

**Recording classical music in Britain:
The long 1950s**

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DPhil in Music

Trinity Term 2015

ABSTRACT

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During the 1950s the experience of recording was transformed by a series of technical innovations including tape recording, editing, the LP record, and stereo sound. Within a decade recording had evolved into an art form in which multiple takes and editing were essential components in the creation of an illusory ideal performance. The British recording industry was at the forefront of development, and the rapid growth in recording activity throughout the 1950s as companies built catalogues of LP records, at first in mono but later in stereo, had a profound impact on the music profession in Britain. Despite this, there are few documented accounts of working practices, or of the experiences of those involved in recording at this time, and the subject has received sparse coverage in academic publications.

This thesis studies the development of the recording of classical music in Britain in the long 1950s, the core period under discussion being 1948 to 1964. It begins by considering the current literature on recording, the cultural history of the period in relation to classical music, and the development of recording in the 1950s. Oral history informs the central part of the thesis, based on the analysis of 89 interviews with musicians, producers, engineers, and others involved in recording during the 1950s and 1960s. The thesis concludes with five case studies. The first four examine significant recordings – *Tristan und Isolde* (1952), *Peter Grimes* (1958), *Elektra* (1966-67), and *Scheherazade* (1964) – while the fifth focuses on *The Anatomy of a Record* (1975), a television programme documenting aspects of the recording process.

The thesis reveals the ways in which musicians, producers, and engineers responded to the challenges and opportunities created by advances in technology, changing attitudes towards the aesthetics of performance on record, and the evolving nature of practices and relationships in the studio. It also highlights the wider impact of recording on musical practice and its central role in helping to raise standards of musical performance, develop audiences for classical music, and expand the repertoire in concert and on record.

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Acknowledgements

I would like to express my gratitude to everyone who has contributed to the completion of this thesis. I am particularly grateful to all those who generously gave their time to be interviewed. Special thanks are due to Alan Rowlands (1929-2012) who provided the initial inspiration for the research topic during a conversation in London in December 2007.

Many others have provided help and assistance along the way, including those who reviewed draft chapters and commented on initial findings, who loaned books, journals, recordings, and other materials, and who provided contacts and introductions to potential interviewees.

I am particularly indebted to my supervisor, Professor Eric Clarke, for his guidance and support over the years. I am also grateful to the students and fellows of Wadham College for providing a creative, stimulating, and supportive environment in which to live and work.

Introduction

Recording has played a major role in the development of classical music since commercial recordings first appeared in the early decades of the twentieth century. For musicians it has often provided a source of income but also a means of promotion, and in many cases has helped to establish careers. The 1950s is arguably one of the most important eras in the history of recording as not only was there a series of technological advances that transformed the experience of recording for musicians, but there was also an extraordinary surge in the amount of recording activity. Despite this, the subject has been poorly documented and has not been the subject of any significant musicological research to date. This thesis explores the development of the recording of classical music in Britain in the 1950s through a study of the current literature, relevant archival material, and the evidence of oral history.

The history of recording can be divided into different eras (Patmore, 2009, p. 120) defined by the state of the technology available at the time, and the extent of its ability to capture and faithfully reproduce a musical performance. In the acoustic era of recording (approximately the first quarter of the twentieth century) the limitations of the recording process frequently required artists to work in cramped and difficult conditions; photographs often show musicians grouped tightly around a recording horn in an attempt to capture as much sound as possible. By the mid-1920s the introduction of electrical recording equipment, including microphones and amplifiers, enabled musicians to work in more natural conditions and also improved the quality of sound reproduction on record. Throughout the first half of the twentieth century, however, the limited duration of the 78 rpm record – approximately four and a half minutes – restricted the ability to record

longer works, while the lack of editing made it necessary to record in single takes, making recording a difficult and frustrating experience for many musicians.

The 1950s represent a significant period in musical and recording history as the way that recordings were created and experienced was transformed by a series of technical innovations including tape recording, editing, the long-playing (LP) record, and stereo sound. The new technology enabled musicians to record in long takes, while the introduction of editing allowed them to correct errors without having to repeat an entire take. Engineers revised working practices in order to maximise the potential of the new technology and the opportunities afforded by it. At the same time the role of the record producer evolved to become an increasingly important part of the recording process.

Within a decade recording had evolved beyond a preoccupation with documentary aesthetics – the idea of simply ‘capturing’ a performance on record – and into an art form in which multiple takes and editing were essential components in creating the illusion of an idealised ‘perfect’ performance. Meanwhile, the new medium of the LP record required record companies to re-record repertoire for release in LP format – at first in mono sound and then again, later, in stereo – but also provided the opportunity to record repertoire previously neglected in the catalogues, including large-scale orchestral works and operas. Growing record sales and demand from consumers gave record companies the confidence to take risks and to develop audiences for emerging niche markets including early music and contemporary music, which in turn gave musicians the opportunity to experiment with new or previously unrecorded repertoire.¹

¹ In discussion of the 1950s the term ‘early music’ is taken to refer to repertoire up to and including the Baroque era; the early music movement’s exploration of later repertoire and use of terms such as ‘period performance’ were not common before the 1970s and 1980s (Fabian, 2003, pp. 1-27; Haskell, 2001).

These developments had a profound effect on both the recording industry and the music profession in Britain yet there are surprisingly few published accounts of the musicians, producers, and engineers working during this period. The study of recordings is a growing discipline in musicology but the recordings of the 1950s have not been the subject of any substantial musicological research or publications to date and there has been little attempt to assess the impact of this period in any thorough or meaningful manner, with the subject grossly under-represented in the literature. Many of the key figures involved in classical music and recording during this period are deceased and those who survive are now elderly. With the demise of the classical recording industry and of once-great companies including Decca and EMI, much archive material has been lost and it is increasingly difficult to access what little remains. There is therefore an urgent need to investigate this area, especially while it remains in living memory, to establish the true significance of the period in terms of its impact and influence on recording and on classical music in general. In the absence of other sources the findings of this study will help to illuminate what has hitherto been a neglected part of musical history by demonstrating the significance of recording in this period, its impact on music and musicians, and its influence on musical practice. Throughout the thesis the term ‘the 1950s’ actually covers a slightly broader time frame, since although many of the issues under discussion relate to that decade there is inevitably some continuity and overlap with events before and after. Therefore the core period under discussion and referred to as ‘the 1950s’ extends from approximately 1948 to 1964 but there are also occasional references to recordings and events outside this period – and which fall into what might be termed ‘the long 1950s’ – where they are of relevance to a discussion of recording in the 1950s.

Part I of the thesis outlines the background to the subject, the first chapter consisting of a review of the current literature available on recording and the extent of its coverage of aspects of the recording process and of the 1950s in particular. Chapter 2 provides contextual information for the study by looking at the cultural history of the 1950s in Britain with regard to classical music. Chapter 3, although not setting out to be a comprehensive history of the development of recording in the 1950s, considers some of the major developments of this period and their implications. With little documentary evidence available, this chapter draws upon contemporary reports within publications including *The Gramophone* and *Records and Recording* as well as accounts from autobiographies and other works published later.

Part II is concerned with oral histories of the period, based on an analysis of 89 interviews with musicians, producers, engineers, and others associated with the recording industry during the 1950s and 1960s. These comprise 43 interviews from the British Library Sound Archive *Oral History of Recorded Sound* and 46 interviews conducted by the author between February 2009 and June 2015. The interviews explore issues such as the ways in which musicians responded to the challenges and opportunities offered by the new technology, how this influenced their thinking in terms of the aesthetics of performance on record, and the wider impact of these developments on the record industry and the music profession in general. They also provide first-hand accounts of the experiences of those who were directly involved in the industry during the period in question and enable a more comprehensive picture to emerge of the impact of recording on music and musicians in the 1950s. In many cases these are the only accounts left by the individuals concerned, many of whom have died since being interviewed. The introduction to this section sets out the methodology for the study and also considers issues such as the reliability of long-term

memory in oral histories. Chapters 4-6 discuss the key findings from the analysis of the interviews under the following chapter headings: People, roles, relationships; Recording practices; Musical practice and the influence of recording.

Part III consists of five case studies. The first is of HMV's 1952 mono recording of Wagner's *Tristan und Isolde*, conducted by Wilhelm Furtwängler; not only was this the first complete studio recording of the work but also the first complete opera to be recorded by HMV on magnetic tape. The second study is of Decca's 1958 stereo recording of Britten's *Peter Grimes*, conducted by the composer, in what is an early example of the stereo opera productions associated with John Culshaw. The third study is of Decca's 1966-67 recording of Strauss's *Elektra*, conducted by Sir Georg Solti. Although falling slightly outside the core period of this thesis, this recording was one of Culshaw's last major recording projects – arguably therefore representing the culmination of his influential work of the 1950s – and also the subject of a prolonged debate in the pages of *High Fidelity* magazine about the legitimacy of aspects of Decca's approach to stereo opera. The fourth study considers Decca's Phase 4 recording of *Scheherazade* (1964) as an example of alternative approaches to stereo recording. The final study is of *The Anatomy of a Record* (1975), a television programme documenting the recording of Mozart's Piano Concerto No. 27 in B flat, K. 595, performed by Alfred Brendel (piano) and the Academy of St Martin in the Fields conducted by Sir Neville Marriner. The programme is a rare example of film footage of a recording session and although it is, again, outside the core period for this thesis the equipment and methods shown are representative of those developed in the 1950s and therefore of relevance. As well as documenting aspects of the recording process the programme provides compelling evidence of the sometimes fraught relationships that can exist between artists and producers when recording.

Part I:

Context and background

1 Literature review

Until recently there were few academic publications on the subject of recording, a fact partly explained by the experience of Robert Philip. Before embarking on his doctoral study of orchestral style as demonstrated by recordings, at Cambridge in 1968, he had sent a proposal to the then Heather Professor of Music at the University of Oxford, Sir Jack Westrup, only to receive a reply in which Westrup stated: ‘I feel bound to tell you that I could not recommend this topic to the Faculty as appropriate for research’ (Philip, 2004, p. 1). It is therefore only recently, and particularly with initiatives such as the AHRC-funded Centre for the History and Analysis of Recorded Music (CHARM) – operational from 2004 to 2009 – that recording has been seen as an ‘appropriate’ subject for academic research and that scholars have embarked on work in this area to any significant degree. The CHARM initiative has inspired several new publications, each of which is a welcome addition to the literature, although the number of authors working in this field is still relatively small and there is considerable scope for further research.

