the complete running of the viewing industry.

The archival research not only offers insight into the introduction of synchronised sound in cinema, but also the wider picture of cinematic history at the time. In general terms, sound was not a big issue of the magazines until 1928, and in some cases, not even until the later part of 1928. *The Jazz Singer's* impact was not predicted and there is little mention of the film before its release in October of 1927, aside from some interest in the technical merits of the Vitaphone system (the sound-on-disk method of synchronising sound and image). It is in reading a variety of archived magazines and journals that the industry was entirely unaware of the impact that synchronised sound would have and film reviews of *The Jazz Singer* at the time are often entirely at odds with the perception of the 'landmark' film that changed the industry. Journals and magazines in the 1920s therefore, give a much wider picture about the different thoughts and aspirations of cinema practitioners, exhibitors and audiences and these opinions provide the reader with valuable insight into the potential in film for sound and image relations in this period.

There are two different sets of dichotomies that are apparent when analysing the archival research and this is of great importance when applying a Derridean approach to the analysis of sound and image relations in film. Firstly, there is an undercurrent of tension between the ontology of film as a subject based in science or art – this tension brings together writers and practitioners on both ‘sides’ of a perceived difference between ‘art’ and ‘science’ and the tension itself is of great importance. Any attempt to separate film into either art or science is counter-productive – the very apparatus which might be considered entirely ‘scientific’ are designed to create an ‘art’ form that is concerned with expressing emotion; the most complex understanding of scientific equations and algorithms that are concerned with the capturing and playing of sound and image are important precisely because they operate to express emotion in the best way possible. This tension is attested to by many different authors and the importance of film as ‘art’ is frequently paramount – this is complicated further by the division of film into ‘silent’ film as ‘art’ and ‘talking’ film as populist entertainment.

The second dichotomy of interest is concerned more with this division of film into two different art forms – the ‘talking’ film and the ‘silent’ film. The vast majority of articles that mention the future of sound film predict a two-tier system (or binary opposition) where film will progress along two distinct lines; the talking film, which is predicted to be a novelty feature at worst, and a format suited only to certain genres at best, and the ‘silent’ film with a synchronised score, which is seen at the time to be the form best suited to a variety of expression and would continue as the ‘high art’ form of cinema. With hindsight, of course, we know that this second form did not exist for

much time at all and is barely mentioned as a separate film form in cinematic history, but at the time it was assumed that the majority of films would continue along the line of 'silent' film practice.

These dichotomies immediately place cinema into a binary opposition with itself and the tension and complication of the differences and similarities between the two 'forms' are inherent in the pages of the journals. A Derridean reading of these oppositions allows for a deeper understanding of the film form at the time, and the potential that exists in contemporary film that inhabits both 'worlds' of cinema as neither 'form' distinct from the other evolved, but a combination of the two, essentially the very site of the 'hinge' between the two dichotomies.

This chapter will deal both with the historical and technological insights that the research provides but also present a Derridean analysis on the dichotomies that are present within the archival material. This approach will provide supplementary information about the historical period of the introduction of synchronised sound to film, that will demonstrate the potential for sound image relations that was present at the time, but also offer a way of understanding oppositions present in film and film articles as a way of articulating the potential in the 'undecidable' nature of film – in this case both as 'art' and 'science' and also as 'talking' and 'silent'. For the rest of this chapter, film forms and different aspects of sound and cinematography will be referred to by the most common terminology of the 1920s. Cinema at the time was usually referred to as 'pictures' or 'photoplays' and the style of acting used in 'silent' film was called 'pantomime' acting. Films with synchronised dialogue are called

‘talking pictures’ whereas films with synchronised scores or no synchronised music are called ‘silent’ movies. ‘Movies’ and ‘pictures’ are used interchangeably but ‘film’ is usually reserved for the process of shooting the images with a camera (filming) or for the film stock itself.

## THE CINEMA INDUSTRY IN THE LATE 1920s

It is important to first understand the industry of film in the late 1920s as this period is often referred to as ‘early’ cinema, which lends itself to connotations of an embryonic form, or one that is primitive in its development and expression. When examined in more detail most film historians acknowledge a difference from the films of the 1890s – 1900s and those of roughly 1908 and onwards to the 1930s where certain cinematic standards of narrative and editing were established. Sound is often a punctuation in this history, where it is acknowledged, but seen as part of a greater trajectory towards the dominant classical model of the 1940s. Bordwell, Staiger and Thompson discuss this trajectory in *The Classical Hollywood Cinema*:

Historians have called these very early years of film production the ‘primitive’ period. This period is generally assumed to have begun with the cinema’s commercial origins in 1894 and lasted until somewhere between 1906 – 1908...Most historians would agree that between the primitive period and the sophisticated studio production of the twenties, the US cinema moved from a narrative model derived largely from vaudeville into a filmmaking formula drawing upon aspects of the novel, the popular legitimate theater, and the visual arts, and combined with specifically cinematic devices. (1988:157)

The acknowledgement of a difference between the two periods of cinema is present, but there is no mention of the introduction of synchronised sound in the historical trajectory, whereas it is evident from the journals and magazines of the time that this caused a significant disruption to the form that cinema was developing, film practice. There is little mentioned of the introduction of sound to cinema in the 1920s in this version of cinematic history; cinema is generally seen to have solidified its set of practices by the 1920s and the introduction of sound was considered another development that supported the dominant narrative form:

I do not wish to imply that all films from 1917 on were complete or correct in their utilization of the classical system. Many drew upon it in a tentative or clumsy way; others could easily be mistaken for mid-twenties films. But few entirely fail to draw upon the system. And by the mid-twenties, classical filmmaking had reached relative stability. Undoubtedly a film of the mid-1920s is likely to look somewhat different from one of 1917. During the interval, filmmakers were assimilating the guidelines, which had reached the status of rules...By the 1920s, directors, cinematographers and other filmmakers had a range of models of the classical style to follow. As one 1928 commentator, referring to scenarists, suggested:...(1988:231)

Bordwell, Staiger and Thompson outline a system that was so established that during the 1920s narrative and editorial 'rules' had been set and cinema was already well on the way to the dominant model of the 1930s. The journals and magazines of the time do demonstrate an established set of generic conventions and assumed common practice, but there is much more fluidity than is suggested in the above quotation; practitioners were deeply involved in discussion about different cinematographic and sound techniques and sound was a key part of the discussion.

The mid to late 1920s saw a fall in the financial income of the American cinemas and it was into this climate that synchronised sound was introduced to mainstream film. The year had been less successful for exhibitors and a handful of technological advancements were being considered in terms of their financial benefit to the industry. Colour film had been available for a few years, although limited to cinemas with the technology to screen it, experiments in stereoscopic film (three-dimensional moving image) had been taking place, and tests with incandescent lighting were underway. At the same time, commercially available synchronised sound technology was introduced and was seen by many as part of this handful of advancements, some of which became established technology, and some did not, certainly for the foreseeable future. Exhibitors were having to weigh the cost carefully of continuing to employ musicians and vaudeville acts and spend money on new technologies that may or may not prove to be successful. 'Super' theatres were being built, the most famous of which was probably the Roxy Theatre in New York which seated an audience of nearly 6000 people and was completed in March 1927. These bigger movie theatres were able to offer a greater diversity of entertainment from musicians and comedy acts to presentations of new technology.

Gomery notes that the 'super' theatres were using a very formulaic approach to the evening performances and this would have had an impact on the type of film made in the climate, the decisions made by these theatres would have an impact on the smaller independent cinemas.



In the 1925 – 26 season exhibitors, led by Roxy in New York City, and Balaban and Katz in Chicago, established a formula for stage presentations. The show opened with an overture, usually 8 to 10 minutes long, followed by a presentation of 15 to 20 minutes, then a newsreel of 7 minutes, a short of 10 minutes, and then the feature filled the remaining two-hour period. Many times exhibitors shortened the feature to fit into the required two-hour period. (2005: Chap 2, p.11 of 155, 12%)

Several articles highlight the difficulties facing exhibitors in the years 1926-27 specifically, both financially and in terms of the difficult choices that had to be made in regard to the programming of events and films. Edited by William A. Johnston, who was outspoken in his beliefs about the progression of all cinematic technology, including sound, *Motion Picture News* discusses the difficulties explicitly for exhibitors in the summer of 1927. A July article titled *Booking Slump Is Widespread, News' Survey Shows* (1927:186) demonstrates the frustration and caution of exhibitors and the problems that had occurred during that year:

It is clear...that film sales this year are far behind the normal. Offerings of new product to theatres for the 1927-28 season are meeting stubborn resistance, amounting in some instances to a definite blockade...Big circuits are not closing for product as rapidly as former years, thus holding up subsequent bookings. This is not universally true, but movement is very widespread. Exhibitors are more sceptical than usual about how good the new product will be, their doubt being based to some extent on disappointments in this season's pictures. Due to block-booking and loading up with pictures, theatres, in many cases have product in plenty for several months ahead. This is one of the prime causes of the indifference being shown to new season product. "Watchful waiting" sums up the general attitude. (July 22, 1927:186)

The article describes the practice of 'block-booking' – buying a set of pictures and feature films from one or two sources, to ensure that the following months are

guaranteed financially as far as possible. This could be one of the explanations for a delay in the time of the release of *The Jazz Singer* and the impact in the magazines and journals. Popular films were screened for a longer time period than is usual today and would often be repeatedly reviewed over a number of weeks by exhibitor and fan magazines. In the same publication in August of 1927, an article titled *Is The Movie Itself Being Destroyed?* questions the crossover of producers that own movie theatres and the practice of screening their own films at the expense of other, 'better' ones.

The author alludes to the problems of finances and choices for exhibitors:

If a producer owns a theatre to shove his pictures on the public by holding out pictures they would prefer – he is certainly not serving the public. And we all know that there is no one program, and never has been, strong enough to supply even a weekly run theatre with even one-half of the pictures that it needs to make the box-office pay, or pay as it might. But let us say that the theatre is free to buy the best pictures for its public. Very well; how may the theatre know what pictures are best unless the theatre gets complete information about them? In other words, complete service from the distributor. Without such service how can an exhibitor buy intelligently and then sell his wares successfully?

In a recent editorial we asserted that salesmen were not giving this service to the exhibitor – not selling with service but selling with bull. We hear constantly about sales quotas, sales drives, flying squadrons, sales weeks, etc. etc. (August 5, 1927:330)

Here Johnston's magazine criticises the practice of distributors of films not providing accurate information about their quality; this is coupled with an economic climate where an unpopular film might cause a significant impact on the success of the theatre. It is not a time when exhibitors or practitioners are inclined to take a big risk in technology, yet the reaction of the public and the increase in bigger theatres means that every decision is a critical one. The increase in Theatre chains were threatening

the independent exhibitor; the chains were able to pool their resources and were able to provide additional funding to help weaker films:

The very same week in which the newspapers broadcast a threatened cut in production salaries another announcement appeared. This one stated that a cabaret band had been hired, at a cost of over half a million dollars, to travel a chain of theatres and perform “where it was needed”. This announcement strikes me as the more significant of the two. If we need famous bands to put over picture entertainment it would appear that pictures are not serving the public. (August 5, 1927:330)

It is in these bigger chain theatres and ‘super’ theatres that the exhibitors see the biggest threat – in this instance a cabaret band that would have been entirely unaffordable for an independent exhibitor of a town theatre would compete with the program that they are able to provide. It is into these conditions that synchronised sound is born; the opportunity to produce instrumental sound, without the repeated fee of live musicians is perhaps one of the reasons that it was so successful. As Gomery notes, “Mechanical sound recordings of the most popular music could supply all exhibitioners, not just first-run theatres, with the ability to present the best music for films at the lowest cost.” (2005: Chap 2, p.13 of 155, 12%)

Theatres are increasingly competing with the variety and quality of their weekly ‘programmes’ of entertainment – these include the newer technologies, such as colour film, depth illusion and sound, as well as vaudeville acts and musicians. Eric T. Clarke, in a later edition of *Motion Picture News* suggest that ‘lavish’ acts are a ‘fad’ that will pass (a commonly held belief about the talking picture at the time) but examines three ‘conditions’ that account for the proliferation of these acts. It is often

cited that the 'death' of vaudeville was due to the integration of synchronised sound in film, but here Clarke indicates that this pattern of decline had already hit the vaudeville theatres prior to this point:

The present craze for big spectacles, lavish presentations, costly stage bands is, as I see it, only a passing fad. Its origin, however, is interesting, and is due to three conditions:...

1. Vaudeville has had to come to pictures.
2. Large expensive houses tied to one line of product have felt the need of something to help carry those self-same weak sisters of which I have just spoken.
3. Imitation of "Roxy" and attempts to beat him at his own game.

After many years' success in their own field, the straight vaudeville theatres found themselves faced on the one hand with increased cost caused largely by higher transportation expense. On the other hand, their receipts were dwindling. The increase in movie attendance certainly took business away from the vaudeville houses. Inclusion of pictures in vaudeville programs resulted in consequence, enabling a satisfactory show to be given at a lower price than a full show of straight vaudeville would require. The policy has succeeded, with the result that today there is hardly a house in the country now running straight vaudeville. Bearing in mind however, that one of the big reasons in vaudeville is to fill out the show at a lower cost per minute, it follows closely that houses buying good vaudeville cannot afford good pictures, and must necessarily regard the film as subordinate to the vaudeville. (October 21, 1927:1251)

It is perhaps fairly obvious why independent and smaller theatres were understandably resistant to bigger chains providing a service that they could not hope to match, but it does seem to be a trend that there was a genuine concern in the quality of the productions being made, and the intent to uphold the standard of film that had become dominant. The climate was difficult for the independent exhibitor, and the control that they had historically held over the choice of films and the way that these films had been screened, was diminishing as they fought to match the programmes provided by the bigger companies.

Test presentations of new technology were commonplace in the 1920s – in the early 1900s these presentations had been aimed mostly at exhibitors and practitioners, but the appetite for new technology and the dwindling returns from the ‘everyday’ silent film meant that there was an interest from the general public in attending these presentations. New technology was showcased in large theatres as part of an evening programme of entertainment – the idea behind the bigger presentations was to allow exhibitors to see what was popular and make more informed decisions on purchasing content and equipment. Alongside newer technology, expensive live acts and new films were presented for a bigger cost than a smaller theatre would be able to garner.

However, the downside to this was that audience’s expectations were raised by the entertainment on offer in the bigger theatres. J. S. Dickerson, the Assistant Editor of the *Motion Picture News* outlines this problem in December of 1927, highlighting the detrimental effect that the bigger presentation was having on smaller town theatres:

...there is nothing wrong with presentation and a big show for the money if you have only one class of theatre to take care of. The net result, however, when all classes of theatres are concerned and all theatre owners are considered, is quite another matter...it could be said that the presentation idea has backfired. It was designed to meet a condition, existing in the large theatres with a big investment “nut,” where a larger gross revenue than it was fair to expect straight pictures could command, was necessary. But when the neighborhood theatre, hurt by the competition of the presentation house, tried to hold its business by a similar policy so far as was practicable, the standard of entertainment, as the public saw it, was simply stepped up a peg. (December 23, 1927:1949)

Earlier in the year, Clarke writes for the *Journal of the Society of Motion Picture Engineers* on a similar theme, but his concern is less financial and more focused on the success of the feature film, a year previously the concerns appear to have been more

focused on the artistic impact of bigger shows; after 1927 the financial aspect becomes more prominent.

I do not believe in big headline acts which rival the feature in their cost. I do believe in a big orchestra and only when that orchestra is away on vacation will I set in big acts. Then I reverse the policy of the house. During the regular season my aim is to build everything up towards the feature – not to overshadow it. (January, 1927:52)

It is important to highlight the financial problems facing exhibitors in 1927 because it helps to uncover the bigger picture relating to the introduction of synchronised sound. Musicians and vaudeville acts were an expensive way of maintaining audience numbers and until this point there had been no alternative to provide a varied show and musical accompaniment. The expense of fitting theatres with the new sound technology, especially when several different technologies were competing for prominence (each with their own different set of equipment), was beginning to appear to be a viable option when opposed to paying musicians and vaudevillians per performance. Aside from the financial considerations were the genuine concerns from exhibitors and practitioners that the talkies were not 'good' films and could not compete with the highly developed silent features that were in place. Until fairly late in 1928 it appeared that talkies may very well be a fad that would pass, in the same way that colour and stereoscopic filming appeared to have diminished.

Into this year arrived viable and commercially available synchronised sound – it had been present since the dawn of moving images, a fact acknowledged by inventors and practitioners (many of whom inhabited both roles) but for the first time, problems

with synchronisation and amplification had reached a point that was acceptable for exhibitors. Test footage by Lee DeForest and Theodore Case, among others, had been appearing sporadically in presentations. Fox had decided to invest in the sound-on-film system, whereas the Warner Brothers took their inspiration from the technicians at Western Electric and invest in the Vitaphone (sound-on-disk) system. Fox decided to move forward in the development of talking news reels at the same time that the Warner Brothers invested their efforts into synchronised musical numbers and talkies; both forms therefore appear simultaneously in the theatres. The slight advantage held by Warner Brothers in the success of *The Jazz Singers* was eventually overtaken by the benefits of movietone (sound-on-film) that was less plagued with synchronisation issues. Both forms of sound technology also produced equipment capable of synchronising music and sound effects with a silent feature film. This was a cheaper option for smaller theatres.

The economic climate meant that the exhibitors were simultaneously wary and also keen to invest in a reliable source of income – in the same way that block booking of films had become commonplace, exhibitors were willing, where possible, to spend a significant amount of money on a guaranteed crowd-puller. In tension with these requirements was the exhibitor as creative artist, who was keen to provide artistically excellent films rather than align himself with the latest 'fad'. These tensions are obvious in the discussions surrounding the introduction of sound into the movies.

## THE INTRODUCTION OF SYNCHRONISED SOUND TO THE INDUSTRY

The introduction of sound technology is first evidenced in the writing of the trade journals predominantly. This is where practitioners and inventors can present their inventions to their peers and receive feedback and thoughts on future development. The exhibitors' magazines tend to start writing on sound slightly later, usually around late 1927 into mid 1928. Fan and audience magazines are the final publications to comment and are confined mainly to reviews of the features and shorts that appeared in the theatres.

It is of great importance to see how first the inventors and practitioners, and later the exhibitors, envisaged the place that sound would have in cinema – assumptions and expectations of sound from person to person, or from journals and magazines, but there are some trends and beliefs that are clear; firstly, that the introduction of sound would be slower and more gradual than it turned out to be, secondly, that silent feature films would exist alongside talking movies and finally, that cinema was already an established and complex form of art. Starting in the mid 1920s with sound technicians and inventors there arises articles both on the established form of cinema and the predictions for sound in the future.

