Approaching Sound: A Sonicological Examination of the Producer's Role in Popular Music.

Peter O'Hare

Master of Philosophy (Research)

University of Glasgow

Faculty of Education

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Contents

Introduction

The recorded song has been the dominant carrier of popular music for the last 50 years, with recordings being relayed to the public through a variety of mediums (Radio, Television, and Internet) and numerous formats (vinyl, cassette tape, minidisk, MP3). As Frith points out "Twentieth-century popular music means the twentieth-century popular record" (1992: 50). The final recorded song is the end product of a recording process, a process that includes technical and creative input from a variety of personnel. These can include the artist, recording engineers, sound mixers and the record producer, what Hennion refers to as the "creative collective" (1990: 186). Additionally, Theberge notes that within this recording practice "The process of multitrack recording has become the primary mode of production in popular music" (2001: 11).

Given this acknowledgement and the importance placed on the recording process it is surprising that there is still relatively little detailed academic research regarding the recording process, or those involved in it. In comparison, there is a wealth of research regarding cultural aspects of the popular song e.g. genre and gender studies, as well as musicological examinations of popular song structure and textual analysis of lyrical content. The purpose of this study therefore, is to examine the role of the producer, the person contractually obligated to deliver that final master recording. In doing so the study intends to shed light on the production process and redress this gap in academic research.

While there are a small number of important studies that include the producer and the production process (Hennion 1990, Warner 2003, Moorefield 2005), the majority of academic studies are at once willing to acknowledge the importance of the producer's role, without offering any detailed definition. They fail to pinpoint the precise contribution that the producer makes to the final recording. This leads to incomplete descriptions and vague interpretations of the role e.g. Theberges "it was the producer, more than anyone else, whose judgment prevailed within the studio environment" (1997: 217), and Longhursts "the producer tends to have overall control of the recording process" (1995: 75). Both these statements fail to demonstrate conclusively the producer's contribution from either a contractual, technical or creative standpoint.

Steward and Garratts “The producer’s job is to direct the overall sound” (1984: 60) does not offer an explanation of how this is achieved, and Shuker’s recognition of “Producers as creators of recordings” (2002: 205) lacks any detail regarding the recording process and the producer’s involvement in it. This failure to offer a more detailed assessment is the result of two inadequacies. First, many academic researchers lack either a technical or creative insight into the production process. Secondly, there is a lack of an investigative theory that can be used to highlight the sonic qualities of the recording process.

In order to address these overlooked areas, this study will investigate the producer’s role from a technical stance while incorporating cultural and musicological issues. This will be achieved by introducing the approach of sonicology. The term sonicology has been coined, by the author, in order to examine the sonic elements of the popular recorded song, those elements not covered by a musicological or textual analysis. It is precisely these sonic elements that the producer exploits and controls during the recording process, the same elements that result in the overall *sound* of the recorded song.

Therefore, the study will incorporate the approach of sonicology as a means of exploring the producer’s role, a role whose importance lies in the fact that producers are in charge of the recording process, both contractually (they benefit financially from royalties and advances) and creatively (controlling recording choices and decisions). How they arrived at this position and what exactly producers do to affect the creative outcome of the recording, its *sound,* will be explored in depth in subsequent chapters.

Chapter one will explore the history of production, tracing the developments in both technology and practice, that facilitated the emergence of the producer’s role. The chapter will also examine technological advancements that enabled experimentation within the recording process. This in turn led to longer recording sessions and increased decision making, all of which impacted on the role of the producer.

Chapter two introduces the new approach of sonicology which will be used to explore the sonic elements of the recorded song. This new approach will create a more

accurate investigation than that previously offered by musicological or textual analysis alone. This chapter will also highlight examples of the producer's sonicological approach to recording.

Chapter three offers a definition of the producer's role, a role that is often misunderstood and ill-defined within academic studies surrounding popular music. The chapter will define the role within the dual parameters of contractual obligations and recording approaches. This will include an investigation of the legal requirements placed upon the producer and how this impacts on the overall role. In addition the differing approaches to recording are explored using a typology of skill sets, which help to explain the creative input a producer can have on the final recording.

The producer's contribution to the *sound* of a recording is discussed in chapter four. This will be achieved by defining the term *sound* and investigating its primary elements, elements that the producer exploits and controls during the recording process. The study will show that by controlling the signal path from source to final recording the producer is in a unique position to creatively affect the resulting *sound.*

The study offers a further insight into the production process, and the various approaches to the producer's role, with the inclusion of three case studies.
The first of these, covered in chapter five, investigates the production career of Phil Spector. Spector was one of the first people to bring the role of producer to public recognition. His particular recording style, taking control of all aspects of the process, highlights the power a producer can exert in pursuit of the final recording. The case study illustrates the producer's contribution to the *sound* of the recording. This was Spector's ultimate goal, as he recognized the *sound* of a recording as being just as important as the musical input. This will be highlighted with a deconstruction of his famous "wall of sound" recording technique. The chapter will also address Spector's involvement with The Beatles during the recording of *Let It Be*, where Spector's contribution to the production of the album ended in controversy.

The second case study, chapter six, focuses on Mike Stock, part of the Stock, Aitken and Waterman team that was hugely successful during the 1980s. This resulted in Stock becoming the most successful British songwriter/producer in chart history, a

contribution that is often overlooked within popular music studies. This chapter will illustrate the importance of the producer's contribution to the *sound* of a recording, by considering Stock's awareness of the commercial implications of his productions.

The final case study, chapter seven, discusses the work of Steve Albini the "anti-producer", and focuses on his relationship with the group Nirvana and in particular the events surrounding the recording of their *In Utero* album. It addresses Albini's recording philosophy and his ethical stance regarding the recording process, royalty payments and his rejection of the producer title. These arguments in turn shed light on the producer's role by highlighting the process and title that Albini rejects. The chapter considers the repercussions of his non-production stance, and how Nirvana's record company eventually employed another producer to supply an alternative 'radio friendly' version of *In Utero*.

The study now begins its investigation of the producer's role by acknowledging the developments in both technology and practice that facilitated it.

Chapter One: History Of Production Technology and Practice

In order to fully appreciate the producer's role and its contribution to the recording process, it is necessary to chart the developments of both technology and practice. This will in turn offer a deeper understanding of the producer's role, which will be explored in detail in chapter three. Therefore, the purpose of this chapter is to highlight significant events within the production history of the popular recorded song, which relate to the materialisation of the producer's role. The chapter will not only focus on technological developments, but also on practices that lead to the evolution of the producer's role, including the innovative ways in which technology was manipulated. This is reinforced by Theberge who offers, "too often 'technology' is thought of simply in terms of machines – sound recording and playback devices, rather than in terms of 'practice' " (1999: 216-217). As will be argued later in this study, it is often the recording *practices* of the individual producers that differentiate their work.

As mentioned in the introduction, studies that lack a technical or practical insight into the production process can often lead to a vague description of the producer's role. Therefore, by investigating the history of production technology *and* practice this chapter will illustrate just how the producer arrived at such a privileged and powerful position.

Reproduction

At the heart of the recording process is the concept of the reproduction of a sonic event. One of the first major breakthroughs in recording technology arrived in 1877 when Thomas Edison invented the phonograph, allowing the recording and playback of sound [**1**]. Edison's technology (with improvements in playback devices and formats) remained the dominant instrument of the recorded song for many years up until the advent of electrical recording in 1925.

The next major advancement in recording technology, magnetic tape, was to have a significant effect on the recording process, although it was not initially conceived

with music in mind. Initially its main purpose was as part of the German radio propaganda effort during the Second World War. When the war ended, tape recording technology was brought back to America. One of the first people to see its potential was the singer Bing Crosby who envisaged it as a way of pre-recording his own radio shows. However it was Crosby's friend Les Paul who, upon receiving an Ampex machine from Crosby in 1949, would realise the full potential of this new tape technology. By adding a fourth head to his Ampex tape recording machine, he was able to record a voice on one pass, rewind and add another voice. This achieved a paradigm shift from the concept of tape simply capturing a live event, to the possibility of self-accompaniment [**2**]. Thus heralding, as Cunningham states: "The first major breakthrough to affect the creative use of sound and indeed launch the notion of record production as we know it today" (1996: 49).

As Cunningham notes, Les Paul introduced the notion of record production with his sound on sound recordings. The importance of this and its contribution to the history of production can be explained as follows. Previously, recording had simply meant the capturing of a live performance. Artists would play live and several takes would be recorded until one was deemed suitable (microphones and/or artists would be positioned or repositioned accordingly). All of the instruments and vocals for each take were recorded together, locked together in the recording. Les Paul introduced the notion of a recording containing several performances, recorded apart, at different times and then layered together to produce a final recording. The decision process involved in such recordings is one of the keys to the evolution of the producer's role. Les Paul had to decide the order in which the instruments were to be recorded (the inherent limitations of the tape also played a part i.e. tape noise and degradation). He also had to balance the level of instruments and vocals. All of these decisions and choices were a mixture of both the technical and the creative. Paul had the ability to add a lead guitar line to his rhythm accompaniment, the level and prominence of which was another consideration for the producer. Thus technology had facilitated the advancement of the recording process. However, recording practice, the manner in which this technology was manipulated, was also emerging as a creative art form, all under the control of the producer.

Multitrack Recording

Revolutionary as it was, Les Paul's 'sound on sound' recording technique suffered from limitations found in its very description. Sounds were recorded and layered on top of each other onto one single piece of tape. Although this was more flexible than disk, performances were still locked in at each stage, which made mixing difficult. In addition, choices as to the order in which instruments were recorded often bore a relationship to their ability to be heard after the tape had passed through the re-recording process. The next major breakthrough in recording technology would overcome this problem and, in doing so, help establish the role of the record producer.

The advent of multitrack tape recorders (4 and then 8 track) during the 1960s afforded the luxury of single dedicated tape tracks. In production terms this meant that single instruments could be recorded in isolation or alternatively multi-mic combinations could be recorded to one track for larger productions. In terms of the evolution of the producer's role, multitrack recording introduced greater decision making both technically and creatively. Artists were also beginning to realise the possibilities of the multitracking process. Often they would look to the producer as the person to unlock the creative potential of the recording process, thus increasing the importance of the role. One of the early exponents of this was the Beatles' producer George Martin and his work on the *Sgt. Pepper's Lonely Hearts Club Band* album. As Martin recalled, "As well as changing the way pop music was viewed, it changed the entire nature of the recording game" (1994: 1). Its importance lay in the fact that the recording process was now a vital creative force. As Martin states " It was the watershed which changed the recording art from something that merely made amusing sounds into something which will stand the test of time as a valid art form: sculpture in music" (Martin & Hornsby 1979: 214). The recording also had other implications regarding the production process.

As was noted in the beginning of this chapter, the history of production consists of many contributing factors both on a technological level, and the approach to recording practice. One of the most important influences The Beatles had on the recording process was that by nature of being EMI's greatest selling acts, Abbey Road was

forced to adopt an open door policy on The Beatles' recording sessions (i). The Beatles led the revolution and started recording all hours of the day and night. This meant that songs could be worked out in the studio and the studio could be used as a compositional tool. The band had already decided to stop touring, a decision which freed them from recording an album that had to be reproduced live. So they embarked on an unprecedented six-month recording project. This resulted in longer recording sessions and an increased working relationship between producer and artist, which in turn elevated the importance of the producer's role. In contrast the Beatles first album 'Please Please Me' had been recorded in the same studio with the same producer in only twelve hours.

During the next two decades, the 1970s and 1980s, multitrack tape recording technology progressed to 16 and then 24 tracks (with the ability to synchronise these machines to produce an even greater number of tracks). This in turn led to an increase in decision-making. Sonically, these decisions would have an impact on the final sound of the recording. An example of this can be found in the choices now afforded during the recording of drums. The producer could choose to record all of the drums to one track or record them individually to eight tracks. They could then, if desired, be sub-mixed to two tracks. This approach to recording would also increase the amount of time spent in the recording studio, with the ability to record many different versions and takes of each instrument. However, the addition of more tracks did not in itself make the job of production necessarily easier. As Bill Szymczyk, who produced the majority of the Eagles' hits, lamented: "The advent of multitracking led to the ability to defer decision-making. But at some point, somebody's gotta deal with it" (Daley: 2004). This person would, increasingly, be the one who oversaw the whole production process the producer.

The nature of multitrack recording now meant that artists could record a part and leave while other musicians came in and overdubbed theirs. This increased the prominence of the producer, who was often the only one present at all of the recording sessions. Thus the producer was in a unique position, retaining an overall view of the

(i) EMI owned Abbey Road studios and previously recording had taken place in three-hour sessions e.g. 11-2pm, 3-6pm.

complete recording process. The producer's decision-making and control of an increasingly complex recording process (both on a technical and creative level) was now being recognised by artists and critics alike. Producers now had a category in the Grammy's introduced in 1974 as "Best Producer of the Year" and won by Thom Bell, which recognised their contribution to the recording process, separate from that of the artist involved.

M.I.D.I. and Digital Recording

These innovations in multitrack technology and practice were still firmly rooted in the manipulation of analogue magnetic tape. The next major influence on the history of production would begin with the impact of digital technology. 1983 saw the introduction of the M.I.D.I. (Musical Instrument Digital Interface) protocol that allowed the connection of different keyboards and devices (from different manufacturers) and the ability to access sounds from these. The protocol used binary information to transmit performance data that could be manipulated as files by hardware and computer sequencer programmes. This in turn gave the producer the ability to programme passages of music without committing them to tape, thus being able to augment audio tape tracks. The use of sequencers and MIDI instruments and then sampling devices were to lead to the increased influence of the producer. In one example an artist could record a performance into the sequencer using a piano sound. The artist could then leave the studio and the producer would be free to substitute the piano sound for any other while still retaining the original performance, only the sonic nature of the performance would be altered. This in turn altered the working relationship between some artists and producers, as will be explored in depth within the case study on Mike Stock in chapter six. The other major influence of the sampling revolution was the ability to compile a complete track without the use of any musicians. In many cases a mixture of sampled and real time performances was becoming part of the recording process, one that has continued to the present day.

The advent of hard disk recording machines in the mid 1980s has meant the decline in the use of analogue tape recording. The advantage of hard disk recording for the

producer is that they have the ability to edit performances and manipulate takes in a fraction of the time it would take to perform the same operation using tape. Digital multitrack recording also allows multiple copying without any loss of signal quality. This has increased the compositional nature of recording, with the producer being able to offer several options for the artist, with software plug-ins allowing for the tuning and manipulation of instruments and vocals.

Summary

This chapter has traced the rise of the role of producer in conjunction with advances in recording technology and practice. It has illustrated the increased prominence of the role due to technological advancements that allowed a greater number of recording possibilities for the artist. This in turn led to an increased decision making process that inevitably rested with the producer. The increased use of multitrack recording also resulted in more time being spent in the studio, which intensified the artist/producer relationship. The artist progressively called upon the producer for their technical and creative expertise. In doing so, the importance of the producer's role was established. They now had control of the recording process with the ability to define the overall *sound* of the recording. The next chapter will explore this *sound* element with regards to its description within the academic study of popular music.

Chapter Two: Sonicology

In this study's introduction and first chapter, it has been argued that the producer's role is of importance because of their control over the recording process and, ultimately, the *sound* of that recording. But how can that contribution be measured within an academic assessment of the recording process? In answer to this, chapter two introduces a new approach titled sonicology, as a means of expressing precisely the producer's contribution. The chapter will explore musicological and cultural attempts at defining the producer's contribution and highlight the shortcomings of such descriptions. This will be followed by examples of a sonicological analysis of the producer's work, and approach to recording.

The Recorded Sound

In their introduction to *The Cambridge Companion to Pop and Rock* (2001) Frith, Straw and Street draw a distinction between "the songs and sounds" and their effect and influence within the field of popular music. As Hennion adds: "The song is nothing before the "arrangement" and its creation occurs not really at the moment of its composition but far more at the moment of orchestration, recording, and sound mixing" (1992: 187-188). Given the importance of the recording process on the eventual outcome of the song, it is perhaps surprising that there exists very little acknowledgement of this within the field of popular musicology. There are two main reasons for this: first, the limited study of popular music as opposed to the exhaustive investigation of the classical canon (Hawkins 2001, Middleton 1990). In cases where musicology does focus on popular music there is still too much emphasis given to the score, producing a culture of "notational centricity" (Tagg 1999: 28) and a "methodology slanted by the characteristics of notation" (Middleton 1990: 104) leading to the conclusion that music analysis "has been almost synonymous with the analysis of musical notation, the musical score" (Shepherd 1999:161). This is problematic when faced with the sonic elements of the recorded song, a point echoed by Middleton who believes that traditional notation finds difficulty dealing with non-standard parameters such as "articulation (attack, sustain, decay) not to mention new techniques developed in the recording studio, such as fuzz, wha-wha, phasing and reverberation" (ibid: 105). This leads to an inaccurate reading of the popular recorded

song, as highlighted by Middleton's reference to Wilfred Mellers's books on the Beatles and Bob Dylan. Middleton states that the terminology of traditional musicology "acts like a sieve, letting anything foreign to its sphere of competence escape" (ibid: 112). Similarly Trevor Wishart argues that: "standard music notation came to act as a filter through which all conceivable sounds could be passed to provide the rather restricted palate of sounds that were used in classical music" (cited Shepherd 1999:160). Therefore, employing standard notation would appear to be an inadequate tool when attempting to investigate the popular recorded song and its variety of sounds.

The second, and perhaps more significant reason for this lack of research, is the absence of any technical vocabulary (already used by production teams in practice) or theory to match the notation and descriptions used in classical musicology. This point is acknowledged by McClary & Walser "what popular music has instead of the score is, of course, recorded performance – the thing itself, completely fleshed out with all its gestures and nuances intact. What would seem to be an indisputable advantage over notated music converts to a disadvantage only because analytic methods are still tied to those aspects of music that can be fixed or accounted for in notation" (1990: 282). Hawkins concurs with this view adding that the literature on musicology tends "to focus more on the intricacies of theoretical debate than to attempt the interpretation of the music" (2001: 7). Similarly Warner notes that musicological studies dealing with the complexity of modern technology (technology which is often part of the recording process) are insufficient, noting: "Furthermore, the traditional analytical parameters of music (pitch, tonality, rhythm, arrangement, etc.), those with which academics are most familiar, continue to demand attention. However, modern pop music is clearly bound to this technology both creatively and perceptually, and appropriate analytical methods need to be developed which not only take this relationship into account but also illustrate its pervasive influence". (Warner 2003:33)

While traditional musicology uses notation and textual analysis to investigate the popular song, there is however a third component vital to the overall description of the recorded song. This is the sonic element, used in the description of the overall *sound* of the song, a result of instrumentation, the recording environment and the recording process itself. This area has tended to be under researched in the field of

popular music, yet in any attempt to analyse the production/recording processes involved in music, it is necessary to take account of its fundamental component, *sound*.