In the growing body of published research on recording, much of the literature (Chanan, 1995; Day, 2000; Eisenberg, 2005; Katz, 2004; Philip, 1992, 2004), has focused on its historical and socio-cultural analysis although some more recent titles (Bayley, 2010; Cook, Clarke, Leech-Wilkinson, & Rink, 2009; Dogantan-Dack, 2008; Frith & Zagorski-Thomas, 2012; Leech-Wilkinson, 2009) have taken a broader, more inter-disciplinary approach. While the aesthetics of recording are often touched upon within the literature, there has yet to be any systematic review of this field in its own right, with authors tending to ignore the specific nature of recording and subsuming it within the scope of performance studies. As a result, this aspect of recording has often received little more

than cursory or anecdotal treatment within the wider literature and there is little consideration of issues such as working practices or relationships within the studio. The historical period under consideration, the 1950s, is also poorly represented in the literature on recording and to date there has been no definitive survey of the extent or impact of recording on classical music at this time. It is nonetheless a useful exercise to review the existing literature in order to determine what has been said about these issues. Given that the available evidence is often fragmentary and tends to be distributed amongst a wide range of publications, this review will necessarily be selective and will consider relevant literature within the following broad categories: Histories; Interviews; Biographies; Technical; Philosophy and Aesthetics; Cultural Studies; and Interdisciplinary Studies. Consideration will also be given to the wide variety of other sources that exist in the form of popular magazines.

Histories

Although this is by far the largest category of literature on recording, few histories have been written from an academic standpoint. Discussion will therefore be limited to what may be considered the key works in this area. Roland Gelatt's *The Fabulous Phonograph*, first published in 1956, claims to be the first comprehensive history of recording, in which:

Science and business and aesthetics are inseparably commingled in the historical progression from Edison's raucous tin-foil apparatus to the high fidelity reproducers and recordings of today. I have attempted to keep these three elements in fairly equal balance.

(Gelatt, 1977, p. 11)

Despite this claim, the book is essentially a chronological history of recording tracing its technical development and commercial growth as an industry in the first half of the twentieth century, although the second edition (Gelatt, 1977) was updated to include then

more recent developments. Aesthetic considerations in the process of recording are referred to in passing but not dealt with in any thorough or substantial manner. Gelatt also fails to analyse musicians' experiences of recording and how it has impacted on their playing, ultimately providing little sense of the development of artistic approaches to recording. For many years, this was one of the few books on the history of recording, a point acknowledged in the introduction to Michael Chanan's *Repeated Takes* (Chanan, 1995) in which he states that, at the time of writing, there was 'a dearth of serious writing about the record industry (as opposed to a mass of anecdotal stuff about recording artists)' and so his aim was 'to provide a general history of the medium' (Chanan, 1995, p. ix). The book covers the growth of recording from a technological and commercial viewpoint, and also considers the effects of recording on performance and interpretation. In the chapter 'The Microphone and Interpretation' (Chanan, 1995, pp. 116-136) Chanan considers changing attitudes to recording, and speculates as to whether recording changed performance practice in the twentieth century or merely accelerated a process that was already underway. Yet in the discussion that follows, which includes a lengthy account of changes in performance practices in early music drawing on the work of Richard Taruskin (Chanan, 1995, pp. 123-127), recordings are described more as a means of documenting change than as a catalyst for change. While this provides valuable insights into stylistic changes in performance practice, it is indicative of a common failing in the literature whereby recordings are evaluated against the values of the concert hall rather than being interpreted in terms of their own aesthetic possibilities. Ultimately, Chanan offers no firm conclusions as to the extent of the influence of recordings on performance practice. He does, however, include examples of musicians' responses to the experience of recording. For instance, he cites an anonymous musician who stated in 1951 that 'in the presence of an audience you play with heat, but the disc is recorded cold' (Chanan, 1995, p. 128).

Many of the musicians quoted describe recording in negative terms, as a problem to be overcome, although Chanan provides a balanced account by also giving examples of musicians for whom recording had positive aspects, such as the conductor Igor Markevich who appreciated recording ‘for allowing us to hear the music in better conditions than in live performance’ (Chanan, 1995, p. 130).

Discussion of the transformation in recording practices in the 1950s following the introduction of tape recording (providing the facility to edit and to make repeated takes of a passage) enables Chanan to move towards a consideration of new aesthetic approaches to recording that emerged at this time. In doing so he makes the observation that ‘the new situation also brought a clash between musician and producer over control of the recorded sound image, and in practice most performers gave way – in the interests of their careers’ (Chanan, 1995, p. 131), although no examples are provided to support this claim. He also begins to discuss ways in which the rise of the role of the record producer changed recording, as evidenced in the career of Walter Legge, but the theme is not explored in any depth. The same is true of the pages devoted to Maria Callas (Chanan, 1995, pp. 134-136), where Chanan begins promisingly with the statement:

If the microphone and the recording studio indeed produce a different approach to interpretation from that of the concert platform and the opera house, then what the difference consists of can be gauged by comparing the several different versions of the same operas that Callas recorded over her relatively short career, between the late 1940s and the mid 1960s.

(Chanan, 1995, p. 134)

However, other than referring to recording’s ability to highlight the nuances of Callas’s performance, an approach encouraged by Walter Legge as her producer, Chanan’s analysis falls short of defining the exact nature of Callas’s aesthetic approach to recording or the extent of the difference between her recorded and her live performances. Ultimately, it

would appear that the scope of the project is so vast that although Chanan makes many lucid observations with regard to the changing aesthetics of recording, and of the changes in recording during the 1950s, these ideas are not fully developed; nor are there clear definitions or in-depth analyses that would guide the reader to firmer conclusions. The emphasis on comprehensiveness at the expense of detail appears to be a problem common to several of the histories currently on offer, suggesting that a single volume cannot do justice to the history of recording in its entirety.

In the preface to Timothy Day's *A Century of Recorded Music* (Day, 2000) the author states that the book is not a comprehensive account of the history of recorded music and that 'such an account is hardly possible until much more information is unearthed and analysed' (Day, 2000, p. ix). While this may be a modest claim, considering the breadth of the book's content, it is true that there are significant gaps in the literature, this being a 'neglected field notoriously difficult to cultivate' (Day, 2000, p. x). Unlike previous histories, the work is aimed at a scholarly audience and is meticulously researched and referenced, providing much valuable source material. One of the work's strengths is that technological and other changes brought about by recording *are* related to their effect on musicians and the choices available to artists in terms of repertoire. For instance, when discussing early recordings Day notes that:

The acoustic process of recording therefore limited what music could be attempted, it affected how the musicians performed in various ways and it seriously distorted the sounds they actually made. Large numbers of performing musicians could not be recorded at all.

(Day, 2000, p. 11)

As well as providing a historical overview of recording, the first chapter 'Making Recordings' (Day, 2000, pp. 1-57) has many useful sections on musicians' attitudes to recording, studio practices, the role of the producer, and relationships in the studio. Again,

the attempt at comprehensiveness means that many of these areas are not covered in sufficient detail to be of real value and consideration of the issues raised remains somewhat superficial. The same is true of Gronow & Saunio's *An International History of the Recording Industry* (Gronow & Saunio, 1998), described by the authors as a cultural history, which has an entire chapter devoted to and entitled 'The Age of the LP' (pp. 95-134). The coverage of classical music represents a relatively small portion of this chapter, much of which covers jazz and popular music, and there is greater consideration of the recording industry in the USA than that of Europe. Discussion of the effect of technological change on musical practice is minimal and although the authors note that 'the working practices of different producers and conductors tended to differ sharply' (Gronow & Saunio, 1998, p. 122) they do not expand on this statement.

Colin Symes's cultural history of recording takes a different approach through an examination of the material culture of recording in which he considers the role of record sleeve artwork, specialist magazines devoted to recordings, and record reviews as essential components in the promotion and consumption of recordings. The experience of recording, although not prominent in the work, is touched upon in a short section on musicians' attitudes to recording (Symes, 2004, pp. 38-42). Here, Symes notes that many musicians were apprehensive about recording in the acoustic era as the extreme conditions in which they worked made it a stressful experience, while the limitations of the recording process at that time forced them to make musical compromises. In the section that follows, Symes goes on to discuss the fact that although conditions were vastly improved by electrical recording and, later, by the introduction of tape recording, these advances also created problems. In relation to editing, Symes asserts that musicians were divided into 'two rival, irreconcilable camps' (Symes, 2004, p. 42): the 'take ones' who preferred to record in long

takes and use a minimum of editing, and the ‘take nines’ who recorded in short takes to take advantage of editing techniques. Another chapter deals with the iconography of record sleeves and how, during the 1950s, the record sleeve was transformed from mere packaging into a vehicle to promote LPs through the use of innovative artwork, informative sleeve notes, and the distinctive styles and logos of each record company. This chapter at least provides some invaluable background contextual material on the changing nature of the production and reception of records in the 1950s.

One particularly captivating volume is Mark Katz’s *Capturing Sound* (Katz, 2004), written as a series of case studies that present recording as a catalyst for change, whether in performance practice, listening habits, or the emergence of new popular genres. The chapter ‘Aesthetics out of exigency’ (Katz, 2004, pp. 85-98) examines the evidence for the development of a continuous vibrato in violin playing in the early decades of the twentieth century, which Katz argues was a result of the need to improve the quality of the sound of strings on early recordings. The difficulty in capturing the sound of the violin on recordings meant that, within two decades, recording artists changed from the fairly sparse use of vibrato as ornament, to the near continuous use of vibrato as an essential means of expression. If his assertion is correct, as appears to be confirmed by an interview with the violinist Peter Mountain who remembers being instructed to use a continuous vibrato when he was a student at the Royal Academy of Music in the 1940s (Mountain, 2010), then this is an early example of recording influencing the aesthetics of concert performance. Even if the change could be shown to be due to other reasons, such as wider changes in artistic practice, recordings would still have played an important role in the dissemination of this change in practice. The distance of time and the lack of substantial evidence from sources other than recordings make it difficult to reach any firm conclusions about this theory but

Katz's work demonstrates both clarity and rigour, making for a persuasive argument and an authoritative voice.

In contrast to Katz, Norman Lebrecht's *Maestros, Masterpieces and Madness*, subtitled 'The secret life and shameful death of the classical record industry' (Lebrecht, 2007), lacks the rigour and objectivity of a scholarly source. This is in keeping with Lebrecht's work as a journalist and broadcaster but often makes for a highly subjective account of the fortunes of the recording industry. Parts II and III in particular – respectively 'Masterpieces: 100 milestones of the recorded century' and 'Madness: 20 recordings that should never have been made' – reflect Lebrecht's opinions and, although these provide useful illustrations of the highs and lows of the recording industry, they are inevitably highly personal and selective choices. Lebrecht's writing suggests a tendency to rush to conclusions and to seek the sensational without being bound by the need for accurate reporting or an objective analysis of the evidence. Ultimately, Lebrecht's account is intended as a work of popular appeal rather than a scholarly tome.

Interviews

Amongst the books reviewed, two works (Badal, 1996; Harvith & Harvith, 1987) consist of interviews dealing with the experience of recording and its effect on musicians. In the introduction to Harvith & Harvith, the authors state that the interviews 'raise provocative questions as to how celebrated musicians intend their recordings to be heard and how accurate they feel their recordings are as a legacy' and that 'a number of musicians address directly and candidly these issues and many others' (Harvith & Harvith, 1987, p. 18).