Otto Nelson's thoughts on the early history of cinema are recorded in the *Transactions of the Society of Motion Picture Engineers* and he covers the birth of the industry in the late 1890s to the current films of 1926. He believes it salient to mention that moving images are, in fact, rapidly changing static images:



What is known as “moving pictures” is an optical illusion. No one ever saw movement in a picture. Your [sic] sit in a motion picture theatre and see a figure moving across the screen. You do not see a moving picture, but a series of stationary pictures flashed on and off the screen. (May 1926, 28)

An explanation of the persistence of vision may not seem anything particularly remarkable, especially relatively near the introduction of moving image technology, but Nelson makes a very important point – that moving image is an *illusion* and not a replication or re-presentation of the ‘real’ world. There is a tendency with all involved in the film industry of the 1920s to use words such as ‘realism’, ‘naturalism’, ‘perfection’ and it is important to recognise these as concepts that uphold and conceal a construction – that of a ‘natural’ phenomenon based on human perception. Nelson here reveals the construction behind the moving image; that it is in fact a static photograph. Later in the article, however, Nelson comments on the current (1926) film industry, saying:

A new milestone was reached in 1913 with the production of feature pictures played by celebrated dramatic stars in the most successful stage plays; then came the magnificent picture playhouses in the big cities. We now have the wonderful theatres of the silent drama costing millions of dollars and seating audiences of five and six thousand. Film producers now produce super-pictures, the production of which at times amounts to millions of dollars. All branches of the industry have kept pace with this evolution, from the makers of cameras and film to the manufacturers of projection apparatus, all of them progressing with one thought – to place a perfect picture on the screen. (May 1926, 28)

So, Nelson here uses the word ‘perfect’ in relation to cinema and in turn cinema as a purely visual event. He does, however, refer to cinema as ‘silent’ drama, implying that

there exists 'sound' drama, but he does not include these technicians and performers in his description of the development of film. Later in the article Nelson places a large portion of the success in the development of societies such as the *Society of Motion Picture Engineers* who helped to regulate and standardise film practice. Nelson's article describes a growing and successful industry which has developed beyond recognition from early film history. His article suggests a smooth and increasing trajectory towards 'perfection' of the image. This is, of course, a logocentric viewpoint of cinema, and one that is to be someone troubled by the introduction of synchronised sound.

The *Transactions of the Society of Motion Picture Engineers* contains in every volume an article that reports of the Progress Committee. Each volume's article is separated into different sections dealing with various areas of development such as projection, film stock, cameras etc. and the section on 'Talking Pictures' in the 1925-26 report is representative of the language that surrounds the development of synchronised sound:

A number of patents have been taken out for talking motion pictures. The general trend of development appears to be towards either synchronizing a phonograph record which in turn reproduces through a loud speaker with the action of the film or by the use of a sound record placed along the edge of the film outside the perforations... (Crabtree et al. September 1926:23)

This is a typical entry in the Journal – it is entirely factual and there is no consideration given here to the impact or the ontology that sound might have. The journal is a combination of very factual articles and reports, and some articles that cover more

philosophical questions about the ontology of cinema. As all articles are the written report of a speech given at a meeting, most are followed by the minutes of a discussion and question and answer session that came after the speech in the meeting. The transactions provide a rigorous and thorough record of the thoughts of practitioners and exhibitors and are a very useful resource. It is within these pages that the first reports of synchronised sound are written.

It is clear from this record of transactions (number 25) that little has been developed in the commercial arena for synchronised sound in 1926, but the journal does provide a very good background to the cinema technology and thoughts of the time. The same set of transactions contains another two articles that do mention sound and image but are speeches that were delivered on the importance of live music and accompaniment within the silent movie. In this period, live music has reached its furthest point – in just eighteen months the existence of live music in cinemas will start to dramatically decline and within two years, numerous musicians and musical directors will no longer be employed by theatres, certainly not on a full-time basis. Therefore, any account of live music in theatres in 1926 provides the reader not only with details of the most developed form of live music that occurred, but also the embryonic form of the synchronised music which was to follow it. Victor Wagner, Musical Director from Eastman Theatre in Rochester (New York) presented a speech to the *Society of Motion Picture Engineers* entitled *Scoring a Motion Picture* in 1926. This written account provides a fascinating insight into the philosophy of the composer for silent movies, including their beliefs in the role of music for film, and what form that music should take. It is clear that the concept of synchronisation is

extremely important, as is effective scoring. Wagner is also emphatic in his belief that music provides the best form of expression to work with moving image.

#### The role of music in the mid 1920s

Wagner first emphasises the importance of experience and musical knowledge in choosing music for a particular film, and we gain an insight into how this was done:

A musician who through ignorance or whim chooses music which burlesques a serious scene commits an offence, he destroys the science and art of musical presentation of motion pictures. One has to have at his command a musical library of a thousand different numbers and a sensitive feeling for their different moods to be able to classify the numbers properly. (September 1926:40)

A musical director would have been in charge of all music performed in the theatre, including booking and liaising with external performances, choosing music for the films screened and rehearsing and conducting the orchestra of the theatre. He would also have worked with an organist if one was employed for quieter days in smaller theatres. Wagner indicates that it was common, or at least best practice, to have a library of musical scores which were organised according to moods. This would have enabled the musical director to quickly choose suitable numbers and rehearse the musicians alongside the film. To do this effectively would have necessitated a vast knowledge of many different musical pieces and genres. By 1926 many distributors of feature films were also providing a written score that could be played alongside the movie – if this was the case the Musical Director's role was more straightforward, but

if not, the selection of numerous different musical pieces would be necessary to score an entire feature-length film.

Wagner also notes that it is important to be familiar with the film as well as the music so that a director does not immediately leap to incorrect categorisations of characters. This demonstrates the origins of the synchronised leitmotif that is present in later films (including as a key feature of the music of *Sunrise*). For this task Wagner explains that

Not only is a knowledge of high-class music necessary but also a knowledge of most of the popular and national music with their characteristics of practically all the civilised and uncivilised nations. (September 1926:40)

It is a vast and complex task and demonstrates the importance of music, right from the silent period of film history, in situating the viewer geographically and historically as well as representing emotion and character. This is a role that synchronised music plays in film and is part of how the role of music is taught in film studies. In fact in 2010, Buhler, Neumeyer and Deemer note that “In some respects, music stands in a special place in sound design...” (2010:xxii), so in many ways, music still operates as a distinct element of sound design in contemporary studies of film. It is clear from this article that there already existed a complex, sophisticated format for music. It was entirely inconceivable that this role in cinema would be obsolete in a few years, not only to the Musical Directors and musicians, but for anyone working in the industry at the time. This is already clear from the small amount of space taken up in the update of the *Report of the Progress Committee* but also from articles like Wagner’s. Wagner sees his role as absolutely essential in the cinematic form – there is no expectation of

synchronised dialogue in his speech, and in 1926 he comments on his role in the film industry:

There is one task laid on the musical director who arranges a musical program of accompaniment for motion pictures which is seldom appreciated. This is the task of making music supply in a measure the spoken word – the missing dialogue – the play on the speaking stage – where this is not provided in action and in subtitles. (September 1926:40)

This quotation simultaneously reveals two important points; firstly, that music and musical directors saw themselves as replacing or replicating dialogue in cinema, and secondly that despite the importance of his role, Wagner inadvertently makes a case for dialogue in film by referring to it as “missing”, therefore evoking the dialogue itself in the *trace* of where it is not. Wagner has highlighted that cinema is an art form with *missing* dialogue – in his mind music is the most appropriate medium to replace this, but the key idea here is that of *replacement* rather than interpretation. Missing dialogue is a concept that comes from the *pro-filmic* event – the action in front of the camera, or, more specifically, the actuality of the actors speaking. The *filmic* event, the images captured on the film camera, are silent – any dialogue spoken by the actors has not been recorded. This simple assumption, that the dialogue is *missing* is actually a belief that upholds the very nature of film as a ‘natural’ phenomenon, rather than a constructed medium relying on photography and the persistence of vision. It would make no sense to expect photographs of actors to speak, or to think of them as having missing dialogue, but the film strip as a moving projection somehow imbues a quality of naturalness.

Similarly, Wagner would have been familiar with the phonograph, a familiar piece of technology in 1926, which recorded live sound, but it seems unlikely that he would describe any dialogue recorded as 'missing' the image. It is only when thinking reflexively about the reasons for assumptions with moving image technology that the artifice becomes clear – the construction and ongoing upholding of the moving image as naturalistic was clearly well in place in 1926.

Wagner does continue later to clarify his position about dialogue in film, making the case for its absence (or non-presence): "Scenically, the motion picture is a great inspiration; no speaking stage can in completeness, in gorgeous realities, and in generous detail approach the scenic richness of the motion picture." (September 1926:40) – Wagner's opinion is that, with the appropriate musical choices, cinema can provide a more expressive art form than the spoken stage. We can glean here some understanding of the assumptions and development of cinema as a narrative form having shared history with the stage play (also inherent in the terminology of film at the time as a 'photoplay') and certainly this seems to confirm the assertions of Bordwell et al about the establishment of a set of narrative and cinematographic guidelines by the 1920s.

Synchronicity is important to Wagner, by which he means the matching in time of the music to specific characters, scenes and rhythm in the film. The frame rate was not yet standardised either in the shooting or projecting of a film – this is a subject that concerns exhibitors and practitioners of the time and there is much written about the

best speed for projection, as always this is in tension with the wish of the exhibitor to fit as much into the programme as possible. More than synchronous, however, Wagner makes the case for the dependence of film upon music, not yet seeing the film form as being truly audio-visual, but existing in a symbiotic relationship with music:

The film play is a form of art and is analogous to the ballet in that it necessitates, for its adequate presentation, the synchronization of action with music. Thus, in its right development, we find a new art form in music, the possibilities of which are practically limitless. In film play we see one art-form which is dependent upon another – music – for its completion, and it is still incomplete and imperfect for presentation to the public without its musical counterpart accompanying it... (September 1926:40)

There is a lot to unpack here – dealing first with the concept of synchronicity – Wagner does not use words such as ‘perfection’ when considering synchronicity, but it is clearly of importance when thinking of cinema as the event screened to the public. He talks of matching action with the music – it is impossible to know how exact this matching was but certainly it implies a more closely followed synchronicity than only the ‘right’ genre for the music and the characters. It is likely that key events in the film, or at least key movements or actions, were also interpreted by the musicians. These choices are not inevitable choices of playing music alongside moving image, but at this point in 1926, they are the most common and therefore ‘naturalised’ choice.

Wagner’s assertion that film is an art form that relies upon another, is very significant; music is not yet, in his eyes, seen as part of the same art form as film, implying that sound in general was not considered yet to be part of film. Despite this, it would have been inconceivable to screen a feature without providing live sound, as Wagner



indicates – in fact, he sees film as ‘incomplete’ and ‘imperfect’ without music. Of course, with a Derridean reading these words both indicate a logocentric way of thinking, but the site of logocentrism once identified, becomes powerful in operating as a site of the *hinge* – which will be explored later in this chapter. For now, it is interesting enough to see that Wagner considers cinema to be ‘imperfect’ without the presence of music, or more generally, sound. This helps to support an understanding of film history that includes sound from its very inception – Wagner has not recently scored films, but as he attests, he has built up a wealth of knowledge over many years of experience in scoring films. There is also more than sufficient evidence in every publication that music, musicians, and performers are an essential part of film, not only in the screening but also the filming. Cecil DeMille, one of the most prolific and significant film makers of the period, describes in a later edition of the same journal, the importance of live music on set when recording:

Music is an interesting factor in direction. We spend a lot of money to have an orchestra there to put the actor in a certain frame of mind, to get a certain emotional response. That music is just as bad for the director as it is good for the actor, because it fills an emotional spot with him. In watching a scene while an orchestra is playing I always put my hands over my ears so I will not hear it, because there may be a blank place in the scene which is filled by a beautiful note over here and gives you satisfaction, and when you see it on the screen you say, “Strange I didn’t catch that. That point is wrong.” The reason is that the music satisfied that void. (April 1928:305-306)

Although written two years later, DeMille is specifically talking about silent movies – he is concerned about the difference that may occur between the screening and shooting if he uses music during the shoot. This is a very significant quotation from DeMille as it highlights the practice of using music to evoke an emotional response

from the actors during the shooting of the film – essentially inserting music into the *pro-filmic* event. The *absence* of this music in the screening of the film causes a *void* – into that void is the (non)presence of the sound that was performed during the screening – DeMille can (not)hear that sound once it has been removed. Two things are significant here – firstly, that music was regularly used during the shooting of silent movies, and that the ab(pre)scence of that music was a potential problem in the screening – without the music the film had the danger of becoming somehow ‘empty’ or in Wagner’s words, ‘incomplete’.

There is a belief here from Wagner and DeMille as music being an integral part of film, but not yet as being part of the film medium – it is obvious that sound has played a part in cinema since the very early period and that practitioners, theorists and the audience see the combination of music and moving image as a discrete art form. In the same 1926 journal of transactions that Wagner wrote about the importance of scoring for film, Johnston is also recorded on his thoughts of *The Public and Motion Pictures* – Johnston can obviously see that synchronised sound is going to be a part of the next few months of cinema, but he wants to make it clear that music and moving image are their own medium:

Last year the Capitol Theatre, New York, had varying intake running from \$30,000 to \$77,000 a week. Yet the added attractions – and while not borrowed from the vaudeville ranks, they were excellent – were of about the same caliber throughout the year. It was the picture that made a difference in the receipts of over forty thousand a week – the picture and the usual influences – seasonal or what not that affect all theatre attendance. But the point is that pictures are one thing and vaudeville another. They don’t go together. Pictures and music do. Each enhances the other. Each has a universal and steady appeal. Each has a tremendous following. Each is a universal

language. Vaudeville simply doesn't belong in the same category. (September 1926: 47)

Johnston is talking here about the programme of the evening, a programme that might include music, film and vaudevillian acts. Johnston believes that vaudeville has no place and does not reach the same level as music and moving image – of course at the same time vaudeville acts are already being recorded in synchronised sound by a number of different people including Case and DeForest and experimental technicians with Western Electric and Warner Brothers. This article, timed in September 1926, appears to be a plea for the inclusion of music as opposed to vaudeville/stage acts. *Plantation Act*, the short talkie starring Al Jolson will be released in a few weeks, and it is likely that Johnston knows of the production because later in the same speech he also states: "It would be calamitous, for instance, to have Douglas Fairbanks driven out of pictures in order to make room for Al Jolson, the vaudevillian." (September 1926, 48)

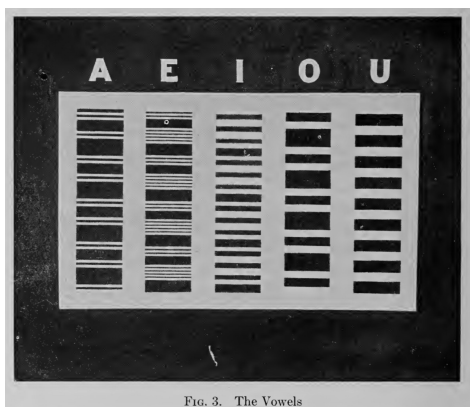
It could be, of course, that Johnston is being merely condescending towards the vaudeville acts, but there is something that is specific to the combination of moving image and music that in particular comes to be seen as an art form with its own specificities, and this continues into the introduction of synchronised sound.

#### The Technology of Synchronised Sound

Lee DeForest gives several speeches to the Committee of the Society of Motion Picture Engineers on the progress of his work into developing synchronised sound

technology. One of the earliest of these comes in 1923 and there are many parts in his account of *The Phonofilm* (May 1923: 61-77) that provide an insight into DeForest's belief for the role that synchronised sound will play in film. It is here, with the inventors and designers of new technology that the ideology of film sound is, to some extent, born; technology is developed along the ideas of its inventor and it has already been seen from DeForest and Case's sound tests that elevate the importance of synchronicity, music and vaudeville and the capturing of renowned speakers' words. The paper is somewhat scientific but DeForest offers many thoughts on the role that Phonofilm (a sound-on-film system) will play. The paper also acknowledges the simultaneous development of Vitaphone (sound-on-disc) so can also be seen as a position speech for sound-on-film technology.

It is noteworthy that DeForest, with the sound-on-film system is producing a *visual* replication of sound on the film strip – during the technical part of his presentation he demonstrates this with an image of a film strip recording of spoken vowels.



(May 1923:70) The Photographed Vowels

This capturing of sound and reproducing it as a visual record falls into one of the two ways in which James Lastra (2000) suggests recorded sound is conceived – this visual representation of sound can be seen as following a line from the Edison phonograph, but DeForest is also thinking in term of simulation as the capturing and playing back of sound is represented with these two diagrams:

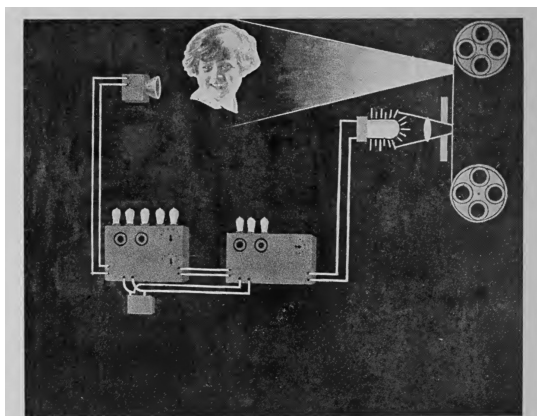


FIG. 1. THE RECORDING PROCESS

Chart showing the method of photographing a moving picture and sound waves (music or voice) on the same strip of film. The sound waves are recorded by fine lines on a narrow path along one side of the regular motion picture film. Sound waves are picked up by telephone transmitters, then amplified to radio frequency, thereby controlling the amount of light in the photon lamp, from which the photographic record is made of the original sound vibrations.