At this point it is worth noting that there already exists a body of research concerning performance and space (Vincent and Rodet 2003, Borg and Groenen 1997) and audio signal analysis (Dubnov et al., 2006) along with studies regarding timbre (Grey 1977, McAdams et al., 1995). The difference in this study's sonicological approach is that it examines the recording process, which has a direct effect on instrumentation, space, and timbre precisely because of the nature of capturing signals, their manipulation, and journey to the final master. The effect of the recording process is often overlooked within studies regarding timbre, as with Berger and Fales investigation of "Heaviness in the Perception of Heavy Metal Guitar textures" (2003). The study offers analysis of four pre-recorded examples of guitar playing, highlighting components such as timbre, frequency, harmonic content and noise without once acknowledging the recording process that produced them. This is a process that can alter all of these components depending on the recording medium, (tape/digital) the type of microphones used to capture the signals, or even the effects and processors used to manipulate the signals.

Sonicology: Approach and Analysis

As a means of addressing the sonic elements described before, I would like here to introduce a new approach, that of sonicology. This approach can be defined as an investigation of the sonic elements within recorded music. This would cover the sonic properties of the recorded popular song; an area that traditional musicology, notation and textual investigations are not equipped to deal with. It includes descriptions of the recording process, emphasizing choices that have a direct effect on the sound of the recording, including the choice of recording studio, type of equipment used, effects, processing and stereo image. It also investigates the production, engineering and mixing methods employed in the life cycle of the song. This would then enable analysis of popular music to include a sonic description, which would complement notational and textual analysis of the song. This appears to be an entirely new approach to the analysis of popular music, and one that has been absent from previous

investigations. While vocal phrasing, instrumental technique and even the integral sound of the instrument are all contributing factors to the sound of a song, sonicological analysis would begin at the point of the recording process. The reason for this is that all of these elements can be affected, manipulated and enhanced during the recording process. Even within a live performance, with the interaction between players contributing to the overall experience and sound, the choice of room, microphone placement and recording medium, can alter the sonic outcome when capturing such a performance. Further research could lead to a sonic vocabulary an analytical sonic meta-language, which could be used to describe these sonic elements within the popular song, thus contributing towards a musicology of the popular recorded song.

The difficulty in addressing sonic elements within popular musicology should not be a deterrent to an in-depth investigation. The problem here is that a lack of understanding can lead to inaccurate descriptions of popular music, as witnessed in Middleton's description of Antoine Hennion's "Les professionals du disque" (1981) as an "ethnography of the production process" (1990: 116). This at once places the emphasis on the co-operative practice of the recording studio and deflects from the sonic implications of such practice. This point is also overlooked in Philip Tagg's review of Hennion's work in which Tagg notes "a 'dry' acoustic guitar track is mixed up front"(1999: 311) without offering a proper explanation of the term 'dry' as used in this context. A sonicological explanation would state that the guitar is recorded without additional artificial reverberation and therefore appears as if it were being played in front of the listener (the addition of reverb would have placed the guitar further back in the sound field, as if it were being played at the end of a large room). Such descriptions can result in any discourse surrounding the recording process being limited to more comfortably accepted areas of cultural and auteur theories, and ethnographical studies, which may be relevant and justified, but routinely miss the *sonic* element.

Similar problems are encountered in the work of Alan Moore. He acknowledges the importance of sound stating that "insufficient attention is paid to what I call the 'Primary Text', i.e. that constituted by the sounds themselves" (1993: 1). Later he adds that "The stream of sounds a listener hears is composed of rhythm and harmony

and melody and instrumental timbre and lyrics and, quite possibly other elements as well"(ibid). However, as he continues it is evident that there is a lack of sonic investigation in Moore's account of Nattiez's three levels of analysis (1990) which include "the imminent (what actually inheres in the music), the poetic (how that music looks from the point of view of the producer) and the aesthetic (how it looks from the point of view of the receiver)" (Moore 1993: 5). Moore concentrates his study on the third level and offers a valuable discussion of the text from the point of view of the listener. This would be acceptable if not for the fact that he then proceeds to analyse properties of the popular song, including six pages of analysis of the voice, without any reference to the sound as it appears on a recording. The tonal characteristics of the voice, indeed the "grain of the voice" (Barthes 1941), can be greatly affected by equalisation, effects and reversing. All of this achieved at the second level of Nattiez's analysis and ultimately affecting the primary text for the listener. Moore mentions the nasal cavity (thin tone) and chest (full tone). However, these sounds can also be achieved using technology. Equalisation can produce the so-called telephone or megaphone vocal effect by deliberately reducing low and high frequency content and boosting mid range frequencies (usually at 1 kHz). The vocal line can have vibrato effects added to it, or it can be completely distorted. Such techniques would be highlighted in a sonicological investigation.

Another example of the importance of proper sonicological analysis of the recorded song is illustrated by the following musicological description of Bruce Springsteen's 'Born In The USA'. At one point in his chapter on musicology and genres, Shuker contrasts the original recorded version with an acoustic version that appeared on a later compilation. The original is described as having a "militaristic flavour, especially in the upbeat chorus sections, with the anthemic refrain: Born in the USA…." (2001: 146). In contrast, the acoustic version is said to be a more "ironic celebration of the United States" (ibid). This is attributed to "Springsteen's vocal and guitar being fairly constant throughout" (ibid). There is no mention of the sonic qualities of the original recording that are indeed responsible for the anthemic refrain. Just one example would be the driving snare drum sound which anchors the whole song, the result of Max Weinberg's drumming talents, but certainly heightened by production techniques, including gating and a large reverberation, giving the sense of space and depth, that anthemic quality Shuker had alluded to. Thus a purely

musicological analysis is inadequate in dealing with the sonic characteristics of the recorded song. Even within textual analysis of popular music the importance of the sonic elements are acknowledged, however not fully investigated. Thus Shuker reflects during his analysis of song texts that "my own students' responses to particular songs support the view that popular music audiences listen primarily to the beat and the melody – the sound of the record" (ibid: 148). However he fails to grasp the full significance of sound.

The sonic elements of the recorded song the *sound* also has implications for the area of cultural theory. The *sound* of popular music is often cited and given great importance without any technical expression or explanation of how it was achieved. Thus Middleton recognises the importance of sound in the context of popular music, citing it as the means in which audiences differentiate between genres and styles, going so far as to say that "it is above all the kinds of sound with which we have become familiar that define the music culture we live in"(1990:88). Similarly Shuker states that popular music genres can ultimately be identified by "stylistic traits present in the music: their musical characteristics" (2001: 150), and Theberge adds, "the specific uses, abuses, or the explicit rejection of various technologies are thus instrumental in defining a particular 'sound' – a pop aesthetic – and contribute to a sense of 'distinction' between popular music genres"(2001:4).

However, these descriptions fall short of describing the specific sonic elements that differentiate these styles and genres. Sonicologically, this could include 1950's Rock'n' Roll 's slap back delay or the 1980's gated snare drum. Once the sonic elements have been identified it is then possible to re-create the sound, style or even genre. This sonic imprint can also be applied to other styles for creative effect. This is illustrated on the recording of The White Stripe's 2003 album *Elephants*, which was recorded on an 8-track analogue tape machine at London's Toe Rag studios. The studio was set up in 1991 and prides itself on using vintage equipment, which was a deliberate choice from the outset. The studio's founder and producer, Liam Watson, had a love of records produced in the 1950s and 1960s "I like a lot of the stuff that was done at EMI studios, all the classic Beatles stuff, just the mid-60's beat kind of thing " (quoted in James, D. Oct 2003). Watson found that in the 1990s "that kind of sound wasn't really being achieved i didn't want to build another bog-standard cheapo 24-track studio" (ibid). The result was a studio built around Studer tape recorders and

a collection of vintage mikes and mixing desks all used to produce the classic sixties sound. Interestingly, this sound transferred well to the 21st century when The White Stripes decided to record using the eight-track recorder. The band's Jack White, being the producer on the album, made a deliberate production decision by choosing Toe Rag studios. He wanted to record the album without the aid of computers or hard disk recording software (e.g. Digidesign's pro-Tools recording system). Indeed the sleeve for *Elephant* states that no computers were used during the writing and recording of the album. Jack White was quite unreserved in his criticism of computer recording "getting involved with computers is getting involved with excess…they hollow out the talent of people and make them sound like mumbling robots, kills their creativity… it makes the recordings totally lifeless, without soul" (quoted in True 2004: 140). Therefore, the White Stripes album did sound different to most of the albums produced that year. This was because by using tape and vintage equipment the album was different, sonically, to those albums being produced on hard disk recording software packages prevalent at the time.

A Sonicological Approach to Recording

What this chapter has addressed so far is that musicological, textual and cultural analyses of the popular recorded song have to date, led to an incomplete description, largely being void of any technical explanation. This in turn points to the importance of a sonicological analysis that includes elements of the recording process that gives birth to the song. It also highlights the importance of the record producer who is both the subject of this study, and the person in charge of this recording process.
This raises the question of how a producer approaches a project in sonicological terms as opposed to just the musicological or textual components of the song. In fact this can begin early on in the recording process or even before it has begun. This was illustrated in producer Jack White's choice of Toe Rag studios and the promise of that vintage sound, a combination of retro technology and practice. Consider also the production of The Beach Boys *Pet Sounds* album, released on 16th May 1966. Producer and writer Brian Wilson's vision for the album was certainly a sonicological one, as he had begun to think "in terms of production rather than just song writing", stating that " it's the overall sound, what they're going to hear and experience in two and a half minutes that counts"(quoted in Granata 2003: 120). As the producer,

Wilson's choices and decisions would contribute to the realisation of this *sound.* Wilson was to record the instrumental tracks at Gold Star; Western and Sunset Sound studios then record the vocal tracks at Western and Columbia studios. The reason for choosing so many studios was that they all possessed a unique sound. This was because they were constructed differently in terms of acoustic properties, but most importantly, the equipment used, and in particular the bespoke mixing desks, were custom built by the studio's own engineers. Thus each studio had a particular sound and this is why Brian Wilson decided to record in this fashion, as Bruce Botnick an engineer on the project adds "Brian came to a studio for what the engineer and studio were doing"(quoted in ibid:123). This dedication to the sonic properties of the recording environment led to the observation by songwriter Jimmy Webb that in Brian Wilson's case "the recording studio was an instrument – Brian made it an instrument" (quoted in ibid). A decision to mix the album in mono as opposed to stereo meant that the choice of where instruments should appear in the stereo field, i.e. left to centre to right, was negated (this decision could also be seen as a concession to the fact that Wilson could only hear properly with one ear). The most important sonic decision however, was that of using only one track for the live instrumental recordings, while using the remaining seven tracks for the lead and harmony vocals that came to epitomise the entire record.

Indeed it was the sonic qualities of the *Pet Sounds* album that impressed and inspired The Beatles who released their *Sgt. Pepper's Lonely Hearts Club Band* a year later on 1st June 1967. This led their producer George Martin to comment that Wilson had "a wonderful sense of instrumental colour, and a profound understanding of record production" (quoted in ibid: 198). In turn Martin also concentrated on adding sonic elements to The Beatles compositions. He would interpret their suggestions while adding his own production methods and arrangements, as George Harrison concludes "we used to be slightly avant-garde on certain days of the week, and he would be there as the anchor person, to communicate that through the engineers on to the tape" (quoted in Martin 1994: 131). This is illustrated on the recording of 'Lucy In The Sky With Diamonds'. Working within the limitations of two 4-track machines, George Martin recorded a basic backing track including acoustic guitar, Lowry organ, tamboura and drums. These were then mixed together onto track one of the second tape machine, which left three remaining tracks. One of these tracks was used for the

bass and for an electric guitar part. The unusual sound achieved on the electric guitar was the result of George Harrison's guitar being recorded through his amp and then through a Leslie loudspeaker (this is the rotating loudspeaker from a Hammond organ that produces its distinctive swirling sound), thus producing a unique guitar sound. This meant that George Martin still had two tracks left for recording vocals. The decision this time was to slow the tape down and record the lead vocal and harmony, then when the tape was returned to its proper speed, the vocal would appear "thinner-sounding, which suited the song" (ibid: 105). The second vocal track was also recorded at a slightly different speed along with tape echo to produce the final results. One example of a sonic request as opposed to a musical one came during the recording of 'Being For The Benefit Of Mr. Kite'. Having taken the lyrics for the song from a Victorian poster advertising a circus event, John Lennon's request to his producer was that "I'd love to be able to get across all the effects of a really colourful circus" (quoted in ibid: 89). To achieve this Martin recorded various organ sounds, trying to recreate the authentic circus organ effect. However, it was decided that this was not enough to convey the feeling Lennon was after. So Martin had the idea of collecting old recordings of steam organs, which he then gave to his engineer with instructions to cut them up into pieces fifteen inches long. His next request was for the engineer to throw these pieces of tape into the air and then collect them and join up the random pieces into a continuous tape. The resulting tape achieved the swirly fairground effect they had been looking for.

Summary

These examples acknowledge the sonic elements of each recording and just how important the *sound* was as opposed to just the music and lyrics alone. This is not to underestimate the impact of the music and lyrics; it does however serve as an example of how, by merely relying on a musicological or textual analysis of these two albums, the analysis remains incomplete. Therefore, sonicology can complete the overall picture by highlighting these important elements, important not just for the artist and the producer, but for the listener as well.

A sonicological investigation of the popular recorded song serves to highlight the sonic elements and how they are achieved. This in turn points to the importance of the producer who is in charge of the recording process and the choices and decisions that in turn result in the *sound* of the recording. They are the sonic architects of the recorded song. Each producer approaches the recording process differently, resulting in different sonic outcomes. The same artist may work with different producers achieving a different sonic result in each case. In some situations (see the case study on Mike Stock) artists may deliberately seek a producer in order to achieve their *sound.* What differentiates these recording approaches and how we define the role of the producer is discussed in the following chapter.

Chapter 3: The Role Of The Producer

"Being a 'producer' - my frequent job description – introduces a whole new set of complications. First of all, no one really knows what the job description means. Is it the guy who sits in the corner of the control room grinning encouragingly and chopping cocaine, or is it Phil Spector, who writes the music, hires the musicians, grooms the vocalists, invents the sound, designs the image and then marries the lead singer? Somewhere between these extremes is a vague cloud of activities that get credited on record covers 'produced by…' "
(Eno 1996: 393-4)

As discussed in chapter one, an advance in recording practice and technology facilitated the producer's role in terms of increased decision making and overall control of the recording process. This in turn highlighted the growing importance of the role, as the studio itself became a compositional tool. However, a definition of the producer's role has often proved difficult. In the study's introduction, academic interpretations of the role were shown to be often vague and lacking in any real technical insight. As will be shown later in this chapter, some producers themselves find it difficult to define their role as borne out by producer Brian Eno's quote above.

This chapter seeks to define the producer's role within the dual parameters of contractual obligations and approaches to recording. Contractual obligations offer a degree of commonality, legally placing the producer in charge of the recording process. The next area, the creative approach to the recording process, differentiates producers and contributes in sonicological terms to the differing "sonic" results of recordings. These creative approaches to recording will be explained and illustrated by means of a typology of practice.

Historical perspective

Advancements in technology and practice meant that the nature of recording changed from merely capturing the live event to that of a creative and compositional force. The result was that those in charge of recording sessions were increasingly being asked to make decisions based on their musical, technological and commercial expertise. Initially these included the house engineers who worked at the record company's own

studios. In the 1950s in the USA, this included labels like Columbia and Capital (even the smaller independent record labels such as Sun and Chess were based around their own studio and house engineers). During this period the person who dealt mainly with the artist was the A&R (artist and repertoire) manager. Their main role was to place songs from songwriters with artists. Generally artists would record in the record company's own studios where the house engineer would handle the technical operations.

One of the figures responsible for raising the profile of the producer during the late 1950's and early 1960's was Phil Spector, whose contribution will be discussed in greater detail in chapter five. He was an 'all rounder' when it came to the role of producer, possessing the necessary technological skills as well as being an arranger, songwriter and musician. At the same time in Britain independent producers such as Joe Meek and Andrew Oldham were furthering the notion of the independent producer. Larger companies including E.M.I. still had staff engineers and artists with recording managers such as George Martin. It was not until the end of the 1960's and into the 1970's that the producer's role was given more prominence with the advent of 8, then 16 track recorders. This meant more choices and more decisions were being introduced into the recording process, as is noted by Simon Frith who comments that technological advances, starting with multitrack tape, enabled the producer to create performances from multiple takes and performances, leading to the situation where "the musical judgments, choices and skills of producers and engineers became as significant as those of the musicians" (Frith 1992: 62). It was this recognition, that producers had a significant contribution to the overall sound of a recording, which increased the importance of their role. The producer's creative input was now being recognised. In sonicological terms this meant their choice and use of the studio space, effects, treatment of instruments, and manipulation of the master tape. In practical terms artists recognised the important contribution a producer could make to a project. The increased studio time was reflected in an increased working relationship between artist and producer. The producer was in a position to offer creative solutions and choices during these longer recording sessions. However, each producer would approach a recording differently, resulting in a different recording experience and ultimately, a different sound. This chapter will now explore how academics and producers define this approach.

Defining the Producer's Role

As mentioned in the study's introduction, previous academic research has described the producer's role in the recording process as that of a "creator"(Shuker 2002: 205) or as being in "control" (Longhurst 1995: 75) or whose job is to "direct" (Steward & Garratt 1984: 60). In fact the analogy of the motion picture director is a convenient option for many commentators (White 1993: 2, Gillett 1996: 111, Avalon 2002: 75). These vague assessments are not confined to the academic community alone. Music industry guides are often as vague in their interpretation of the role, describing the producer in turn as responsible for "getting the dynamics and emotion of the music on tape" (Harrison 2002: 106) and "The person who provides all that is required to make a recording work" (Barrow & Newby 1996: 75).

While it may be acceptable for academics to struggle with the complexities of the producer's role, the one group of people who by definition should hold the key to an accurate representation, would be producers themselves. However, this is often not the case, as Paul White comments, "I have interviewed a great many of the top record producers over the past few years and nearly all have a different approach to the subject, so there's no absolute definition or job specification" (1993: 7).

Mike Clink, producer of Guns 'N' Roses adds: "A true producer takes the band to the next level. He or she can deliver an idea that a band has in their heads and make them better than they would be on their own. A producer gives a band insight into things they wouldn't normally think about. They're also the funnel for ideas, taking the pressure off individual band members. They organize, run the show and make sure something gets done every day" (quoted in Droney 2005). While Elliot Mazer, producer for Neil Young, observes: "It is the producer's job to help the artist realise their creative vision and while doing so make a record that is commercial. There are cases where a producer carries the creative vision, but I love working with artists that have a clear idea of what they want" (quoted in Ingles 2003).