However, the authors do not attempt to analyse the responses and elsewhere, in the preface, state that the reader 'must provide his or her own answers to the questions these

interviews raise' (Harvith & Harvith, 1987, p. xiv). James Badal's work, meanwhile, is a collection of interviews, or 'conversations' as he refers to them (Badal, 1996, p. ix), that began life as a journalistic assignment to interview conductors making guest appearances with the Cleveland Orchestra, the interviews originally appearing in the record review magazine *Fanfare* between 1984 and 1991. Early on, Badal states that:

Working successfully in the studio requires an understanding of the role recordings play in contemporary musical life, as well as enough technical literacy to be comfortable with the process of making them.

(Badal, 1996, p. 5)

The interviews probe these and other issues, raising pertinent questions about the value and significance of recordings, the artistic choices to be made, and the technical challenges involved but, as Badal admits:

These interviews do not reveal definitive answers to such questions. I had no particular ideological positions to defend when I began this project in 1981; my intention was to explore the issues with people who constantly have to grapple with them as part of their professional lives.

(Badal, 1996, p. 13)

Both Badal and Harvith & Harvith present essentially raw interview data and, although this provides invaluable source material on historical recording conditions and the experiences of musicians, the authors do not offer any analyses or attempt to reach any conclusions. Neither study is directly concerned with the 1950s – the Harviths' interviews are mostly with musicians who were working in the first half of the twentieth century, while Badal's are with conductors who were still active in the 1980s – but the interviews offer important clues as to the nature and process of recording in the mid-twentieth century. Ultimately, their value is limited by that fact that, as the authors freely admit, neither work offers any answers to the many questions that arise from the interviews.

The practical and aesthetic considerations inherent in the recording process have also been neglected to a large extent. More recent research (Curran, 2007), based on interviews with musicians and record producers, established a number of the key issues at stake for musicians when recording, particularly in relation to the goal of perfection and its effect on musical performance. The majority of the interviewees in this study felt that recording deserved to be considered as an art form in its own right, in the same way that the film and television industries are seen as producing dramatic work quite distinct from that of the theatre, and yet the idea of a recording aesthetic remained an elusive concept. The problematic nature of defining an aesthetic approach to recording is exacerbated by the fact that these concepts have changed and evolved along with the various social circumstances and technological conditions in which artists have worked. In terms of the 1950s those changes also occurred at a time when recording had a different status with musicians and consumers, and had not attained the ubiquitous presence it has today. Therefore, while the study identified some of the issues facing musicians when recording and their responses to the medium, it dealt with modern musicians working in the digital era and the findings do not translate easily to artists of previous generations working in different historical circumstances.

Biographies

A number of biographies have been published that are relevant to recording in the 1950s but most are highly anecdotal and superficial in their accounts. Autobiographies by Artists and Repertoire (A&R) managers Fred Gaisberg (Gaisberg, 1946) and Joe Batten (Batten, 1956) cover the development of the recording industry in the era of the 78 and consist mainly of anecdotal accounts of the artists that they encountered. As such, they reveal little of the thinking behind working practices of the day but at least provide useful contextual

material for the changes that occurred in the 1950s. More recent record producers from the second half of the twentieth century are also represented in the literature but, again, the majority of these works contain little in the way of insights into working practices or relationships in the studio. The biography of Walter Legge, EMI's principal producer of the 1950s, is a lightweight and largely anecdotal account of his life by his wife Elisabeth Schwarzkopf (Schwarzkopf, 1982). Indeed many of the stories have been told elsewhere, not least by Legge himself as he was a prolific writer of articles for magazines and other publications, and some of his writings have also been reissued in an edited volume (Sanders, 1998). Neither of the publications mentioned here reveal much of Legge's working methods although some measure of his aims and aspirations can be found in a statement in his own words:

It was my aim to make records that would set the standards by which public performances and the artists of the future would be judged – to leave behind a large series of examples of the best performances of my epoch.

(Schwarzkopf, 1982, p. 16)

Later autobiographies by producers such as George Martin (Martin & Hornsby, 1979), John Culshaw (Culshaw, 1981), and Suvi Raj Grubb (Grubb, 1986) are more revealing and do engage with aspects of the philosophy and aesthetics of recording, although not at length or in depth. For example, Culshaw – Decca's principal producer from 1956 to 1967 – was certain in his belief that recording amounted to a different art form from concert performance and that artists needed to make adjustments in order to accommodate this difference:

An artist who can be exceptional in the theatre cannot necessarily reproduce the performance in recording-studio conditions. [...] Communication with an audience in a theatre is an entirely different exercise from communication through a microphone to a domestic audience.

(Culshaw, 1981, pp. 94-95)

George Martin, meanwhile, refers to ‘floating standards’ (Martin & Hornsby, 1979, p. 76) in relation to the aesthetics of recording, using the term to point out that there is no set approach. Seen from his perspective, artistic goals and the methods used to achieve them are the individual responsibility of the producer, working in collaboration with artists and engineers, and responding to the collective energy produced in a recording session. Martin makes one critically important observation with regard to the changing nature of the role of the record producer, noting that when he joined the profession in the 1950s the term ‘producer’ was not in use and that he and his colleagues were known as A&R managers, or simply artists’ managers. The managers would make all the preparations for the recording in consultation with the artists but ‘when the appointed day came, it was really the engineer who was in charge’ (Martin & Hornsby, 1979, p. 241). It was the technological advances of the 1950s that brought change, beginning in the USA:

They started to talk about ‘record producers’. That usage soon crossed the Atlantic. It was an indication of the changing role of the A&R man/producer and of the increasing importance that was being attached to him.

(Martin & Hornsby, 1979, p. 242)

Although a matter of terminology, this change marks an important transitional period during which the term ‘record producer’ begins to enter the public consciousness, first in the USA and later in the UK, bringing with it an awareness of the role and its status. Particularly useful in Martin’s work is his account of the change in the role and status of the record producer in the 1950s and 1960s as the advances in technology both enabled and demanded a more proactive stance on the part of producers, particularly in popular music:

Today the producer’s role has completely changed. He works with the engineer to create something which, in terms of normal acoustics, is not possible, something which is larger than life. He is there to superimpose his will on the artist, to steer the recording into the musical direction he wants.

(Martin & Hornsby, 1979, p. 243)

Martin spent most of his career working in the field of popular music where the idea of a producer trying to ‘superimpose his will’ on an artist might be more readily accepted but this attitude would not necessarily transfer easily to the world of classical music where an artist might expect to have more input to the process and control over their interpretation. An experienced classical recording artist would most likely expect to be treated as an equal and to work in collaboration with a producer. However, the literature currently available has little to say about interpersonal dynamics in the recording of classical music and the ways in which producers and musicians work together, pointing to another gap in existing research.

Technical

There are surprisingly few books devoted to the technical aspects of the recording of classical music, although there are many on home recording and the recording of popular music. This only helps to intensify the air of mystery that surrounds the art of the classical recording engineer, who has little representation within the literature. John Borwick’s *Sound Recording Practice* has undergone many revisions since it was first published in 1976, with chapters rewritten to reflect changes in technology and working practices within the industry. The first and second editions (Borwick, 1976, 1980) are of particular interest as they include chapters on the recording of classical music by recording engineer Trygg Tryggvason (Tryggvason, 1980), and the role of the producer by John Culshaw (Culshaw, 1980). Both emphasise the need to consider the end user of the recording, the listener at home, and to fashion the sound with that aim in mind but Culshaw also makes the point that the technology of the 1950s, and particularly that of stereo recording, necessitated the development of the role of the record producer:

Stereo gave the producer no option but to produce, for at the very simplest level he was faced with a spatial requirement: it made no sense at all, or indeed it was downright comical, to record a love duet in which the characters were audibly several feet if not several yards apart. The producer and his imagination finally became a determining factor in the effectiveness of a record.

(Culshaw, 1980, p. 321)

Other more recent works on the technology of classical recording include Moylan (1992) and Hallifax (2004). Moylan addresses aspects of the aesthetics of recording by discussing the variables within the engineer's control, such as the sound balance established during the recording session or the editing process that takes place afterwards, and the extent to which the engineer has the potential to alter or manipulate them in order to arrive at the final recorded performance. In the process an engineer may create an 'altered reality' as Moylan terms it (Moylan, 1992, p. 85), by modifying the acoustic of the recording or the relative balance of instruments or voices. He can also edit a recording to the point where it represents a performance beyond the capabilities of the artist in the concert hall or so technically perfect as to be musically sterile. In Hallifax, what are often direct and bold statements about recording reflect the author's real-world experience of the industry as a freelance recording engineer. For instance, in one passage he summarises the informal type of induction and training of engineers that used to exist within the recording industry:

The major recording companies, each with its own distinct philosophy, practices and techniques, used to be the guardians of the recording craft. They handed down their accumulated expertise to younger generations, who perpetuated it and developed it and, in turn, passed it on.

(Hallifax, 2004, p. 9)

This statement confirms the way in which record companies throughout much of the twentieth century relied on oral methods as a means of knowledge transfer rather than any structured or documented system of training. Recording engineers tended to stay with one company – there was generally little movement between companies – and often became associated with the particular house style of that company. With the demise of the classical

recording industry those forms of apprenticeship no longer exist and, with the passing of the generations, lack of documentation, and the dearth of personal accounts by engineers, the knowledge and history of working practices in the recording industry and how they evolved are in danger of being lost without research to identify and record them. Even when training is available, as seen in the growth of music technology courses in FE and HE institutions, the dominant aesthetic approach is likely to be that of ‘commercial and popular music – another world, less enigmatic and more pragmatic than the culturally and sonically abstruse art of recording classical music’ (Hallifax, 2004, p. 9). The result is that classical music is increasingly marginalised within the recording industry and this bias tends to be reflected in the literature available on recording. This reinforces the case for capturing and documenting the histories of recording from those producers and engineers who helped to define the various aesthetic approaches to the recording of classical music from the 1950s onwards.

Philosophy and aesthetics

In Robert Philip’s first book, *Early Recordings and Musical Style* (1992), his primary intention was to use recordings as a means of documenting changes in performance style from 1900 to 1950. He identifies a number of key changes that evolved gradually through this period such as the use of a more frequent and continuous vibrato by singers and instrumentalists, a decline in the use of portamento, a closer adherence to stricter tempi and more accurate rhythmic values, as well as an increasingly standardised approach to the use of certain types of instrument, such as the metal-bodied flute. Philip attributes these changes partly to the needs of recording, with its concern for accuracy and clarity, but also to factors including the technical demands of much contemporary music, which required a higher standard of performance. If Philip is correct, and Katz too (see p. 22), it seems that

the practical and aesthetic requirements of the recording studio have influenced the aesthetics of concert performance – and especially so in the second half of the century, with the rapid expansion of the recording industry brought about by advances in recording technology and growing consumer demand. Even though Philip published this pioneering work over 20 years ago, it was not until recently that others began to build on this work.

Amongst the publications that continue in the vein of Philip's work is Dorottya Fabian's *Bach Performance Practice 1945-1975* (Fabian, 2003), which adopts a similar approach by using recordings as a means of studying changes in performance practice in historically informed performance, noting the way that recordings document the development of the early music movement in the post-war period. Although there had been recordings of early music made during the first decades of the twentieth century, it was only in the 1950s that the record industry began to develop this repertoire with the introduction of dedicated record labels including Deutsche Grammophon's Archiv Produktion and Telefunken's Das Alte Werk. Fabian reports that at this time recordings of early music often had to be made bar-by-bar as standards of performance were not as advanced as they are today and there were often problems with intonation and ensemble (Fabian, 2003, p. 40). The early repertoire was not well known at the time and not frequently heard in concert halls so the record industry played a vital role in supporting artists, promoting the repertoire, and building audiences.