(May 1923:64) The Recording Process

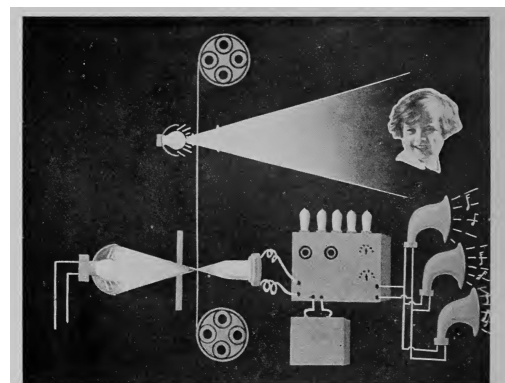


FIG. 2. THE REPRODUCING PROCESS

Chart illustrating the method of reproducing the moving picture and sound waves (music or voice) registered on the same moving picture film. Two different parts of the same film aroused simultaneously in the reproducing process of the Phono-film projector, which is an ordinary moving picture projector with a special attachment for the sound record. The keynote of the reproducing process is the use of a photo-electric cell. The fine photographic markings on the edge of the moving picture film where the sound record is recorded control the amount of light thrown upon the photo-electric cell which thus translates light waves back into electric vibrations, afterward amplified by means of audion lamps and loud speakers.

(May 1923:66) The Reproducing Process

In both diagrams DeForest uses the image of a child to stand in for 'sound'. In the recording process, the sound of the child enters the technology, in the reproduction process, the technology in the diagram *literally reproduced the child* with light and musical notation. DeForest is concerned with the simulation of the human with visual means. This is not an inevitable development of technology, this is technology designed along the polemic of reproduction and capturing of the natural world.

DeForest sees the inclusion of synchronised sound as a move towards naturalism or, what he terms, realism, in film and suggests that the combination of different technologies could help to achieve this:

There is no reason why the Phonofilm process cannot be used with one or two of the better colored-picture methods. Already steps have been taken to combine the Phonofilm with color, and we expect to be able to release films combining this doubly charming novelty within a few months. We believe this will mark a great advance towards that perfect realism on the silver screen of which we have all dreamed, but which in its perfection can never be attained. (May 1923:71)

DeForest also uses the term 'perfection' which is linked to the idea of synchronicity rather than fidelity of sound, although fidelity is something that concerns him as the Phonofilm process had rather more difficulties with amplification than the Vitaphone did. We can see clearly that the intention here of sound technology was to reproduce, re-present and synchronise entirely with the image.

DeForest reinforces this when he speaks directly about the demand for the motion picture – there is a tension between developing a technology that can accurately produce the human voice, and the requirement for this within 1920s cinema – a medium that is in a symbiotic relationship with music as opposed to dialogue. There was concern at the time that the spoken word in film would lead inevitably to the shooting of stage plays – something that film shared a common history with but was rapidly developing along a different direction. DeForest does not envisage in 1923 that this will be the case for talking pictures:

...it is appropriate to direct your consideration to some of the useful commercial and educational applications of this principle...These questions have doubtless been passing thru your minds since the topic of talking motion pictures was first called to your attention:- “Does the public want the talking picture? Is there room in the field of silent drama for screen versions which are not all merely pantomime?” “Can the picture and sound which go together so naturally in actual life, and which have been so completely divorced from each other since the beginning of cinema art, be again brought together in a manner which shall be, if not entirely natural, at least artistic and pleasing?” (May 1923:72)

These questions are pertinent to an industry that is relying on musicians and vaudeville acts to bring the public into its theatres. These questions also complicate the widespread belief that talking film was inevitable and part of the journey towards classical Hollywood cinema. Bordwell et al put the historical period of the teens into the 1920s as part of a smooth line towards an increasingly cohesive set of narrative rules. DeForest, and others, are questioning the impact on the medium entirely. He seeks to reassure the committee:

If you ask whether the ordinary silent drama to which we are all so familiarized can in general be improved by the addition of the voice, the answer is unquestionably “No.” Many, and in fact most of the moving picture artists are not trained on the legitimate stage; they have no adequate speaking voices – many in fact are incapable of speaking good English. The situation is exactly like that existing when the moving picture was first evolved. It was then the common idea that the moving picture drama would be nothing more than an attempt to photograph the ordinary drama of the stage, limited to the same confined situations, the same small scenes, the same few characters, etc. It did not take long to demonstrate the total failure of the new motion picture art to enter into successful competition with the drama along these lines...But Edison, and the other moving picture pioneers, had supplied a new medium, and it did not take the more enterprising, energetic, and progressive producers long to see the entirely new possibilities which thus lay open to them, and to evolve an entirely new form of entertainment. How well they have succeeded in evolving a new art is attested by the immense financial success of the moving picture industry of today. (May 1923:72)

It is astonishing to see developers of synchronised sound technology unwilling to suggest that sound should be used to accompany drama in film. To see DeForest talking about the industry makes it clear that it was unthinkable that a thriving, commercially successful industry that had already developed significantly over thirty years would be changed overnight by this technology. DeForest hints at some of the problems that occurred with the introduction of sound – the content being filmed, and the actors being used; sound film was responsible for the complete disappearance of hitherto prolific film actors. So, what does DeForest advocate in 1923? He envisages:

...an entirely new form of screen drama can be worked out, taking advantage of the possibilities of introducing music and voice, and appropriate acoustic effects, not necessarily thruout the entire action, but here and there where the effects can be made much more startling, or theatrical if you will, or significant, than is possible by pantomime alone...(May, 1923:72)

DeForest cannot imagine silent film with the inclusion of a completely synchronised soundtrack and suggests a form where sound is included to selected moments of a feature film, rather than a process where “...the reverse principle of merely attempting to introduce acoustic effects into scenes and situations which were primarily better adapted to pantomime art.” (May, 1923:73) DeForest details several genres that he believes would be best suited to sound film, including news reels, incidental music, comedy and animation and education. DeForest also highlights the significance of being able to record auspicious speeches of historical significance,



citing the example of the Gettysburg Address – in fact he suggests that this could be reproduced with an actor to record the speech.

The one area that DeForest actively discourages incorporating sound into is that of drama. Many of his suggestions include music, or the reading of poetry by trained vocal artists, for the ability of film to record the outside, in famous landmarks or abroad is a distinct specificity and “These sentiments, these emotions, can only be adequately expressed by appropriate music, or perchance to the accompaniment of the poem of some great master.” (May, 1923:74). Naturalistic acting did not exist in drama film of the 1920s – pantomime acting was a form developed to suit the silent movie; much of what was required to express the narrative and emotion of a scene could be conveyed by non-verbal communication of the pantomime actor, and the occasional intertitle. The idea of pantomime actors talking did not seem like a good one – the two forms did not work well together and the over-dramatized speech of the stage did not work well with the intimacy of film with all the power of cinematographic close up shots.

DeForest’s technology, the Phonofilm, was initially used by Fox who, as DeForest suggested began to use it to provide talking news reels in theatres; an extremely popular medium that was successful because it was very quick to turn around. Same day news stories were common from the late 1920s and led to the development and success of Fox News, which continues today. DeForest also produced more tests, seen in the previous chapter, of famous historical characters performing speeches, with varying degrees of success. The introduction of sound film was on the horizon, and by

1927 all types of publications were writing about it – the trade journals by this time had in-depth discussions about different technologies, whereas the exhibitor and fan magazines focused more on the experimental presentations that had made it to the movie theatre.

### Sound In 1927

DeForest presents again for the Society of Motion Picture Engineers' Committee in January of 1927, this time to update them on the progress of the phonofilm process. The speech and accompanying article are essentially the same as the one given in 1923 – even the photographs of the technological diagrams and vowel sounds are the same, but he does update the speech with a few key points. DeForest believes essentially exactly the same ideas about the placement of sound in film that he did in 1923. He advocates for the same uses of sound, evokes the same concerns about its placement in talking film and is progressing along a line of 'perfect' synchronisation. The idea of silent film as a separate art form is more developed, however, and music is now an inexorable part of this – I use the term silent film to include even those films with synchronised scores as the practice and ideology of film making remains the same as films presented with live music.

Even more than before, DeForest, believes that feature films accompanied by music is a medium belonging to 'high' art – it is separate from vaudeville (a sentiment that Johnston would agree with) and has the potential to enhance and improve the taste of the audience:

I may even venture that Phonofilm will in time elevate the present undeniably low level of taste and intelligence of the average motion picture audience. A rash expectation you will say!...Suppose night after night a bit of the best poetry, spoken by trained voices, accompanied by appropriate and lovely music, emanates from the motion picture screen, simultaneously [sic] appealing to the ear eloquently, to the eye artistically, in title or scene – Would not such presentation, in time, break down the cynical indifference of ignorance – insinuate in the hearts and then into the minds even of “low-brow” audiences a sense first of the melody and then of the genuine beauty of true poetry? (January, 1927:74)

Aside from the astounding condescension of the speech, this is also remarkable for the vision that DeForest has of the development of Phonofilm – that it would be part of the specificity of cinema and that this would help to secure film’s place as a ‘high-brow’ art form. This is a long way from the shorts of vaudeville that are appearing at the same time. DeForest first made his technology work in synchronisation with the image, but he has gone further in his imaginings, wanting the sound of the movies to have an artistic impact that enhances the role that music is currently occupying in 1927. This is not a straight trajectory towards narrative continuity cinema but the insertion of sound as a key element of cinematic specificity that separates it from other stage drama.

A few months later in the same publication, a technician from the Western Electric Company, P. M. Rainey, presents a speech to the committee entitled *Some Technical Aspects of the Vitaphone*. At this point in 1927 Vitaphone productions were well underway with the Warner Brothers, including instrumental shorts, *Plantation Act* and the filming of vaudeville acts. Rainey’s report is extremely technical, covering almost entirely, in great detail, the way that the Vitaphone system works. However, there are a few moments where it is possible to see how he, and the Vitaphone technicians are

thinking about sound. Most significantly in terms of film history, Rainey notes that the invention of recorded sound with moving image is not a new phenomenon:

While we are describing a new art, the conception of sound motion pictures is not new. The records of the Patent Offices of the civilized world bear evidence that the conception of sound motion pictures is more than thirty years old. The advent of the telephone in 1876, the phonograph in 1880, and the motion picture in 1895 appear to have stimulated inventive genius along these lines during the closing years of the past century. (August 1927:295)

Rainey points out that the technology for recording sound has been available from *before* the first cinematic moving images. This is evidence that supports Rick Altman's assertion that an *historical fallacy* subordinates the importance of sound by supporting a version of history that places the invention of recorded sound as second to that of moving image. He suggests the reason for this is that:

...it is thus hardly surprising that sound should be seen by silent filmmakers more as a threat than as an opportunity. Repeatedly warning against the temptation to return to the theatrical model, represented by the dominance of synchronized sound... (1985:51)

There is clear evidence of this perception of threat in the archival research – exhibitors and technicians are very clear that talking film should not return to the 'theatrical model'. It is important that Rainey acknowledges the history of recorded sound as it evidences his belief that the technology runs in a parallel trajectory to moving image.

Rainey, like DeForest is keen to inform the committee that the Vitaphone process is able to reproduce 'natural' sounds of all frequencies including music in synchronisation with the moving image. This is clearly a perceived requirement of the technology in 1927. Rainey highlights some of the technical conditions that must be met on set in order to produce sound motion pictures – these conditions are a marked change from the ones that would have existed on a silent film set and this article is an example of how fundamentally the method of filming would soon change:

You gentlemen are familiar with the limitations of recording scenes. You must have certain conditions as regards light intensity, focus, etc., otherwise the recording of the scene will not be faithful in every detail. In the recording of sounds, there are analogous limitations. For example, the sounds to be recorded must be well about the intensity level of extraneous sounds.  
(August,1927:294)

Rainey goes on to elucidate exactly what this means for the film set:

The problem of proper time relation between the reproduction of a scene and the natural accompanying sounds is most easily solved by the simultaneous recording of sound and scene...precaution must be taken against recording undesirable extraneous noises. For example, the Director's megaphone must be dispensed with during recording and noiseless gestures or signals used to give the desired cues or instructions. The studio must be acoustically suitable with heavily carpeted floors, sound absorbing walls, sound damping draperies, etc., in order to prevent undesirable echoes or reverberations which otherwise would be recorded with detrimental results. (August,1927:294)

Rainey is suggesting precautions that would entail a profound change in the way that films were shot and there is some awareness of this because he prefaces the explanation with a reminder to the committee of the amount of care and attention that is required for a moving image scene. This comparison between light and sound makes it clear that the same amount of precaution is reasonable. For a director, and

their crew, however, to dispense with audible instructions from a megaphone during recording periods would be been an extremely difficult change to make and would have necessitated increased rehearsals and planning before the scene was shot. These are fundamental changes to film practice and Rainey is clearly aware of the significance of these. This comes four years after DeForest presents his first paper on the Phonofilm system, and can, therefore, afford to be more persistent with the changes that would need to take place.

Alongside the scientific diagrams, Rainey includes examples of recording practice, including a studio that has been fitted with heavy carpets and drapes. An orchestra are being recorded with the Victor Talking Machine Company (1901-1929), a phonograph manufacturing company founded by Eldridge R. Johnson in 1901. The first of the two images shows the current method of recording that the company use, and the second shows a discarded older method, which Rainey calls the 'acoustic' method – although both images show a heavily modified studio in terms of acoustic fitting, the second image shows the physical difficulties of getting the musicians close enough to the recording horn, which is reminiscent of the Dickson Experiments. The newer, 'electrical' method uses additional filtering technology to remove unwanted extraneous sound.



FIG. 16. Scene in studio using electrical method of recording.

The electrical method (August, 1927:309)



FIG. 17. Scene in studio using now discarded acoustic method of recording.

The acoustic method (August, 1927:310)

These images provide a fascinating glimpse into the complexities and inevitable upheaval that the recording of sound must have introduced to the film set. Vitaphone was also reliant on a wax disc, that had to be viewed under a microscope during the

recording process to ensure correct indentation of the stylus into the wax.

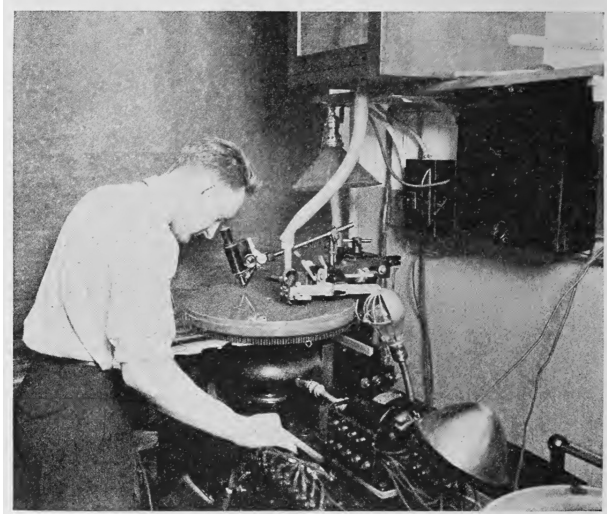


FIG. 15. Close-up of recording turn table.

(August, 1927:308)

The disc process had many technical difficulties including the temperamental nature of the wax disc – other technicians describe the practice of recording two discs at once – one was used for on-set playback of sound, an amazing asset to the direction, but one which destroyed the disc in the process of playing back, demonstrating how fragile the disc system was.

A later article in the same year, recorded in the *Transactions of the Society of Motion Picture Engineers* is a paper given by Earl. I. Sponable, a technical director for the Fox-Case Corporation (as the sound recording part of Fox was called at the time, working as it was with Theodore Case on Movietone.) Like Rainey he also asserts that “The conception of the idea of sound motion pictures is not new...” (September, 1927:458) but had not until now been commercially viable until “...the perfection of sound transmission apparatus...” (ibid.).



Sponable also claims that “The novelty of “talking pictures” is past. Now unless the illusion is so very real that the hearers are unaware of the process involved, the system will surely be doomed to failure.” (September, 1927:459).

Sponable is presenting this paper prior to the release of *The Jazz Singer* – this is a very early assertion that talking pictures have already been showcased and are in jeopardy, but this opinion is actually still one of a pre-*Jazz Singer* world, where talking presentations have been met with mild interest, but no real take up of the technology. It must also be noted that Sponable’s paper is recorded in a technical journal, which tended to be slightly ahead in its ideas regarding sound as it heard from leading voices at the experimental stage in the industry. Sponable too suggests that ‘perfection’ is of great importance to sound recording; he does not, as DeForest does, qualify his statement with an understanding that this is not a possible concept, but suggests that Movietone is reaching the level of ‘perfection’ in its equipment. Sponable also describes the specialist conditions and equipment that are needed for the recording of sound, mentioning specific cameras, projectors and recording rooms.

Sponable’s vision for the inclusion of sound may at first appear to be advocating a more over-reaching role than that of DeForest – he claims that the uses for Movietone “...are now being developed along a number of different and varied lines. These include pictures of the same type as the silent picture, but with sound...”(September, 1927:471). However, as Sponable suggests uses for sound such as musicals, and educational films, it becomes clear that he means that the ‘same pictures’ that will be

made, are those that contain the same cinematographic, dramatic and directorial techniques as the silent movies. Sponable points to the use of music, a synchronised score, to enhance these films:

Musical scores for the silent pictures can be applied after the silent picture has been finished. These are directed and played by the finest musicians obtainable. Special effects are incorporated that greatly enhance the presentation of the pictures especially in the smaller theatres. (September, 1927:471)

This is an important clarification to what Sponable means by the 'same pictures' – he does not envisage a disruption to the feature film recording process. The changes to direction, sets, cameras etc., will not alter the dominant form of film making which will remain exactly the same. Music is inserted *after* a film has been finished. Silent films will continue in the same way, but with a synchronised score. In September, 1927 this is a very typical view; it is not until the commercial success of talking pictures and the obvious demand for it that feature films begin to even consider the immense changes of the synchronised sound film set. C. Francis Jenkins, a radio technician provides another example of this view in July of 1927:

But who wants "talking movies". Except for its transient novelty, *talking* movies will, in my opinion, have no great or permanent attraction for the public. Quite likely recorded music will be substituted for the orchestra accompaniment to pictures. "Talking pictures" are an anomaly. If the pantomime picture tells the story, please, then, why the talk. It is with murder in our heart that we have our next seat neighbor tell us what the story is in the picture we are looking at. (July, 1927:51)

For Jenkins, the intertitles and acting style are sufficient and preferable when watching a film – he notes the irritation he feels when a neighbouring viewer starts to

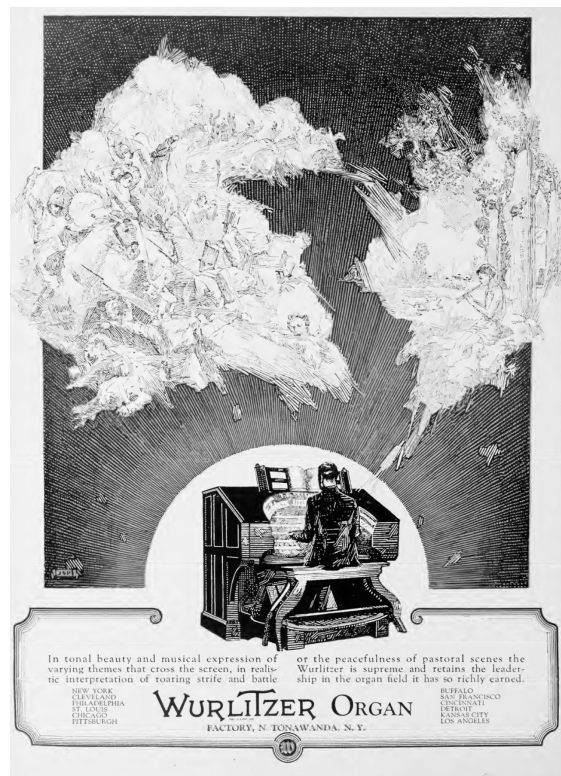
explain the story to him, and he sees these two examples, that of the words coming from the film soundtrack and the words coming from a person in the cinema, as the same – the level of annoyance, he feels, will be similar.