Joe Boyd, producer of amongst others Nick Drake, REM, Kate Bush and Pink Floyd, had a simplified approach to the artists he worked with: "My role as a producer was to

be their audience" (quoted in Hepworth: 2006). This often confuses those looking for definitions of the role, as Boyd adds: "They ask me what kind of producer I am – a musician or an engineer? They don't understand the idea of somebody who's just a producer" (ibid).

Tony Taverner, producer for such diverse acts as Duran Duran, The Jam, The Gypsy Kings and Motorhead, offers his view of a successful producer: "It's simply someone who gets a good end result. The way you approach it is entirely up to you. If you don't make good records you're not a good producer, simple as that. Whether you're a brilliant musician, or a brilliant engineer, or whether you sit at the back of the room and say six words during the whole session doesn't matter, you've got to get the result" (quoted in Holder: 1998).

These producers' definitions of their own role seem to be inconclusive. The underlying problem appears to be the failure to recognise the duality of the role, which operates within both a commercial and creative framework. There may be reluctance on the part of some producers to openly discuss the commercial nature of their role, which leads to most descriptions (like the majority of the above) focusing on their creative input. An example of the commercial and creative dichotomy inherent in the producer's role can be observed within the criteria employed by industry publication, *Music Week,* to judge their producer of the year award 2007. Producers were evaluated on:

- Quality of production.
- Innovation and creativity in production.
- Personal contribution to specific recordings.
- Success at delivering projects with maximum appeal for target audience.

(Music Week, Awards Supplement: 24 March 07)

A footnote to the criteria explained that: "Although commercial success may be relevant, the judges looked primarily for producers whose work made a key creative contribution to the overall outcome of a particular project, regardless of their sales" (ibid). The criteria and statement clearly show reluctance at simply rating the producer's success in commercial terms, by the addition of the creative element to the criteria. In fact the winner of the 2007 award for best producer, Mark Ronson, had that same year produced a number one selling album for Amy Winehouse, tracks for

Lilly Allen's platinum selling album, and tracks for Robbie Williams and Christina Aguilera. The question of whether a successful producer is one who is a commercial success is in itself worthy of further study. Although it cannot be covered fully within this thesis, elements of this argument surface during the case studies in the last three chapters. What is important however, is the recognition of the pressures that may be placed on producers by record companies eager for just this sort of commercial success. This necessitates discussion of the importance of the dual nature of the producer's role, which includes contractual obligations and the creative approach to recording. This will now be examined.

Contractual Obligations

Given the complexity of the producer's role, by far the most stable and unifying factor is that of their contract (ii). Contracts will generally be negotiated between the producer and record company (or in some instances the artist) with slight changes reflecting the project itself or indeed the status of the producer or artist. The three most common and important areas are as follows.

1. The production and delivery of master recordings.
2. Recording budget.
3. Producer's royalty.

The production and delivery of master recordings (1.01 a, 1.03) is the contractual basis of the producer's power. This clearly places the producer in charge of the recording process, holding them responsible for the delivery of the completed work. The producer is also required to act in liaison between artist and the record company (1.01 b). Although the producer is in charge of the recording process, ultimately it is the record company who make the final decision as to whether these master recordings are of a suitable quality: of a "commercially viable, marketable product" (Massey 2000: 8).

(ii) This section will refer to clauses contained in an excerpt from a standard producer's contract, which can be found in the Appendix.

If the record company does not receive the recording favorably, they have the option of not releasing it. This can make good commercial sense, as the cost of marketing and promoting a record is generally greater than that of the recording costs. This option is possible because the record company own the rights to the recording of the song, even if the artist owns the publishing rights.

The recording budget can have an effect on the final outcome of the recording. An unlimited budget can equate to excess and unlimited studio time, whereas a limited budget may result in restricted recording time both having an effect on the resulting recordings. One important clause that appears in many producers' contracts is known as the 'overage clause' (1.02). In essence this can result in the producer paying for any expenses incurred above the set budget. This can be used by the record company as a device for keeping the project on time and focusing the producer's task of supplying the master recording.

The producer's royalty (4.01) is often the area that they are most guarded about. This is where producers make their living. They can receive advance payments and /or royalty payments for a project. Royalties are often negotiated as percentage points of net sales. These points in general can range between 1% and 4% for a typical project. However royalties are negotiable and, depending on the status of both artist and producer, this rate may change considerably. In simple terms the more records that sell results in a greater return for the producer. The conflict this can cause will be highlighted in the case studies where, in the case of Mike Stock, royalties were viewed as legitimate reward for a job well done. While Steve Albini often declines royalty payments on principle, seeing them as an unnecessary pressure on the creative results of the recording process.

The commercial imperative of the recording process, and its relationship with the creative approach, is an issue that appears regularly in each of case studies covered later. Although as Avalon states, by being part of the music industry a bottom line is reached where "If an artist wants to make 'Art' they don't need a producer or a record company. Anyone can make a record if they don't care how commercial it is. But when artists sign with a major label, they are signing a contract that says, 'Yes, we

want to make records that sell in large quantities.' The producer is hired as the expert consultant toward that goal" (Avalon 2002: 32).

So far we have been concentrating on the producer's contract from the view of the major label deal. It is worth noting that there are also production deals that are made directly between artists and producers where the artist is not signed directly to a label. These include the artist signing to a production company where the company has control over the final master or when an artist hires a producer to work on a specific project. In both cases the final master recording can be released independently or licensed to a major company for distribution. In practice however, most new acts signing to a major record company are more than happy to have chosen for them, a producer that has the blessing of the company. As Avalon states: "Experience has taught the label that most new artists can't be trusted with a large budget, and since in all likelihood they do not have the studio experience to produce the record themselves, the label will stipulate in the contract that the artist will, at the artist's expense, hire a producer"(ibid: 32).

These contractual obligations form one part of this chapter's definition of the producer's role. The contract clearly sets out the legal requirements without stipulating how this is to be achieved. In fact the contract, like other attempts seen earlier, offers a vague definition of the producer's role in fulfilling its legal requirements. It states that the producer is defined as a "qualified person" (8.06) adding: "The producer warrants that he will render to the best of his skill and ability all such services as are usually rendered by a record producer... in order to provide a first class artistic and technical recording" (8.08).

I will now concentrate on how the producer approaches the recording process and how they achieve the first class artistic and technical recording mentioned above.

Typology: The Producer's Approach to Recording.

One major inconsistency within previous attempts at defining the producer's role has been the inability to separate the overall role from the differing approaches to that

role. This chapter has identified the common legal requirements of the role, but it is the variety of working practices, use of technology and creativity that exemplifies and differentiates between the various types of producer. It is precisely these different approaches that result in the myriad of sounds heard in recordings and confirm the importance of the producer's role within popular music.

Before introducing a typology of producers' approaches to the recording process it is worth addressing some of the general duties and practices common to the role, many of which result from the contractual obligations discussed previously. The producer will generally form part of the communication link between the record company, via its representative, the A&R (artist and repertoire) person, and the artist. A recording budget will be set and the producer will then liaise with the artist. General duties would include the choice of recording studio/studios and the hiring of additional equipment or musicians, and possibly an engineer. All of this expenditure would come out of the recording budget, which would eventually be recouped from the artist's royalty, as indeed would the producer's fee. Having dealt with the general duties, and before the introduction of our typology, it is worth noting the work of Richard Burgess (1997: 1-13) who offers a typology containing four descriptions of the role, summarised below.

a) The All-Singing-All-Dancing-King–Of-The-Heap: A producer who is very' hands on', can write songs, engineer and arrange.

b) Humble Servant: works well with an established artist, an artist who has stronger ideas as to what the project should entail, however is dependent on the expertise of the producer to realise these ideas.

c) Collaborator: often an ex-band member, willing to listen to the ideas of the artist and facilitate the recording process.

d) Merlin the Magician: less hands on, their mere presence can inspire confidence and produce results. They often pay only fleeting visits to the studio, however their name attached to a project can guarantee favorable results.

While this contains a useful insight, the typology tends to concentrate on general personality types. The typology introduced below will focus on particular skill sets and practices that highlight an approach to the role that offers a wider typology than the Burgess model. This typology is based upon five main skill sets that exemplify the producer's approach to recording:

- Visionary
- Musical
- Technical
- Commercial
- Managerial

Visionary

Artists who, although musically competent and proficient in song writing, feel they need a change in direction or just inspiration, may seek out a producer with a visionary approach to recording. The visionary producer may be one who does not conform to the conventional approach to recording. This can have the effect of putting artists at ease, so ensuring an atmosphere conducive to recording. These producers are happy to use the studio as a creative instrument or alternatively to dispense with it completely, recording in other environments. One example of a producer with the "visionary" approach would be Rick Rubin.

Rubin recorded the Red Hot Chili Peppers in a house in the Hollywood hills, with the band all set up in one room. This created an atmosphere far removed from the sometimes sterile conditions of the top recording studios. In a similar approach Rubin has used his own home as a recording studio, where he has played host to artists such as Jonny Cash and Neil Diamond. Rubin has resurrected the careers of both by encouraging them to perform in the relaxed surroundings of his home studio, often with stripped down arrangements that reflect the true nature of the artist.

Another example of the visionary producer would be Brian Eno. Part of his approach to production in the past has included his "Oblique Strategy". This consists of a boxed set of cards produced by Brian Eno and his artist friend Peter Schmidt, designed as a

series of prompts to be used in the recording studio. These prompts can be employed during times when the recording process has stalled creatively. The prompts included suggested instructions or practices that would hopefully get a project back on track. As far as the recording environment is concerned, these included prompts like the creative suggestions "Honour thy error as a hidden intention and imagine the music as a moving chain or caterpillar". Technical considerations, including, "Consider different fading systems and spectrum analysis". While arrangement ideas such as "Are their sections? Consider transitions and don't be afraid of clichés" (Taylor 1997) are also included within the set.

Musical

Producers who are themselves musicians or artists often favour the musical approach to production which draws on their own musical and recording experience. Because of their musical knowledge they generally have a good idea of how instruments should sound and as such, have a unique rapport with the artists and musicians they are recording. This empathy often produces good results and a feeling of trust in the producer. A producer this category would be Daniel Lanois. He is a recording artist in his own right, but has produced a number of successful records including *The Joshua Tree* with U2.

Technical

The producer who favours a technical approach to production will usually have come from an engineering or programming background. Artists themselves are often keen to buy into such a producer's technical expertise. Often these producers start off as successful engineers who then progress to the role of producer. One example would be Nigel Godritch who, after engineering on several projects for bands including Radiohead, then went on to produce albums by Paul McCartney and Travis.

Commercial

The commercial approach is one that is favoured by the major record companies, looking for a successful sound for hire. These commercial producers may be on the

rosters of management companies who handle successful producers e.g. 140db Management. Peter Jones is a producer who has worked with many artists including Morrissey, The Eurythmics and The Bluetones. He is conscious of the commercial pressure from record companies, especially A&R personnel, and how this dampens the creativity of the producer: "They would rather go for the top ten factor and pick a producer who is a known quantity, because that will help them to market the band" (quoted in Jones 1995). This commercial success can lead to a raft of production jobs, however, this may result in what Jones describes as "Typecasting" a tag which " many producers struggle to avoid…all you have to do is produce one successful album, and suddenly you find yourself in demand from similar bands who all want to work with you. Before long, people start to assume that you are only capable of producing one type of music, and this will eventually narrow your choices quite dramatically" (ibid).

Managerial

This approach is utilised by those who do not necessarily possess the technical or even musical skills associated with record production. The skills that they do possess however, are an instinct for success and the ability to offer the right advice at the right time. They tend to come from an artist management or A&R background. Examples of this managerial approach to production would include the likes of Andrew Oldham's early work with the Rolling Stones and John Landau's work with Bruce Springsteen.

Summary

This chapter set out to define the producer's role. In doing so it looked at how academics, the music industry and producers defined that role. It was clear that each group defined certain aspects of the role without offering a complete definition. A definition was arrived at by dividing the role into the dual parameters of contractual obligations and approaches to recording. The producer's contractual obligations defined the role in legal terms without identifying the approach. The producer's approach was then defined with the aid of a typology of skill sets, which

demonstrated the different methods producers employ within the recording process. These findings reinforced the importance of the producer's role by confirming their control of the recording process both contractually and creatively. In sonicological terms this also confirmed control of the all-important *sound* of the recording. The next chapter will explore just how the producer achieves this.

Chapter Four: Controlling The Sound

Previous chapters have illustrated the evolution of the producer's role, with the last chapter concluding with the assertion that the producer's influential position is guaranteed by contractual arrangements that place them in charge of the recording process. This chapter considers the importance of this with regard to the producer's contribution to the overall *sound* of the recording. In doing so, it will address the definition of sound with reference to its acoustic properties and the human auditory system. It will then investigate the recording process, highlighting areas where the producer can influence the sound. As introduced in chapter two, this will take the form of a sonicological investigation of the producer's role in the recording process, highlighting elements that impact on the sonic fingerprint of the final recording. Finally the chapter will illustrate the consequences of the producer's role with regards to the final sound of the recording and links to a semiotic interpretation of the producer's choices. It is within the controlling of the *sound* of the recorded song that the producer's importance is recognised, which in turn highlights their influential contribution to popular music as a whole.

Defining The Sound

> *Directly or indirectly, all questions connected with this subject must come for decision to the ear, as the organ of hearing; and from it there can be no appeal. But we are not therefore to infer that all acoustical investigations are conducted with the unassisted ear. When once we have discovered the physical phenomena, which constitutes the foundation of sound, our explorations are in great measure transferred to another field lying within the dominion of the principles of Mechanics. Important laws are in this way arrived at, to which the sensations of the ear cannot but conform.*
>
> 'The Theory of Sound' Lord Raleigh, first edition 1877
> (cited, Everest 2001: epigraph)

This study has previously argued that the sound of popular music is the sound of the popular recorded song. As will be demonstrated later on in this chapter the producer uses and manipulates this sound throughout the recording process. Therefore, in this section a definition of sound will be explored which illustrates the fundamental

elements of sound and the auditory system, both of which the producer exploits during the production process. This will in turn offer a greater appreciation of the recording process and the consequences of decisions taken on a sonicological level. It will be argued that the foundation of any true definition of sound must reside in the fundamental aspects of acoustics and psychoacoustics, in other words, the physical act of sound creation, propagation and the effect on the auditory system of the listener, as was intimated in Lord Raleigh's introductory quote. This is not to underestimate the aesthetic value of music and sound, an area that will not be discussed in depth in this thesis. However, even within this area of research the acoustic foundation of sound cannot be ignored.

This is highlighted in Roger Scruton's "Aesthetics of Music" where he proffers a philosophical definition of sound while being unable to divorce the acoustic reality: "The phenomenal sound is indeed always the result of sound waves. But this does not show that the distinction between the sound that is there and the sound that merely appears to be there cannot be drawn at the phenomenal level, in just the way that we distinguish the real from the apparent colour of a thing" (Scruton 1997: 7). Scruton proceeds to draw a distinction between the cause of the sound and the secondary quality of sound. The separation of sound from the cause, Schaeffer's "acousmatic experience of sound" (ibid: 3), offers him a chance to escape the acoustic confines of sound and retreat into the highly subjective area of aesthetic judgment. Scruton's argument is not entirely a new one. In Jean-Jacques Rousseau's 'Essay on the Origins of Language' he also cannot escape the acoustic properties of sound, offering: "The beauty of sound is natural and the effect purely physical. It derives from the diverse particles of air that are set in motion by the sonorous body and its aliquots – possibly to infinity" (cited, Gilbert and Pearson 1999: 40). While, as Gilbert and Pearson observe: "Rousseau distinguishes between music and mere sound, and argues that music only acquires value when it transcends sound's physicality" (ibid: 40), this study however, by offering a technical insight into the manipulation of sound, argues that sound is fundamentally part of the musical experience. The next section proceeds with a look at the basic elements of sound and how these are related to the producer's role.

An Acoustical Perspective

In its basic form the word *sound* is used to describe the atmospheric variations, psychoacoustics and neurological stimuli that result in the process of hearing. The analogy often used is that of a stone dropped into a pool of water with the waves radiating from its source. In reality sound waves travel outwardly in a three dimensional pattern. These sound pressure waves are generated in a number of ways e.g. a vibrating string, singing (vocal cords), and loudspeakers. These vibrations affect the surrounding air molecules and through a process of compression, then rarefaction, the sound wave reaches the ear. This journey is referred to as the propagation of the wave.

The waveform as a representation of sound pressure contains many fundamental elements including amplitude, frequency, velocity, wavelength, phase, envelope and harmonic content. As will be investigated later, it is precisely these fundamental elements that are exploited and manipulated during the recording process by the producer.

The devices by which we capture sound waves are, of course, our ears. This is made possible initially by the shape of the ears. The ridges of the outer ear, the pinna, direct the sound waves into the aural canal and on to the eardrum (a stretched membrane). The eardrum acts as a transducer (a device which converts energy from one form to another), in this case converting sound waves to mechanical vibrations. These vibrations are then passed along three small bones, the hammer, anvil and stirrup, towards the inner ear. Along the way these small bones act as both amplifiers and limiters, increasing the vibrations from the eardrum and reducing any loud transient sounds. The vibrations that reach the inner ear, or cochlea, pass through two chambers containing fluid, along with rows of small hair receptors. These receptors are frequency responsive, supplying neural stimulation, resulting in the hearing process.

It is important at this stage to highlight the elements of the sound wave, including frequency and amplitude that are reflected in the auditory system. This is significant when discussing the technology that resides in the recording studio, including equipment such as mixing desks, microphones and effects processors, which all rely

on the fact that sound contains these fundamental elements, and are used to capture, modify or manipulate them. As an example of how these elements can be manipulated during the recording process, let us focus on just one of these, frequency.

Within the basic elements of sound, frequency is one of the most important; as Howard and Angus (1996: 79) conclude "A musical sound can be described by the frequency components which make it up". The human hearing system itself operates within a frequency range of 20-20,000Hz, although as we grow older the upper limit decreases to 16,000 Hz by age 20 and to 8,000 Hz by the age of 65. The upper limit can also be affected or damaged by prolonged exposure to high volume. So how does this information translate to the world of popular music? The answer is that this information allows us to manipulate the sound of instruments, including the human voice, during the recording process. Taking one example, the acoustic guitar, it is generally known that most of the clarity of this instrument resides in the frequency range of 2-5kHz. Therefore, this information can be used to manipulate its characteristics in several ways. To boost the prominence of the acoustic guitar in a mix, the frequency range of 2-5kHz could be increased, alternatively, cutting the same frequency range could reduce the presence of the guitar. This process can be repeated for a variety of instruments, using equalization circuits, whether in mixing desks or as outboard equipment that are capable of such functions. This leads to a range of choices and options for the producer, with the ability to alter instruments and vocals in a way that suits the particular song. I will now explore the range of choices and equipment available to the producer, which give them the ability to further alter the *sound* during the recording process.