Robert Philip's second book, *Performance in the Age of Recording* (Philip, 2004), is in some ways a sequel to his first but is broader in scope, considering musicians' experience of the recording process and the ways in which recording has forced them to re-evaluate their attitudes and approaches to performance. There is some useful information regarding

recording in the 1950s, particularly on pp. 42-50 of the chapter ‘The Experience of Recording’ (Philip, 2004, pp. 26-62). Here, Philip discusses the change in performance standards and attitudes to accuracy as evidenced by recordings (Philip, 2004, pp. 42-43), noting that whereas performances on early recordings often contain errors, modern recordings are almost clinically perfect due to the ability to edit together performances from different takes to create an apparently seamless result. Philip also notes that the facility for editing has undoubtedly eased some of the pressures of performance felt by musicians in recording situations but has created other pressures by raising both the standard of performance demanded by record companies and the expectations of listeners. Useful though these comments are, they occupy a small part of one chapter only. As with many of the other works discussed here, Philip’s book covers the entire span of recording in the twentieth century, from the earliest 78s to recording for CD, and the same attempt at comprehensiveness limits its usefulness as a source on recording in the 1950s.

Philosophers such as Roger Scruton (Scruton, 1997) and Peter Kivy (Kivy, 2002) have generally given little consideration to recording in writing on the aesthetics of music, except to mention it in passing when discussing musical performance. Stephen Davies devotes a chapter to recordings in his *Musical Works and Performances* (Davies, 2001) but the emphasis is on how recordings are perceived and experienced by listeners rather than what they mean to musicians and record producers. In discussing some of the differences between live performance and studio recording, Davies cites Alfred Brendel:

In a concert it is the broad sweep that counts. The studio demands control over a mosaic; while it offers the performer the possibility of gradually loosening up, there is also the danger of diminishing freshness. And there is the painful business of choosing between takes.

(Brendel, 1990 cited in Davies, 2001, p. 309)

However, such insights are rare and even though Davies has produced an incisive review of the general reception of recordings, it contributes little to the concerns of this study. The quote from Brendel also demonstrates another problem with the literature: the available sources of original material are so scarce that authors are forced to draw on the same slender resources, and frequently resort to citing each other. The result is that the same quotes, such as those of Brendel or Glenn Gould, are spread increasingly thinly across a wide range of works. Not only does this restrict the number of original voices to be found within the literature, it also limits the potential to make significant progress in this area without further research.

Cultural studies

In recent years research in cultural studies has produced a number of works with relevance to recording although in most cases they are concerned with phenomena associated with sound, listening, and hearing. As such they often have limited value in terms of the subjects of this thesis, although they raise important issues about the changing relationship between artists and audiences, as well as the experience of musical performance, through the availability of recordings. Jacques Attali presents a rather negative view of recording in his book *Noise* (1985), arguing that the reproduction of sound results in ‘the death of the original, the triumph of the copy, and the forgetting of the represented foundation’ (Attali, 1985, p. 89). The potentially negative impact of recording is a theme continued by John Mowitt who argues that recording has the effect of privileging ‘the moment of reception’ in musical experience as the repeatability of recordings means that in recording practice performances are ‘imminently shaped by both the fact and the anticipation of repetition’ (Mowitt, 1987, pp. 173-175). Prominent amongst more recent authors in this field is Jonathan Sterne, whose first book, *The Audible Past* (Sterne, 2003), explored the cultural

origins of sound reproduction in the late nineteenth and early twentieth centuries. More recently he has gathered many of the key works on sound and audition into a collected volume, *The Sound Studies Reader* (Sterne, 2012). This includes an essay by Louise Meintjes in which she argues that the promise of technology and the rarefied atmosphere of the studio can lead to a fetishisation of the recording studio as creative space (Meintjes, 2012). Her study is concerned with modern African musicians working in popular music but nevertheless raises interesting points about the perceived aura around recording, the studio, and the record producer. As with much of the literature in this field, many of the essays in Sterne's volume are highly original and thought-provoking but largely of tangential interest to the concerns of this study.

Inter-disciplinary

In recent years four publications have appeared (Bayley, 2010; Cook et al., 2009; Dogantan-Dack, 2008; Frith & Zagorski-Thomas, 2012), each of which is an edited collection of essays on different aspects of recording. Each work takes a broad overview of the subject with authors approaching it from many different angles and covering a wide range of musical genres. Few refer directly to the experience of recording in the 1950s but several authors refer to aspects of recording that can at least inform a study of the period. Susan Tomes, for instance, refers to the greater intensity of recording sessions when compared with concert activity due to the need to perform at a high level for hours on end, as well as the fact that endlessly repeating passages and listening to playbacks encourages a highly self-critical approach to performance (Tomes, 2009). Peter Hill speaks of the importance of having a producer in whose judgement you can have 'perfect trust' and of the value of long takes as a means of performing in a more creative manner so as not to feel overly restricted by the technical requirements of recording (Hill, 2009). Donald

Greig, meanwhile, points to one of the essential paradoxes within recording: although in many ways it should be a liberating experience for the musician, free of the ‘single-take’ experience of the concert hall and therefore safe in the knowledge that they can repeat a passage if necessary, it often has the opposite effect and suppresses risk-taking and creativity (Greig, 2009, p. 27).

In another essay the clarinettist Roger Heaton argues that performance and recording are different things, describing a recording as ‘an artefact that appears in your living room as a sound object, almost an installation. It is not a performance but a work of art, complete in itself’ (Heaton, 2009, p. 220), a view that is echoed elsewhere by Stephen Cottrell (Cottrell, 2010, pp. 21-22). Others disagree, however: both Andrew Kania (Kania, 2008, pp. 6-10) and Dorottya Fabian (Fabian, 2008) argue that performers and listeners experience recordings as performances and that recordings should therefore be considered simply as a type of performance. In her conclusion, Fabian observes that the differences between recording and concert performance may not be as great as theorists would like to believe and that theoretical assertions that recordings are not performances ‘seem to have little bearing on ‘real-life’ listening experiences or the intentions of the performer’ (Fabian, 2008, p. 254).

Andrew Blake discusses the role of the record producer and notes that although producers have become a significant force within the recording industry, the role is often poorly defined; the producer nonetheless needs to be able to draw upon a wide range of skills to be able to plan and manage the sessions, and to work effectively with the musicians. He also claims that ‘the classical record industry worked from the 1930s to the 1960s with an autodidact as producer’ (Blake, 2009, p. 39); this was certainly true of the two principal

producers of the 1950s and 1960s, Walter Legge and John Culshaw, but there were also many examples of trained musical practitioners working as producers. He does note, however, that Legge and Culshaw worked mostly within the confines of the core repertoire of the eighteenth and nineteenth centuries and cultivated a roster of ‘star’ performers, reflecting the conservatism of the industry at that time. Coverage of classical music in Blake’s chapter is limited to a few pages, although the contributions that follow from Jonathan Freeman-Attwood and Michael Haas, both established record producers working exclusively in classical music, set out some of the issues for producers and for the study of recordings. Freeman-Attwood, for instance, refers to Glenn Gould’s view of recording as a vacuum in which the ‘inexorable linearity of time has been, to a remarkable extent, circumvented’ (Freeman-Attwood, 2009, p. 57). Freeman-Attwood explains that for some musicians this vacuum can make the studio a ‘restricting and lonely place where adrenaline is elusive without the audience’ (Freeman-Attwood, 2009, p. 57), creating problems for performers who then have to rely on the judgement of the producer to help them achieve their best performance. Haas points out that for some musicians the intensity of the studio can be overwhelming, referring to the case of the pianist Radu Lupu for whom ‘the studio became the microscope, emphasising too many interpretative gradations’ (Haas, 2009, p. 61), ultimately leading him to reject recording, whereas for Glenn Gould that same intensity and focus on detail helped to channel his creativity.

Of all the essays in the four volumes, that by Dorottya Fabian (Fabian, 2008) comes closest to addressing issues relating to the effect of recording on musicians and musical practice through an empirical study of musicians’ responses to a questionnaire on the differences between studio recording and live performance. The range of responses is to some extent limited by the fact that the questionnaire consisted largely of closed questions

requiring yes/no answers or ratings against a predetermined scale. The use of a questionnaire also precluded any opportunity for follow-up questions to probe issues in more detail although three optional questions at the end provided opportunities for more personal responses. Despite its limitations, the study produced some interesting results. For instance, although almost all the respondents indicated that recordings are different from concert performance, a majority nonetheless regarded them as performances and sought to eliminate differences between the two (Fabian, 2008, pp. 241-243). As with many of the essays referred to above, Fabian's study was concerned with modern musicians working in the digital era and the results, although interesting, are not necessarily transferable to a study of recording in the 1950s.

Although none of the authors addresses the concerns of this study directly or in any depth, the four books contain much of interest and have the potential to act as a catalyst for further research and publications, especially given the increasing interest in recording as a subject of academic interest. Considering the four volumes together it is noticeable that some authors appear in more than one anthology – Albin Zak has chapters in three of the four books – reflecting the fact that the study of recording is a relatively new discipline within musicology and that there are relatively few established authorities in the area. Inevitably, this means that there is some overlap between the books and there is not always as great a diversity of voices as might be expected.

Miscellaneous

There are several works that defy easy categorisation. Evan Eisenberg's *The Recording Angel* (Eisenberg, 2005) is a wide-ranging and at times rambling work with no easily discernible structure. Eisenberg's background is in journalism and this shows in his

relaxed but engaging style of writing and his almost whimsical approach to the subject. Four of the chapters, titled 'Clarence', 'Tomas', 'Nina', and 'Saul', describe encounters with individuals – whether these characters are real or imaginary is never made clear – and the ways in which recordings have touched their lives. In other chapters Eisenberg moves effortlessly from discussion of classical music to blues and popular music, and even muzak. In the chapter 'Phonography' (Eisenberg, 2005, pp. 89-131), Eisenberg discusses a number of important concepts that have relevance to a consideration of the changing aesthetics of recording practice, such as the increasing ability of recordings to faithfully reproduce the sound of a performance, and the rising influence of the record producer, but these are not developed in detail or brought to any conclusion. Overall this is a thought-provoking book but the superficiality of its approach, and the lack of any references or a bibliography, means that it has limited scholarly reach.