The trade journals, then, show the opinions and intentions of sound recording practitioners in 1927 and the view is very clear and mostly unequivocal; recording sound technology will, with luck, have a place in cinema, but it will not disrupt the key specificity of film, that of the silent feature. Little will change to filming technique of dramatic films and music and other effects will be added to these to provide the best music possible and assist the smaller theatres. The technicians all make a point of using terminology such as ‘perfect’ and ‘perfection’ in regard to the technology – they mean this in two ways; first the ability of the recording to synchronise to the image, and secondly that the fidelity of the sound appears ‘natural’. There is talk of music as an ‘accompaniment’ which is, of course, the same word that is used for the live orchestra or organist, and this appears to be a continuation of the way of thinking that places sound as an element of the image, rather than on an equivalent level.

The audience and exhibitor’s magazines do not have the same amount of detail or coverage of synchronised sound prior to the arrival of *The Jazz Singer* and occurrences of the subject are usually in terms of reporting the test and smaller presentations, or the expense that may be incurred by an individual theatre. *Motion Picture News* has numerous small reports on the development of both main sound technologies, for example, a short briefing in the July edition reports on the short film being made following success of two previous Vitaphone productions: “...a third number, featuring Eddie Peabody, is now being made. Peadbody is called the West Coast banjo

wizard...he and his accompanist, Jimmy Maisel, render a collection of songs.” (July 1, 1927:2557). This report shows the ongoing vaudeville shorts being recorded with the Vitaphone system.

It is worth mentioning that advertising for musical items continues in the magazines, well past 1927, a typical example being for that of theatre organs which are advertised as being a cheap replacement for a full orchestra, and certainly for the more expensive sound recording experimental technology. An example of this are the Wurlitzer adverts, which appear in a prominent position at the beginning of every *Motion Picture News* magazines. Wurlitzer organs were some of the most expensive and well renowned organs that were on sale and they were advertised as being able to convey a great deal of emotion and emotional tone.



*Motion Picture News* (July 22<sup>nd</sup>, 1927) XXXVI (3)

Adverts such as this evidence the same belief in music and the ability of music to convey emotion that is seen in the papers given in the trade journals. Musicians and live music equipment were a big part of the film industry and it was a long time before the realisation that the decline was irreversible sank in.

Exhibitor magazines did occasionally do larger features on upcoming technology, such as one article in July by Edwin Schallery, who discusses the Vitaphone progress in Hollywood – these articles are generally shorter than the trade journals but take up a large proportion of space in the exhibitor magazines. During the production of *The Jazz Singer*, Schallery visits the Vitaphone recording set and discusses the future use of the system. He admits that “It seems pretty well conceded that these devices will eventually become a necessary adjunct of every theatre’s equipment – not for continuous use, but as the occasion and opportunity arise.” (July 8, 1927: 36) Schallery also notes that *The Jazz Singer* is a very “elaborate” production; “Later on full-length productions will be made. However, this is well in the future.” (July 8, 1927:36).

Schallery suggests that sound recording/producing equipment will be in the theatres of the future and is even willing to imagine regular full-length films using the technology, but cannot imagine that this will be for a long time. In less than a year from this point, full length talkies will be produced by many major production companies, and by the end of the decade the silent film will have all but disappeared from the industry. This view is mirrored by other writers throughout most of 1927.

Magazines aimed at the film audience are even less prolific in their writing on sound films. *Variety*, a magazine reporting on vaudeville, the stage and films, devotes very little space to the subject, only very occasionally mentioning shorts. These short

reports use similar language such as 'perfection' and focus mainly on the technical proficiency of the synchronisation and the amplification.

There is one astonishing article, that represents many key figures' opinion on dialogue in film, that that is from *Monthly Picture Play* (1911 – 1977) which was founded by J. Stuart Blackton, who was also the founder of the Vitagraph Studios, and Eugene V. Brewster. This was a fan magazine that managed to obtain the views of leading figures in the film industry of the day. The article, published in the June 1927 edition, was titled *When Will We Really Have Talking Movies* asks various production company heads and actors if they think that talking movies will be successful and if so, when. The article points out that not everyone asked contributed; "Some of the Hollywood producers refused to comment. The Warner Brothers, who sponsored the Vitaphone, remained silent, evidently thinking the Vitaphone should speak for itself." (July, 1927:32) Considering *The Jazz Singer* was in pre-planning by this point, it made sense that the Warner Brothers were not keen to offer an opinion. The article suggests that although there is a rise in the number of talking presentations, it is likely that synchronised sound will become assimilated to film in such a way as not to cause a big impact:

Four or five years ago there was much ado about colored photography revolutionizing the picture business. Two years later there was a scare from the inventor who had perfected a device that would give depth to the screen figures, thus adding another dimension to our drama. A month seldom passes in which the producers are not confronted with something new in the mechanical line of picture making. Yet they go ahead with their picture making without much disturbance. (July, 1927:32)

This short excerpt sums up both the general concerns and the general feeling about sound in cinema, coming off the back of several new technologies that had promised to revolutionise the industry. Despite assurances that the next 'big thing' had arrived, film makers had seen little fundamental change to how films were made, and there was no reason at this point to assume that sound would be anything more than one more technology in a spate of similar inventions. The article also references the tendency for inventors of the time to claim that they had 'perfected' an invention – something that is being claimed by the inventors of sound technology.

The various interviewees provide their opinions, which are fairly similar with one exception, in that they do not believe that dialogue film will form a key part of film in the future. The first person interviewed, Jesse L. Lasky, is the Vice-President of Paramount, who, according to the article:

...welcomes the perfection of the synchronization of sound with action, not because he believes in the future of talking movies. He says: "This synchronization of action and sound makes it possible for the small theater to offer divertissements and orchestrations which will help motion pictures. But I have grave doubts that we will ever have motion pictures with the cast speaking their lines. Now and then there will be a freak picture in which the players will render lines in one scene, perhaps. I doubt that there will be much more than this. Actual talking motion pictures would change the entire art. And not for the better. (July 1927, 32)

These are some of the strongest words written at this time about talking pictures – plenty more occur after the release of *The Jazz Singer* as the industry begins to understand that it will be fundamentally changing. Lasky also claims that dialogue would slow the film down and limit the scenes that were able to be shot, thinking specifically about outside shooting; he cannot imagine an outside scene:

...And how ridiculous it would be to show a street scene in a city with the only sound synchronizing with the action that of the players speaking! It would suggest soundless automobiles and silent street-cars. Such conditions would entirely ruin the realism we enjoy in such scenes today. Frankly, I do not think that lines are at all compatible with the art that has been developed for the motion picture. July 1927: 33)

Lasky's inaccurate understanding of how an outside scene would sound (we do not have sound technology today that would be capable of cutting out all traffic background) will soon be corrected, but it is interesting that he is concerned that sound would affect film's realism, particularly when the concern of the recordists has been to capture naturalistic sound. He also refers to cinema as its own specific art, but one that, according to Lasky, is concerned with realism as opposed to expression.

Irving G. Thalberg from Metro-Goldwyn-Mayer (M.G.M) studios is also unable to imagine a cinema that does not have the current format of the film feature; "I do not believe the talking motion picture will ever replace the silent drama any more than I believe colored photography will ever replace entirely the present black and whites." (July,1927:33) This way of thinking may seem amusing or even entirely misguided, but it demonstrates the established position of the feature film in 1927. Even while Thalberg uses the terminology of the full sound and colour film, by referring to films as silent and black and white, he is certain that this format is an art form that has developed into a standardised position. Samuel Goldwyn agrees with his colleague, conceding that sound may play a part in the prologue of a film (the opening musical number), "...I am quite confident that talking pictures will never replace entirely the silent drama." (July, 1927:98) Goldwyn goes on to suggest that talking films will disrupt the engagement on the viewer of the narrative, especially when sitting in a



dark theatre. He is pre-empting the main purpose of classical Hollywood sound; to operate to engage rather than disrupt the viewer. It is understandable at the time that his concern is about the engagement of the viewer with the narrative, as this narrative engagement is the direction that film has taken since the early 1900s.

John McCormick from First National Studio cannot imagine a rapid changeover in technology, suggesting that sound might well be incorporated into film, but it would be a more gradual process. He is not keen to immediately purchase sound technology – “...I am sure there would be no haste in making the transfer. Millions of dollars in equipment could not be thrown out overnight to make room for talking pictures.” (July, 1927:98) The director Clarence Brown was also unconvinced that a sudden changeover to sound would be possible, citing the financial impact – “To take a concern that has millions of dollars invested in it and turn it bottom side up would result in a tremendous loss of money.” (July, 1927:98) but he is more convinced of the ‘art’ of silent film drama and it is for this reason that he cannot imagine an industry of talking films:

Colored pictures, talking pictures, and we are right back on the stage...If talking and colored pictures were perfected, I believe we would still have the present-day black and white picture. When color and voice are introduced, we shall be dealing in an entirely new medium, a medium that corresponds to the stage. Our present black and white pictures are as far removed from a talking picture as an etching is from an oil painting. Motion pictures allow much to be filled in by the imagination. When this is removed, we are dealing in a new medium of expression. (July,1927:98)

Here is the crux of the belief of many directors, who, less concerned with the financial impact, may be more willing to experiment with an art form that would enhance film, but emphatically believe that sound will destroy the art that has been developed over thirty years. Brown's explanation of the audiences' imagination is shared by director Al Christie, who is concerned that:

If screen characters were to talk, the motion picture would lose most of its appeal, Most audiences play the parts as well as the actors. People place themselves in the position of the hero or heroine and unconsciously they do their own thinking and talking...(July 1927, 98)

Christie is describing a specificity of *silent* cinema – the voice as imagined by the audience. Both Christie and Brown see the audible voice as unnecessary exposition that would jeopardise this imaginative space in the minds of the viewer. Similar concerns are voiced at the time for talking radio (television) that will rob the listeners of the imagination and intellectual space from where they can imagine their characters.

The directors and producers that feature in the article can all, to some extent, imagine some sound in cinema, but are all agreed that this would not be for some time yet, and in most cases, agree that it would not be for the majority of productions or programmes. Only one director is reluctant to relinquish any ground to dialogue films; Cecil DeMille. He uses the space in the article to promote his own film, refusing to comment on dialogue film at all – it is an amusing response that is worth relaying in full:

Mr. De Mille's representatives told me that Mr. De Mille had never seen nor heard the Vitaphone or any other talking picture. Therefore, Mr. De Mille does

not feel that he is in a position to comment on the merits or demerits, whichever the case might be, of the talking moving picture. When the Vitaphone was holding sway at Grauman's Egyptian theater in Hollywood, Mr. De Mille was in the throes of developing his next big picture, "The King of Kings," which is the story of the greatest orator that ever lived, Jesus Christ. (July, 1927:98)

A condescending and subtle response that hints the ability to produce a film about "...the greatest orator..." without the requirements of synchronised sound, whilst at the same time never explicitly aligning himself to either side of the talking picture argument.

The article, that captures so effectively the general feeling in regard to talking film in 1927 demonstrates the level of feeling against the rapid inclusion of synchronised sound in film. What is clear is that the commonly held belief of early to mid 1927 was that synchronised sound would likely be used in the future of cinema, but that this use was probably going to be limited to certain genres of films such as music and vaudeville acts, educational films and existing as a music track with some special effects in feature films. The impact of a synchronised sound film shoot was overwhelming for all cast and crew involved. The realisation that cameras, lighting, sets, direction and acting would all have to change is evident in the trade journals. The expense to exhibitors would be significant. Additional articles on amplification indicate that the audience were also concerned about the ability to even hear the sounds being played in the theatre. Technicians were concerned with concepts of 'perfection' of synchronisation and although this, and the playing back of sound in the theatres was improving, the Exhibitors, film-makers and technicians were agreed – the

synchronised talking feature film was not likely to be a part of cinema, at least not for the foreseeable future.

This evidence from the archival research demonstrates a clear difference from a film history that details a smooth trajectory from early film into classical Hollywood that incorporated sound smoothly along the journey. There was overt resistance, both on a technical and an ideological level, to the inclusion of synchronised dialogue in film.

This resistance continued into 1928, and the reviews of *The Jazz Singer* and *Sunrise* are somewhat surprising, based on the knowledge of the impact that *The Jazz Singer* later went on to have. Film makers, exhibitors and technicians were not convinced by synchronised dialogue, but sound began to feature much more noticeably in the magazines and journals of the time.

## THE JAZZ SINGER AND SUNRISE

Donald Crafton, in his book *The Talkies, American Cinema's Transition to Sound, 1926-1931* discusses the reaction in the trade magazines to both *The Jazz Singer* and *Sunrise* and suggests that the success of *The Jazz Singer* was to an extent retroactively created by 1920s journalists, based on the response and box office success of the film. He notes that whilst the death of Sam Warner (the day before the premiere of *The Jazz Singer*) was reported in the papers, the opening night of the film was not:

It was only months later that reports began to appear describing the film as a breakthrough, turnaround motion picture for Warner Bros. Curiously the authors tended to repeat themselves in trying to express the film's importance. (1997: 517-518)

Although there do exist reviews from the film that were written at the time, they do not appear to immediately recognise any huge significance in the film. It is part of the 'myth' that has built around the film that places it as so integral to perception of the 'sudden' change to sound film. This is evident in the research in this chapter and supports the opinion that the critical reviews tended to follow the box office success, rather than the reverse.

Gomery is again critical of Crafton's analysis of the reception of *The Jazz Singer*, because he does not agree that the film is the defining moment of the synchronised sound era, he says of Crafton's work that...

...we do not find a discussion of sound...but an analysis of *The Jazz Singer's* reception. This...assumes that the industrial corner was turned by release and reception of one film – *The Jazz Singer*. The box office record holder, *The Singing Fool*, is only noted for its bad acting, and not its record-setting revenues. (2005: Preface, loc 137, 3%)

For Gomery, any discussion of *The Jazz Singer* in terms of its success in the film industry is inaccurate because of his own analysis of archival material, from which he asserts that, whilst "...fans and scholars would say – no *Jazz Singer*, no talkies." (2005: Chap 5, p. 55 of 155, 34%) this is a myth when considering the statistics of the box office:

The myth is that *The Jazz Singer* made so much money, it convinced all that talkies were inevitable...yet...the champion at the box office from 1928 to 1938 was *The Singing Fool*." (ibid)

Whist Crafton acknowledges that the trade paper reviews of *The Jazz Singer* were somewhat retroactive in their praise, for Gomery, the focus on the film is entirely unwarranted; the distinction, if any, should belong to *The Singing Fool*. Gomery is so emphatic in this assertion that he dedicates an entire chapter to the film in *The Coming of Sound*, claiming that this is the film that made the most significant impact on the film industry in terms of synchronised sound. Gomery suggests that *The Jazz Singer* is investigated primarily because of its chronological placement, but neither the chronological nor economic status are helpful when considering how the film treats *sound*. Gomery's suggestion that we should "...should abandon the myth of *The Jazz Singer*, and replace it with the economic reality of *The Singing Fool*." (2005: Chap 5, p.60, 37%) is not helpful, as it replaces one type of structure and constraint (chronology), with another (economy). It is worth noting, however that his archival research points clearly to the superiority of *The Singing Fool* in the box office.

O'Brien agrees with Crafton that the 'hype' occurred some weeks and months after *The Jazz Singer's* initial release and that "Recent historical study has done much to clarify the circumstances of the film's reception by documenting the degree to which its legendary impact was a function of media hype..."(2005:66) This is somewhat evident in the research although it is not entirely true that the film passed, entirely unnoticed, through its initial release. Some reviewers *did* comment on the significance of the sound in the film, particularly in terms of the success of Vitaphone, but there is no immediate indication that a seismic shift had occurred in the landscape of film

sound. Gomery claims that *The Jazz Singer* opened to 'lukewarm reviews' (2005: Chap 3, p.44 of 155, 29%), which appears to be an accurate description of the reception at the time.

Crafton also mentions the reaction to *Sunrise*, as a film released just prior to *The Jazz Singer* as evidence that the reviews demonstrate a much more complex and nuanced response to the films. In 1927 Crafton explains that:

The legend is that sound itself was such a novelty that it pulled in customers regardless of the quality of the picture. But look at what happened to THE JAZZ SINGER's synchronized rival from Fox.

F.W. Murnau's *SUNRISE* opened with a Movietone sound track on 16 September 1927, two weeks before the Warner's film. Like the early Vitaphone features, it had no recorded dialogue. The film immediately won critical raves and several honors, including *Film Daily Year Book's* ten-best list. Everyone agreed that it was one of the most "artistic" films ever made. But on Broadway it sank like a stone." (1997:525)

Again, this response is evident in the research where critics and reviewers are emphatic in their praise of the film. It is interesting to see this point of view at the time, and this archival material helps to demonstrate that it was not necessarily a foregone inevitability that the sound practices used in *The Jazz Singer* would become the homogenised version of sound that developed soon after.