The Producer's Contribution to the Sound

The most significant feature of the producer's role is the fact that they control the recording process. In doing so, their choices and decisions can directly affect the overall sound of the recording. This point is echoed by producer John Leckie, whose production credits include recordings by Radiohead, The Stone Roses, Muse and The Verve. Leckie told this study that the producer's role is to " work on arrangements and songs and make a sound that's true to the band and contemporary to what's

happening at the time"(2006). The recording process normally includes the recording of multiple instruments and vocals on to multiple tracks (either on tape or hard disk), which are then mixed to form a stereo (or mono) master.
As has been mentioned previously, the producer exploits the fact that sound is made up of elements, such as frequency and amplitude, in the process of getting the original sound from its source to the master. This process can be highlighted by following a typical signal path like the one shown below.

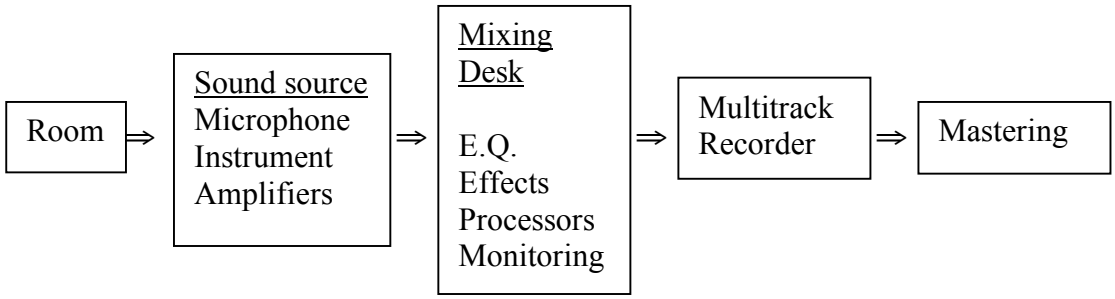

Fig.1 Representation of signal path

Room

The room in which a recording takes place can greatly "colour" the eventual sound. Some are acoustically treated to either reflect sound or to absorb it. These reflections produce a natural reverberation, which may enhance some recordings. Rooms can be treated in a way which absorbs most of these reflections giving the producer the choice of adding artificial reverb as and when required [**3**].

Each room will have its own unique sound and some producers will seek out specific studios for vocal or drum recordings based on the sound of the studio itself. Therefore a singer can record a vocal in several rooms and the sound of the room will be part of the vocal sound. John Lupner, co-founder of Q Division Studio in Boston, confirms this point. He was the studio assistant on the Pixies *Surfer Rosa* album, which was recorded by Steve Albini. Lupner said: "When that record comes on, I often recognise the room more than the song. I worked in that room for 15 years, it has a sound, and that was the sound Steve captured on the album" (quoted in Frank and Ganz 2005:81).

Therefore the initial choice for the producer will be which studio and rooms will be utilised for the recording. This can depend on a number of factors, the type of artist they are working with, whether they require a room that a band can play live in, or just a vocal room with additional sampled instruments recorded separately.

Microphone/Amplification

Once a sound source is introduced into a room the next stage is to capture it, usually by means of a microphone. They take the sound and convert it into an electrical voltage, which can then be passed along cabling towards the mixing desk. The choice of microphone can be important as each one can have an effect on the sound. One of the choices involves picking microphones with specific polar patterns. Some microphones include interchangeable heads or selection buttons which act to change the polar pattern. The patterns include Omni, which picks up sound from all directions, and Cardioid, which picks up sound mainly from the front, to directional patterns which pick up mainly direct sound (thus reducing the effect of the room). Many producers have their own collection of microphones, which they often take from session to session. Some may prefer valve tube mics for their warm vintage sound, which is actually a result of valve technology producing pleasant sounding harmonics (harmonic distortion). Others may prefer harsher sounding dynamic mics like the ones used for live performance, to produce that livelier feel. Most vocal microphones do not present a linear frequency response; they tend to offer a slight boost between 3-5 kHz, which is the frequency band where speech articulations are most prevalent. This boost is used to make the vocal more intelligible. Here we can see a direct correlation between the frequency element of sound and production practice, within the choice of microphone. These choices are also made when miking up guitar amplifiers. The guitarist may have a favored sound, which the producer can affect by the choice of microphone used. In addition the placement of the mic towards the amplifier speaker can also alter the sound. Placing the mic facing directly at the centre of the speaker cone captures a brighter sound with higher frequencies present. By moving the mic slightly away from the centre we gradually encounter a duller sound.

Producer Mike Hedges utilised a specific miking technique which enabled him to obtain a variety of sounds. When producing the group Travis he set the guitarist up with his guitar plugged into one amp, and he then linked this amp to another two amps in different rooms, all miked up independently and routed separately to the mixing desk. All three amps had different settings producing different sounds. This has sonicological significance as the guitarist would play one song, one performance, using the same musical notes and chords, however, three separate tracks of guitar would be recorded. The only difference would be the actual sound of each track. These sonic differences would be made up of a combination of amplifier settings, effects, mics and the acoustics of each room in which the amplifiers where situated. This is a typical example of the producer controlling the sound of the recording.

Mixing Desk (multitrack/monitoring/mastering)

The mixing desk lies at the heart of the recording process. This is the destination for all of the signals, which are then manipulated and re-routed to the mastering devices. The producer and engineer will be stationed behind the desk during the recording process (except for forays into the live area) and it is from here that the producer will direct operations. The mixing desk enables the producer (and /or engineer) to send the signal to other destinations or to other pieces of equipment. Most desks will have some form of EQ (equalisation). Originally intended to make up for the poor response of amplifiers and microphones, they are now used creatively to alter the sound of instruments by emphasising or de-emphasising the various frequency components. This can be used during the mixing process to "place" instruments. The mixing desk can also route the signal to processors such as compressors which affect the dynamic range of a sound (in other words the amplitude of the sound). Again this can be used creatively within the recording process [**4**], as can the use of artificial reverb which has previously been discussed. There are, of course, countless effects and processors which can be added to the original signal and it is not possible to cover them all in this study. However, the producer has this array of equipment at their fingertips which gives them the ability to totally alter the original sound. The producer also has the ability to place sounds within the stereo field [**5**] and this can produce a narrow intimate feel or a wide stadium rock environment, simply by placing instruments and effects correctly. Even the choice of multitrack recorder, either analogue or digital,

has a bearing on the eventual sound of the recording (e.g. The White Stripes' choice of analogue recording for their *Elephant* album). The producer will listen to recording and playback in the control room via the studio's monitoring system. In a typical studio this may consist of an array of speakers all chosen to emulate different listening conditions or to assist the producer when listening to certain frequency ranges contained in the recording. The control room itself is often acoustically treated to produce a linear listening area.

The final mastering of the recording allows for adjustments to be made to the stereo master, which generally include compression or equalization processes. As will be highlighted later in the third case study, there has been an increase in the use of this mastering stage to maximize the loudness of the song, usually by heavy compression and limiting.

In some recording situations, e.g. computer recording, the mixing desk, multitrack and mastering stage may all be contained in one programme. The user can utilise plug- ins and effects all in the digital domain. However, they will ultimately be manipulating the same fundamentals of sound, and the same choices and decisions will have to be made. The difference is that any analogue sound sources will pass through some form of analogue to digital conversion in order to operate within in the digital domain, and will then be converted back again at the monitoring stage.

The description of the signal path above highlights areas where choices and decisions will be made as to the sonic structure of a recording. This will vary depending on each producer's working methods or depending on which artist is being recorded. In each case the finished recording will have a distinct sound.

Thus far it has been argued that the *sound* is an integral element of the popular recorded song. It is now necessary to discuss the link between this *sound* and the listener.

Influential Sound

So far this chapter has illustrated the producer's ability to control the *sound* of a recording by virtue of being in charge of the signal path and the various decisions made along it. The importance of such control, and how it impacts on the significance of the producer's role, will now be discussed.

Within textual analysis of popular music some academics are willing to acknowledge the importance of the sound element (Shepherd 1999, Shuker 2001) with Hawkins adding: "I stress that the pop text is more than just the song. In a sense, it is an entity of motion determined by the variables of sonic structure that link it together" (2001: 7). This section can now begin to investigate a link between the sound of a recording and its effect on the listener, Tagg points out, "the ability to connect music as sounds with the society in which it exists, which influences it and which it influences. This means discovering which sounds mean what to whom in which context. And this, obviously, is a semiotic matter" (1999: 3). Antoine Hennion (1983) furthers the debate offering "The meaning in question is to be found 'down below', in those areas that carry the public's imagination, its secret desires and hidden passions – one could almost define such categories as *sociosentimental.* They include key phrases, "**sounds**", images, attitudes, gestures, and signs, infralinguistic categories which are all the more difficult to pin down insofar as they escape definition by the official language, and are not autonomous but inseparable from the social context within which a given group attributes a special significance to them"(ibid: 186, emphasis mine).

As a means of extending the concept of the *sound* of the recording, music semiotics offers a bridge between the producer, via the musicians and recording process, to the listener. Using Tagg's basic communication model (fig.2) we can begin to build a picture of the processes involved.

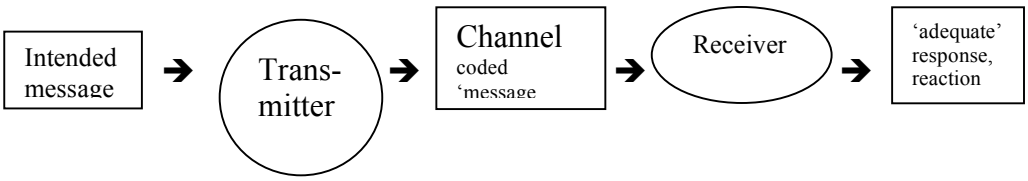

Fig.2 Simplified example of Tagg's communication model. (Tagg 1999: 9)

This model describes "the central process going from idea (intended message) through 'transmitter' and 'channel' to 'receiver' and 'response'. The transmitter is any individual or group of individuals producing the music – composer, arranger, musician, vocalist, recording engineer, DJ, etc. The channel or 'coded message' is the music as it sounds, and the receiver is anyone hearing the music the 'transmitters' themselves or other people. The 'intended message' is what the 'transmitters' want to get across – the right sounds at the right time in the right order creating the right 'feel' " (Tagg 1999:10). This corresponds to the producer's control of the signal path as shown in Fig.1 (page 38)

Interestingly, Tagg does not mention the producer among his transmitters. He highlights the musician, as transmitter, being responsible for constructing sounds corresponding to most of these 'feels'." He then offers a selection of "connotative spheres ('feels')" to verbally express messages. These include "Wide and open, ethereal sublimity and distant bagpipe"(ibid). These are only three of the fifty seven descriptions on offer, however, these three and others can ultimately be produced using production techniques, effects, stereo placement and equalisation. This is another case where a sonicological investigation of the recording process could be used to draw a closer comparison between technical process and textual or semiotic analysis. Tagg does not include the producer or his practices in his description of the construction of 'feels'. Perhaps this is because the role of the producer is not fully understood, in that most people's perception is that the artists are solely responsible for the *sound* of the recording.

As has been argued throughout this study, the producer is the one person who controls the whole transmitter stage by immediately controlling the previous stage i.e. the intended message. They achieve this by deciding on a sound for the recording and using his artists, technology and production practices to produce the subsequent stage, the channel coded message, i.e. the right sound. Indeed the producer, would be the person responsible for contributing to, in textual analysis terms, a preferred reading, where the choice of instrumentation, effects and practices would be used to establish a dominant message.

A sonicological example of such practice took place in the early 80's when Shakin' Stevens' producer, Stuart Colman, discovered that the particular delay time used on the classic 50's Rock'n'Roll recordings was 130 milliseconds. By adding a similar delay to Stevens' recordings Colman was able to reconstruct the Rock'n'Roll sound. The instrumentation, lyrical content and even the musical notes employed were, alone, not sufficient enough to convey the nostalgic message. Similarly, the recent resurgence in 1980's music owes much to the recreation of sonic characteristics found in that decade's songs. These include heavily gated snare drums and the over-indulgent use of reverb and delay. Further research could include a sonicological listening study which would be used to confirm the semiotic nature of the production process. However, the difficulty in qualifying or quantifying the above is due in part to the problems associated with listening studies in general i.e. people listen to music in a variety of conditions and environments. Although one report which highlighted the processes outlined above, Serge Lacasse (2000), discussed a reception test carried out on 128 people in Quebec where 90% of the listeners perceived a voice with a distorted effect as 'quite' or 'very aggressive'. The normal unaffected voice was considered soft by 70% of participants. This is evidence that the sonic treatment of the voice does have semiotic consequences, which in turn emphasises the importance of the producer's choices made during the recording process.

Summary

The purpose of this chapter was to link the producer's role to the overall *sound* of the final recorded song. In order to achieve this it was necessary to define sound within an acoustical framework, with reference to the hearing mechanism, and ultimately the listener. This was accomplished by addressing the mechanics of sound propagation and reception, with further investigation centering on the properties of sound itself. The reason for such an investigation was that by highlighting these acoustical elements, the chapter was able to show that it was indeed these same elements that the recording process manipulated, sonically, during the recording process. This process was then sonicologicaly examined by means of a signal path, which illustrated the various areas where the producer was able to manipulate the *sound* with a combination of studio equipment, processes and effects. Having evidenced areas

where the producer controlled the sound, the chapter concluded with a discussion on the importance of such control, citing the semiotic significance of the producer's choices. By successfully linking the producer to the *sound* of the recording and the influence that they can exert, this chapter has succeeded in emphasising the importance of the producer's role.

There now follows a series of three case studies which focus on the producer's role. Each study investigates approaches to the role which in turn cover areas such as the producer's influence on the *sound* of a recording, their relationship with artists, and with the music industry as a whole, and serve to exemplify this study's research and findings.

Chapter 5: Case study 1 Phil Spector

"My personal hero is Phil Spector…he had a huge influence on my own music – he taught me how to produce records. He taught me how to get the best sound you can get, and he taught me about drumming and echo chambers, everything"

Brian Wilson

Producer, Artist, The Beach Boys.
(quoted in Granata 2003: 120)

"I picked up image and energy from Spector, and used all of what I thought were his principles when I produced the Rolling Stones records"

Andrew Loog Oldham

Producer, Manager, The Rolling Stones.
(Oldham 2001: 170)

The two quotes, cited above, succinctly encapsulate the multi-faceted Phil Spector. On one hand the record producer in search of the ultimate in sound, and on the other, the man, the image. This case study, while concentrating on his production techniques, will not ignore aspects of his personality that guided his approach to recording and helped raise awareness of the producer's role. There are three main reasons why Phil Spector has been chosen for this study. The first is his position within the history of record production; this can be clearly evidenced by listing a sample of his productions and the artists he has worked with, which include;

'Imagine' – John Lennon
'River Deep Mountain High' – Ike and Tina Turner
'Unchained Melody' – The Righteous Brothers
'Da Doo Ron Ron' – The Crystals
'Be My Baby' – The Ronnettes
'Do You Remember Rock 'n' Roll Radio' – The Ramones

'My Sweet Lord' – George Harrison
'The Long and Winding Road' – The Beatles

The second reason is Spector's pioneering record production techniques, including his often cited "wall of sound", which will be deconstructed within a sonicological examination later on in this chapter. The third reason is Spector's revolutionary approach to the role of producer, which included an important grasp of the record industry as a whole. This resulted in Spector assuming the roles of independent label owner, music publisher and freelance record producer. This case study will also include an investigation of Spector's relationship with the artists he worked with, and in particular Spector's involvement in the production of The Beatles *Let It Be* album. This example will be used to highlight the problems that can occur when the producer's sonic vision clashes with that of the artist. The chapter will reflect the key arguments of this study by acknowledging the importance of the *sound* of the recording within popular music, and the contribution the producer makes in achieving this.

West to East: A Musical Journey

Having moved to Los Angeles as a child from New York, the west coast with its thriving music scene was the perfect training ground for the teenage Spector. His first major musical success came as a member of a band called The Teddy Bears, whose first single, 'To Know Him is To Love Him', reached number one in the Billboard chart in 1958. The song, written by Spector, was a tribute to his dead father with the title lifted from the inscription on his gravestone "To Know Him Was to Love Him". While perhaps not the most obvious subject mater or inspiration for a teenage anthem, it demonstrates the non-conventional route to music making that would typify Spector's approach in the years to come. Boosted by the success of his first single, but conscious of the group's shelf life, Spector made the decision to travel back to the city of his birth, New York. He ended his journey at the offices of songwriters Leiber and Stoller situated in the famous Brill Building on 1619 Broadway.
This decision was perhaps the single most important component in his future success. He was aware that the Brill Building, the 'Hit Factory', was producing a string of

chart hits that would help him realise his potential. Throughout his career he would visit and revisit the Brill Building writers looking for songs or co-writing with them. Leiber and Stoler allowed Spector to sit in on some of their recording sessions and this certainly influenced his own recording technique. Leiber and Stoller were also pioneers within the business side of production. When they where asked to produce records for the Atlantic label they secured a non-exclusive deal that also gave them a producer's royalty equal to two cents for every record that was sold, a fact that would not have gone unnoticed by the young Spector. Thus an important precedent was set in motion, which has affected the producer's role to date. The producer could now expect a considerable financial return on a commercially successful recording," If Leiber and Stoller were not the first independent record producers; they certainly became the first highly successful ones" (Emerson 2006: 14).

Spector's importance to the role of the producer and popular music is certainly linked to the sound he created for his recordings. However, equally important and pioneering was his approach to the business side of production. At a time when George Martin was still being paid a staff wage at EMI for producing the million selling Beatles records and receiving in return a very small producer's royalty, Spector was himself an independent producer, had set up his own record label, Philles (with Lester Still) and had his own publishing company, Mother Bertha (named after his own mother). The significance of these business ventures was not solely monetary, as it also bought Spector independence within the recording industry. This level of autonomy allowed him to record whom he liked, where he liked, and for however long it took to achieve the sound he was after. This resulted in recordings that were not produced in the regular three-hour sessions, overseen by cost conscious major labels, which was the standard practice at the time. Spector's sessions regularly overran, giving him the opportunity to change arrangements, experiment with rhythms and even scrap entire sessions he was unhappy with. He *was* the record label, therefore he held the veto on whether the record could be released or not. Spector was not operating under the constraints of a third party record company who, as discussed in chapter three, contractually hold the rights to the master recording supplied by the producer.

His business prowess soon started to attract as much attention as his musical achievements. None more so than when writer Tom Wolfe wrote about the young

Spector in his1965 essay “The First Tycoon of Teen”. (Wolfe 1965, 1991) He described Spector’s working practices and his control of the recording process, calling him “the greatest of the independent rock and roll producers” (ibid). Spector also used the article to enforce the notion of the producer and his own importance to the recording process. These descriptions were instrumental in informing the record buying public, giving them an insight into the recording process and identifying the role of the previously anonymous producer, giving a public face to the role.