Alfred Brendel and Susan Tomes, however, have each produced works offering insights into the creative process of recording based on personal experience. Brendel in particular has written on his impressions of recording in a number of publications over the years and it is noticeable that his views have changed from an earlier commitment to studio recording to a conviction that live recordings offer the best opportunity to capture some of the spontaneity of concert performance, and are ultimately superior in their musicality and their ability to convey emotion (Brendel, 1990a, 2007). Meanwhile, in *Beyond the Notes* (Tomes, 2004), Tomes expresses unease about the process of recording as well as a certain level of dissatisfaction with the finished product:

I feel uncomfortable with my records because they are only a partial document about us. Another reason for discomfort is that I know the finished product presents a performance which never in fact took place [...] Therefore, when listening to a record, I often have to sigh, because it presents a blemish-free but antiseptic picture

of our playing, and it gives the impression that we have mastery over nerves and fatigue, which is of course absolutely untrue.

(Tomes, 2004, pp. 141-142)

Tomes writes that she feels self-conscious when recording because of the need to continually reflect on one's performance, to repeat passages, and to remove imperfections (2004, p. 141). In the end, there are so many compromises involved in the process that, in her view, the quality and level of performance on recordings is not comparable with that of concert performance:

I don't think recording is compatible with being musically profound [...] In my experience, to be profound you have to let go of surface thoughts and allow something deeper to guide you, but for me this is not possible in recording because you have to control the surface more than at any other time.

(Tomes, 2004, p. 148)

This is echoed by Alfred Brendel who has written of the 'sterilising' effect of recording, in which 'the interpreter who aims at accuracy risks less panache, lesser tempi, less self-effacement' (Brendel, 2007, p. 347). Both Tomes and Brendel provide solid, reliable opinions based on years of experience of performance, both in concert and in recording situations. Brendel's contributions are particularly valuable as his recording career began in the 1950s and spanned several decades, so he has considerable experience of changing approaches to recording and it is possible to chart changes in his own attitude to the process. In the final analysis, however, the views of two musicians working mainly in the modern era of recording cannot be regarded as representative of musicians in general and, invaluable though their insights undoubtedly are, they are too few to provide a comprehensive analysis of the situation.

Similar accounts by record producers are almost non-existent, at least in relation to the recording of classical music. John Culshaw's *Ring Resounding* (1967), an account of Decca's recording of Wagner's *Ring* cycle with Georg Solti, therefore stands as a

monument to one of the most significant series of recordings of classical music in the twentieth century, both for what it achieved in musical terms and the standards it set for others. The book also provides documentary evidence of the thoroughness with which Culshaw planned and conducted his recording sessions. The critic Edward Greenfield has argued that, although it is ostensibly about the first complete recording of Wagner's *Ring* cycle, *Ring Resounding* 'in fact [...] stands as the first major textbook of the gramophone, in its enhanced role as an artistic medium' (Greenfield, 1968). At the same time there are limits to the usefulness of Culshaw's account as he often provides a tantalising glimpse into some aspect of the recording process but then fails to expand on it, for instance when writing about his experience of recording with Benjamin Britten:

Composers have been among the first to realise that stereo has transformed the purpose of the classical gramophone record. Britten will devote days to discussion with me or one of my colleagues about how best to convey one of his operas in the stereo medium.

(Culshaw, 1967, p. 24)

Our knowledge of the creative processes involved in the production of Britten's works would be immeasurably richer for knowing what filled those days of discussion about particular recordings, what factors were taken into consideration when realising his works on record, what Britten's approach to performance was when recording, and the nature of his collaboration with Culshaw. Culshaw's contribution does, however, provide many invaluable insights into the changes in working practices brought about by the technological advances of the 1950s and 60s. For instance:

The advances in technology over the past few years have also brought about a psychological change in the studio. It is still true that all the machinery and all the assembled skills are there for the record; but the means of achieving that end have become far too complex for the artist to command the *method* in the way that was common until a few years ago.

(Culshaw, 1967, pp. 26-27)

This statement is crucial to an understanding of the background to the changes in artistic and working practices in recording at this time, and the role of the producer in directing sessions and making decisions, rather than the artist. Culshaw's explanations of his own attitudes to recording are also highly illuminating. For instance, Culshaw's aesthetic approach to recording was informed by a desire to maintain a sense of drama in performance but he was well aware that this sense of drama could all too easily be diluted by the recording process:

Some record companies prefer to stop a 'take' whenever anything goes wrong, and so cover each error as it happens. I dislike this system because, by constantly interrupting, you are bound to destroy whatever dramatic intensity is being generated.

(Culshaw, 1967, pp. 74-75)

Overall, the text lacks detail as to exactly how Culshaw went about his work but nonetheless it serves as a document of a particular conceptual approach to recording by one of the leading record producers of the twentieth century. It is remarkable, however, that although it is over 45 years since its publication, no comparable work has been produced since then and, other than Culshaw's autobiography (Culshaw, 1981), *Ring Resounding* stands alone as testament to the art of the record producer.

Magazines

A major resource for the study of recordings is in the popular literature that developed around the industry, comprised mostly of specialist magazines devoted to reviews of recordings and hi-fi equipment. Some of these publications have long histories – *The Gramophone*, for instance, was founded in 1923 and is still in production – and provide invaluable reference material charting the development of recording during the twentieth century. They also have their limitations; interviews with musicians were not a common

feature for some time and although producers such as Culshaw and Legge occasionally featured in articles, or even contributed articles themselves, they were usually careful not to disclose information that might be commercially sensitive. When interviews did begin to appear on a more regular basis in the 1950s it is noticeable that the interviewers adopted a somewhat deferential style of questioning and that the interviewees rarely discussed anything in more than superficial detail. It was only later, with the emergence of other magazines, such as *Records and Recording* (launched in 1957), that interviews with artists finally began to probe beneath the surface and to reveal more of the recording process. Other contemporary publications include magazines from the USA, such as *High Fidelity*, and these can offer a different perspective on recordings, particularly in the form of reviews. As with so much of the literature on recording, the evidence to be found within these publications is often fragmentary and spread throughout multiple issues; they are nonetheless an important resource for primary source material.

Summary

Recording in the 1950s is not well represented in the current literature and there is no single volume that covers the period; what information exists is both fragmented and incomplete, and dispersed throughout a wide range of sources. A key problem with many works is that they attempt to cover the entire history of recording in the twentieth century and the desire for comprehensiveness precludes any detailed coverage of the 1950s; several authors make reference to aspects of recording in the 1950s but fail to develop their points in any detail. The limited availability of sources, whether in the form of publications or archive material, poses another problem: in those instances where authors do discuss aspects of the 1950s or of the recording process they often draw on the same sources, which highlights the need for further research in this area. One reason for the paucity of

such material is that for much of the twentieth century the A&R managers who supervised recording sessions had a relatively low profile in the media and amongst the general public, especially while they were not credited on recordings. Therefore, apart from autobiographies by Gaisberg (1946) and Batten (1956), their views are largely unknown. Even with the development of the role of the modern record producer from the 1950s onwards, there are few works that explore the working methods and artistic approaches of the producer and those by Culshaw (1967, 1981) and Martin (1979) are the most helpful in this regard. Recording engineers are even more poorly represented in the literature and, with a few exceptions, their accounts have gone almost completely unrecorded. Some artists have given accounts of recordings in biographies and interviews but many of those accounts are anecdotal and reveal little of the experience of recording for musicians in the 1950s nor its effect on musical practice in the studio or the concert hall. Magazines such as *The Gramophone* provide a rich source for contemporary reports of developments in recording but the deferential tone of interviews in the 1950s restricts the amount of useful information to be found. The number of recent publications indicates the growing interest in recording as a subject for academic research and, while none has addressed the subject of recording in the 1950s, there is at least the potential for development in this area. Given the general lack of literature on the recording of classical music in the 1950s, the scarcity of personal accounts, and the limited amount of scholarly work in this area, the following chapters draw on archival material, oral histories, and a wider range of literature, to present a picture of musical life in the 1950s, changes in recording practices, and the ways in which these impacted on musicians and on musical practice in general.

2 Cultural background: classical music in the 1950s

Introduction

This chapter provides contextual information for a study of the development of recording and its significance in British musical life by considering the cultural background of 1950s Britain, with particular reference to classical music. In recent years there has been increased interest in the 1950s amongst historians, leading to several new publications (Hennessy, 2007; Kynaston, 2007, 2010, 2013; Sandbrook, 2006). These have largely been concerned with the broader social and economic history of the period and while there are often references to aspects of cultural history, these tend to relate to popular culture whereas classical music receives little coverage. Boris Ford's *Modern Britain* (Ford, 1992a), part of his *Cambridge Cultural History of Britain*, contains several chapters of relevance to the cultural background of the period, including Paul Griffiths' chapter on music in post-war Britain (P. Griffiths, 1992). These provide a useful introduction to the period, although the scope of the volume is not confined to the 1950s. Other sources include archival material from the BBC Written Archives and the archives of the Arts Council of Great Britain. The surviving documents within these archives often reflect the concerns of organisations – organisations tend to generate extensive paper trails – and in terms of music these include orchestras, opera companies, and venues. Of those organisations, many are London-based and there is comparatively less coverage of music in the provinces, of amateur music, or of musical genres such as chamber music. Combining these sources with the wider literature, it is nonetheless possible to construct a representative picture of musical life in the 1950s.

The 1950s and post-war optimism

A common theme expressed in histories of the period is that, for all the difficulties created by the legacy of war, the 1950s represent a period of optimism in British life. There was full employment, low interest rates, a newly created health service, an improved education system, and a collective will to build a better Britain (Hennessy, 2007, p. 246). The post-war economy was buoyant, and between 1952 and 1964 consumer expenditure grew in real terms by 45% (Hennessy, 2007, p. 518), with the increased visibility of marketing and advertising, particularly with the launch of ITV in 1955 and events such as the Ideal Home Exhibition, being significant factors in this growth. The rise in prosperity was such that in a speech given on 20 July 1957 the Prime Minister Harold Macmillan, in what came to be seen as a defining moment of the era, was able to declare: ‘let’s be frank about it; most of our people have never had it so good’ (Hennessy, 2007, p. 533), even though privately he feared that the level of economic growth could not be sustained. The 1950s also mark a turning point in British post-war social and cultural history – a period of far-reaching change, as observed by the historian Eric Hobsbawm:

The Fifties are the crucial decade. For the first time you could feel things changing. Suez and the coming of rock-and-roll divide twentieth-century British history.
(Hennessy, 2007, p. 491)

Change came in many different forms, from the growing number of women in the workforce to the emergence of a vibrant youth culture. Increased wealth and improved educational opportunities meant that people could aspire to a better life, whether by owning their own property, buying consumer goods, travelling abroad, taking up sports and pastimes, or by cultivating an interest in the arts. People could also aspire to a change in social status as the increasing opportunities to change their circumstances created the potential for social mobility. A mass social survey conducted by *The People* newspaper in 1951 showed that for many people social status was determined largely by education as

this had a bearing on their manners, accent, occupation, and income; many children left school at 14 and relatively few continued beyond 16 unless they were part of the minority destined to go to university (Gorer, 1955, p. 35). There was also a large number of young adults whose education had been interrupted or curtailed during the Second World War, and who were consequently keen to redress the loss. Self-education was seen by many working- and middle-class people as a worthy activity and one that was reward enough in itself even if it did not lead to any material change in their circumstances. Listening to music and learning about it through broadcasts and recordings was a popular form of self-education that both responded to and fuelled the growth in recording during the 1950s.