There is little evidence of either film in either trade magazines, journals or fan magazines before their release. Reviews of both films exist, and the literature afterwards *is* significant, but prior to this, neither film was expected to have a big impact. A small article in a July edition of *Motion Picture News* mentions *The Jazz*

*Singer* in relation to other productions that the Warner Brothers were making – “Director Alan Crosland making “*The Jazz Singer*,” has temporarily suspended work in the West and is now in New York for special scenes.” (July 1, 1927:2584:B) In an August edition a small feature on an interview with Alan Crosland provides some information about the techniques of filming a synchronised sound film. The interview serves to reiterate just how different a synchronised sound shoot is, and Crosland explains the differences:

The film can be cut, rearranged, shortened, or anything desired – when not accompanied by Vitaphone – but since the record cannot be so altered, once a thousand feet of film has been synchronized with a disc it must remain in precisely that form and length. This means that if a “talking movie” throughout were being made it would be necessary to film a thousand feet at a time, synchronized with the record of the voices, and used in just that form. Such is not the case with “*The Jazz Singer*,” however. Songs will be introduced only at those points where the story hinges vitally upon singing, and there will be no talking. (August 5, 1927:389)

This is a fascinating glimpse into the methodology and intention of Crosland when filming *The Jazz Singer* – Crosland does not see the film as a talking picture, but a silent feature with moments of song. It is only retrospectively that *The Jazz Singer* becomes known as the first talking film. The difficulties in recording with Vitaphone are almost insurmountable, leading to a large reduction in editing for any film shot entirely in Vitaphone. There are far fewer problems in maintaining synchronicity when shooting in Movietone or any sound-on-film process, so it is easy to see why sound-on-film was more popular post 1927. A film recorded in one thousand feet sequences, each one a discrete and unedited unit, would be a completely different form to cinema up to that point; it is obvious why directors were not keen to use the technology. *The Jazz Singer* does, of course, have some moments of planned dialogue,



but the intention of Crosland is clear – this was to be a film that included synchronised moments, coming from the development of the Vitaphone shorts such as *Plantation Act*, and the rest of the film was to be shot with silent film conventions, a synchronised score being added to the edited film afterwards. *The Jazz Singer* was never expected to be a ‘landmark’ cinematic event – the pre-production archival material supports this view.

Many of the contemporaneous upcoming films paid for pre-screening advertising in *Motion Picture News*, sometimes paying for several weeks of double page posters. *The Jazz Singer* is barely advertised in any of the fan or exhibitor magazines, but the film does make an appearance in a double page advert in a September edition of *Motion Picture News*.

The First 3  
WARNER WINNERS  
for 1927-28

# Now!

You can give your patrons  
the best and still make money.  
Now you can get back on in-  
timate terms with big profits.

26 Warner Winners for  
1927-28

The Bush Leaguer	Good Time Charley
The Desired Woman	The Comeback (Temp. title)
Slightly Used	Prender My Back
The Broadway Kid (Temp. title)	The Girl from Chicago (Temp. title)
Jaws of Steel	Across the Atlantic
A Sailor's Sweetheart	Rings of the Desert
One Round Hugenot	Talk to be Believed
A De Luxe Winner	Resolute (Temp. title)
Reveries of Married Men	The Devil Dog (Temp. title)
Sailor Boy Murphy	The Silver Slave (Temp. title)
A Day of the Regiment	A De Luxe Winner
Rebecca O'Brien	If I Were Single (Temp. title)
Five and Ten Cent Annie	Talk to be Believed

1. **MONTE BLUE**  
IN  
**The BUSH LEAGUER**  
Comedy drama of small town life with Monte  
Blue in a new type of romantic hero

2. **The DESIRED WOMAN**  
Starring  
**IRENE RICH**  
Powerful, gripping melodrama teeming with  
suspense and action

3. **SLIGHTLY USED**  
MAY with CONRAD  
**McAVOY and NAGEL**  
Captivating and sophisticated comedy with a  
clever all-star cast

**Coming! Al Jolson in "The Jazz Singer"**  
WARNER BROS. SUPREME TRIUMPH

Member Motion Picture Producers and Distributors of America, Inc.—Will H. Hays, President

*Motion Picture News* (September 2, 1927:5-6)

The advert is mainly concerned with promoting three other Warner Brothers films, two of which, *Slightly Used* (1927, Archie L. Mayo) and *The Bush Leaguer* (1927, Howard Bretherton) were accompanied by a Vitaphone score of music and sound effects. Unfortunately, these films are now lost, and no comparison can be made, but it seems clear that the synchronised parts of *The Jazz Singer* were not the main advertising point; rather it was Al Jolson that the Warner Brothers chose to promote. Jolson was already an extremely successful vaudeville star and would have been a household name. The writing at the bottom of the pages could be seen as an addition, rather than the main point of the advert, or simply that whilst the other films had been released, *The Jazz Singer* was still to make an appearance. Nonetheless, the film is not advertised according to any major breakthrough in sound recording – this is more evidence that the film was not expected to have the sudden impact that it did.

*Sunrise* is rarely mentioned prior to its release and is not generally thought of, certainly in 1927, as a sound film. Murnau, however, is quoted in *Motion Picture News* in a later September edition, in an article about the upcoming presentation of a Movietone short where Benito Mussolini speaks. Later *Sunrise* will be reviewed in a programme that also contains this short. Murnau, unlike many other directors of the time, is confident, according to the article, that the film of the future “...will be as different as that of to-day as the styles in clothes to-day are from those of the ancient Greeks. F. W. Murnau has certain ideas which he believes will lead eventually to a complete metamorphosis in film manufacture.” (September 16, 1927: 843) There is no clue as to what form this metamorphosis may take, but since the quotation is in an

article regarding Movietone, the same process that Murnau was using on his current production, it is likely that this is the change that he expects.

Due to the close release date of both case study films, most reviews of *Sunrise* and *The Jazz Singer* are very close together in journals and magazines, even appearing in the same editions in some cases. This is particularly useful as it allows for a direct comparison between how the two films were received.

The *Monthly Picture Play* magazine's December issue contains a double page film review by Norbert Lusk. *Sunrise* is reviewed on the first of the two pages, and *The Jazz Singer* on the second, and the reviews could not be more different. The review of *Sunrise* reports that each of the main actors has given the performance of their career. The review opens thus:

"Sunrise" is a striking picture, a real achievement which will not soon be equalled. There hasn't been any picture quite like it...Every one who takes the screen seriously should see this manifestation of its great scope, and study the sharply individual technique of the director..."Sunrise" is a *tour de force* of directorial skill, not a riot of the emotions. It is a photograph of the *minds* of the characters rather than their hearts. Would you prefer to think than to weep? Then see "Sunrise", for it bears every sign of being the most important film of the year. (December, 1927:58)

The review is glowing and in terms of the cinematography and direction; rather than encouraging an 'emotional' populist appeal, Lusk suggests an intellectual one. He credits Murnau with being able to express the psychology of the characters through the camera. Writing in December he claims the film as the most important of the year. This is how *Sunrise* was perceived in 1927 – as a technically brilliant, subtle and intellectual film that used the developed form of cinema to its best advantage to

represent the emotions of the characters through the camera. There is no suggestion here as to whether Lusk heard the accompanying score or not – there is certainly no mention of it whereas other reviews do mention the Movietone sound. Lusk is drawing on his experience as a film reviewer of silent film in the 1920s, and to him, *Sunrise* represents the pinnacle of the art form. There is a stark difference between this review and that of *The Jazz Singer*.

“The Jazz Singer” is important because of Al Jolson and the Vitaphone. As a picture it is second-rate, but with the comedian actually heard singing some of his famous numbers in conjunction with the story, “The Jazz Singer” offers some genuine entertainment. (December, 1927:59)

The majority of the short review describes the various musical numbers and the story, but finishes with a complaint about the acting and casting of Jolson in a character role:

*Jack Robin* in Jolson’s hands becomes a veteran performer, who knows that he is the star of the picture and takes that fact with gravity. Thus it becomes no characterization at all, but simply an opportunity to see Jolson on the screen and hear his inimitable art. May McAvoy’s appearance as the actress is charming. She is properly sprightly, too. Bobbie Gordon plays *Jakie* at thirteen. The boy makes you wish that *Jakie* hadn’t stopped being such a good actor when he became Mr. Jolson.

Lusk’s review of *The Jazz Singer* is extremely important as it redresses the assumption that the film was an unequivocal success as soon as it was released. It may well have been a box office success, but the critics and film makers of the time were not convinced of the quality or merit of the film. Lusk rightly guesses that the film will do well as it has two major selling points – Al Jolson, and the Vitaphone system; he knows

that audiences will want to see one of the biggest vaudeville stars of the time performing songs on film. Lusk is critical, however, of the film because he sees it as a film that showcases Jolson, and Jolson is, according to Lusk, unable to act as another character. Jack Robin is not a veteran performer, certainly not at his big stage debut in the film, but Jolson performs with the obvious ease and poise of an experienced star; Jolson performs as Jolson. For Lusk, this is not filmic, it is theatrical. A contemporary audience of the twenty-first century may look at the acting of Bobbie Gordon, who plays the young Jack, and see a style that appears over-dramatic and old fashioned, but Gordon is acting in the pantomime style of the 1920s which was designed to convey emotion without synchronised dialogue. Whereas Al Jolson may appear much more natural in his actions, and more relaxed, this style at the time is that of the stage performer. It does not represent the emotional depth of acting at the time. *The Jazz Singer* is seen, certainly by Lusk, as a “second rate” film with a big star and new technology garnering audience interest.

*Motion Picture News* has its first review of *Sunrise* in its October edition, and this is as part of a programme of entertainment that saw the Mussolini short in the first half. This review is important because the reviewer, Oscar Cooper, reports on the combination of the Movietone score with the film. It makes such an impression that in the first paragraph of the review Cooper claims that the programme is so important because “It is filled with prophecy about the future of the industry; it foreshadows, more clearly than ever before, the way the perfect union of sound and silence will be brought about on the screen.” (October 7, 1927) Again the word ‘perfect’ is used in relation to synchronised sound, and in a programme where synchronised dialogue

forms much of the first half it could be understood as referring to this, but, Cooper claims that “The preliminaries to “Sunrise” are a glorified news reel.” (ibid) Cooper is excited and full of hope for the future of sound, specifically because he has seen and heard *Sunrise* with a synchronised score.

This review has lots in common with Lusk – both reviewers compliment the cinematography of the film, and both recognise that the camera operates psychologically:

Murnau tries the boldest of all screen experiments. He wishes to photograph the thoughts of his characters. To do this, the camera must, and does, become one of the players. It moves about as the characters move, in a thin story. But here the way the thing is done, not the thing itself, is everything. (October 7, 1927:1046)

Cooper reveals the complexity behind the cinematography at the time and it is a far away from primitive early cinema as it could be. The camera has become a character within the film and reveals the inner psychology of the characters – this supports the case study reading of *Sunrise* where the music also evokes character and psychology through leitmotif, also playing a role in creating the impression of a character who is not physically visible on the screen. Cooper demonstrates the importance of allowing a film to be studied without the constraints of its technological and historical reference point. This review in *Motion Picture News* holds a similar relevance when dislocating *Sunrise* from an unfortunate place in film history, where it was released within days of *The Jazz Singer*.

Cooper later mentions Movietone and it is one of the first examples of a review of a synchronised score of a feature film, he is full of praise for the combination of the sound and image of the film – the audio-visual event. For possibly the first time a film can be reviewed as an interplay between sound and image, with the understanding that the reader has the ability to see the same performance with the same interplay.

...Movietone, scored to the picture, has gone right along with Murnau's camera journey. In the traffic tie-up up you can hear the honk of horns from irate motorists; a touch of realism which brings you up with a sudden start as you realize that these, and similar sound effects, seem perfectly natural in a motion picture. Another prophetic glimpse of the coming greater destiny of the screen. The march of the camera is taken up again; Movietone goes along, keeping in time with drum-beat or love theme or comic note or tragic interlude as occasion requires.

"Sunrise" is an amazing picture. It is totally unlike anything ever done before. Nobody knows what its commercial fate will be. Thrown cold at an audience, it may falter at the box office. But in such a setting as that given it at the Times Square, it may well prove a success. In any event, it is a sincere, wholly artistic film, filled with touches of genius. It challenges showmanship of a new order, because the picture itself belongs to the new world of the screen. And with that new world, upon which the Fox forces have opened a huge window with their program at the Times Square, will be keyed to the perfect union of sound and silence in the motion picture... (October 7, 1927:1046)

For Cooper, *Sunrise* has demonstrated the potential in sound film, to include another element of expression with the image that is the same in every screening. Cooper admits that this may not win box office approval, (although it certainly garnered accolades at the first Academy Awards in 1929, winning three Oscars) but the film is artistically extremely important, demonstrating the ability of sound to work with image and maintain the fundamental expressive mode and specificity of silent film. Cooper's last sentence here makes sense when thinking of silent film as a genre that

includes films with a synchronised score – sound and silence are both, he hopes, a future along the same trajectory.

The following week's edition of *Motion Picture News* has two further pages of reviews of *Sunrise*, all glowing in their recommendations. Each week has a roundup of what the daily papers are saying about a collection of films, and this week has a collection of reviews for *Sunrise* – specifically the same screening as Cooper attended at Times Square. All of the reviews are outstanding, one in particular shows how unusual the reviewers thought that the film was at the time – that of the *Daily News*, a paper founded by Joseph Medill Patterson in 1919 and still going today. The review claims that the film is:

Magnificent – marvellous –  $99\frac{3}{4}$  perfect...Not even in our fondest dreams of what a  $99\frac{3}{4}$  perfect picture might be, did we expect anything as remarkable as 'Sunrise'. Stands alone as film of films. The best of this year, last year, and all the other years that have given themselves over to cinemakind...Has remained for Hollywood to be the birthplace of Murnau's most powerful, most poignant, most wonderful screen drama. (October 14, 1927:1189)

There is no analytical material here, but it is an exceptional review which demonstrates how entirely unusual and how excellent many reviewers and exhibitors genuinely thought that *Sunrise* was – in particular the most glowing reviews are those that include a review of the sound. The only criticism that the research showed at any point, was a throwaway comment on Janet Gaynor's wig, which was thought to be ridiculous and unrealistic, and a comment about the story being somewhat thin. Apart from this, the research showed the reviews of *Sunrise* to be outstanding. Here was a



film that incorporated sound in the way that the majority of directors, exhibitors, technicians and actors wanted, and the result appeared to be a success for the relationship of cinematography and sound recording.

Another review of *The Jazz Singer* by Laurence Reid is in the following week's edition – it is not as unforgiving as the review from Lusk, but highlights again that Al Jolson is a weaker actor and the combination of stage and screen does not sit entirely comfortably:

Singing a group of songs that run the scale from sacred to mammy melodies, his voice registers well and carries over the top. As a screen actor, the greatest character singer of them all has much to learn. That he has grasped the fundamentals of pantomime cannot be disputed. As yet he is a trifle self-conscious (especially out of the burnt cork), and not sure of himself, but there's no denying that his personality is colourful enough to make him popular on the screen as on the stage...It is made too sobby, insamuch as Jolson is not called upon to flash any comedy. As box-office material in [sic] should draw because of Jolson's wide popularity. It has many moving moments and some fine acting. (October 21, 1927: 1266)

Certainly, the review is not a poor one and has some praise for Jolson in his move from stage to screen, but the review centres around the success of the film due to the presence of Jolson and the synchronised songs. The reference to 'burnt cork' is the stage makeup for the blackface that Jolson wears in the film; this is what Reid means by Jolson as a character singer – the character of the African-American slave that Jolson would have played frequently on stage. An extremely offensive practice now, it was common in 1927. It is again obvious that Reid can see the personality of Al Jolson in the film, not that of Jack Robin the character.

The articles and research up until this point in 1927 provide a clear picture of the film industry and the concepts that were in place about synchronised sound. It is fair to say that most industry professionals had no notion that synchronised sound would be anything more than a niche gimmick, a synchronised score, or, at the most influential, a talking film of the distant future. The reviews of *The Jazz Singer* and *Sunrise* do nothing to disrupt these viewpoints; *Sunrise* is undoubtedly seen as the more *filmic* of the two, the one most closely linked to the film industry's current practice at the time. *The Jazz Singer* is reviewed as a mediocre film that will sell because of the casting and the technology. The success of the synchronised Movietone score in *Sunrise* gave reviewers great hope that film would continue in much the way it had done. This picture disrupts any notion of a smooth trajectory through the teens and 1920s into the 1930s that Bordwell et al suggest was the case. Many years of consideration of the technology, experiments, tests and films were given over to synchronised sound and in the Autumn of 1927 very few in the industry were predicting the sudden change that *The Jazz Singer* hailed.

It is, perhaps, a peculiarity of the particular climate in the film industry of 1927 that synchronised sound took the direction that it did – far from a 'natural' progression from silent to talking film, there was a sudden and swift change that caused a great and often detrimental impact on actors, exhibitors, film makers and technicians alike. The poor economic year from 1926-27 had brought about practices such as block booking films and shoring up poorer programmes with vaudeville and music acts. The price of paying musicians per performance was very high, and this may have been weighed against the price of fitting a cinema for sound – many interim technologies

were on the market at the time that provided the facilities for a synchronised sound disc – a way of providing full orchestrated music for one price. The experimental presentations of film technology such as colour, stereoscopic images, incandescent lights and sound were drawing audiences to the bigger ‘super’ theatres. The time was right for a box office success to convince many exhibitors that, whether they believed that dialogue film was artistically valid or not, it was a way of drawing audiences in, and could be offset against the price of musicians. The climate could be the reason for the sudden change that seems so completely at odds with the philosophy of the time.

The articles following the release of *The Jazz Singer* begin to demonstrate an acceptance that synchronised sound, in terms of talking pictures, was becoming an inevitable and intrinsic part of cinema. The reaction to this from the industry was mixed and initially poor but within a few months acceptance turned to consideration of the possibilities of the technology.

## REACTION TO THE TALKING MOVIE

### Trade Journals

The trade journals were the first to really consider the philosophical and technological impact of a rapidly changing, talking, film industry. A flurry of articles appeared in 1928, each concerned in some way with the fundamental changes that talking film would make to the industry. Carl Wilson, a member of the Academy of Motion Picture Arts and Sciences writes in early 1928 of the differences and concerns that he has regarding scenario writing – an area that will change beyond recognition within a few

months. Wilson is still not convinced of the longevity of talking pictures at this point; “I think motion pictures will remain to a certain extent a black and white medium without sound.” (1928:70) but he does advocate the use of certain sound effects that live music or image cannot produce, giving the example of a sudden machine gun sound. However, it is whilst in discussion with the Committee to whom he is presenting, that we see the impact of *The Jazz Singer* on his thoughts. Wilson is asked by Mr. Griffith, a member of the committee, if he would have written a play in the same way;

...if you should do this sort of think a year from now and had available sound recording and reproducing devices fully perfected? Do you still feel you could get better results by starting as you did or could you accomplish what they did on the stage by sound recording film?