Spector’s production duties included major hits for the Crystals’ ‘Da Do Ron Ron’ and the Ronnettes’ ‘Be My Baby’ written in collaboration with Spector and Brill Building writers Jeff Barry and Ellie Greenwich. Spector constantly sought new artists and interchanged lead vocalists at will, all in order to realise the sound he was after. Throughout this time his recordings were referred to as his “Wall of Sound” which will be examined in detail later. This was certainly the most successful period of his career; however this study will also investigate other production duties that he undertook from 1969 onwards.

Spectors’ continued success led him to London in 1964 where he enjoyed the company of The Rolling Stones and in particular their own manager/producer Andrew Oldham. Oldham was greatly influenced by Spector, as journalist Chris Hutchins recalled: “Andrew was the absolute fan of this man, he treated him like God. I didn’t see Andrew in awe very often, never in awe of the Stones, but he was in awe of Phil Spector” (quoted in Oldham 2001: 170).

Spector had indeed given Oldham some business advice even before he had met the Stones, as in an earlier encounter Spector gave him an insight into the business side of his production technique: “He told me that if I ever found a group to record, I should on no account let them use the record company’s studio or sign the act direct to the recording company, but instead should pay for an independent studio session myself and afterwards sell or lease back the tapes to the record company. That way, Spector explained you keep control and you earn much more money” (Oldham 2001: 183). The London visit also cemented a relationship with the Beatles, which would resurface with a career saving offer of work six years later.

Spector's search for the ultimate recording, in terms of sound, marked him out as a pioneering producer. He showed this with his productions of The Righteous Brothers hits 'Unchained Melody' and 'You've Lost That Loving Feeling'. The latter track gave Andrew Oldham the chance to repay Spector for his help and advice. This occurred when British singer Cilla Black brought out a version of "You've Lost That Loving Feeling" in the UK. Oldham was furious that this version could overshadow what he considered to be a masterful production by Spector with The Righteous Brothers. He took the unprecedented step of placing an advert in Melody Maker (at his own expense), which stated that the record was "Spector's greatest production, the last word in Tomorrow's **Sound** Today" (Oldham 2003:172, emphasis mine). Oldham's sonicological evaluation of the record was validated by the record buying public, and it was The Righteous Brothers who triumphed when their version got to number 1, giving Spector his first chart topping single in the UK.

Not content with this success he strived for a bigger and better sound and it was this quest for the ultimate production that sent him into premature retirement aged 26 in 1966. Spector thought he had achieved his ultimate goal with the recording of 'River Deep Mountain High' with Ike and Tina Turner. The production was monumental. However, the song failed to impress the American record buying public and it only reached number 88 in the Billboard Hot 100. Spector took the rejection personally. There was much speculation as to why the single failed commercially. Had the public tired of Spector's over exposure, had the business had enough of him? Whatever the reason, Spector decided to step back from the business and take stock, much like the other 1960's innovators Brian Wilson and Bob Dylan. However, like them, he too was set to return to centre stage.

Producing *Let It Be*

Spector's emergence from his self-imposed retirement began in the spring 1969 with some lukewarm collaborations for the fledgling A&M record label. The next step however, was a call to produce the biggest pop group in the world. When Spector became Apple Record's producer, The Beatles producer, it resulted in some of the most successful and controversial productions of his career. The catalyst in the

renewed relationship between Spector and The Beatles was Allen Klein, who had taken charge of the band's affairs following the death of Beatles manager Brian Epstein. Klein was a long-time friend of Spector and was also particularly close to John Lennon during this time. This mutual friendship led to Lennon hiring Spector as the Beatles producer. Lennon clearly had respect for Spector's work; the unseen factor seems to be that anyone else chosen to produce the Beatles would have found it difficult to constrain the band's egos and to approach the project objectively, given the history surrounding them. George Martin had been able to do this in the early years. However in the light of The Beatles' phenomenal success he had slowly lost his grip and by the time of the predominantly self-produced *White Album* it was clear that producing The Beatles was an extremely difficult task. Spector certainly had an ego which could match The Beatles, as witnessed by his work for the fledging A&M label that had seen him add his own logo to their records, that of a man wearing a cape and top hat, with the wording "Phil Spector Productions".

The first production job was the latest Lennon solo offering 'Instant Karma'. Spector stamped his authority on the recording utilising his trademark echo to produce the drum sound and his layering technique for piano, with Lennon on one, and George Harrison and Alan White both playing another while Klaus Voorman played an electric one. The result was a huge success "the first solo Beatles record ever to sell a million copies" (Thompson 2003: 129). Spector, from a sonicological standpoint, had delivered: "It was the sound that sold the record. No other Beatles record had ever sounded like this" (Williams 2003: 144).

The next decision by Lennon proved to be one of the most controversial episodes in Spector's production career. The *Let It Be* album had started life as "Get Back", a film that would follow the Beatles as they rehearsed and recorded songs with just the band, a back to basics approach. However, the filming and recording only acted as an insight into the disintegrating life of the band. They had amassed over 30 hours of recordings made by George Martin and engineer Glyn Johns. However, by this time The Beatles had lost interest in the project and had in fact recorded the *Abbey Road* album. After Spector's work on "Instant Karma", Lennon handed him the job of producing *Let It Be*. Spector set about the task of trying to make sense of the many hours of recordings, snippets and jams and eventually delivered the final album, with

the sleeve note announcing, “As reproduced for disc by Phil Spector” (1970). However, the production was not to everyone’s taste.

The Long and Winding Road

Much of the controversy surrounding Spector’s involvement on *Let It Be* centered on the track ‘The Long and Winding Road’. This was a case where the producer’s control of the recording process was in conflict with that of the artist and was further complicated by the fact that The Beatles were also the record company, Apple Records. Thus, as was discussed in previous chapters, there was no third party veto. Spector was delivering the master recordings to The Beatles themselves. It didn’t help that by this time the Beatles in-fighting meant that many decisions taken within the group were often not a consensus vote, with separate Beatles siding with one another and in particular Lennon, Harrison and Starr siding against McCartney.

Paul McCartney, in an interview with the *Evening Standard*, commented: “The album was finished a year ago, but a few months ago American record producer Phil Spector was called in by John Lennon to tidy up some of the tracks. But a few weeks ago, I was sent a re-mixed version of my song “The Long and Winding Road” with harps, horns, an orchestra, and a women’s choir added. No one had asked me what I thought. I couldn’t believe it” (quoted in Miles 1997: 575). He did add that he didn’t blame Spector for it. However The Beatles’ other producer, George Martin, was less forgiving. In an interview for *Rolling Stone* he added: “I always understood that the album would be like nothing The Beatles had done before. It would be honest, no overdubbing, no editing, truly live…almost amateurish. When John brought in Phil Spector he contradicted everything he had said before. When I heard the final ***sounds*** I was shaken. They were so uncharacteristic of the clean ***sounds*** the Beatles had always used. At the time Spector was John’s buddy, mate, and pal…I was astonished because I knew Paul would never have agreed to it.”(Miles 1997: 575, emphasis mine). It is interesting from a sonicological viewpoint that George Martin criticises Spector’s involvement in purely **sonic** terms.

On 18th February 1971 Paul McCartney filed a writ that called for the dissolution of The Beatles partnership, effectively splitting up the group. His barrister David Hirst explained to the judge the three reasons that his client had given for him leaving the group. They were the delayed release of McCartney's solo album, the transfer of the rights of the film "Let It Be" from Apple to United Artists and finally that Allen Klein's company ABKCO had altered 'The Long And Winding Road' on the Let It Be album " without consulting him" (Miles 1997: 578). In Spector's defence Ian Macdonald states "he had no choice but to cover the original tape with something since it was little more than a run- through with a good McCartney vocal" (1995: 271). There was another clue as to the lush and at times overpowering embellishments; the original contained "Some atrocious bass playing by Lennon" (ibid: 271). Whether through lack of interest or a deliberate attempt to sabotage the McCartney song, the bass playing was particularly weak. Macdonald continues: "Spector's feat of diverting attention from how badly played the original track is can only be accounted a success" (ibid). Even so the track was released, as the group's last single in the US and reached number one. Spector replied to the criticism later, adding that McCartney "Went and picked the Grammy up, for the album that he didn't want out"(Williams 2003: 149).

Even years later, with the release of The Beatles Anthology series, the resentment of Spector's involvement was still present. This is illustrated by Mark Lewisohn's sleeve notes for *The Beatles 3 Anthology* where he describes its version of "The Long And Winding Road" as such: "The Anthology presentation is as nature intended …featuring only The Beatles' and Billy Preston's' instrumentation, whereas the Let It Be version was dressed up with orchestral and choral tracks produced by Phil Spector" (Lewisohn 1996).

The treatment of his song by Spector still rankled with McCartney and he was instrumental in the decision, some 30 years after the event, to release the song on a newly mixed *Let It Be…Naked* album.

Although Paul McCartney disapproved of Spector's treatment of *Let It Be*, the other Beatles were not that concerned. This was evident by the fact that both Lennon and Harrison used Spector to produce their next solo albums. Spector was on hand to

produce the John Lennon/Plastic Ono album and contrary to the 'Wall of Sound" technique the production was understated, as Lennon biographer Ray Coleman agrees, "The sparsest Phil Spector has ever given his name to" (Coleman 1985: 362).
The starkness of the songs and the production were not an immediate hit with the public and for his next album *Imagine* Lennon retained the services of Spector, while this time the sound was fuller with much more instrumentation and treatment. As Lennon observed: "The first record was too real for people, so nobody bought it…you see 'Imagine' was exactly the same message but sugar coated. Now 'Imagine' is a big hit almost everywhere." Adding that in order to succeed you have to "Put your political message across with a little honey" (quoted in Coleman 1985: 365).

In this case it was Spector who had supplied the "honey" in terms of his production. It is interesting that Lennon felt that the public would only respond to the sonic sugar coating of "Imagine". It adds prominence to the role of the producer and a measure of responsibility. Should the producer be true to the artist and faithfully record their performance or sonically enhance it in order to be commercially acceptable? This sonic enhancement was criticised by McCartney on 'The Long and Winding Road' yet praised by Lennon on *Imagine*. This leads to questions of authenticity and commercialism that the study cannot discuss in depth here. However, the same argument resurfaces in all three of our case studies and further research could usefully uncover the full extent of the producer's role in this area.

Even with the success of The Beatles solo albums Spector's personal life was in turmoil and contributed to the decline in interest from those wishing to use him as a producer. In musical terms time had also moved on, as had technology. Spector's methods were now seen as outdated compared to modern studio techniques and practices. However, there were still those that recognised his talent and possibly his status. So it was that The Ramones agreed to have Phil Spector produce their 1980 album *End of the Century*. According to Everett True, one of the reasons for The Ramones choosing Spector was a belief, in part, that the reason for their lack of chart success was to do "with the production…It was time to bring in the 'name' producers" (2002: 136-7). As Johnny Ramone stated: "We agreed to do it because we thought his name would help us out" (quoted in ibid: 150).

Even so this was to be a typical Spector controlled production, as observed by Ed Stasium who was present in Gold Star studios for the making of the album: “Phil made the band play constantly, do more takes than they had ever done in their lives” (quoted in Fricke 1999). Although the recording sessions were difficult, the end result was a commercial success: “Spector’s presence helped it sell more than any other Ramones record to date” (ibid: 149).

The next 14 years were a bleak time for Spector, it ended with a surprise return to the studio in 1994 for the recording of an album by Celine Dion. Spector managed to record some songs before his temperament took over and caused a falling out with Dion and her manager husband. Spector was still controlling the sessions as he had in the1960’s when he was the star not the artist: “As a writer, producer, and label owner, Phil Spector controlled so many aspects of some performers careers that he could exploit them to the brink of extortion”(Emerson 2006: 234). However in the 1990’s Artists such as Dion had more control over their career and would not put up with Spector's behavior. This all but ended his recording career. However his last recording session to date in 2002 was with British band Starsailor who initially met Spector after an American gig. Spector's daughter was a fan and was instrumental in introducing them. This resulted in Spector recording two tracks including the number 10 hit ‘Silence Is Easy’, before both producer and band parted company due to the difficult working relations brought about by Spector's mood swings.

Spector’s musical vision centered on the sound and the performance, and when technology got in the way, as we are about to learn with regards to his disliking for stereo, he wasn’t afraid to ditch it. The importance of his approach still lives on as evident in the critically acclaimed album by Scottish group Aberfeldy. Aberfeldy’s debut album *Young Forever* was recorded in mono with the group all in one room sharing a single microphone. This was a reaction to mutitracking, as producer Jim Sutherland explains: “On lots of records these days, somebody’ll play some drums and somebody else’ll come along and put down something else, then they’ll send the tapes to New York…and it’s cool that you can do that kind of thing, send stuff over the internet and so on, but actually getting a bunch of people to sit down in a room and interact with each other is also pretty incredible” (quoted in Greeves 2004).

Spector's personal life and the publicity surrounding it have since overshadowed all aspects of his contribution to popular recorded music. However his greatest legacy to the world of production was his "Wall of Sound" recordings and the next section investigates how he was able to achieve this ground-breaking technique.

Behind The Wall of Sound

In Ken Emerson's vivid investigation of The Brill Building and its stable of highly successful songwriters, he documents Phil Spector's involvement with several of the song writing teams. What is even more telling is the fact that he references the term "Wall of Sound" on nine separate occasions (Emerson 2006: 145, 149, 150, 152, 153, 194, 202, 204, and 236). It is a testament to Phil Spector that a production term has gained such importance and has remained synonymous with its creator. The problem with this however, as used by Emerson and others, is that the term is often mentioned without any accompanying explanation or proper description of what constitutes this technique. The notion of sonicology, as outlined earlier, provides a useful tool with which to investigate Spector's production technique.

Gold Star recording studios in Hollywood was the location were Spector first created his "Wall Of Sound" recordings with The Crystals, The Ronnettes and many others. It boasted two echo chambers which would be crucial to the sound of recordings made there. The studio had been purpose built by its owners Dave Gold and Stan Ross. Gold was responsible for building and designing the studio equipment and for the acoustic treatments, gaining knowledge from reference books and using his own initiative to produce a unique recording setting. This was done "with the stated aim of creating a studio, one of the first in the world, that was deliberately tailored towards creating a specific sound" (Thompson 2003: 22). Gold Star certainly delivered in sonic terms, what Spector required. His frequent session guitarist Jerry Cole added "The studio and Gold Star's echo chambers was the 'Wall of Sound' " (quoted in Granata 2003: 124).

When Joe Boyd was producing Fairport Convention, they requested a recording session at Gold Star, conscious of the great Spector recordings made there. As Boyd

recounts: “The acoustic was amazing; sounds jumped out of the speakers and off the tape. When we got back to London with our rough mixes, we listened in awe: the punch of the recording was astounding” (Boyd 2005: 206). Spector often returned to the studio for recording, as with The Righteous Brothers, Ike & Tina Turner and even in 1980 with The Ramones. However, while the studio was an important component, the ‘Wall of Sound’ also had several others. One was down to Spector's deliberate choice of instruments, and in particular his technique of using two or three of the same instrument. This practice was not entirely new; the young Spector would have witnessed such set-ups during the Leiber & Stoller sessions he attended when he first arrived back in New York. Although Leiber and Stoller had been using multiple instruments, like several guitars, Stoller notes that: “Phil was the first to use multiple drum kits, three pianos and so on” (quoted in Emerson 2006: 152). This would dramatically alter the balance of sound. Arranger Stanley Appelbaum recalls that where as Leiber and Stoller: “Strove for a clean, clear sound…thin out the pallet”, Spector: “Piled instrument on instrument to raise an echoing tower of Babel” (quoted in ibid: 152). Spector also employed this technique later on George Harrison’s solo album *All Things Must Pass* as Harrison reflected: “Some of the sessions were very long in the preparation of the sound, and the arrangements had at times various percussion players, sometimes two or three; two drummers, four or five acoustic guitars, two pianos and even two basses on one of the tracks” (Harrison 2001).

Spector employed many session players to play the multitude of instrument set ups required for his sessions. The Wrecking Crew, as they came to be known, consisted of a core group of session musicians chosen from the large pool of musicians working in film and music studios around the west coast. Another major factor in the “Wall Of Sound” was that Spector liked to record his musicians together without using isolation booths or baffles. Given that the preferred live area at Gold Star was 20 by 22 feet with a low 14 foot ceiling, this led to a cacophony of sound, with instruments not only being picked up by the nearest mike but bleeding into other mikes as well. The walls of the studio were also painted in acrylic paint, which is very sound reflective, this helped to project the sound all around the studio. Therefore in sonicological terms the performance was indeed important to the sound of these recordings, however the environment, mic placement and recording process had a direct effect on the sonic results of the recordings.

The studio acoustics along with the layering of instruments helped to create a dense sound. However, there was one other vital ingredient which was crucial to the sound and Spector's philosophy- this was the fact that the recordings were made in mono (monophonic). Today, most recordings are mixed in stereo where instruments and vocals are placed between left to centre to right in the mix. With mono recording these choices are negated, everything is coming from the centre. This means that sounds are not going to float between speakers or suddenly turn up on the left or right, there is also less chance of the listener inadvertently turning the balance wheel to left or right and ruining the mix. Spector favoured the mono approach, and it meant that each take would be unique, introducing a tension into the session that worked favourably and spurred on musicians and producer alike. This approach led to Brian Wilson insisting that his *Pet Sounds* album was also mixed in mono. In later years Spector would sport a "Back to Mono" badge in reference to his preferred mixing technique. He wore one during the *Imagine* sessions and in the picture that appeared inside his reissued Christmas album. Spector's box set career perspective 1958-69 was titled "Back to Mono" and included a 'Back to Mono badge'. In sonicological terms the use of mono recording is crucial to Spector's 'Wall of Sound', a detail that is often missed by those investigating his production technique. This includes Moorefield's account that "the placement and imaging of the voice in the mix are masterful" (2005: 13) without mentioning mono as the preferred choice of mixing.

It is always difficult in hindsight to assess the impact of the "Wall Of Sound" recordings that were heard for the first time during the 1960's. Therefore it is worth noting the reaction of someone who was actually there. Just as Spector had been present at the early Leiber & Stoller sessions, Brian Wilson of the Beach Boys was also present at Gold Starr studios during some of the Spector sessions. Indeed he recalled: "Pet Sounds was an offshoot of the Phil Spector production technique" (Granata 2003: 235). Wilson would not only emulate Spector's production method, but also record at Gold Starr, using many of The Wrecking Crew musicians that Spector had used on his sessions. Drummer Hal Blane commented "My sound on Brian's dates was basically the Phil Spector sound, with a few minor adjustments…. Phil liked a high, tight snare sound because he wanted it to cut through the 'Wall.' I always played the snare and floor tom in unison to strengthen the backbeat" (quoted

in ibid: 140). Thus the sonic template of Spector's drum sound was transferred to the *Pet Sounds* sessions, not the performance or the musical notes but the *sound*.