Musical life and concert venues after the war

During the war years music had provided some relief from the intensity of the conflict, both for those fighting in the armed forces and those left behind who had to endure the aerial bombardment of Britain's towns and cities. The importance of music in people's lives meant that 'there were many signs, noticed everywhere, of a great war-time boom in music which was to continue after 1945' (A. Briggs, 1977, p. 6). Music continued to provide comfort for the emotional scars left by the conflict and its appreciation chimed with the aspirations of a generation who had lost educational and career opportunities to the war. As a result, audiences for classical music grew in the post-war years, with the music critic of *The Times* reporting that 'however it was, a large, new, uninstructed but hungry public has been recruited for music, especially orchestral music' (Anon., 1951, p. 6).

Meeting this demand, however, was not straightforward, particularly in London where the destruction of the Queen's Hall in 1941 meant that there was no major concert hall for

orchestral music other than the Royal Albert Hall. There were plans to rebuild the Queen's Hall, and Hugh Gaitskell, Chancellor of the Exchequer, made a statement in the House of Commons in June 1951 outlining proposals for its replacement. The new hall was intended to have a capacity of 3,500 (the old hall held 2,200) and 'room for another 1,000 under promenade conditions' as well as a smaller hall with a capacity of 1,100 for 'recitals and chamber music' (Arts Council, 1952-65). Despite this statement the hall never materialised and a committee convened in 1954 and chaired by Lionel Robbins concluded that not only was there insufficient evidence of demand to warrant the financial investment needed to build and run another concert hall, but also that an additional hall would most likely undermine and destabilise existing concert venues in London. The committee's thinking may have been influenced by the fact that in the meantime a fortuitous combination of events – namely plans by London County Council (LCC) to redevelop the South Bank area, which had been heavily bombed during the war, and government plans for the Festival of Britain – had led to the building of the Royal Festival Hall, with the government providing £2 million towards its construction on condition that the hall would be ready in time for the Festival in 1951 (Mullins, 2007, p. 30).

The creation of a new concert hall seemingly provided a solution to London's needs, but the Royal Festival Hall was not the success that had been hoped for as the acoustics were less than perfect, despite careful planning. The first acoustic test on 14 February 1951 revealed that the reverberation was less than two seconds and that as a consequence the sound was brittle (Mullins, 2007, p. 43). The hall was subsequently 'tuned' using panels and plugs, and further tests in April 1951 showed some improvement, with a review of the opening concert on 3 May 1951 containing the statement that the sound of the orchestra – a combined orchestra representing all the major London orchestras – 'provided some

reassurance about the hall's treatment of string tone for which previous tests had aroused some anxiety' (Anon., 1951, p. 20). However, despite alterations to the acoustics, the sound remained problematic: many orchestral players reported that they were unable to hear one another on stage, while critics complained that the hall lacked resonance and that orchestras in particular sounded 'dry' as they could not achieve the fullness of tone for which they were striving (Mullins, 2007, pp. 73-75).

Other aspects of concert life in London were also far from settled as several small-scale venues were lost to bombing, redevelopment, or other changes in usage during and after the war, leaving little choice between the 540-seat Wigmore Hall and the 2,500-seat Royal Festival Hall as dedicated venues for professional music-making in London. The Royal Albert Hall was also available but was not necessarily the venue of first choice as it was considered to be difficult to perform in due to its size (with a 5,200-seat capacity it was also difficult to sell enough tickets to cover expenses) and its problematic acoustics. For a long period there was even uncertainty over the future of the Wigmore Hall: the minutes of the Arts Council's Music Advisory Panel reveal that there was a possibility that the hall would be demolished as part of a redevelopment scheme when its lease expired in 1965. It had also emerged that the LCC had plans to build additional concert halls at the South Bank, including a purpose-built hall seating 450 that would be in direct competition with the Wigmore Hall. The Arts Council of Great Britain had taken over the lease of the Wigmore Hall in 1945-46 in order to ensure its survival but the Panel realised that if the new hall proved to be a success it could make the Wigmore redundant. At the same time there was a concern that without the Wigmore the LCC would effectively have a monopoly over London's major concert halls and that 'this body would in effect become the sole arbiters or selectors of artists wishing to present recitals in London' (Arts Council,

1952-65, 18 July 1961). This and the fact that the new halls, originally scheduled to open in 1964, would not be completed until 1967 – creating a hiatus in concert provision in London if the Wigmore Hall were to be lost to redevelopment – persuaded the Arts Council to intervene and secure a renewal of its lease.

It was against this background of post-war rebuilding, both physical and cultural, that the Arts Council of Great Britain had been formed. This was a significant development for the arts in Britain that built on the work of the Committee for the Encouragement of Music and the Arts (CEMA), formed in 1940 to support the arts as a means of maintaining public morale during the war by encouraging voluntary arts groups and by promoting professional arts activities including concerts and theatre productions. The chairman of CEMA, John Maynard Keynes, later recalled that during the war when ‘our spirits were at a low ebb [...] It was the task of CEMA to carry music, drama and pictures to places which otherwise would be cut off from the masterpieces of happier days and times’ (Harrod, 1972, p. 616). The impact of CEMA’s work was such that although its funding by the Board of Education had been intended as an emergency measure for the duration of the war it was agreed that its work should continue. This led to the formation of the Arts Council of Great Britain in 1946, with government funding secured by Keynes, although by the 1950s ‘the prevailing austerity was reflected in the titles of the Council’s annual reports: *Art in the Red* and *The Struggle for Survival*’ (Shaw & Shaw, 1992, p. 28). Despite the financial restrictions the Arts Council began to gain recognition for its work and by 1955 it had increased the number of grant-receiving organisations from the 46 inherited from CEMA to a total of 92 (Arts Council, 2013). In terms of music, these included the Royal Opera House, orchestras in London and the regions, and a number of newer organisations including the Society for the Promotion of New Music (Arts Council, 1955;

Frayling, 2009). The Arts Council also supported a range of other work, including touring activity by orchestras and opera companies, the commissioning of new music, and concerts featuring new works. One of the Arts Council's earliest successes, however, was in gaining widespread recognition for its role in organising the Festival of Britain.

Festival of Britain (1951)

The Festival of Britain was in many ways symbolic of the feeling of optimism that pervaded the 1950s as it sought to capitalise on the collective post-war euphoria and general goodwill by creating a sense of national pride, with the arts being central to its activities. First proposed by the Royal Society of the Arts in 1943 and announced by Herbert Morrison in the House of Commons in 1947, the Festival was conceived as – in the words of its Director General, Gerald Barry – ‘a tonic to the nation’ at a time when Britain had endured almost a decade of austerity, and when post-war rationing was still in place (Leventhal, 1995). The Festival became a major event in the nation's cultural life and featured exhibitions, both static and touring, that looked to the future and painted a picture of a new era of opportunity and leisure. Its reach was not confined to the South Bank or even to London as the Festival was rolled out across the country in the form of local festivals and was also linked to the restoration of public buildings such as Colston Hall in Bristol. The organisation of the Festival of Arts, regarded as the centrepiece of the Festival of Britain, was entrusted to the recently created Arts Council of Great Britain. It devised a programme in which there were to be provincial festivals built around established music festivals, each with its own character and specialism, as well as events in London. In terms of the musical content, popular classical works featured alongside those by British composers, and the Festival also featured several commissions.

The impact of the Festival in promoting a progressive image of Britain was reinforced by subsequent events such as the coronation of Queen Elizabeth II and the ascent of Mount Everest, both in 1953, and Roger Bannister's four-minute mile in 1954, all of which captured the public imagination and helped to affirm Britain's perceived status in the world. Sir Winston Churchill went so far as to coin the idea of a 'New Elizabethan Age' as a way of encapsulating the prevailing mood of optimism, a concept that the press took up with enthusiasm (Sandbrook, 2006, pp. 43-44). The legacy of the Festival's impact on musical life in Britain was less certain as, although it had helped to facilitate the refurbishment of some concert halls, the commissioning of new music, and the creation of its most lasting and most visible legacy in the shape of the Royal Festival Hall, musical life in Britain was still burdened with problems of finance and concerns over standards of performance.

Concert programmes

A frequent criticism of post-war concerts concerned the conservatism of concert programmes. When the young Leonard Bernstein visited London in 1946 he wrote a letter in which he reported that 'the state of music is a shambles, the programmes are embarrassing, the standard of performance abysmal' (Simeone, 2013, p. 200). Some attempts were made to challenge the status quo; the Philharmonia Orchestra, for example, was reported to have begun programming regular 'celebrity' concerts in which a 'virtuoso standard of performance is the main aim' although it was noted that 'the programmes rarely depart from the standard repertory' (Mason, 1963, p. 7). There were attempts to break with convention by programming non-standard or contemporary works but these often failed to attract audiences and in the programme for the final concert of its 1961-62 season the London Symphony Orchestra warned that 'owing to the disappointing support

for some of its modern programmes, there would have to be a policy of retrenchment in the immediate future' (Mason, 1963, p. 7). Nor was the conservatism of concert programmes confined to orchestral concerts. Choral music had declined in popularity and promoters were reluctant to programme works other than *Messiah* or *Dream of Gerontius* because of poor ticket sales. Reasons for the decline were attributed to a 'certain complacency and lack of enterprise among choral societies' but also to 'social changes which have made many more leisure occupations available to those who in the nineteenth century would have become choral singers' and who would, presumably, have formed part of the audience for choral concerts too (Mason, 1963, p. 11).

Outside London there was some evidence of successful innovation in programming by regional promoters and provincial orchestras. For instance, the Hallé Orchestra had premiered new works in its regular concert series in Manchester and at the Cheltenham Festival of Contemporary Music, while the Royal Liverpool Philharmonic Orchestra had won acclaim for its 'Musica Viva' series of concerts programming contemporary works (Mason, 1963, pp. 8-9). One significant difference that may have contributed to the success of these concerts was that in the provinces there was greater co-operation between arts organisations and a more systematic approach to programming so that orchestral concerts were balanced by chamber concerts and other performances. This created greater opportunities for audience development and may, in turn, have encouraged audiences to be more adventurous in their choice of concerts. In London there was little co-ordination of programmes, venues, or performers so that they were all effectively in competition with each other, which did not encourage integration or crossover between audiences.

Musical training and standards of performance

The end of the war enabled contact with foreign musicians and orchestras once more.

Many of the great musical centres of Europe, including Berlin and Vienna, were in ruins and London offered a refuge, if only temporarily, until conditions returned to normal. As a result there was an influx of talented musicians from abroad who possessed a greater awareness of technique and musicianship than was common amongst British musicians at that time, as well as a sense of professionalism that served to challenge some of the complacency that had existed within the profession until then. The violinist Judy

Cunningham recalled her first encounter with European standards:

During the war – I was still a student – I met Ernst Rosenberg, a Czech refugee who'd just got out; I was playing with a pianist who was playing with Ernst. He'd been with Ševčík, a famous teacher. I studied with [Rosenberg] and he was a marvellous teacher. It was continental teaching, which we didn't have in this country – by their standards we were a bunch of amateurs [...] in every way. When I was at the [Royal College of Music] nobody taught me technique. We played bits of concertos, things like that, but without enough technique. Ernst really got down to the nitty gritty.