Mr. Wilson: Now you are hitting below the belt, I don't know, I wish I did. I wish I knew exactly where to place in my mind the new sound film. For instance, I cried freely over the magnificent effort of Al Jolson's singing in *The Jazz Singer* and yet I raved to myself against the bad technique necessary to secure it....I think sound effects are great when they are great sounds, but are limited when they depend on the mere novelty of sound alone. I do not want sound motion pictures considered as one might consider a dog walking on his hind legs – not that he does it well, but because he does it at all. (1928:68)

There is a tension here that was not present prior to the release of *The Jazz Singer* – it is an acknowledgement that whilst the film may have been entertaining and certainly technically excellent for the time, that it may not be the direction that many practitioners are keen to take. For Wilson, the concern is that by making a sound picture, it will be considered as noteworthy only because it contains dialogue – dialogue that Wilson is not convinced will come across well in audible speech or in the writing of the script. There is a concern that the ‘spectacle’ of sound will be what it is judged against, rather than its merit.

H. B. Franklin, the President of the West Coast Theaters Inc. shares Wilson's concerns, presenting a paper just a few months later to the same committee. It is no longer possible to dismiss talking pictures because the box office success of *The Jazz Singer* has made this an impossibility, but there is deep concern over the form that cinema will now take. His paper, *The Entertainment Value of Sound* (1928:620 – 624) begins with an acknowledgement that cinema has irrevocably changed:

The motion picture has is being born all over again. Sound synchronization is bringing to the motion picture theatre a second chapter of progress, not alone because of the great interest shown by the public in sound synchronization but because of the re-created interest that it has brought to the entire industry...All in the motion pictures...realize that they must adjust themselves to the new conditions brought on because of this development...It is to be expected that the advocates of the silent motion picture will make every effort to hold their place with the public. (1928:620)

Franklin's suggestion is that silent film is maintained alongside the talking picture and he still cannot imagine an industry where silent film disappears. The change in the tone of papers post-*Jazz Singer* are distinct, it is no longer acceptable to entirely dismiss sound, but not immediately radically different. A two-tier system of film is a popular suggestion for practitioners where both film forms co-exist:

...the silent motion picture is too well established as a medium of entertainment to vanish because of this new development. It is likely that the motion picture theatre of tomorrow will offer both types of entertainment. Many stories and situations are of a type that do not lend themselves to proper interpretation through speech. This is particularly true of that type of picture which must find a world market, where the problem of different languages must be considered. (1928:620)

The apparent problems of moving to a synchronised dialogue format must have appeared somewhat insurmountable; the world market is an area that is regularly written about by distributors and producers. To lose this entire industry would have been catastrophic. Instead of a relatively simple changing over of intertitles, a film in spoken English could not yet be satisfactorily altered for different languages. This is no small issue, it is another example of how the specific format of the spoken word was so apparently problematic.

Mordaunt Hall – an editor at the time but also a writer of intertitles and a film critic presents a speech to the committee at the same time that acknowledges the public demand for sound but questions how the industry is to implement the change. His opening condescending tone gives way to one of deep concern about the state of film with synchronised dialogue, now, he says, that film has been given a voice:

...it remains for the child to be taught to talk intelligently...The fact that the shadow is heard means that more and more will be expected from the screen, but, so far, in a number of instances the vocal end has weakened the acting, for players...have forgotten that words are not enough; that they must be accompanied by facial expressions and gestures. (1928:603)

Hall is concerned, like Wilson, that films are being made simply because they are talking films, rather than for any artistic merit. Now that the inventors have created the technology, Hall is keen for producers to make discerning decisions about the type of film, story and script that are made. He claims that although the talking film has initially drawn audiences;

...there is the danger of theatre owners not only losing the new patrons attracted by the idea of sound, but also some of those who were especially enthusiastic about the silent productions and who find that sound has killed the art of the pictures, or caused the stories to be banal. (1928:603)

Hall says that claims that talking film will mean the end of the stage is unlikely and;

This, in my humble opinion, is no more likely than a man falling in love with the articulate shadow of a lady. True artists of the stage with color and flesh and blood will always be with us, for man can't make a man. (ibid)

This is a belief that mirrors later film studies analogies to *The Allegory of the Cave* by Plato (360 B.C.E) where Plato describes a group of prisoners who sit motionless and unable to turn their heads around in a cave. A fire burns behind them throwing shadows of the outside world onto the back wall (essentially mimicking a film screen). If the prisoners have never seen the outside world, they would suppose that the shadows were the actual things and people that they represent. Only upon escaping the cave is a prisoner able to see the real world and recognise the shadows for a trace of the actuality. Hall claims that an audience who have seen the actuality rather than the shadow, in this case, the stage rather than the screen, will never be satisfied with the trace of the human. It is a compelling argument and one that has been used in film studies to critique the idea of the 'real' world being present on film. Hall is arguing for a cinematic art that does not attempt to reach the status of the real but understands its ability to be representative and expressive. In this sense Hall is actually implicitly critiquing a logocentric model of film, that strives towards the impossible, that of replicating actuality. Instead Hall advocates an expressive cinema that does not

attempt to produce stage works but produces films – a different medium and expressive mode.

The rest of Hall's paper deals with concerns about the ability of actors and directors to appropriately use the spoken word, and suggestions for the form that this may take, but there is an interesting moment during the discussion following the paper, where we can see a specificity of silent film that immediately changes when spoken dialogue appears. When asked what a young adult movie goer may think about the spoken film, Hall replies, "People somewhere about that age would be fifty-fifty; some find the sound disturbs their whispered conversations." (1928:612) It is clear from this that it is entirely acceptable and common practice for patrons to whisper to each other during the film – in a film that does not rely upon the ear to hear the narrative, it is possible to both talk and see at the same time. We think now of whispering in the cinema to be unacceptable, but Hall is concerned that the spoken word might be a distraction from those who wish to whisper.

Frank Woods, the Secretary of the Academy of Motion Picture Arts and Sciences reasons that he is well placed to comment on the difficulties brought by the new format and also by de facto, reasons why there may be such tensions between different practitioners in the industry:

The Academy, representing the production branches of the industry, is concerned like the Engineers with the perfection of technical skill in the use of instruments and materials in production, but it is also concerned with the artistry of the resulting product, the attractiveness of the product in the theatres and the relations of the production industry with the public.  
(1928:625)



Here is a conflict that is causing so much consternation in the industry – there is a difference in intention and demand between the technicians, artistic practitioners and the public, and in this period of 1928, talking film sits in the middle of all of these requirements. It is a medium of both science and art and attempts to align film to one or other of the sides is causing disruption and bad practice.

Woods suggests that ways around the current difficulties for small theatres is an industry that is producing the same film in two different versions:

Practically all pictures now are being produced by the major companies and short subject producers include sound accompaniments of speech or effect, and music. These pictures, however, are made in duplicate, as silent pictures, for use in the thousands of theatres in this country and abroad which are not equipped for sound projection. (1928:628)

There are several examples of this practice that exist today – Hitchcock's *Blackmail* (1929) was changed mid-shoot into a talking picture and silent scenes still exist that Hitchcock shot as 'backup' for the talking scenes. We see an example of another one later in *Motion Picture News*. It seems extraordinary that the expense of shooting films twice was ever practiced by the industry, but the following article demonstrates how seriously and to what extent film makers were considering making the change to speaking films work.

Edwin Hopkins, a sound specialist, presents a paper that suggests a way of 'Re-Vocalizing' films – of placing another voice in the place of the actor during post-production. This is *not* the practice of Automatic Dialogue Replacement (ADR), which was not developed until later, but a forerunner of this, which cannot have been

particularly successful. Hopkins points to five main reasons why voice replacement is needed – foreign language films, films where the actor is good on screen but poor vocally, outside scenes, scenes shot in non-sound proofed studios and films where directors wish to speak over the action. With hindsight, it is possible to see where some examples appear ludicrous – directors simply adapted to a new style of directing, studios were sound proofed and actors were either proficient with both voice and physique, or they did not continue in the industry, but these suggestions became the forerunners of dubbing for foreign language films and ADR for noisy sets. Hopkin’s claims for his technology are, however, dubious, either in technical ability or realistic practice.

Hopkins claims that cinema will improve immeasurably because the very best of both worlds of image and sound can come together. At a time when radio actors were well known stars, Hopkins imagines that the same will be the case for *voice* stars of the films. His process involves a technology that he has invented that can replace the voice of the screen actor with that of another in the edit. The voice actor will match as far as possible the words and speed of the screen actor. However, as it is impossible to get this entirely accurate. “When they get out by a second or so long stretches of film may be cut out in neutral spots, to prevent jumps. In practice, it is difficult to put in new frames or duplicate frames. It is simpler to cut frames.” (1928:848) Hopkins really is advocating a system of editing where “...the film cutter examines the film to see where it lags behind and here and there cuts out a frame.” (1928:851)

Hopkins’ suggestions for foreign language films are even more astonishing. The basic principle is that the American actor speaks in the foreign language that they have

learned, which is good enough to mimic the basic lip patterns, and the film is then 're-vocalized' by a native speaker who will have a better sound to their voice. The words that the screen actor speaks must be said in the foreign language, although

...not necessarily with the correct accent. Five languages, however, will cover the larger part of the foreign field: Spanish, French, Portuguese, Italian and German. American actors should learn these languages fairly well. In the case of more difficult languages such as Russian, Chinese and Sanskrit, they may be phonetically represented in English characters and learned by rote, without a complete understanding of the meaning of each word. (1928:851)

The process would involve repeated filming of the same film, each with a different language. Hopkins also suggests that all voice actors, after learning the script and becoming familiar with the timing, should record their lines in front of a live studio audience so that they sound as convincing as possible in terms of the acting. Of course, as this is a process that Hopkins has developed, he is keen to reassure the committee of the positive impact it could have:

One effect of re-vocalization in foreign language will be to provide the players and extras of Hollywood with an occupation for their spare time, on and off the set. They may employ it in learning foreign languages.(1928:852)

Needless to say, this was not a technique that ever became practice. Hopkin's suggestions seem wildly ridiculous today – the obvious impact of continuity in terms of cutting out frames 'here and there' and the sheer infeasibility of actors learning multiple languages and re-filming one film with multiple versions is immeasurable. Not only would the practice be technically poor and impossible to make, but the expectation on an actor to learn five languages to some level of competency, and to learn entire feature film scripts phonetically is far too high. However, the practice of

recording entire films more than once *did happen* in the very early sound period in Hollywood. Bilingual stars were able to shoot the film in more than one language, and other productions shut down their English language film sets in the evening and opened a foreign language set in the evening, re-shooting the same scenes day for day.

It is only when looking at these types of suggestions and practices is it possible to see how significant the changes were to the industry and how much these changes would cost. Only with a strong box office take up would the introduction of these changes even be considered. For producers to even consider shooting the same film, multiple times, it would have had to have a big return internationally. For a multi-million-dollar industry, the impossible seemed to be happening – huge upheaval meant that solutions such as those that Hopkin's suggested were worth taking seriously. It is not, when considering the climate of the time, inconceivable that the role of acting would have progressed along a line where it was expected that an actor would have proficiency in several languages.

It is within the pages of the *Transactions of the Society for Motion Picture Engineers* that we see the technicians of the industry coming to terms with the reality of talking films. There is still some hope and certainly suggestion that silent film practices will continue, at least in some form, and that accompanied films would be more common practice than the spectacle of the talking film. The philosophical arguments for this are based on the premise of film as expressive art, rather than technical wonder; a form for expressing emotion as opposed to replicating actuality. There is a divide

between those on the 'artistic' side of film and those on the 'technical' side, further complicated by an audience whose appetite for talking pictures seems undiminished and in turn fuels the development of even more talking films.

The trade journal *American Cinematographer* is a little more critical in its approach to talking films, probably because, rather than representing the entirety of the film industry the journal catered for specifically the cinematographer; a role that had, until this point, enjoyed a position of utmost importance on the film set. At the same time, the magazine appears to recognise the inevitability of the talking film in the industry. Film history up until this point tends to uphold the importance of image over sound because sound was an element of the film that changed with every performance. Certainly, there were concepts of 'good' and 'bad' sound, and the exhibitor magazines particularly, were deeply concerned with the employment of musicians and the process of scoring movies to the best of their ability. Now, however, the medium of sound would mean the inclusion of team of onset sound technicians and post-production editors. The technicians of sound were working alongside the cinematographers and this has a big impact on the cinematographic team.

A December 1928 edition of *American Cinematographer* includes a satirical article that epitomizes the concern of the cinematographer. The article is entitled *Sound Hits Hades* (December 1928:11) and appears in an editorial section of the magazine:

The Hollywood citizen has just arrived in Hades. "Where can I find a picture show?" he demanded of a native.

“The Brimstone Theatre is just over there behind the Asbestos Works,” grinned the native.

The H.C. bought a ticket and sat down to enjoy himself. There was an orchestra, an organ, a jazz band and a lot of canned vaudeville. The film entitled, “Pandemonium,” was full of spoken subtitles and sound effects but there were no pictures on it. The H.C. grew restive. After a while he called an usher.

“Are you tryin’ to kid us,” he asked with acerbity.

“Whaddyamean kid you?” countered the usher.

“There ain’t no pictures on this here film,” sobbed the H.C.

“Pictures? Whaddy expect for \$1.65,” yelled the usher.

“Ya mean to say ya got notin’ but sound here,” wailed the H.C.

“Sure. We strive to be up to date,” smiled the usher with great complacency.

And as the H.C. stumbled out the little devil in the box office thought she heard him mumble: “This IS Hell.” (December 1928:11)

For the cinematographer, this is the nightmare – a film programme that includes all aspects of live and recorded sound, but absolutely no images at all. The blame for this state of affairs is put onto two key people in the satire – the ‘Hollywood Citizen’ who, so enamoured with sound, is keen to see a programme with synchronicity, is not willing to pay more for it, and the box office ‘devil’ who has been behind the hit sales of the sound film. Satire is a good way of analysing what the main concerns of the time are – it is a form that exaggerates the (believed) negative aspects of the subject to such an extent that they become comedic, but in exaggerating those aspects it makes them immediately obvious to the researcher. The satire goes to the extreme extent of describing a ‘picture’ film with no ‘pictures’ but it is easy enough to see the anxieties for cinematography; the populism and financial impact that synchronised sound brings with it mean that its position in film is seen as supplanting that of the camera.

The popularity of talking pictures meant that films were made quickly to accommodate demand. There seems to have been little time for artistic development and it is feared by many in the industry that the lowest form, the 'cheap trick' is the result. This explains to some part an industry that still today subordinates sound. The cinematographers saw sound as an inevitability, and one that they would have to accommodate, but there was plenty of dissent about this. The rapid development and expansion of talking pictures is seen as one of the main reasons for poor practice. Lewis Physioc writes for the magazine, in an article called *Technique of the Talkies* (August, 1928: 24 – 25):

The talking pictures occupy a peculiar position in the picture business. They have re-entered the field after an interval of many years, and have not, like the silent pictures, enjoyed the same process of development during that period. And further supplementing of modern scientific equipment probably encourages the idea that there can be very little benefit derived from a study of those earlier experiments. It is unfortunate that the merit of the present achievements cannot be signaled by a comparison with the previous efforts. There is still a mystery suggested in the absolute suppression of the first "talkies," especially the Edison Kinetophone. We, therefore, depend upon contemporaneous criticism to develop the technique of the talkies. (August, 1928: 24)

This is a balanced view for an article in a cinematographer magazine in 1928 – Physioc is keen to see a way forward for both aspects of cinema to come together. Physioc also acknowledges the history of sound recording and the apparent suppression of those techniques until this point. The talking picture has happened, and rather than look to historical formats, Physioc looks forward. There is plenty of criticism in the article. He sets out key areas that are of concern including concerns regarding perspective, saying that the close-up is overused and is of even more concern now, as "...it becomes an even more important matter, due to the relation between the

volume of sound and the size of the picture.” (August, 1928:24) He is concerned more generally with the volume and consistency of sound in the theatre – this is a concern of many technicians of the time – there are many complaints about volume being, on the whole, too loud. Projectionists at the time were responsible for the volume of the playback – being in a separate booth their audition of the sound was often based on what they could hear from where they were. This is matched in many articles by a concern about loudspeaker placement – the most obvious place for most practitioners and exhibitors is to place the speakers in the orchestra pit, or behind the screen. Concerns of perspective, volume and speaker placement are based upon an assumption that the audience will only accept the sound as ‘natural’ if it appears to emanate from the screen.

Physioc is also concerned about overly long scenes where the camera is not able to cut away – for him the actors become wooden and the film becomes slow. There is much to be developed in the fields of acting and direction and more to be developed for cinematographers. For Physioc, a successful film is dependent on many different coming together – “The co-ordination of these different departments represents the general technique of talking pictures, and then must be studied and developed, not only individually, but collectively.” (August 1928, 24) This is a balanced view that demonstrates the possibility of the coming together of sound and image with the cooperation of the various film departments for a production. In many cases this takes a number of years, but it is being promoted as best practice in 1928. The year following *The Jazz Singer’s* release does show the beginnings of a way forward for what was previously inconceivable.



In the same magazine, we see the article quoted at the beginning of this chapter, with *Jimmy The Assistant*. In more acerbic tones Jimmy concurs with Physioc – talking pictures are here to stay and although “...the panicky rush into talkies is just going to set our dear little picture business back about two years...” (August 1928:37), there is no returning to a previous form. Unlike the papers presented for the *Society of Motion Picture Engineers*, *American Cinematographer* seems certain that the form of motion picture has changed. Jimmy warns against a belief in two separate forms of cinema:

Don't ever kid yourself into thinking that the talkie will be one thing and the movie another. Not a chance. In the first place, talkings **are** moving pictures – or should be; only they're moving pictures with about a thousand times the outlet for expression that the old movie had. And in the second, overwhelmingly last reason, they make it possible to give a better show for less money. Less money from everyone – the producer, the exhibitor, the public. And that's all you have to know to decide whether they're going to be IT or not. They ARE – and how! (August, 1928: 37)

This is an interesting opinion – couched in comedic terms it is possible for the magazine to suggest more radical ideas as they can be explained as 'Jimmy's' thoughts, rather than that of the editor. The article suggests that the expressive possibilities for talking pictures are *increased* – a differing opinion to many of the other practitioners, who see synchronised words as a death knell for expressive cinematography. *American Cinematographer* appears to understand that the financial conditions mean that it is unlikely that the older 'form' of silent cinema will return – the choices are either to bemoan the changes and the restrictions placed on the camera or work to find a way of producing the best expressive art possible.