Spector's influence on Brian Wilson was not just technical or musical, Spector had fought to gain control of all aspects of his recordings and this would have a bearing on Wilson taking a stand against the studio's control over his own recordings, allowing him the independence to record were he wanted, on his own terms. Spector was aware that Nik Venet had been credited as producer on the first two Beach Boys records, although it had been Wilson that was making all of the important production decisions. As Spector's own engineer Larry Levine observed: "Phil would often run off on a diatribe about Capitol not making Brian the producer. He felt that Brian deserved all of the credit, all of the money, and every bit of recognition that went along with producing his own records" (quoted in ibid: 121). Phil Spector, despite rumours to the contrary was generous with his advice and not at all guarded when it came to his recording techniques. When multitrack recording made it possible for 4 or 8 tracks Spector still favoured the multi-instrument approach, much of the time playing live, as was evident in Harrison's *All Things Must Pass* sessions. The live aspect often produced a heightened atmosphere where artists pushed themselves, without the aid of a multitrack safety net, towards great performances.

Summary

Phil Spector exemplifies this study's argument that the producer influences the *sound* of the recorded song, and therefore the role is of significance within the study of popular music. He has influenced the history of popular music production for over five decades, as was highlighted by the examples discussed in this chapter, and in doing so he has made a valuable contribution to the popular music canon.

This study also cited Spector as the person responsible for raising the profile of the producer's role. He advanced the public perception of the role, partly through the phenomenal success of his one-man empire, but also as a result of his own self-belief. He was, as Cunningham describes him "the first 'personality' producer" (Cunningham 1996: 60). The use of his own logo, underlined with the "Phil Spector

Production" tag, left no one in any doubt as to who was responsible for the sonic spectacle that awaited them. His success meant that he could live the lifestyle of the stars he worked with. He hung out with the Beatles and the Stones, drove flashy cars and lived in a mansion in the hills. As Andrew Oldham observed, "Phil looked more like an act than most acts, and behaved like one too" (Oldham 2001: 170).
This behaviour brought him into the public eye and he in turn let the public have a glimpse of the recording environment: "He did change the way records could, and would, be made and elevated record production to commercial art. He moved the meaning and status of record production out of the back room and on to the main lot" (Oldham 2001: 170). This is evident in the many publicity photographs showing Spector in the studio or standing in front of a mixing desk (e.g. as seen on Ike and Tina Turner's *River Deep-Mountain High* album back cover). Spector however, could not sustain such a persona without also maintaining a degree of professionalism and ultimately chart success.

This chapter argued that Spector's production success was due in part to two important factors. The first was his business acumen, which was highlighted by the fact that he was one of the first successful independent record producers. This was due in part to him also being the label owner and publisher. The freedom this bought allowed Spector to experiment within the recording environment free of the constraints of record company pressure.

This freedom, exercised within the recording environment, led to the next important factor in Spector's success story the "Wall Of Sound". This chapter employed a sonicological investigation of Spector's famous production technique and concluded that it consisted of a number of elements which all contributed, in sonic terms, to the final Spector sound. It was this sound that was the root of his success and he employed it on several projects with many artists. Nick Cohn in his book *Awopbopaloobop Awopbamboon* testifies that: "Spector knew more about the actual mechanics of recording than any other producer before or since" (ibid: 171). He gave the world one of its first instantly recognisable production technique the "Wall Of Sound". His use of echo, instrumentation and vocal recordings are still a benchmark for the recording and production process to this day. Other aspects of his career which the thesis cannot explore, but are worthy of mention, include his contribution to the

genre of 1960's female singing groups, which he almost single handedly invented and his promotion of black artists at a time when there was still widespread segregation within music, radio and society in general.

In conclusion Phil Spector is important to this study because he:

- Raised the profile of the producer's role.
- Acknowledged the importance of the business side of production.
- Recognised the importance of the overall *sound* of the recording as a force in itself and applied this with his 'Wall of Sound' technique.

The model of independent producer and label owner would be taken up two decades later in the form of P.W.L. Records, and producer Mike Stock, who is the subject of the next case study.

Chapter Six: Case study 2 Mike Stock

The second case study of this thesis features the most successful producer/songwriter in British chart history (in terms of record sales). This ranks him above both Lennon and McCartney and Jagger and Richards, although his name is not as instantly recognisable. Mike Stock is perhaps more familiar when addressed within the context of his two business partners Pete Waterman and Matt Aitken. Under the SAW (Stock, Aitken and Waterman) partnership the three men dominated the British charts during the mid 1980's and early 1990's. This success is one reason why Stock has been chosen as part of this study's investigation of the producer's role. It also allows the study to redress the lack of any credible academic research on Stock, while highlighting his significant contribution to the popular music canon. This contribution places him in line as a contender for achieving auteur status, as Shuker observes, "there is a strong case for according auteur status to other key figures involved in creating the music in its various forms: the songwriters, the producer" (2001: 119).

Another reason why Stock has been chosen is that he embodies this study's central theme i.e. the influence the producer has on the sound of a recording. He clearly approached songs in terms of production and as such was one of the few producers (Phil Spector included) whose work was recognised in terms of their sound. This chapter proceeds with a short history of Mike Stock, detailing his route towards the SAW partnership. It will then continue with an analysis of Mike Stock's SAW sound, once again employing a sonicological approach to the investigation of its key elements. The contribution of the *sound* and Stock's production style, to the overall commercial success of SAW's operation, will also be examined. In turn this commercial success and the impact it had on the record industry as a whole will be analysed. The chapter concludes with a reflection on Stock's production methods and the effect they had on his relationship with the artists he recorded, including debates surrounding notions of creative control within the production process.

Stock History

Despite the fact that he was self-taught, with no formal musical training, the young Mike Stock had a definite career goal. Contrary to most musicians' dreams of stardom, Stock wanted to be a songwriter first and foremost. An early publishing deal with Marrow Music failed to provide any real success and he concentrated on playing the club circuit in order to continue his musical ambition. More prestigious bookings at London's top hotels led him to hire a guitarist called Matt Aitken, himself straight off a cruise ship band. In 1984 Stock decided to retire from playing hotels and built himself a basement studio in his home. Aitken decided to join him and they set up their own company 'Sticky Label'. Similar to the way in which Phil Spector had operated, Stock's first venture was a record called 'The Upstroke' which he and Aitken recorded. The next step was to enlist two female singers who would front the band, which was to be called Agents Aren't Aeroplanes. This production method was the blueprint for the SAW recordings, which would follow the same pattern of marrying pre-recorded songs to artists.

The song was taken around various record companies with the only real interest coming from Pete Waterman, a former northern soul DJ who managed to get it recorded and released on Proto Records and distributed by RCA. Although the record only reached number 60 in the British charts, it cemented the relationship of Stock, Aitken and Waterman. Though all three were credited as producers on SAW records, in reality it was Stock and Aitken who were in the studio writing and playing all the instruments. Waterman was really the A&R man; his strength lay in the fact that he knew the music industry side. It was Waterman who was responsible for getting the acts that Stock would then write for and produce.

SAW's first real production success was 'You Spin Me Round (Like a Record)' for Dead or Alive, which reached number one in December 1984. Although not written by Stock, it did, however, herald the SAW sound that would attract new and established artists. Writing success followed for artists like Rick Astley for whom Stock wrote and produced 'Never Gonna Give You Up', a number one single both in the UK and USA in August 1987. Other successful acts, including Mel & Kim and Bananarama, began to dominate the UK charts. This led, in late 1987, to Pete

Waterman setting up his own label PWL to handle SAW's releases. Its first major success was Kylie Minogue's number 1 'I Should Be So Lucky'.
In the period that followed, from the late 1980's to the early 1990's, SAW produced 100 top 40 records, including 60 top ten hits and 13 number ones. Mike Stock left SAW in 1993 following the sale of PWL to Warner Brothers. The following section analyses the production methods that gave rise to the PWL sound, a sound that resulted in the commercial success listed above.

Building the sound of a bright new Britain

In Chapter Two, the notion of a Sonicological approach to the investigation of the recorded song was introduced. The chapter highlighted the fact that producers will often begin the production process aiming for a particular sound. For Stock and PWL the importance of the sonic element of their records was reflected even within the company's advertising slogan. Therefore, just as Phil Spector's own Philles label had announced "Tomorrow's **Sound** Today" (Oldham 2003: 172, emphasis mine), similarly PWL offered, 'The **Sound** Of A Bright Young Britain' (emphasis mine). The following section will provide a sonicological appreciation of the SAW sound, as well as documenting Stock's contribution to it in terms of his production role.

One of the most important elements of the SAW sound relates to the fact that Stock (along with Aitken) was the songwriter for the label. This information helps us to place Stock within the skill sets of the producer's typology. He was also technically proficient, responsible for recording the SAW records, with a clear appreciation of his market. This resulted in Stock fulfilling three categories of the typology outlined before; commercial, musical and technical. Consequently Stock would admit that "When I'm writing I'm thinking in production terms" (Stock 2004: 103). Therefore arrangements and choice of chords where all employed in terms of how they would sound in the final recording. Stock was not preoccupied with the problems of how to replicate the sound live on stage; his goal was the sound of the recording. This point is echoed by Simon Napier-Bell who notes, "They wrote to a formulae that was dictated by their production techniques, and this meant that every song they wrote would be perfectly produced" (2001: 322). The result of this approach was that Stock, as

producer, was influencing the sound of the recording even before he had committed anything to tape. He was able to do this by deliberately writing songs that would lend themselves to his own production values. Stock's sonic template included a take on 'HI –NRG', a sound that had been popular, especially in gay clubs, where it was also known as 'Boy's Town' music. The importance of gay clubs had an inadvertent effect on the production of SAW's records. Waterman was a frequent DJ at the clubs and was well acquainted with the dance-floor lights that were triggered by the sounds of the particular record being played. SAW's idea was to include elements in their records that would realise the maximum potential of the light systems. They achieved this by adding percussive elements in the higher frequency range such as handclaps and cowbells, playing triplets. They also cut out a lot of the bass frequencies, which would often be compressed (squashed) by the club's sound systems. As Waterman concluded: "When one of our records came on, it was louder than the previous one and the lights would go off like fireworks" (quoted in Napier-Bell 2001: 321).

Stock's production therefore, was initially aimed at a specific target audience, as Watermen explained: " I knew the gay scene very well and knew all the DJs, because it was the old Tamla Motown market, I knew there were potentially 15-20,000 buyers for any record made in that vein" (quoted in Cunningham 1998: 313-4). This was also confirmed by Richard Smith writing in the *Gay Times* who reported that: "The SAW boys are clever guys who know their market and who know that a pretty considerable chunk of it consists of gay men…they pander to this…a perfect and beautiful hybrid of the two popular music forms that have been dearest to us in the past: early Motown and HI NRG" (Smith 1990). Thus Stock as the producer was not only contributing to the *sound* of the recording but deliberately using the production, its sonic elements, to influence and appeal to the audience. This echoes Adorno's notion that: "Structural standardization aims at standard reactions" (cited Frith & Goodman 1990: 305) and although not addressing the recording process directly Adorno continues: "The composition hears for the listener. This is how popular music divests the listener of his spontaneity and promotes conditioned reflexes" (ibid: 306). Thus what Adorno regarded as a negative consequence of popular music was seized upon by Stock as a positive means of channeling his production methods for the desired effect. A further example of this is the use of tempo in their HI NRG productions, as Stock describes, "we worked out that the average resting heart works at 60 to 80 beats per minute, so

we always made our songs twice the resting heartbeat with the intention of generating excitement and getting the feet tapping"(Stock 2004: 46).

The final contribution to the SAW sound can be linked, in part, to the advancement of technology at this stage in the early 1980's. Mike Stock and Matt Aitken were the songwriters for the PWL label and also the label's band. They were responsible for all of the sounds and instruments heard on the SAW records, apart from the vocals. Stock was the producer and would use the same recording set up, synths, drum machine and vocal mic. Multitrack recording enabled Stock to record one part and then overdub the rest negating the need for any band. This method of working was a result of the technological advances around this period, which resulted in the advent of digital synthesizers, sequencers and drum machines. The advent of the MIDI (Musical Instrument Digital Interface) also allowed devices to be linked and controlled by each other. The result of these advances meant that music could be recorded and re-recorded and edited in a fraction of the time used to record on traditional analogue equipment. This inevitably led to a similar sound emerging from the SAW studio; the only real difference would be the artist who supplied the lead vocal.

Sonicologically SAW had succeeded in generating a sonic blueprint controlled by its chief architect, producer Mike Stock. As their success grew SAW started to receive requests from established artists, keen to achieve 'The Sound Of A Bright Young Britain'. By attaching SAW's 1980's sonic imprint they would be instantly updated and presented to a new generation by default. Stock had already had success with Bananarama; they went on to add the SAW sound to Donna Summer, Cliff Richard and even worked with Heavy Metal band Judas Priest, although no recordings were released. It seemed that SAW could do no wrong, however, when the backlash started it originated from an unlikely source.

SAW v The Record Industry: The sound of success

By the end of the 1980's SAW and PWL's success was evident in the huge quantity of records they sold (upwards of 500,000 copies for each Kylie single). Rather than rejoicing at SAW's success the record industry turned against them, viewing them as

a threat. The reason was simple; they *were* a very successful record company. However, they were more significantly a successful *independent* record company. As Waterman states, forcibly, "We were pissing people off incredibly because every record we had released dominated the independent chart" (quoted in Smith 2002: 61). Stock adds that: "By the end of 1989, the three of us in SAW had 27 per cent of the market in the record business" (Stock 2004: 94). This was clearly a concern for the major record companies who employed thousands of people from marketing, distribution, to A&R, all being outsold by such a small operation as SAW.

The manner in which Stock, as producer, contributed to this success can be related directly to his production practice. The previous section considered the SAW sound and how this was instrumental in achieving success. There were also other factors which facilitated the production process and contributed to their business success. The first of these was that Stock never made any demo (demonstration) takes of the songs his artists were recording. The usual practice is to spend some time recording an initial version of a song to tape or disk, a work in progress. Between the demo stage and the final recording the song will go through a series of changes, which may include tempo, arrangement, instrumentation, keys and lyrics. Stock didn't make demos as he and Matt Aitken *were* the band, they played all of the instruments on all of SAW's recordings therefore they didn't need to pass a demo to the other band members.

This had a direct impact on the length of time spent in the recording studio. The song would already be recorded and all that the artist was required to do was lay down their vocal part (additional overdubs could be completed without the artist being present).

The second important factor of Stock's production practice was the fact that he was not producing to the requirements of an A&R man or another record company. SAW were releasing records through their own PWL label and Pete Waterman certainly never blocked any productions. This was another reason why Stock didn't require a demo version of his songs. The usual practice was that demos were passed between producer, artist, band members and the A&R person representing the record company's interests, for approval. The quick turn around in recording meant that each song was ready with the minimum of fuss. The songs didn't have to be scheduled,

unlike the majors, into a long list of recording, releases and marketing strategies. The small team at PWL worked quickly and efficiently, in some cases a song would be written, recorded, pressed and in the shops in less than two months, a schedule that the major record companies could not compete with. This mode of production ensured that the SAW sound was ubiquitous during the late 1980's and early 1990's.

Another important factor in this success was the exposure SAW songs received on radio. Stock had always stated that he made records for the public, a point echoed by Waterman: "We have taken pop music back to the people who buy records" (quoted in Smith 2002: 59).

Certainly Stock's productions were radio friendly. They were compressed and sonically balanced; however, they still had to be heard. PWL had an ingenious tactic in their campaign for radio exposure. Every time a record is played on air the station logs its performance. This in turn triggers a payment to the artist via the Performing Right Society (PRS). In general this also triggers another charge payable to the record label via the Phonographic Performance Limited (PPL) charge. In the case of PWL they had waived the PPL charge for all plays of their records. As all the other labels were charging PPL this meant that it was cheaper to play a PWL record. In the case of Kylie Minogue's hit 'I Should Be So Lucky' it was reported that Radio 1 who had played the song "up to 180 times in a ten week period while it was a hit, made a potential saving of up to £15,000 in needle time" (Independent 1988). There was of course nothing illegal in this practice. However, it would not have endeared PWL to the rest of the record industry majors who employed an army of record pluggers desperately vying for radio airplay.

SAW it seems had taken on the record industry and won. However the industry started to turn on them and this became apparent at an awards ceremony event in 1986. The Ivor Novello awards are deemed by artists, and the recording industry, as one of the most prestigious awards given to songwriters. When in 1986 SAW received the award for 'Best song of the year' it was the third year in succession that the trio had won, something that even Lennon & McCartney had failed to achieve. However as they went up to accept their awards they were met by a barrage of boos, as Simon

Napier-Bell observed: “They’d found the formula for success and people throughout the industry were seething with jealousy” (Napier-Bell 2001:313).
The success, however, didn’t continue indefinitely. The SAW sound was overtaken by another sonic blueprint emanating from Seattle and it is perhaps a little ironic that in the end PWL was sold to a major company, Warner Brothers, netting Waterman a large payout. Stock left SAW in September 1993 and continued to write and produce with limited success until the release of ‘The Fast Food Song’ which got to number 2 in the UK charts in 2003. Perhaps as a response to the acceptance of SAW’s past achievements or a reaction to the 1980’s revival sweeping the music scene, in 2005 it was announced that SAW were to reunite. In typical fashion Waterman added that: “The new SAW sound won’t suddenly be hip-hop or thrash metal…if being stuck in a time warp means selling 30 million records again I won’t mind” (quoted in Sherwin 2005). Clearly Waterman valued the important contribution of the *sound* in SAW’s success, the *sound* that was a direct result of Mike Stock’s production. However, the control Stock exerted over the production process, as well as the artists he worked with, led to accusations that SAW was simply a pop production line.

The Hit Factory

One of the most important ingredients in the production process are the artists themselves. However, in a similar fashion to Spector’s ‘Wall Of Sound’, the SAW sound became the sonic framework into which their artists were planted. In Mike Stock’s case the artist was required only to sing the vocal line and had little or no bearing on the writing or production process. As he testifies: “I never tolerated artists telling me how to produce a record in the studio. I’d just give them the song, get it down on tape and put it out regardless” (Stock 2004: 168). SAW even adopted the title given to the Brill Building in New York, and called themselves ‘The Hit Factory’. This led many to believe that SAW was just a production line, such as the 1996 guide ‘Inside The Music Industry’ which described their operation as that which “chewed up and spat out such a large number of teen disco stars”(Barrow & Newby 1996: 201). Napier –Bell observed that “because the songs that pushed the trivial artists whom they produced to the top of the charts came from formula song writing, many in the industry put them down” (2001: 322).

The fact was that this means of production was highly efficient and commercially successful. Pete Waterman summed it up by saying: "What makes a hit record is cash, when you see a cheque come in your bank for a million quid you know that's a real hit" (quoted in ibid 321). It seems that the record industry's aesthetic critiques were based on a commercial jealousy. So what better way to answer them than by producing a record that was both artistically acceptable and commercially successful?