(Cunningham, 2010)

The lack of a thorough and rigorous approach to training in Britain meant that domestic conservatoires lagged behind their European counterparts and by the 1930s 'most British students wanted to finish their training abroad and very few foreign students came to study in London' (Binns, 1997). Sir Neville Marriner studied violin at the Royal College of Music (RCM) during and after the war and, following advanced studies in Paris, returned to teach there from 1949 to 1959. He recalled that he tried to encourage students to enter competitions but was dissuaded from doing so and told that this was not the preferred way at the RCM where the emphasis was on encouraging a collegiate, ensemble-based approach rather than on developing soloists or virtuosi. Dissatisfied with such attitudes

towards attempts to raise aspirations and introduce a greater sense of professionalism at the RCM, Marriner eventually resigned from his post.²

Concerns about standards were not restricted to teaching or to individual performers as critics frequently voiced concerns about the quality of orchestral playing in London. At its meeting on 23 June 1952 the Arts Council's Music Advisory Panel considered a report on 'The Orchestral Situation in London' in which it was stated that standards were considered to be unsatisfactory, with many visiting conductors expressing the view that performances were not on a par with those of orchestras in Europe and America, and also that there were too many 'good average' concerts. The London Philharmonic Orchestra (LPO) was singled out for particular criticism although it was acknowledged that the withdrawal of its grant from the LCC had caused financial difficulties and that subsequently the orchestra was often overworked to the detriment of its performance. Various options were considered, including the idea of having a 'national' orchestra along the lines of the Concertgebouw, but with insufficient funds to effect any meaningful change the meeting was inconclusive (Arts Council, 1952-65). The problem was not new and much of the blame was attributed to limited rehearsal time and the extensive use of the deputy system by which players, most of whom did not have contracts and were employed on a freelance basis, would often substitute a deputy if they could obtain more lucrative work elsewhere. This made it difficult for orchestral managers to maintain a consistent ensemble of musicians, and conductors would often find that the players assembled before them at a concert were different from those who had attended the rehearsals. Conductors came in for criticism too and Geoffrey Sharp, writing in Ralph Hill's *Music 1951*, expressed the view

² Sir Neville Marriner, Barbirolli Lecture, Royal Academy of Music, 27 January 2012.

that orchestral music in London was in decline and that there were few outstanding conductors:

Among conductors Greenbaum, Harry, Heward, Kabasta, Weingartner, and Wood are dead, Mengelberg has retired, and Beecham, Toscanini and Walter are all past their prime. One might be excused for thinking the same of Furtwängler if his recent English performances [in 1948] represented his greatest achievements since the war [...] On the whole foreign conductors are better at their job; who is there among our own younger men to compare with Erich Leinsdorf, Ferenc Fricsay, Rudolf Schwarz and Joseph Post?

(Sharp, 1951 cited in Fifield, 2005, p. 302)

From the vantage point of the present day, modern critics may place a different emphasis on the relative merits of the conductors named and may also question the omission of conductors such as Otto Klemperer, Georg Solti or Herbert von Karajan, who were not unknown in Britain and had begun to establish themselves on the international stage.

Despite his lack of comprehensiveness, Sharp had identified the inadequacy of musical training for conductors in Britain as a cause for concern. The matter was discussed at the 27 March 1951 meeting of the Arts Council's Music Advisory Panel where in a paper on 'Assistance to Young Conductors' the view was expressed that British musicians were not temperamentally suited to conducting, lacking the necessary single-mindedness. It was also noted that European conductors often worked as répétiteurs in opera houses or as members of an orchestra before becoming assistant conductors, providing them with an established career path that was not available to British musicians (Arts Council, 1946-51).

When the Panel revisited the subject five years later at its meeting on 26 April 1956, the Arts Council's Director of Music, John Denison, was able to report that the situation was improving and that many orchestras and opera companies provided opportunities for young conductors, although some of the more ambitious conductors had gone abroad to gain experience. The LPO had the most extensive scheme, with advanced students sometimes sharing a concert with the principal conductor, as well as providing rehearsal

facilities for students ‘whose qualifications seem to warrant a trial’, but it was difficult to create further opportunities unless funding could be found for short-term assistant conductor posts. Denison had met to discuss matters with the BBC, which had similar concerns, and it was felt that whatever opportunities arose ‘should be offered to a limited list of mutually acceptable names’ with the proviso that with so few opportunities it was difficult to follow a young conductor’s progress (Arts Council, 1952-65).

Orchestras: competition and survival

Concerns about standards of performance were shared by record companies, particularly in relation to orchestral standards in London, where much of the recording activity took place. Before the war the LPO had been regarded as one of London’s finest orchestras but the loss of players during the war and a shortage of musicians afterwards, as well as competition from other ensembles and the emergence of new orchestras including the Royal Philharmonic Orchestra (RPO) and the Philharmonia, meant that it could not maintain this status. According to the flautist Richard Adeney, the LPO of the late 1940s ‘was indeed a worse orchestra than it had been before the war and very much worse than a super-efficient 1990s or later London orchestra, but some conductors drilled, bullied and cajoled it into very good performances indeed’ (Adeney, 2009, p. 79). One of the few British orchestras felt to be capable of achieving consistently high standards in the immediate post-war years was the Hallé Orchestra, based in Manchester and conducted by John Barbirolli. The Hallé aimed to compete with the great European orchestras and did so by reducing the number of concerts it gave in order to spend more time in rehearsal. The strategy seems to have paid dividends as, in the May 1947 issue of the *Penguin Music Magazine*, Ralph Hill stated that the Hallé ‘is the finest ensemble in the country and is in a different class from the LPO, or for that matter any other orchestra in the country’ (Hill,

1947 cited in Pirouet, 1998, pp. 69-70). Hill even argued that because the Hallé was so much better than other orchestras of the day the BBC should be prepared to pay a higher fee in recognition of the high standards it was setting. The problems with orchestral standards in London, however, were such that the arrival of the Philharmonia Orchestra was both timely and, as far as EMI was concerned, necessary. Walter Legge had been contemplating the creation of an elite orchestra for some time, based on his experiments with the Philharmonia Quartet in 1941, and in 1942 drew up a list of prerequisites for such an orchestra, in which he stated that:

1. There are enough first-class orchestral players scattered about Britain to make one orchestra at least equal, and in many ways superior, to the best of any European country. All these players must be in one orchestra – the Philharmonia.
2. It would be an orchestra of such quality that the best instrumentalists would compete for the honour of playing in it.
3. No ‘passengers’. One inferior player can mar a whole orchestra’s intonation and ensemble.
4. An orchestra which consists only of artists distinguished in their own right can give of its best only in co-operation with the best conductors.
5. No ‘permanent’ conductor. A ‘one-man-band’ inevitably bears the mark of its permanent conductor’s personality, his own particular sonority and his approach to music. The Philharmonia Orchestra should have style, not ‘a style’.

(Pettitt, 1989, p. 85)

In the end, the creation of the Philharmonia came about almost by chance after Legge formed an orchestra for a British Council recording of Purcell’s *Dido and Aeneas* at Abbey Road Studios in July 1945. Having been concerned about orchestral standards amongst British orchestras for some time, EMI expressed interest in this new orchestra. Seeing the opportunity to realise his vision Legge founded the Philharmonia Orchestra shortly afterwards, with its first major recording – of the Sibelius violin concerto with Ginette Neveu and Walter Süsskind – taking place at Abbey Road Studio No. 1 in November 1945. The Philharmonia gave few concerts in its early years but soon established itself as one of the leading British orchestras and one of the few with a truly international reputation, largely as a result of its many recordings and the high profile they generated at

home and abroad. Although the Philharmonia gave its first concert in October 1945 it was founded primarily as a recording orchestra; this had important implications as the emphasis on recording activity had the effect of displacing other orchestras, which then had to seek other opportunities:

So far as concert work was concerned, the Philharmonia posed no immediate threat [to the LPO]. Of more concern was the fact that through patronage of the new body EMI appeared to be shutting the doors of the recording studio to the LPO, who in consequence entered into a contract with Decca.

(Pirouet, 1998, p. 62)

Recording had already made an impact on musical life in general as the fees from recording sessions were a vital source of income for many musicians and arts organisations – as were royalty payments – to the extent that ‘without recordings [...] the economics behind musical culture would be very different’ (A. Briggs, 1977, p. 57). The fortunes of the orchestras were, therefore, increasingly linked with those of the recording industry. Inevitably this increased the competition between the Philharmonia and the LPO for recording work and for the best instrumentalists, and several of the leading players in London at that time, including the horn player Dennis Brain, played in both orchestras. There was also further competition between the Philharmonia and the RPO as Sir Thomas Beecham, founder and conductor of the RPO, had signed an exclusive five-year contract with EMI in 1946 and made many recordings for the company. By the 1950s the Philharmonia was not only taking a significant proportion of the available recording work but had also begun to secure its reputation in the concert hall through its ability to call on the best players of the day and its association with conductors such as Karajan. Karajan was noted for being a great orchestral coach with the ability to train an orchestra to the highest standards and this no doubt raised the level of the orchestra very quickly, putting it in direct competition with other London orchestras in the concert hall (see discussion in Chapter 6, p. 188). In this increasingly competitive environment some organisations fared

better than others, and while the Philharmonia and a few other orchestras prospered as a result of their recording activity, many others, including the CBSO, Hallé, and Royal Liverpool Philharmonic, encountered severe financial difficulties during the 1950s. The problems facing the Yorkshire Symphony Orchestra proved to be insurmountable and it was eventually disbanded, while the Bournemouth Symphony Orchestra was only rescued after intervention by the Arts Council (Pirouet, 1998, p. 117).

The inadequate funding of music was to remain a concern throughout the 1950s and 1960s, as indicated by a draft letter to *The Times* written jointly by Benjamin Britten and Lord Harewood in November 1964 but never published and presumably never sent. Britten and Harewood wrote of the ‘unsatisfactory state of the serious musical life in this country today’ and listed the ‘causes of worry’ as including empty seats at concerts, the lack of financial security for orchestras and opera companies, low pay for musicians – ‘which forces them to over-work with consequent deterioration in standard of performance’ – and ‘impossibly bad rehearsal conditions’. Problems were considered to be especially acute in London, which was described as ‘jungle-like in its confusion & danger’ and where part of the problem at least was felt to be caused by programming too many concerts at the Festival Hall. Audiences, in the opinion of Britten and Harewood, were enthusiastic but ‘need guidance, their potentialities need focussing’ (Reed & Cooke, 2010, p. 610).

The adoption of a co-ordinated approach to the programming of concerts in some provincial musical centres such as Liverpool and Manchester had been shown to be of benefit to audiences, promoters, and artists. The lack of such an approach in London continued to be a hindrance to audience development. Standards of musical performance and employment conditions for musicians were slowly improving but the need for

financial stability amongst arts organisations was a recurring theme, and a cause taken up by the Arts Council, which lobbied successive governments for greater support for the arts in Britain.