## Exhibitor and Fan Magazines

The exhibitor magazines react to sound in different ways – the industry is dependent on the money that talking pictures provides, but the exhibitor as a creative director of the theatre remains at times unconvinced of the quality of the talking film. Johnston sums up the frustrations in the *Editorial Highlights* of October 6<sup>th</sup> edition in 1928:

Speaking of Warner Brothers and their astounding rise to the top of the heap, isn't it remarkable that just one picture did it?...Looking back it would appear that, from the very beginning, one picture here and there, has not only put a company to the fore but has actually determined the trend of the entire picture industry...Moulded it, so to say...which makes one stop and think that, after all, show genius, and only that, turns the big tricks...(October 6, 1928)

The next page in the magazine shows the impact of sound financially – those that predicted that it would be unthinkable to spend millions of dollars to refit studios and theatres were proved correct in their prediction of the cost, but not in the willingness of the studios to pay for it, in an article entitled, *\$12,000,000 In Sound on Coast* the immediate changes are outlined:

Sound stages and equipment necessary to convert all of the present coast studios to produce talking pictures will require an initial investment of approximately \$12,000,000. Western Electric, through its subsidiary, Electrical Research Products, will supply the bulk of the apparatus that will be used by producers, for recording by film and disc methods, but R C A Photophone will be utilized by three or four companies according to present plans. Ten sound proof stages are now completed and ready for use on the coast: while a total of twenty more are either under construction or planned. Warners have the jump on the field with five sound stages now being used for dialogue production: M-G-M has one stage just finished, while Paramount is dialoguing pictures on two stages. (October 6, 1928:1046-A)

Johnston seems to have outlined the situation accurately – one film has changed the industry with studios willing to build sound stages for millions of dollars. The Warner

Brothers are a much more lucrative company and have an advantage in terms of equipment. Adverts now begin to change from selling organs to selling sound synchronising systems for the smaller theatres; the Phonophone is a device that allows exhibitors to cue pre-recorded orchestra music, this and similar devices are advertised throughout *Motion Picture News*.

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October 6<sup>th</sup>, 1928:1055

These machines demonstrate a requirement for theatres to screen silent feature films – with the process of block booking, many theatres would have bought a number of films that were silent, studios were still producing silent films as well and the belief was still prevalent that the entire form would not immediately vanish. The Phonotone, and other inventions like it demonstrate a form that is more of an amalgamation of synchronised sound and silent picture – it represents a cinema form that is neither

one or thing or the other and was in fact the way that many practitioners felt was best for the expressive value of film.

In the same magazine, an independent film exhibitor is interviewed about his opinions on 'interchangeability' or the development of technology that could be used for every type of sound film, either on disc or on film. This was a problem for exhibitors who were not sure whether to fit their theatres for Movietone or Vitagraph – many choosing both as features and news reels at the time tended to be shot on different technologies. The exhibitor, W. H. Harris, is reluctant to spend money immediately on either technology – he is not convinced that it will be necessary:

I do not believe that music with the film will become especially popular to the point of eliminating from the better theatres the orchestras and organs. My business has increased about 25 percent since my competitor put in the sound system, and I have not increase my expense. I firmly believe that within three months the novelty of talkies will wear off, and we will settle down once more to a safe and sane business. (October 6, 1928:1059)

In the exhibitor's magazines, the change is obvious from a few months previously and sound is a big topic, but there is not yet the feeling that the method of sound recording or the form of sound recording is fixed. It is a time of great fluidity in film, both shooting and screening, and this is obvious in the pages of the magazines. There are many more articles that comment on the 'nature' of film – the discussions of ontology are being had. There is no indication yet of a direct line of a classical sound model like that of the mid 1930s onwards.

One fascinating article compares the script of the same scene in the film *Interference* (1928, Lothar Mendes – Silent, Roy Pomeroy – Sound) as both sound and silent. An

incredible resource to discover, the script demonstrates just how much direction was already included in silent films and how significant the pantomime acting style was. Immediately it is clear in the talking script is has "...all pantomime subdued, leaving most expressions to be registered vocally." (October 6, 1928:1138). The article also points out that the silent film used more feet of film, contrary to "...The popular impression is that a talking picture requires more footage." (ibid) The article suggests that the director is given more freedom to choose acting style in the talking film, and the dialogue replaces much of the pantomime acting. It is a very rare insight into the two different styles. It is easy to see from this why there was concern over acting style and exposition of dialogue. (Photograph next page)

## Script Showing Difference Between Silent and Dialogue Film

(Hollywood Bureau, Motion Picture News)

**H**OLLYWOOD, October 8.—In response to many requests from directors, writers and technical men, in addition to interested exhibitors, MOTION PICTURE NEWS reproduces herewith actual script pages showing the difference between treatments for silent versions of motion pictures and those containing dialogue. They are reproduced through the courtesy of Paramount, being part of the scripts on "Interference." The silent version was directed by Lothar Mendez and the talking version by Roy Pomeroy. Evelyn Brent plays "Deborah" and William Powell the role of "Philip Voaze."

One interesting phase is the additional latitude given the director for dramatic direction. The silent form goes into detail as to just what facial expressions or business are required of the player. The dialogue version touches lightly on this, leaving practically all of it to the judgment of the director.

Note the similarity of titles and action. The actual difference comes in the photographing. In the silent version all action is conveyed by pantomime. The dialogue treatment has all pantomime subdued, leaving most expressions to be registered vocally. An example is shown in revealing that "Voaze" is drunk.

The amount of business required in the silent version as against the talking one is displayed in the fact that the synchronized "Interference" runs 300 feet less than the silent version. The popular impression is that a talking picture requires more footage.

### "Interference"

#### Silent Version

D-39

**Interior Deborah's Living Room—Medium Shot:** Deborah is pacing nervously when she hears the bell. Feeling that it must be either the reporter or Marlay, she smiles triumphantly, crosses to the door quickly and opens it—revealing Philip, who stands swaying in the doorway.

D-49

**Close Shot:** Of Deborah and Philip as they face each other through the doorway. Deborah can hardly believe her eyes as she sees him. She looks at him—unbelieving—stands dazed—unable to say anything for a moment. Philip makes a little gesture with his hand, saying, "Well, here I am!" Deborah gazes at him wide-eyed—speaks his name in a sort of hush: "Philip!" Philip, quite satisfied with the impression his entrance has made on her, smiles, and with a little bow of his head, indicates, "May I come in?" Deborah moves closer to him as she draws him into the room. She is eager now, joyous. Philip's steps are a bit unsteady.

D-41

**Medium Shot:** Deborah brings Philip down near her desk, talking happily—now almost beside herself with joy at seeing him again—crooning over him like a mother over her child. She takes his hat, starts to help him out of his coat—and, as she is pulling the coat off, Philip says with a little smile, still a bit out of breath:

**Title 17:** "Celebrating an early funeral! Going to snuff out, Marlay said!"

Deborah looks at him quickly as she hears this, drops his coat on a chair near the desk, then comes to him and says eagerly:

**Title 18:** "Then you did see him?"

#### All Talking Version

**Sequence "D": Dialogue—Ernest Pascal:**  
(Hangs up receiver. Remains at phone.)

(A shadow appears at door, and a knock is heard. Deborah rises—goes to door—opens it.)

**Voaze:**

Enters. (Very drunk and rocking on his heels.)

**Deborah:**

"Philip!"

**Voaze:**

"Who says I can't climb a flight of stairs, eh?" (Paroxysm of coughing racks him.)

**Deborah:**

Philip! (Closes door.)

**Voaze:**

(Throws down hat and stick. Takes off coat.) "Surprised—see me—sweet-heart—eh?"

**Deborah:**

"Philip!"

**Voaze:**

(Throws coat over chair.) "You look fine—a splendid woman, Deborah, in this light—ha ha! Well come—nothing to say?"

**Deborah:**

"Philip! You're drunk!"

**Voaze:**

"Celebrating an early funeral. You're going to die, says he—snuff out—"

**Deborah:**

"Who said that?"

**Voaze:**

"Marlay! Sir John Marlay."

**Deborah:**

"Then you did see him!"

An article in the following week's edition of *Motion Picture News* is the report of an interview with the director King Vidor of M.G.M. shows that whilst the editorial features in the magazine err on the side of the future of talking film, Vidor, much like Harris, is not convinced. Exhibitors and practitioners of the industry are still waiting to see what would happen in the long term. Vidor is speaking a year after the release of *The Jazz Singer* – a year that has seen mass economic success of the talking film and a rapid building programme of sound equipment and sets to facilitate the many new talking films – films by which point that have become fully talking, with no silent moments. Vidor does not believe that these films demonstrate much of interest that can predict what will happen in the future:

I do believe, however, that motion pictures have always had a special charm and entertainment value because of the fact that they have represented drama in terms of motion rather than dialogue. On the other hand, there are some types of stories which one may find it very difficult to present in terms of action and 'silent drama'. Mystery and courtroom stories, for example, have qualities differing greatly from character studies, and in many cases it might be wise to produce stories of this type with the addition of partial or complete dialogue...I think that from now on there may always be a certain percentage – say 15 or 20 per cent – of films which utilize dialogue to enhance their dramatic appeal. Sound effects and synchronized scores are another matter. Here there is no interference whatever with the old method of relating a screen story in terms of action, suggestion, and pantomime, and in most cases, I am sure, the special score adds to the appeal of the picture. (October 13, 1928:1147)

Vidor's vision of the future of film making is one where the 'old' method of shooting is combined with the synchronised score to form a new 'silent' form. Complementing this, a minority of films will be shot with synchronised dialogue, at least for some of the film if not the entire feature. These films will be more inclined to contain lots of

exposition that requires dialogue to fully explain efficiently the narrative. 'Old' method films will continue to use the pantomime style of acting, combined with orchestral music, to convey dramatic emotion; intertitles would, presumably, be used for those moments when text was deemed useful.

Throughout all publications there is a mixture of disbelief and acknowledgement that the industry has changed. Most people in the film world seem to agree that the silent film will continue in some form or other, probably as a feature with a silent score. There are a handful of exhibitors and magazine editors who suggest that talkies are inevitable and they begin the task of finding ways to shoot films under very new conditions. An overarching concern of the talkie is in the reduction of dramatic expression through pantomime acting, and the acutely naturalistic tone of dialogue. The two acting styles do not work together and already there are ways in which directors are attempting to change their styles. There is a fear that the style of the stage will return to the screen and that it will be a poor comparison. Specificity of the moving image is alluded to repeatedly – that the art form is an expressive one that does not rely on words, but on camera movement.

In a matter of months, directors and producers who were convinced that talking pictures were either part of a distant future, or an impossibility, were forced to conclude that spoken dialogue was going to form part of cinema. *The Jazz Singer* was an 'overnight' success in terms of the box office, and the economic climate was likely responsible for such a rapid expansion of talking pictures. The film was less successful with industry practitioners and exhibitors who did not immediately adopt the new



practices without concerns. Sound recording technology had been present from the same time, or even just prior to the beginning of moving image technology; this is evidenced through the technical articles, and the film tests that survive. The fact that the practice was not used in film until the late 1920s was perhaps not due to technical constraints – as several articles mention, sound had developed along a similar but divergent line. Prior to the release of *The Jazz Singer*, the reaction to sound had been mixed and few of the bigger studios, or exhibitors, were convinced of its value for film production – not because it had not achieved ‘perfect’ synchronicity, but because, in a way, it had; synchronous dialogue changed the ontology of film and was not desired by most working in the industry. The reception of *The Jazz Singer* by film critics was poor to mediocre; the film would sell, they predicted, because of the novelty of the synchronised sound. They had seen such novelties before in the form of colour film and stereoscopic film – sound seemed to be an extension of these developments, something fun for a special presentation, but not something that would be popular with the majority of feature films.

Where there was interest, was is the potential of the synchronised score, which democratised and standardised the music and effects that could accompany a film. This technique was met with praise when used in *Sunrise* which opened to outstanding reviews; it was not simply the cinematography and lighting that was admired, but the interplay between the sound and image. The camera was seen as a character, but the sound also had a part to play in the presence of the character on the screen. At the dawn of both *The Jazz Singer* and *Sunrise*’s release, the belief was in the potential and the skill and technique used in *Sunrise*. The talking picture

technology meant a film shoot with a large level of disruption and changes to editing, direction, cinematography, acting and writing. The result was not convincing – film appeared slower, took more time to run and often appeared unusual in terms of perspective or playback speaker placement. Exhibitors and practitioners reiterated their belief that the talking picture was a ‘fad’ that may have some niche use. Then the overwhelming public appetite for *The Jazz Singer* became clear, as box office takings were huge; so big in a current climate of decline, that they could not be ignored.

Perhaps without this economy, film practitioners may have forced the technology to move in a different way – certainly the potential was there and the ground was laid for a film industry that included non-speaking films with music, as well as the full dialogue films of today. An industry that incorporated both types of film would have had a greater artistic and expressive palette available. Meaning would have been proliferated and complicated by a variety of technical choices. The narrative classical Hollywood model may have developed separately, or differently along a less naturalistic construction. The reception to talking films was not positive and even a year after the introduction of *The Jazz Singer*, practitioners and exhibitors still remained to be convinced that talking films were the only way forward. *Talking film was not inevitable, sound film was.*

In re-visiting archival journals and magazines, a more complicated picture of the introduction of synchronised sound emerges. The period of time where debate and discussion were prevalent is relatively short in terms of film history, but it is still

extremely important and entirely disrupts a trajectory that seeks to subordinate sound to a position where it joins the image thirty years into the medium, and is immediately and enthusiastically adopted in a way that serves the image and narrative foremost. This perceived trajectory is an operation in logocentric thought, a trajectory constructed and upheld to disguise its own construction. This is the other reason why the research is so important – it uncovers the *undecidability* in the literature of the 1920s, just as the films that have been case studied are a site of the *hinge* and therefore *trace* so are the journals and magazines of the time.

## A DERRIDEAN ANALYSIS

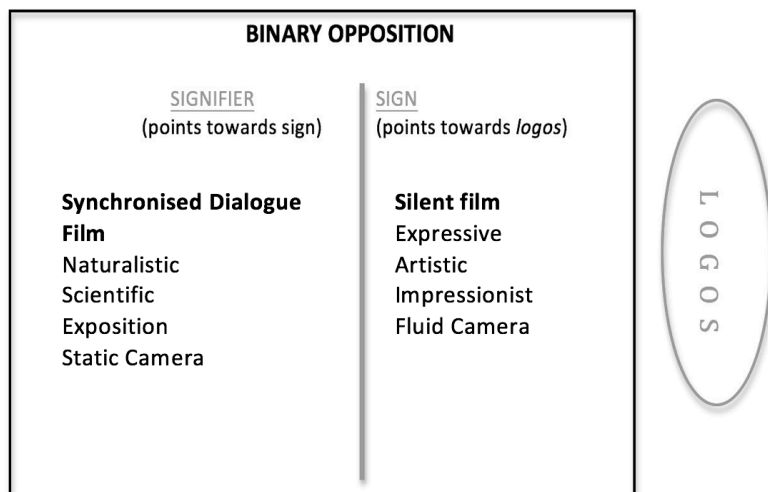
There is an assumption with many film historians that synchronised sound was desired by the public, and by film practitioners, because it was a *natural* addition to the image – it simulated actuality, the pro-filmic event. With this assumption, it becomes difficult to imagine an industry that was not specifically *waiting* for the technology to be developed and as soon as it was, it was adopted and film moved forward in a straight line towards the most ‘perfect’ representation of actuality, of the ‘truth’.

This research entirely disrupts this assumption and therefore uncovers the construction behind the dominant model of classical Hollywood cinema. Film in the period between 1926 and 1928 was rich with potential and, according to the wealth of articles that suggested a variety of techniques, could have developed along any one or more different routes. Into this era comes the *undecidable* film – the one that is neither sound film nor silent film but simultaneously *both*. This is the model that was advocated by many directors and practitioners of the time, the synchronised score

film. A synchronised score would change the specificity of the 'silent' film significantly, by making a film that would be the same *every time it was played*. This was a big difference and had a big impact on the ability of exhibitors to cut reels to fit their individual programmes, and to change music depending on the theatre. It was undeniably a sound film. Sound, when anchored to the film strip or disc, can have the potential to interact with the image very specifically and create new meaning and interplay. The research shows that this method was openly advocated as a form that would bring together the best elements that film had, it would be impressionistic rather than naturalistic and the form would rely on actors conveying emotion physically. Synchronised score films removed, however, the potential that every musical director and exhibitor had, to proliferate the meanings inherent in the film image. A score that is locked to the image will have, certainly, a variety of meanings, but not nearly as much potential as music that is changeable. The role of the musical director would disappear from the theatres. Although many of the practitioners, exhibitors and directors advocated this form of film, they describe it as using 'old methods' – which is not entirely accurate. The film is not a 'silent film' but neither is it fully a 'sound film' – it is undecidable and as such becomes a *hinge* between sound and silence – a film with potential and ability to proliferate meanings that are not possible in a talking film.

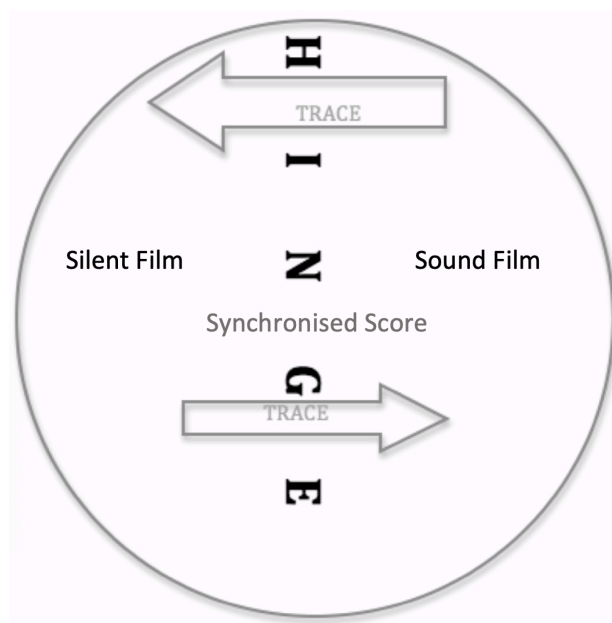
A binary opposition is inherent in the research – that of the silent and speaking film with the silent film occupying a place, according to the writers of the time, that was closer to a true artistic impression, in conveying psychological states it was close to the 'truth' of expression. The image becomes the most important thing when writing

about film and the impact that dialogue would have on the camera is used to claim that film would lose its ability to be its own art form, reliant on a free moving camera. Silent film closes down the potential meanings that the camera of the 1920s is able to generate; forced to stay quiet and still, the film camera loses its potency and therefore its place aligned to the 'truth' of the artistic expression. The camera of the silent film is on the side of the *logos*, the speaking film camera has been usurped by sound equipment – losing its power to be as close to the *logos* (the psychological and dramatic truth of the scene) as possible, it comes redundant. This can be represented as a linearist model:



The research clearly suggests that the *undecidable* form, the synchronised score film, was advocated by the practitioners and exhibitors, and would have acted as the sight of the hinge, allowing the viewer of the film to simultaneously see and (not)see the silent film within the music of the synchronised score film. Methods of cinematography would have remained similar to the silent film, but with time, may have developed a method of creating more specific interplay between the camera and

the music during shooting. The audience were familiar with hearing the voice on the film – a film history that included synchronised dialogue films as part of a specialist niche group; this would mean that audiences would be watching a synchronised score film would come to the film with a knowledge and auditory memory of dialogue films. Synchronised score films would have been films where the spoken word had been knowingly omitted - with this knowledge, the audience are (not)hearing the trace of words not spoken.