This is exactly what SAW achieved with the release of their single 'Roadblock' in 1991. Stock wrote the track in a day; it contained a drum rhythm, funk bass and a guitar riff. Then Stock and Aitken added backing vocals, saxophone parts and finally chanted the word 'Roadblock' over the top of the track. Sonically it was a typical SAW production in terms of the manner in which it had been written and recorded. The only difference was that Stock & Aitken were taking the minimal lead vocal role. By this time it was not only the record industry that was incapable of making an objective criticism of SAW's releases. Even SAW's own artists had difficulty in divorcing the production from the image that had grown up around the PWL label. As was the case when Bananarama's Siobhan Fahey was played a pre-released copy of 'Roadblock' to which she commented: "Yeah, it's a 70's funk track, isn't it? You guys could never do anything like that" (Stock 2004: 51). In an attempt at securing an objective critique the decision was taken to eradicate all traces of SAW from the "Roadblock" track. This was achieved by burning out the manufacturing mark that showed the record had been made in England. The next step was to add SAW's New York lawyer's phone number as the only contact information, in a further attempt to prove that the record originated from America. The single was then promoted as a club single with these specially prepared white label vinyl dance versions. Their ploy worked and, after initial acclaim, SAW owned up and the single reached number 13 in the charts.

Control and The Independent Kylie

The record industry criticisms of Stock's production methods were also echoed by some of SAW's most successful acts, in particular singer Kylie Minogue. One of her

biggest hits ‘I Should Be So Lucky’ was number one in 25 countries including Britain. It launched the career of Kylie (contrary to popular belief the TV show Neighbours was shown twice daily to massive audiences only after she had hit the top spot). The song was written by Stock in 40 minutes. This was because of a lack of communication between members of the SAW team. Minogue had been asked to come to Britain to record with them. However, nearing the end of her two-week stay she was yet to record. On the final day of her stay she arrived at SAW’s studios only to be kept in reception for hours. Finally, when all parties realised the situation Stock hastily wrote a simple backing track. He then proceeded to sing the melody to Kylie who then went into the studio, recorded the vocal and then left to catch a flight home to Australia. The recording was taken around the major companies but no one was interested in releasing it, therefore PWL released it (Stock 2004).

The production methods of Stock and his SAW sound maintained Kylie’s career. However, the criticisms applied to SAW’s ‘Hit Factory’ attached themselves by association to the artists themselves. As Shuker states: “Kylie as a manufactured pop star…pointed to the role of producers Stock, Aitken, Waterman who wrote (with the exception of ‘Loco-motion’), produced, and arranged all the tracks on Minogue’s first album” (2001: 164). In an attempt to counter such charges Kylie fought to regain control, beginning with the actual production process: “I just wanted to be a bit more involved…I was not happy any more at being told to go and ‘have a cup of tea till we call you’ ” (Smith 2002: 69).

Minogue eventually left SAW. However, she could not escape the songs that had built her successful career, in particular ‘I Should Be So Lucky’. The fact was that the public loved this period of work; she still performed the SAW singles in her live shows. However in an attempt to regain control of this body of work, or simply as a chance to exorcise Stock’s production, she appeared at the Poetry Olympics in 1996 at the Albert Hall in London. Persuaded to perform by her friend Nick Cave she read out the complete lyrics of ‘I Should Be So Lucky’ without any musical accompaniment. As Smith concludes: “The extra ingredient of reciting the words in this fashion without the bouncing melody, they took on ironic meaning” (ibid: 137). What Smith failed to understand was that the irony was always there, as Stock stated, ‘I Should Be So Lucky’ sounds all pink and fluffy, but it’s a sad little song” (Stock 2004: 56). He

wrote the lyric based on the fact that someone that busy with her acting and singing career wouldn't have much time left for a relationship. This only goes to reiterate the importance of Stock's production. Textual analysis would clearly show the sadness inherent in the lyric. However, sonicology, offering a holistic approach, would argue that it is the overall sound, the production, which masks this, contributing to an up beat preferred reading.

In an ironic twist to Kylie's quest for control she signed to underground label Deconstruction gaining kudos without great commercial success. The irony being that while she was signed to PWL she was part of the most successful independent record company in British chart history. In contrast in the 1970's, Punk Rock artists had queued up to sign to major record labels, The Sex pistols at EMI, Virgin, Warner Brothers and The Clash at Columbia. As Shuker concurs: "Important in identifying and situating authenticity is the commercial setting in which a recording is produced, with a tendency to dichotomize the music industry into independent labels (more authentic, less commercial) and the majors (more commercial, less authentic)."(2002: 20). However Shuker's assessment is put into question by the independent, yet commercial status of PWL.

Summary

Mike Stock's inclusion in this study has, at least, contributed to an appreciation of his work, which has to date, been under represented within the academic research of popular music. By adopting a sonicological approach, linking the producer's role and practice to the unique *sound* of the SAW recordings, the study was able to highlight Stock's contribution to the success of the PWL label and its dominance of the charts from the late 1980s to the early 1990s.

The chapter was also able to address the criticism SAW received at the hands of the record industry. This was found to be aimed at the production methods employed by Stock. These methods were both efficient and commercially successful. The production methods worked well because Stock possessed many of the skill sets identified within the study's typology of producers. Stock fulfilled the technical, musical and commercial criteria with Pete Waterman assuming the managerial role.

Artist criticism of Stock's production methods was covered in an investigation of SAW artist Kylie Minogue. It was found that her desire for control was centered on her lack of contribution to the production process, a process that was tightly controlled by Stock. It was however, his control over the production process that resulted in the unique SAW sound, the 'Sound of A Bright New Britain'.

Chapter 7: Case Study 3 Steve Albini

The third and final case study in this series concentrates on the work of Steve Albini. Azerrad describes his contribution to music, and that of his band: "Big Black introduced one of the indie world's foremost characters, a person who would help define not just the sound of underground music through the next two decades, but also its discourse – the irascible, outspoken, intelligent, and relentlessly ethical Steve Albini" (2001:312). It is precisely these qualities and Albini's unique stance on recording and the producer's role that makes him a valuable addition to this study's research.

The chapter begins with a short history of Steve Albini, highlighting factors that have shaped his particular view on music. This insight will enable the study to further investigate Albini's recording philosophy, which has a direct bearing on his assessment of the producer's role. A practical example of this will then be explored during an investigation into his recording of Nirvana's *In Utero* album. These reflections will be used to shed light on this study's definition of the producer's role and their contribution to the sound of a recording, a role and contribution that Albini himself categorically rejects.

Big Black And Beyond

Steve Albini's musical education was honed at university in Chicago where, while studying for a journalism degree, he began writing for punk fanzines and attending concerts by the likes of The Dead Kennedys, Husker Du and The Replacements. He formed the one-man band Big Black consisting of vocals, guitar and drum machine, augmenting the group with a bass player and second guitarist for the recording of his "Lungs" EP. Big Black had a forceful, aggressive sound based on Albini's guitar playing. They made several EP's and two LP's, *Atomiser* and *Songs About Fucking*. Early on in the band's career Albini took charge of the organisational aspects. He was the band's negotiator. However, as an example of the ethical stance that would epitomise Albini's career, he refused to sign contracts with the record labels that distributed Big Black records. As Albini saw it: "Contracts were worthless anyway –

if a record company was going to screw a band, they'd do it with impunity since the band couldn't afford to retaliate" (quoted in Azerrad 2001: 327). Big Black toured the country building up a reputation as an uncompromising act dedicated to their art. They began to receive attention from major labels, but once again Albini's stance was that in order to retain their control and uncompromising lyrical content they had to stay with indie labels, as he explained: "We wanted to have pointedly offensive records, and no big record company would put up with that"(quoted in ibid: 326). Big Black eventually broke up and Albini went on to form two other bands, Rapeman and Shellac. It was during a break between bands in 1987 that Albini built his first studio. He recorded local bands and learned to record very quickly. This was due to the nature of the music, which was generally played live, and the fact that many of these bands could not afford lengthy, and subsequently more expensive recording sessions. Albini continued to record relatively unknown bands. However, his work also included influential recordings by The Pixies, The Breeders, and PJ Harvey, which helped to raise his profile within the industry. He currently owns Electric Audio studios in Chicago where he continues to record a mixture of low profile artists and major ones, who seek his unique recording style.

Albini's Recording Philosophy and The Producer's Role

Steve Albini's preferred credit on an album is the phrase 'Recorded by'. He completely rejects the term 'Producer' adding "all that's required to be a full-fledged producer is the gaul it takes to claim to be one" (Albini: 1993). His assessment and rejection of the title and role serve as a valuable contribution to the definition of the producer's role. By highlighting the practice that Albini rejects, this chapter is able to illustrate the contribution that a producer *can* make to the *sound* of a recording, which in turn confirms this study's argument that the producer can influence the overall sound of the recording, by virtue of their control of the signal path.

This study's definition of the producer's role is based on the duality of legal requirements and creative practice. The creative practice was itself defined in chapter

three within a typology of skill sets i.e. visionary, musical, technical, managerial and commercial. Albini, while possessing musical and technical skills, refuses to utilise them as an influential creative force upon the artists he records. This is an opposite stance to that taken in the two previous case studies, where Spector and Stock deliberately imposed their creative will on artists and the recording process, ultimately resulting in the producer's, not artist's, *sound*. Albini's recording philosophy was honed on experiences he endured while he was a recording artist himself. He recalled unpleasant recording experiences where engineers would assume the role of the producer, enforcing their own ideas, irrespective of the wishes of the band: "The band was paying money for the privilege of being in a recording studio, and normally when you pay for something, you get to say how it's done. So I made up my mind that when I started engineering professionally that I wasn't going to behave like that" (Albini cited by Young 2004). Thus Albini's approach to recording is not to impose his *sound*, as he states "Ultimately what I'm trying to do is satisfy the band, most of the time what they want is for me to record their organic sound" (quoted in Tingen: 2005). In doing so Albini relinquishes the producer's role: "I let the band be the producers, I don't feel obligated to reinvent the record underway. The band makes all the artistic decisions; I basically just execute them on a technical level" (quoted in Droney: 2005). This view is contrary to most producers who, like Brian Eno, often view the recording process, and especially the studio, as a "Compositional Tool" (cited Cox 2004: 127).

This philosophy extends to the demystification of the production process. For him all that is required is that: "You put up a microphone and listen to what it sounds like. If it doesn't sound good put up another one" (quoted in Jovanovic 2004: 98). Of course the sonicology of the recording process can be highly complex, and Albini does admit that in order to achieve this successfully, one must have an understanding of the nature of sound, acoustics and electronics. However, this simple process is often overlooked in the race by some producers to apply their own sound by means of effects and processing. By correct placing of mics and correct settings on amplifiers the sound in the live area should be the sound that is eventually caught on tape. Albini offers that "Trying to manipulate a sound after it has been recorded is never as effective as when it is recorded correctly in the first place" (quoted in Tingen 2005).

This is evident on PJ Harvey's *Rid of Me*, where Harvey commented on Albini's unobtrusive recording style "He literally set up the mikes and let us do it" (quoted in Blandford 2004: 54). This is in direct contrast to Mike Stock's production relationship with Kylie Minogue as discussed previously.

Although Albini does not do justice to the obvious technical abilities that are needed to correctly place microphones in an acoustically defined space, his comments highlight the way he was able to operate, with the artist seemingly unaware of any technical boundaries or constraints, and simply concentrate on their playing. This approach was also adopted on the recording of The Pixies *Surfer Rosa* album where Albini concentrated on recording the band as live as possible. As Kim Deal observed Albini likes to: "Mike the live performance of that recording" (quoted in Frank & Ganz 2005: 80). The Pixies' album, and especially its *sound,* was to become one of the most influential forces in music at that time and was also one of the favourite albums of Kurt Cobain, who would later copy its dynamic arrangements and hire Albini for Nirvana's *In Utero* recording.

The Recording of "*In Utero*"

In order to fully explain the recording of Nirvana's *In Utero* album it is necessary to highlight some of the events which led to the point where Steve Albini was asked to record the album. In doing so I will briefly explore Nirvana's early recording projects before concentrating on their highly significant *Nevermind* recording, which had much bearing on the follow up album both in terms of political, cultural and technical considerations. Many of the issues that surrounded the recording of Nirvana's *Nevermind* and *In Utero* albums concerned the *sound* of the recordings. Therefore this section will again follow a sonicological assessment of the recordings in order to explain subsequent artistic and commercial decisions.

Nirvana's first album *Bleach* was recorded in a total of 30 hours at a cost of $606.17. It was produced by Jack Endino and released on the Sub Pop label. Time and money restrictions made for a raw 'live' sounding recording. However, even at the indie Sub Pop label, Nirvana felt pressurised into incorporating a rock sound into their songs, a

sound that was in vogue at the time. When Cobain heard the Albini- recorded *Surfer Rosa* album by The Pixies, he decided that it was time to unveil the similar sounding songs that he had written but suppressed, in order to fit into the Sub Pop rock style. Nirvana carried out further demo recordings with producer Butch Vig that were intended to form the next Sub Pop release, but instead were used to send out to major record companies in the context of securing a new record deal. Eventually they signed with Geffen for an advance of $287,000 including full merchandising royalties. Geffen also bought out Sub Pop's existing rights to the band for $75,000 and 2 percentage points on the next two Nirvana albums.

Nevermind

Several producers were in the running for the next record titled *Nevermind*, including Scott Litt who had produced REM, and David Briggs who had produced Neil Young. Eventually the band decided that they would work with Butch Vig and had a get out as Cobain said: "Vig would be the main producer, but they'd use other producers for the songs the band deemed commercial" (quoted in Azerrad 1994: 166). This at once signaled the band's intention of deliberately employing a producer who would sonically alter their songs, with a view to making them commercially acceptable. Butch Vig's production role for *Nevermind* consisted of the standard practice of choosing the recording studio, in this case Sound City Studio in California. This time the budget was $65,000 including Vig's own fee, although the final cost was $120,000.

When production got underway, Vig often wanted to double track vocals and guitar parts. Cobain at first resisted, as he felt it was compromising his punk values. However, the producer would often persuade him, arguing that he was trying to capture the intensity of their stage sound. He would say: "When you guys play live, it's just so incredibly loud and intense – it's larger than life and I'm trying to use some of these things I know in the studio to make you guys come across that way on record" (quoted in ibid: 174). Vig also used the common production practice of layering parts utilising multitrack recording, starting with the drums and bass, then

adding guitars and vocals. He even sampled some vocal parts for use in different sections of the same song-all pretty standard production practices. However, for the bass drum sound Vig constructed a bass tunnel consisting of several drum shelves. In this way he artificially extended the bass drum and by miking this set up produced a unique bass drum sound. Producer Vig was actively involved in creating a sonic landscape for Nirvana that did not exist in their live performance. He was attempting to recapture their live sound and intensity, by means of production practice. On completion of the recording, Vig mixed the album. However, the band was not pleased with the results. Sonically they felt that the record was flat, and called in producer Andy Wallace to remix the album.

When the album was released, both artist and record company were not prepared for the phenomenal success that followed. *Nevermind* quickly reached number one in the Billboard charts knocking Michael Jackson off that spot. This was quite an achievement for an indie band such as Nirvana. However, the speed of the record's success worried Cobain. He commented on how live shows attracted what he called the 'Jock' element and those that he felt did not understand the punk/indie ethic of the band. He feared that the success of the album was turning Nirvana into just the sort of mainstream rock band that he had fought so hard to avoid. He then began to distance himself from the *Nevermind* album. Interestingly he did not dismiss the songs or their content and arrangement-what he chose to attack was the production style of the album, and especially Andy Wallace's contribution. In sonicological terms Wallace had used production methods to augment Vig's recordings. Wallace had utilised equalisation and dynamic processing to enhance the sonic characteristics of the songs, elements that would result in the songs being more susceptible for broadcast (i.e. radio friendly). By separating the production process from the songs themselves Cobain was able to sound aggrieved, as if the process had diluted his vision for the album. In truth Nirvana had approved every stage of the recording and production/mixing process and had been happy to submit the final version to Geffen, as Krist Novoselic concurs: "I know Kurt liked the way *Nevermind* sounded"(quoted in Jovanovic 2004: 95).

One reason why Cobain would have distanced himself from the production of *Nevermind*, as we have stated above, is that Wallace's contribution had made the songs radio friendly. Although differing in content to what was being played on radio,

they conformed to the type of compressed, safe production style that would not trouble radio programmers or radio producers by having a record that was not sonically compatible to radio air play. That is, the dynamics of the recording (the soft/loud passages) were controlled by being compressed. This meant that listeners would not have to adjust their volume controls to differentiate between these passages. However, too much compression produces a bland linear result, where perceived quiet and loud passages are actually relayed at the same relative volume. This is common practice in most rock and pop recordings. In fact to hear true dynamic recording free of this artificial dampening one must often revert to classical recordings, where the natural dynamics of the orchestra are allowed to be recorded as they are. Therefore, loud passages are loud relative to the dynamics of the orchestration. The other main reason for Cobain's discontent was that he himself felt that the album did not fully represent the *sound* of Nirvana. Therefore, for the next album they had to distance themselves from the *sound* of *Nevermind*.

"*In Utero*"

It was the search for the true sound of Nirvana that resulted in the choice of Albini to record the next album. It was clear that the integral sound of Nirvana, the song writing and instrumentation would not change on the next album. What would change would be the sound as captured on the recording. Cobain was aware of Albini's work; one of his favourite albums had been his recording of *Surfer Rosa* by the Pixies. He was aware of Albini's recording ethos which could certainly help to recapture the Nirvana sound, the sound they achieved on the *Bleach* album, the authentic live sound of the band.

Cobain used Albini as a means of returning to the sound of *Bleach*, a sound that had been lost in the commodification of the Nevermind album. The punk/indie aesthetic had been distilled, not the songs or subject matter, but the *sound*. This was mainly due to the production practices and the role of the producers Butch Vig and Andy Wallace.

Albini was used to regain the punk aesthetic by means of the non-production of *In Utero* and by mere association with Albini, this cultural intermediary (Bourdieu 1984) rooted in the politics and ethos of punk rock, Cobain was trying to appeal to those hard core fans, a return to the pre *Nevermind* sound. This would hopefully alienate the 'jocks" and those who in the words of the song 'In Bloom' "likes all our pretty songs and he likes to sing along…but he don't know what it means" (Cobain: 1993). This was just the situation Albini himself had foreseen in his days as an artist, and one of the reasons that Albini had not signed Big Black to a major label. He did not want to increase his audience to include those who did not understand the band's punk ethos: "There already seemed to be a percentage of the audience that didn't get what we were on about and were just there for a party…I didn't see any advantage in increasing those proportions" (quoted in Azerrad 2001: 336).