Another way in which the synchronised score film acts as *undecidable* in the research is the way in which it sits in between the notion of film as art and film as science. The majority of the criticism levelled at dialogue films was along the lines of the reduction of artistic impression. The films were seen as technologically accurate, as near to 'perfect' as possible in terms of synchronicity, but artistically they were generally considered to be poor. Silent films, or synchronised score films were seen as being more artistically developed. The art and science aspects of film were being opposed in the form of the silent and talking film respectively. Inventors and technicians

concerned with sound were producing scientifically detailed papers on the new sound apparatus which was being challenged by the philosophical and ontological papers from exhibitors and directors who questioned the nature of film and the need for 'perfection'.

The synchronised score film was again aligned to both 'sides' of the opposition – the new technology of sound recording fulfilled the scientific elements of the film medium, where the interplay between music and image would develop and maintain the artistic side of the medium. It is only when attempting to describe film in terms of either/or; artistic/scientific, sound/silent that we reduce its potency. At this time, the imagining of a future of film with a synchronised score was the moment when film could be everything that it had the potential to be. Much like the writing of the time. The research shows a period of writing where the future development of film was not yet fixed – in this period it allowed all aspects of the film industry to consider the potential inherent in the medium. It is an unusual time; one that brings to the surface all that film was and could have been, instead of simply what it was and was not.

Contemporary film study and analysis will benefit from the greater understanding that the archival literature in the 1920s provides, as it uncovers the construction of the smooth journey of film from its early period into the classical Hollywood dominant model. Music and image particularly can be understood as having the *trace* of the synchronised score film within it and acting style and dialogue could be studied with a greater degree of understanding – the possibility for potential in film analysis is uncovered in the pages of the magazines and journals.

## CONCLUSION TO ARCHIVAL REVIEW AND ANALYSIS

The analysis of archived journals and magazines is of immense importance in uncovering a more comprehensive picture of film history at the time of the introduction of synchronised sound to film. A period of time that is often reduced to a sentence in a film history book can be seen to have been a time of great debate and thoughtful reflection on the ontology and direction of film. The research provides clear evidence of a time that was not straight forward and in fact was in a state of great flux. This mirrors the two feature films case studied, that both demonstrate *potential*; that sound and image had many different possibilities for form. An understanding of the historical climate helps to explain the rapid take-up of synchronised dialogue film in theatres, despite significant opposition. A look at the journals of the early to mid 1920s helps to give a picture of film that is not considered to be primitive, or indeed 'missing' any element. The practitioners talk of a rich history of development and consider themselves experienced participants in the medium. Musical directors and exhibitors are both concerned with film sound and a great deal of thought and expertise goes into the scoring of silent film features. In 1927 there is no obvious expectation of a sudden changing of technology – synchronised sound is on the scene, but as one of a number of newer technologies that were being experimented with at the time. Most in the industry saw sound as an interesting 'trick' that might support and enhance certain films, such as educational formats or animation but were fairly emphatic in their opinion that synchronised dialogue was not likely to be popular or desirable.



The release of *The Jazz Singer* caused no immediate waves in the film world – the reviews were average at best and critics saw no indication of the sudden increase in popularity that synchronised dialogue would have, or the overwhelming success of *The Jazz Singer*. *Sunrise*, on the other hand, opened to very positive reviews, that praised the use of Movietone and the sound and image relationship in the film. It was only in the coming months, as the box office success was evident, that technology began to change – this was a rapid change of direction, but it was not an ‘overnight’ one. As practitioners and exhibitors gradually realised the inevitability of a future with dialogue film, articles were written that either suggested a future with two different film forms, or else tried to influence the sound practice to enable the camera to continue in its current format. There is no impression that dialogue film was inevitable, intended, or desirable. Far from a smooth trajectory into synchronised sound, the research offers an alternative view of the time, one which was complex and multi-layered. This complexity demonstrates a time where sound may have developed along several different formats and the research suggests that, for a time, most in the industry were convinced that dialogue films would not be the dominant model of the future. This knowledge challenges the assumption that sound technology was developed later than moving image technology, and also that it was incorporated smoothly in a certain format. By uncovering this complexity, it is possible to see the potential in film history and challenge the dominant model that places sound as subservient to the image. Not only is it possible to revisit this period in history, but it is possible to understand contemporary film in an enhanced way; the *trace* of the silent film is still present in modern day film, certainly through the sound track and the movement of the camera. By comparing dialogue films to the criticism of the form in

the 1920s, it is possible to see how change has enabled film to work artistically and expressively, as well as in a naturalistic and scientific form.

When applying a Derridean analysis to the research, it is possible to see how the synchronised score film had the potential to act as an *undecidable* in film history, but far from a quick resolution, onto either the side of the 'silent' or 'sound' film, the synchronised score could very possibly have become one of the dominant forms of film. The picture that the research provides shows that there was an attempt to prevent film from becoming a synchronised dialogue format – uncovering this attempt, and the arguments surrounding it, allows the reader to re-visit early film with a different and increased understanding of the time, and to apply the potential uncovered to the analysis of contemporary film.

## CHAPTER 6 - CONCLUSION

This thesis attempts, most importantly, to offer an alternative way of studying film – not sound in film, or sound in early film, but a different way of understanding film as a truly *audio-visual medium*. In order to do this, a model for analysis is developed to enable the viewer to re-visit early film, or approach contemporary film with a Derridean approach. To develop the approach, the thesis first indicates the gaps in existing literature and the study of film – this is done through the prism of sound in film, as image in film has been more thoroughly examined (although without the addition of sound as an equal and irremovable aspect of film). The re-examination of sound literature and theory demonstrates the significant difference between the amount written on film from an image-centred stance, and that which concentrates on sound. Either is, incidentally, problematic, as theory which concentrates on either aspect of film (sound or image) fails to adequately capture the ontology of film in its entirety.

Film sound theorists are (generally) agreed on the subservience of sound in cinema, both in the actual film, and in the theory about film, although some, through their writing operate to maintain sound's relegation to the bottom of a binary opposition of sound and image. Alternatively, in an attempt to redress the issue of sound's subservience, a reversal is attempted in analysis and an attempt to highlight sound's importance can come at the detriment of the image, and therefore, the film.

The literature the thesis reviews provides the reader with an understanding of why film sound is subservient to the image, and offers methods for discerning, reading and

understanding sound. The literature also identifies key problems and gaps that exist in the way that sound is understood in relation to film and demonstrates the tendency to separate sound and image in order to analyse them. It is evident that when film is discussed in its entirety that there is a tendency for the image to be treated as the dominant element, making Perkins' suggestion that we treat film *as film* particularly difficult. Where sound is the focus of the writing, sound is either treated as an attribute to image, a *signifier* to image's *sign* or the image is not considered in an attempt to redress the disservice done to the study and practice of sound.

Only through understanding the existing gaps in literature and film practice is it possible to identify a methodology with which to analyse film, but it is first important to relinquish the temptation to reverse the binarism of sound and image and attempt to deal with both aspects as part of *film* – this is where Derrida is essential in providing a framework to allow the reader to operate within the margins of the dominant film theory narrative.

Derrida's theories concern themselves with linguistics as the predominant case study, and as such focus on the binary opposition of speech and writing. The methodology in the thesis provides a model for using the theory to analyse sound and image as a binary opposition, and also justifies this with filmic examples. Key elements of Derridean theory are utilised; the Western Metaphysics of logocentric thought is key to understanding the tendency to analyse a text as if there is a direction towards a *logos*, or centre of truth and light, the 'ideal' or 'perfect' analysis. Along the logocentric path, aspects of analysis are ordered into the *signifiers* and the *signs*, the

latter being seen as somehow closer to the logos, and the former less directly connected. Derrida's disruption to a logocentric direction of thought transforms *signs* and *signifiers* and removes the difference between them, indicating that with no logocentric direction, there is no *sign*. By removing the differences between, in Derrida's case, writing and speech, but in this thesis, sound and image, it is possible to examine all elements of a text in terms of meaning, including those meanings that defy classification.

Derrida's ability to identify the *undecidable* the very thing that negates classification into either side of a binary opposition, is of the utmost importance. The *undecidable* is the moment of deep discomfort, where its resistance to either side of the opposition, and its presence in both simultaneously, allows for the travel of signifiers between the two. The very site of the opposition, in this case, the perceived difference between sound and image, becomes the place where former *signifier and sign* can travel *through*. The boundary, the site of the construction of film as 'natural' has become a *hinge* – an opening as well as a closing, a simultaneous fracturing and joining of the two forms.

*Hinge* is one of the two elements of Derridean theory that are key to the thesis – the other is that of *trace* which is the possibility of multiple readings within one element. This is, in terms of film, the moment when we (not)hear imagined sound – we cannot perceive 'silence' without perceiving 'noise' because it is only definable by its difference from sound. When understanding that 'sound' only exists because of 'silence' it is possible to (not)see the *trace* of sound and image in many elements of

film. By evoking these *trace* moments, we are able to understand more clearly the significance of the transitional films, film sound tests, and archival material, but also understand the construction of sound and image in film more generally. Once noticed, *trace* is always present, and this allows for a proliferation of readings.

Derridean theory does not substitute one 'reading' for another, rather it exposes hitherto unseen readings and opens up a way of understanding film and film sound. Released from a dependency on their place in an historical and technological trajectory, key films can be revisited and analysed with a new perspective.

*Screen/Play* offers the reader a further justification and precedent for using Derridean, and deconstructionist theory, for film analysis. *Screen/Play* is also useful in its uncovering of the construction of the 'dominant' film mode in Bordwell, Staiger and Thompson's key text, *The Classical Hollywood Cinema* and the thesis is able here to provide evidence for the construction in the text of a dominant mode and trajectory of film that can be challenged, and challenged with a wealth of supporting evidence.

*The Jazz Singer* is a key text precisely because it is *undecidable* and cannot truly be classified as a 'sound' film or a 'silent' film. In the multiple and differing ways of representing sound, the *trace* of other sounds is evoked and can be analysed in a way that was not previously possible. A transitional film, only when seen in relation to a boundary between sound and silent cinema, *The Jazz Singer* provides the *trace* of sound in a variety of ways, including subtitles, audible synchronised speech, dubbing and music – it is in the way that these elements combine which is of most significance

here – whilst *any* film will benefit from a deconstructionist approach, *The Jazz Singer* has within it, moments of movement through the site of the *hinge* that expose the construction of film sound.

*Sunrise* is the other feature-film case study in the thesis, and although close to *The Jazz Singer* chronologically, it is very different in terms of its use of sound.

Nonetheless, *Sunrise* can be seen as a transitional film, most significantly because of its synchronised score which is the site of much of the *trace* in the film. The complex and multifaceted layering of music operates to evoke *trace* image – it demonstrates the importance of being able to analyse film as a medium containing both sound and image. Without a Derridean approach, much of the interplay between the music and the image could not be articulated. *Sunrise* has elements of inscriptive and simulative sound but also of inscriptive and simulative image – multiscreen images, moving and dynamic subtitles and various sound effects (leitmotifs, vocal simulation and sound effects) combine to make a truly *audio-visual* film. Without a Derridean approach, *Sunrise* is liable to be relegated to its historical and technological ‘place’ in film history, yet a re-visiting uncovers the immense agency and potential inherent in both the sound and image tracks and the power of the interplay between them.

The case studies in this thesis are atypical, in the sense that they could be seen as ‘transitional films’ but it is hoped that by offering an analysis where the sites of *trace* and *hinge* are so readily exposed, that a model will be created for the analysis of any film or audio-visual event, with a Derridean stance.

The case studies of the early sound films are essential in providing evidence of sound film from the earliest examples of film in the 1880s-90s. Without these examples, it is not possible to see the extent of the concealment of sound's place in film. If relegated as merely 'test' footage, analysis is only possible in terms of technology used, and it is when re-visiting these examples in terms of their content that the agency of them is discovered. Within the tests are examples of a multitude of responses and approaches to sound in film and these examples offer a proliferation and a contextualisation of our entire understanding of film history. In combination with archival material, that provides us with evidence where there are no longer films available (the archival material is itself the trace of film), it creates a much-changed picture of early film.

Archival material is, perhaps, the ultimate example of *trace* in film and further opens the concept of *film* as a medium and the site of the hinge between the archives and the film world. A vast number of views, ideologies and re-imaginings of film sound potential are inherent here, and these examples, when uncovered, provide a wealth of opportunity for the film theorist's understanding of film in terms of sound and image relations. Acting, in part, as another literature review as well as providing interesting material for analysis, the chapter investigating early film magazines and journals provides an essential underpinning of the thesis by providing a history of film and the film industry that is entirely relevant to the case studies. As with the films, the archival literature is considered for its impact on the analysis of film sound, rather than merely as an historical document.



The research provides an expansive range of views from technicians, exhibitors, practitioners and audiences that provide evidence that the introduction of synchronised sound to film was not part of a smooth trajectory towards a dominant classical Hollywood model. Articles that are written prior to and after the introduction of sound demonstrate the concerns that many in the industry had, but, more than this, it offers several alternative models of image and sound that do not include synchronised dialogue.

Contemporaneous reviews of *The Jazz Singer* and *Sunrise* show a distinct difference in reception to the films – far from an ‘overnight success’ *The Jazz Singer*, as a synchronised dialogue film, had a mediocre reception, whereas *Sunrise* was hailed as an exceptional and excellent example of the film medium of the time. *Sunrise*’s synchronised score was seen by many as a promising example of how sound and image could operate together in a new format. An understanding of the economy of 1927 and how this affected the film industry likely resulted in a speedier appropriation of synchronised dialogue - it is evident in the research that exhibitors were keen to invest in a technology that ensured audience attendance; this increasingly meant an acceptance of synchronised dialogue.

The archival research does not only provide an account of the thinking at the time, it does much to destabilise an established film history; it provides examples of both evidence of historical film sound practice, and ontological debate and consideration of the medium of film; this research helps to expose and counter Altman’s *historical* and *ontological* fallacy. Rather than focussing on a way of elevating sound’s status at the

expense of the image, the research shows the existence of a film form that inhabits the *undecidable* space – the synchronised film score, as neither fully ‘talking’ nor ‘silent’ cannot be placed on either side of a perceived opposition. The synchronised score film offers a way of viewing film as *undecidable* and audiovisual. This Derridean reading of the research helps to provide a way of understanding modern film; by uncovering the formats that have been concealed, a film analysis can include an understanding of the silent film practice still inherent in films post-1927.

This thesis offers the reader an opportunity to re-visit and revive any historical film from its place in film history, and the model for a Derridean approach can be used to examine the potential inherent in any number of films. The model can be seen to work and is justified through the analysis of case studies and the support of previous literature, but it is my hope that more than simply an exercise in unveiling different readings in historical films, this model can be appropriated and used to approach contemporary films and even to inform film practice.

This thesis provides the justification for the study of any film *as film*, set aside from its immediate historical and technological constraints, or any other constraints that impact on the ability of the viewer to examine what is on the screen and in the soundtrack. Whilst context will always form a part of the future study of film, it is my intention that this work provides theorists with the necessary space to consider the elements on the screen and the relationships between them, without having to attach those elements to a contextual cause. The temptation to ‘resolve’ moments in the sound or image track can be addressed by naming those moments as *trace* or

acknowledging them as a site of the *hinge*. Rather than awkward moments that eschew resolution, or become exceptions to a categorisation, moments of slippage in film analysis can become generators of meaning.

Most appropriate for analysis may be those films that 'bridge' moments of technological or historical transition; the films that act as a courier for all meaning attached to that transition. However, *any* film can be analysed with the appropriate of Derridean methodology as within its context will be assumptions made about the practice and conventions within it. All films have moments of *trace* and sites of *hinge* and all films contain traditionally 'unresolvable' moments. A study of contemporaneous literature can also provide the researcher with additional meaning, particularly in moments of historical or technological transition.

The Derridean model allows future analysis to deal with *film* as opposed to a particular element within the film. The bias of the image, or other elements such as editing, can be addressed by calling attention to how other elements impact and effect the meaning. Future analysis, at its best, should not be applicable to a specific area of film practice, but should examine fluidity of meaning.

The work here allows for the appropriation of the Derridean model by theorists and researchers in any number of areas within the field of film studies and associated disciplines (including other visual media and music). It is possible for the researcher to incorporate these ideas into their chosen field, using that field as a case study for the application of Derridean concepts. Different binarisms are extremely prevalent and

are constructed in different areas, and the revealing of the construction will provide the researcher with the material needed to generate meaning and research. It is within that which is constructed as 'natural' that opposition (and apposition) exists. From this point the application of *hinge* and *trace* will destabilise the construction and point to its artifice.

This thesis provides a new model and set of concepts for the exploration of film from any period or movement with a focus on meaning, rather than resolution. The concepts appropriated from Derrida will provide subsequent analysis with readings that would not otherwise be possible. My focus has been to address the disservice done to film sound, but by necessity, this has uncovered the disservice done to the analysis of particular films more generally. In using film sound as a case study, the potential in the transitional films has been revealed. This in no way is meant to offer analysis that is somehow more 'accurate' or closer to the 'truth', but to provide fluidity and proliferation of what was previously evident.

It is not my intention to 'overthrow' the analysis and theory of over a hundred years of film making, but to offer the reader and the film theorist, another tool with which to understand *film*. Film is both *sound and image* and, even more than this, *imagesound* and *soundimage*. Film is *undecidable*; film is audiovisual.



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