The choice of Albini, who constantly attacked the corporate machinations of the record industry, would also be a signal to those who had accused Nirvana of being corporate stooges. Cobain continued to attack the sound of *Nevermind* publicly. This in turn was seen by Krist Novoselic as a "Kind of reaction to get Albini…it made sense, going back to our roots instead of making another really slick album" (quoted in Jovanovic 2004: 95).

Albini himself was keen to capture the *authentic* sound of Nirvana. His dislike of the *Nevermind* recording did not refer to the band or songs, he just felt that out of the recordings he had heard it was: " The least representative of the band"(ibid: 97). He went on to state that *Nevermind* sounded that way "not because that's the way the band sounds but because that's the way the producer and the remix guy and the record company wanted it to sound" (quoted in Azerrad 1994: 314). Cobain and Albini, within a sonicological assessment, had both now attacked the sound of *Nevermind*.

Ironically, as we have previously mentioned, Butch Vig strove to recreate the live show energy of Nirvana by augmenting the recording with production processes: "They sounded so amazing live that in order to get that kind of sound on record you had to use more production work in the studio: doubling guitars, using multiple mikes on things and splitting them left and right, just trying to make it sound larger than life" (quoted in Berkenstadt & Cross1998: 61). As will be shown, Albini's solution to capturing the live sound of Nirvana would be simply to have the band play live and record them as faithfully as he could. In order to achieve this they would use Albini's expertise in recording and rely less on production techniques.

For the recording of *In Utero* Albini chose Pachyderm Studios in Canyon Falls, Minneapolis. The choice was significant in that it was certainly far enough away from the temptations and distractions of the major cities (including any possible press intrusion) and also it was the studio Albini had used to record PJ Harvey's *Rid of Me* album. Therefore he was familiar with the studio's recording environment and equipment. The mixing desk was a "classic" *Neve 8068* and songs would be recorded to tape via *Studer* tape machines. This was all in keeping to Albini's preference for analogue recording equipment, a vital component in the authenticity of his recordings.

Recording began mid February 1993 and although Albini was overseeing the project and adopting some of the more organisational aspects of the producer's role, he did not undertake any creative handling of the project. He would record the album for a flat fee of $100,000. In keeping with his ethical stance on producer's remuneration he refused to take any percentage points on the album. Normal practice would see the producer receive a percentage typically between 2-4% of every album sold. Albini refused to take any royalties saying: "It is an insult to the band to say that because I recorded this album and not somebody else, you're selling more records and therefore I want a cut" (quoted in Azerrad 2001: 344). Interestingly this stance resulted in him not being pressurised into making a commercially successful record. Albini had already been paid for his services, therefore he did not have to deliver a radio friendly recording in order to receive more money in the form of royalties. This was in keeping with Albini's philosophy i.e. he was not a producer. We have already discussed that within this study's dual definition of the role, Albini had rejected the creative element. Albini now strove to minimise the other legal element by dispensing with an important contractual obligation.

With studio costs of $24,000 the total budget for the recording was certainly small for the follow up to the highly successful *Nevermind* album. In keeping with Albini's organic approach to recording, he recorded the majority of the basic tracking for the album in the first week. This included sixteen songs, most of them recorded in one take. The songs were completed with minimal overdubs within the second week, prompting Cobain to say that: "It was the easiest recording we've ever done, hands down" (quoted in Jovanovic 2004: 99). The songs were duly mixed by Albini, and all

parties left the studio satisfied with what they had achieved. This should have been the end of the story. However, as we are about to discover, the recording (and in this case, non-production of the *In Utero* album) was to become a contentious issue for Nirvana, Albini, and especially the record company.

In Utero remix

Although both the band and Albini had been happy with the results of the *In Utero* recordings when they left Pachyderm Studios in late February 1993, by April there were reports filtering out that Nirvana's record company and management were less than happy with the recordings. The debate accelerated when an article in the Chicago Tribune titled "Record Label Finds Little Bliss in Nirvana's latest" (Jovanovic 2004: 107), announced that the record company wished to see the album remixed. Albini was contacted by one journalist who informed him that Geffen had, off the record, told him that the record was "awful…unreleasable" (ibid).
Certainly the initial reaction from the band was not to rework the record, as Krist Novoselic added: "I know for a while there was a reactionary element to our mindset. I felt like we shouldn't touch it as a point of principal" (quoted in ibid). There then followed a series of calls between various members of the band and Albini saying that they now felt that the recordings did not sound very good and could they be re-worked. Albini refused to rework any of the recordings and in a letter to the *Chicago Herald Tribune* newspaper added: "I have no faith this album will ever be released" (quoted in Hector 2004: 34).

There followed a series of statements released by Cobain and Geffen each stating that the band had complete artistic control over the album and that it would be released when the band were satisfied with the results. However, in one statement released by Cobain he attacked Albini's political stance. In a letter to *Newsweek* magazine Cobain said: "Steve has made a career out of being anti-rock establishment, but being commercial or anti-commercial is not what makes a good rock record, it's the songs, and until we have the songs recorded the way we want them, Nirvana will not release the record" (quoted in Sandford 2001: 280). This seemed contrary to the reasons that the band had decided to work with Albini in the first instance. They went ahead,

enlisting REM producer Scott Litt to re-work three numbers, two appearing on the final album 'All Apologies' and 'Heart Shaped Box'. Unsurprisingly they would also be the first two singles released. For "Heart Shaped Box" extra backing vocals were recorded, as well as an extra acoustic guitar track. The results of these interventions were exactly the same that Andy Wallace had achieved in the *Nevermind* sessions, which Cobain had tried to distance himself from. They again used equalisation and compression at the mixing and mastering stage to reduce the dynamic range. As Albini said when he heard the remixed tracks, they had been altered: "To make it sound more constant on radio" (quoted in Jovanovic 2004: 109).

In the end, the band decided that they wanted the raw Albini recordings to satisfy their own credibility, while using the remixed tracks to satisfy their corporate masters. This is evidenced by Cobain's own writings, contained in his journals, which were published after his death. In one entry he states that the Steve Albini recording should be released under the title *I Hate Myself And Want To Die*. In a further bid to replicate the authenticity of the recordings, he suggests releasing them on vinyl, cassette and 8-track cassette to be sold to "small mom and pop stores….no promos sent out" (Cobain 2002: 240). In contrast to this subversive marketing strategy he continues by stating that a month after the Albini recording is released they should release another version containing the remixed tracks by Scott Litt. This was to be titled *Verse Chorus Verse* released this time also on CD with a sticker that states "This is the radio friendly, unit shifting, compromise version, which by the way, Nirvana is extremely proud of" (ibid). This would signal the Albini recording as the authentic version for those true Nirvana fans while offering a version that would satisfy the general public, echoing in its *Verse Chorus Verse* title Adorno's fears that recordings would produce "de-concentrated listening" (Negus1996: 9). In other words Albini's un- produced version, reflecting the raw sound of Nirvana versus the Litt version, produced and featuring a sonically enhanced, commercially viable Nirvana. The episode detailed above serves to confirm the producer's importance in controlling the *sound* of the recording.

Summary

Albini's contribution to this study can be considered in terms of his objections to the title and role of the producer. This is evident in his recording philosophy, which was explored within the examination of the recording of Nirvana's *In Utero* album. Albini's conscious rejection of any artistic or creative input into the *In Utero* sessions confirms this study's argument that producers are a creative influence and can control the *sound* of a recording. During the Nirvana recording Albini was the only one who did not bow to any outside pressure. This was made easier precisely because he did not assume the role of the producer. First, he was not responsible for any of the artistic decisions made during the recording. Secondly, he was also not on any royalty points for future sales, therefore he was not going to benefit from any changes made in order to make the album sound more commercial. Thirdly, he was not under direct pressure from the record label, he could walk away having already received his recording fee. This approach also confirms this study's dual definition of the producer's role as having both a legal and creative requirement.

The importance of the producer's contribution to the *sound* of a recording was substantiated through the comparison of Albini's and Litt's involvement on the *In Utero* project. This comparison was made on a sonicological level and it must be noted that a musicological or textual investigation would have been unable to uncover such sonic nuances. Finally, as for Albini's recording philosophy, the revolution will not be televised but recorded on analogue tape for future generations to use as a comparison to the radio friendly, digitally manipulated and fully *produced* sounds of the music industry.

Conclusion

This study began with two main aims. The first was to identify the producer's role within the recording of popular music; the second was to investigate the producer's contribution to the overall *sound* of the popular recorded song. In this concluding section each of these points will be addressed.

The Producer's Role

The study's literature review revealed a lack of any detailed assessment of the producer's role. The term 'Producer' did appear in some academic research, however, it was not accompanied by any adequate definition of the term or explanation of the role. Reflections on the role by producers themselves were often contradictory and misleading as evidenced by the selections featured in chapter three. In order to overcome these inconclusive findings, a definition was arrived at which reflected the dual nature of the role. The first part of the definition included the legal requirements of the producer and subsequent contractual obligations including:

1. Delivery of master recording.
2. Remuneration – fee and/ or percentage points.
3. Studio hire.

This definition served to locate the producer within the legal confines of the tripartite agreement of artist, producer and record company.

The second part of the definition concerned the creative approach to the recording of the popular song. This was addressed within a typology of skill sets which included being:

1. Visionary.
2. Technical.
3. Commercial.
4. Managerial.
5. Musical.

This provided an in-depth definition of the role, one which had previously been absent from any academic research on the subject. This was achieved as a result of research carried out within several fields of study, including areas of acoustics, sound engineering and cultural theory.

The Producer's Contribution to the *Sound*

In order to examine the contribution that the producer makes to the *sound* of the popular recorded song, this study introduced the notion of sonicology. Sonicology enabled an approach to the *sound* of the recorded song that was superior to that of simply a musicological or textual analysis. As a result of this examination it was concluded that as the producer was in charge of the signal path, both contractually and creatively, during the recording process, they were in a unique position to alter the sonic architecture of the song. This could be achieved by a combination of:

1. Studio acoustics.
2. Microphones/amplification.
3. Mixing desk.
4. Effects/Processors.
5. Recording medium.

It was also noted that the reason the sonic characteristics of the recorded song can be manipulated is a direct consequence of the acoustic properties of sound, found both in its creation and propagation. It is precisely these elements that the producer manipulates during the production process. It was also discussed that the producer's control of the *sound* of the recording has consequences when linked to the field of semiotics, which could be investigated in further research within this area.

Each of the research case studies supported the definition of the producer's role and their contribution to the sound of the recorded popular song, including;

1. Phil Spector- The evolution of the role and the "Wall Of Sound"
2. Mike Stock - Artist/producer relationship and the SAW sound
3. Steve Albini – The rejection of the producer's role and practice.

Thus each case study provided specific examples of the producer's role and their contribution to the recording process. In doing so the case studies offered supportive evidence which confirmed the study's typology of creative approaches, and the producer's control of the sound.

By defining the producer's role, and their contribution to the *sound* of the popular recorded song, this study has succeeded in highlighting the importance of that role. This has implications within the academic study of popular music, which relies on the recorded song as one of its central resources. As such, the architect of the song's sonic structure, the producer, deserves to be credited in any serious academic evaluation.

Notes

1. It consisted of a mouthpiece, which received the vocal signal, which then passed via the diaphragm and stylus ending up as an indentation on a foil covered cylinder. Revolving the cylinder with the stylus, reading the indentations, and sending these vibrations to its own diaphragm achieved playback.

2. The notion of self - accompaniment had been tried previously using a recorded performance on disk, with the vocalist singing as both the live vocal and sound from the disk recording were recorded onto another second disk. This was a very crude attempt, limited by the qualities of the disk, and the fact that each attempt had to be recorded to completion before any alterations to balance could be finalised. Magnetic tape allowed for greater flexibility owing to the fact that takes could be recorded then erased.

3. Another use of psychoacoustics and the brain's perception of sound can be found in the use of artificial reverberation (reverb) and delay. The sounds we encounter are generally a mixture of the following three components.
   The direct sound – traveling from the source, taking the shortest path to our ears.
   Early reflections - sound waves that bounce off surrounding objects, arriving later than the direct sound.
   Reverberation - sound waves that have continued to collide and bounce of objects long after the initial sound source has finished, often in highly reflective surroundings (tilled, marbled floors, areas containing high proportion of glass). These reflections tend to blend into a continuous stream of sound gradually decreasing in amplitude. These early reflections are what the brain uses to determine the size of an acoustic space.
   By artificially adding reverb to a signal, a vocal or guitar track, the engineer can place the performer, virtually, in any size room he desires. This can add another dimension to the mix, that of depth. By artificially adding reverb we

can place vocals, instruments very close i.e. no reverb or to the back of the mix i.e. additional reverb.

4. Compression was originally engaged as a means of controlling the recording of difficult material or instruments by controlling their dynamic range (in short quiet to loud passages). This would entail, as in the recording of a base drum, the setting of a threshold value. When a signal crossed the threshold (a particularly strong bass drum hit) it would be reduced by a given ratio allowing weaker signals (a quite bass drum hit) to reach the threshold value untouched. This would result in a string of bass drum hits all of equal strength. The use of compression in this way allows, as utilised in numerous Nirvana tracks, quiet verse passages to be replayed at the same volume level as their seemingly louder choruses. This can be observed by watching the volume meters in a playback device as the track is playing. The meters show the same level throughout the tracks. This is common on the majority of popular music recordings to day. This use of compression is deliberately interfering with the natural dynamics of the instruments/vocals.
Originally intended to be a discrete effect, compression is commonly used today in an obtrusive fashion. Used to distort or accentuate the sound of instruments e.g. the pounding bass drum in the Prodigy's Firestarter track.

5. Possibly the most well known psychoacoustic effect is the stereo effect. Developed by A.D. Blumlein in 1931 stereo (from the Greek meaning 'solid') is based on the brain's assumption that if both ears hear a sound source of equal intensity and without any differences it assumes that the source is the same distance from each ear. This allows us to feed two loudspeakers (left and right) with the same signal, which the brain perceives to be identical in both ears, placing the signal in the centre of the sound field. Conversely by altering the intensity of signal to one of the speakers the brain perceives a movement to one side; this in turn has developed into the panning effect, which mixers use to create movement or sound placement within a track. Allied to this is the fact, mentioned earlier, that sound waves contain a frequency element. In terms of psychoacoustics this relates to the brains perception of direction. In

short the brain can perceive the direction of mid to high frequency sounds more easily than low frequency sounds. This enables the mix of a particular project to contain mid to high frequency elements such as bells, glockenspiels, backing vocals and guitar sounds which can be placed anywhere between left to centre to right.

This gives the producer a stereo sound stage in which to place instruments, and can be as narrow or as wide as desired.

Appendix

Standard Producer's Contract (excerpt, CBS Records)

1 RECORDING PROCEDURE

1.01 In connection with each Master Recording produced by the Producer hereunder, the Producer shall:

(a) Produce and record such Master Recording in a mutually approved studio and produce and record such repertoire that Company has approved in writing.

(b) Upon Company's request, perform as liaison between the Artist and Company in all necessary and appropriate matters.

(c) Mix, re-mix and edit the Recordings at Company's direction if Company does not elect to do such mixing, re-mixing and editing otherwise.

1.02 In the event that Company does not deem any expense incurred by the Producer in the course of performing his services hereunder to be a reasonable recording cost Company shall have the right after sending to the Producer a detailed list of expenses so incurred without Company's prior written approval, to deduct such expenses from any advances and/or royalties payable to the Producer hereunder.

1.03 The tapes of Master Recordings Delivered to Company hereunder shall be satisfactory in the reasonable opinion of the Company for the manufacture of Phonograph Records.

2 RECORDING COSTS

2.01 Company shall pay the aggregate amount of all recording costs including without limitation costs of all accompaniment

(instrumental and vocal) arrangements and copying and studio and engineering charges. All such recording costs shall constitute advances and shall be charged against royalties payable to the Artist.

3 GRANT OF RIGHTS

3.01 All Master Recordings recorded hereunder from the Inception or Recording thereof and all Matrices and Phonograph Records manufactured therefrom together with the performances embodied thereon shall be the sole property of Company free from any claims whatsoever by the Producer or any other person; and Company shall have the exclusive right to copyright such Master Recordings in ins name as the owner and author thereof and to secure any and all renewals and extensions of such copyright whenever available. Solely for the purposes of any applicable copyright law all Persons rendering services in connection with the recording of such Master Recordings shall be deemed "employees for hire" of Company.

3.02 Without limiting the generality of the foregoing Company and any Person authorised by Company shall have the unlimited right to manufacture Phonograph Records by any method now or hereafter known, derived from the Master Recordings made hereunder and to sell, transfer or otherwise deal in the same under any trademarks, trade names and labels, or to refrain from such manufacture, sale and dealing, throughout the world.

3.03 Company and licensee of Company each shall have the right and may grant others the right to reproduce, print, publish or disseminate in any medium the Producer's name and/or professional name, and approved portraits, (which approval shall not be unreasonably withheld) pictures and likeness and biographical material concerning the Producer as news or information for the purposes of trade or for advertising purposes including but not limited to "institutional" advertising (i.e. advertising designed to create good will and prestige and not for the purpose of selling any specific product or service) provided, however, that no direct endorsement by the Producer of

any product or service shall be used without the Producer's written consent.

4 ROYALTIES

4.01 Except as otherwise provided the royalty payable to the Producer shall be calculated by multiplying the applicable basic rate by the Royalty Base Price in respect of applicable percentage of Net Sales of Phonograph Records consisting entirely of Master Recordings made hereunder and sold by Company or its licensees through Normal Retail Channels.

8 WARRANTIES: REPRESENTATIONS: RESTRICTIONS: INDEMNITIES

8.06 The Producer warrants that he is now and will remain at all relevant times within the definition of "qualified person" as defined by the Copyright Act 1956.

8.08 The Producer warrants that he will render to the best of his skill and ability all such services as are usually rendered by a record producer of first class repute and in accordance with the directions given by the Company and in collaboration with such persons as Company may designate in order to provide a first class artistic and technical recording.

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Glossary of technical terms

Amplitude The maximum value during a single cycle of a wave.

Analogue to digital conversion The conversion of an analogue waveform into binary information for storage and manipulation within the digital domain.

MIDI (Musical Instrument Digital Interface) This is an agreement between manufacturers to standardise a method of interconnection and communication between MIDI-equipped devices. It is a serial system, offering 16 separate MIDI channels of information via one cable.

Dynamic range The usable region between low-level noise and distortion at high levels.

Frequency The number of complete sound waves that pass a given point in a given time.

Timbre The quality of a sound related to its harmonic structure.

Phase The time relationship between two signals.

Sampling The process of recording a sound and storing it digitally for triggering and manipulation by a sampler.

Sequencer A system that can store and retrieve MIDI information. This can include musical performance details as well as parameter settings for synthesisers and effects units.

Envelope The amplitude characteristics that determine the shape of a sound.

Harmonic distortion The change in the harmonic content of a signal when passed through a nonlinear device.