Opera

Finance was certainly an issue in the provision of opera, with implications for standards of performance, and the Arts Council played a significant role in trying to improve matters there too. Some progress had been made with the establishment of a permanent national opera company, Covent Garden Opera, at the Royal Opera House in 1946 with Karl Rankl as its first musical director. The company received Arts Council support from the beginning although an Arts Council review of opera policy in October 1953 contained the admission that funding of the Royal Opera House had ‘always lagged behind the general working development of the Theatre’ and that its early grants ‘bore little relation to actual needs’ (Arts Council, 1952-65, 26 October 1953). Throughout the 1950s the Arts Council funded three opera companies on a regular basis – Covent Garden, Sadler’s Wells, and the Carl Rosa touring company – with others including the English Opera Group funded for specific projects. However, the funding of opera was a continual challenge for the Arts Council: a further review of opera policy in March 1958 revealed that the finances available were no longer enough to give adequate support to the three companies and that it might be necessary to withdraw funding from one, or to consider a merger of the Covent Garden and Sadler’s Wells companies. At its previous meeting in January 1958 the Music Advisory Panel had even considered the possibility that without further funding Covent Garden might have to close temporarily or that the three companies might have to present reduced seasons. The situation was finally resolved in September 1958 when, concerned by repeated reports of the poor standard of productions by the Carl Rosa Opera Company,

the Panel recommended the withdrawal of its funding; the Carl Rosa company eventually closed in 1960 with some of its members transferring to Sadler's Wells (Arts Council, 1952-65).

In the meantime, the quality of productions at Covent Garden was also a matter for concern as Covent Garden Opera's status as a national opera company (formed with the intention of producing operas in English) restricted its ability to attract international artists unless they were prepared to learn their roles in English. This also had an adverse effect on audiences as productions in English were less popular than those in their original language. The policy was eventually relaxed, enabling the company to attract international artists and so achieve higher standards of performance, but the uncertainty persisted through much of the 1950s and affected the perceived status of the company. This may have been a factor in the company's difficulty in recruiting a new musical director after the departure of Rankl in 1951, the company employing a series of staff and guest conductors until Rafael Kubelik took up the post in 1955. Under Kubelik the company began to gain recognition at an international level but when he left in 1958 there was again difficulty in finding a replacement, and it was only after Georg Solti arrived as director in 1961 that the company began to achieve the highest standards.

The influence of European émigrés on musical life in Britain

Rankl, Kubelik and Solti were just a few of the many European artists who were influential in challenging attitudes to professionalism and raising standards in the arts in Britain. As noted in Judy Cunningham's comment (see p. 53), British musicians benefited from exposure to European standards of training and discipline following the arrival of immigrants from continental Europe both during and after the Second World War. Until

then Britain had remained somewhat detached from mainland Europe, as noted by Sir Claus Moser when recalling the words of Stefan Zweig who ‘wrote in the thirties “England was not then, and never became, a true part of Europe”. He felt it to be a people apart’ (Moser, 1996, p. 87). This sense of detachment extended to a cultural isolationism that encouraged suspicion of European cultural practices even though in some regards they were arguably superior, as demonstrated by many of the fine orchestras and soloists that could be heard in mainland Europe. The sense of isolation was reinforced by the attitudes of leading musical institutions as between the wars there had been a feeling that the BBC and the musical establishment in general had been somewhat reluctant to embrace the music of contemporary European composers, a trend that Paul Griffiths attributes to what he describes as a ‘characteristically English conservatism’ (P. Griffiths, 1992, p. 52). The implications of this attitude can be seen in the case of Benjamin Britten who, in 1933, was awarded a travelling scholarship; he had intended to use it to study with Alban Berg in Vienna but was prevented from doing so, as he recalled later in life:

[W]hen the [Royal College of Music] was told, coolness arose. I think, but can’t be sure, that the director, Sir Hugh Allen, put a spike in the wheel. At any rate, when I said at home during the holiday, ‘I am going to study with Berg, aren’t I?’ the answer was a firm ‘No, dear’. Pressed, my mother said ‘He’s not a good influence’, which I suspect came from Allen. There was at that time an almost moral prejudice against serial music – which makes one smile today!

(Britten, 1963 cited in Matthews, 2003, p. 26)

After the war, however, attitudes began to change and although there may have been resistance in some quarters, the influence of émigrés from mainland Europe on musical life in Britain was noticeable. As well as Rankl, who helped to establish the newly created Covent Garden Opera Company as a viable concern and to build its status to a level where it could attract international artists, notable émigrés included: three members of the Amadeus Quartet, which redefined standards of string quartet playing in a career lasting some forty years; Rudolf Bing, who was instrumental in founding the Edinburgh Festival;

and Karl Haas, who founded the London Baroque Ensemble in 1941 and was amongst those promoting early music at a time when there was little knowledge of early repertoire amongst musicians or audiences.

The enduring influence of the many émigrés who arrived in Britain during and after the war is due in part to their total commitment to the highest standards of performance. The early success of Glyndebourne, for instance, was attributed to the influence of émigrés:

[It] was due to two refugees, Fritz Busch from Dresden and Carl Ebert from Berlin. [...] What Glyndebourne did from the start was insist on high standards; as did Solti later when he took over the musical directorship at Covent Garden. [Solti] said in an interview only the other day that it was one of his first tasks there to introduce more musical discipline. To all these immigrant musicians, dilettante and amateurish tendencies were unacceptable.

(Moser, 1996, p. 96)

The influence of Solti at Covent Garden was particularly notable. John Tooley (General Director, Royal Opera House, 1970-88) recalled that for Solti ‘English ways were a mystery [...] He could not understand how anything was ever achieved in what he clearly perceived as such a relaxed, even amateurish, manner’ (Snowman, 2002, p. 341).

Following his arrival as musical director in August 1961 Solti immediately set about making changes and instilling a greater sense of discipline within the company so that during his 10-year tenure of the post, the standing of Covent Garden – awarded the title ‘Royal Opera’ in 1968 – rose amongst international opera houses.

This intolerance of poor standards was not confined to musicians but was shared by various émigrés from central Europe who were simultaneously bemused and appalled by what they saw as British amateurishness. In his series of Reith Lectures in 1955 (on the subject of English art) the art historian Nikolaus Pevsner, whilst acknowledging many of the benefits of life in Britain, expressed the view that England was disadvantaged by its

lack of a tradition of great artists, noting that: ‘There is no Bach, no Beethoven, no Brahms. There is no Michelangelo, no Titian, no Rembrandt, no Dürer or Grünewald’ (Pevsner, 1976, p. 80). He went on to state that England had produced ‘a nice crop of amateur painters from maiden aunts to Prime Ministers’ but that what set the great artists apart from the amateurs was ‘a violent compulsion towards a singleminded self-expression to which a lifetime must be devoted’, the clear implication being that British artists had been found wanting in the self-discipline, drive, and ambition necessary to succeed at the highest levels. His conclusion was that ‘the amateur is altogether characteristic of England, and not the specialist’ (Pevsner, 1976, p. 80), and although Pevsner was referring specifically to the visual arts it could be argued that, with a few notable exceptions, this assessment was true of much of the arts in Britain at that time.

Aside from any personal motives, the driving forces behind these émigrés’ determination to instil rigour and discipline into the arts in Britain, and to nurture a sense of pride and artistic ambition, were their passion for the high arts and adherence to European cultural values – often at odds with British attitudes. As Claus Moser observed, in Britain ‘culture was the icing on the cake, whereas in Central Europe we were raised to think it *was* the cake!’ (Snowman, 2004, p. 446). For Moser the influence of European émigrés on British cultural life was undeniable and the benefits were clear:

[S]tandards have been raised, disciplined professionalism heightened and dilettantism discouraged, artistic interests widened, and support, financial and in participation, increased. But to pretend that the result has been to transform national values and attitudes would be pretentious. What may be true is that the refugees have contributed to a more European approach to culture. Certainly we think in Europe-wide terms and are without anti-Europe prejudices. We simply can’t help seeing Britain as part of Europe, and as a result the rest of Europe has perhaps been drawn more to take part in our artistic life.

(Moser, 1996, p. 99)

If there was any assimilation of European cultural values in Britain it took place gradually over a period of years and was not without its challenges – for instance, the appointment of Karl Rankl as musical director at Covent Garden was resented by Sir Thomas Beecham and others who felt that the future of a national institution should not have been entrusted to a foreigner (Snowman, 2002, pp. 209-211). There were undoubtedly individuals in Britain who were equally insistent on the highest standards, such as the producer and impresario Walter Legge, but even then the influence of European cultural values is evident: Legge appointed a series of European conductors – Herbert von Karajan, Wilhelm Furtwängler, Otto Klemperer – to direct the Philharmonia Orchestra, and his principal interest as a record producer was in the core repertoire of nineteenth-century Europe. European artists and European cultural values continued to be seen as setting the standards to which British artists and arts organisations should aspire, a message that arts organisations and record companies working on an international basis could not afford to ignore.

Television and radio broadcasting

One of the most influential organisations in post-war Britain was the BBC. If the conservatism of the British establishment between the wars had led to resistance within the BBC to European influence on contemporary music (see discussion, p. 61) there were at least signs of a change in attitudes after the war and this was influential in raising awareness of a wider musical repertoire and of contemporary music in particular. The launch of an additional radio service in 1946, the Third Programme, created the opportunity for the BBC to make a greater commitment to the programming of contemporary works although this fuelled arguments that the new station was elitist and only catered for a minority (Ford, 1992b, p. 163). In fact the Third Programme was not

exclusively devoted to music and presented a mixed offering of the arts, although by 1948 music accounted for 55% of its airtime (Davidson, 1994, p. 373). The programming of the BBC's output at this time was to an extent influenced by the legacy of its first Director General, John Reith, through his successors; these included William Haley (Director General, 1944-52) who oversaw the creation of the Third Programme. Reith was of the view that broadcasting, and radio in particular, had the ability to influence public tastes; he also believed that the working classes aspired to the lifestyles of the middle classes and upper classes. Haley shared these views and believed that audiences would gradually aspire to higher quality programming, ascending a pyramid of progression with the Light Programme at its base and the Home Service and Third Programme at the top (Hennessy, 2007, pp. 110-111). Consequently, the BBC spent a comparatively large proportion of its funds on subsidising the Third Programme, although as the costs of broadcasting light music increased, largely due to copyright fees, there was less money available for serious music.

In its early days, the BBC relied on the views of advisory panels and its staff in devising radio programmes rather than undertaking market research and, despite the beliefs of Reith and Haley, it had little real knowledge of its listeners (LeMahieu, 1988, p. 151). Listener Research figures from the 1940s, however, showed that less than one per cent of the audience listened to the Third Programme and that the Light Programme had by far the biggest share of listeners (LeMahieu, 1988, p. 187). For all Reith and Haley's worthy ideals, the reality was that the majority of listeners wanted entertainment rather than erudition and preferred to stay with the Light Programme whereas audience figures for the Third Programme actually fell. Broadcasting was nonetheless an important source of employment for musicians as live studio concerts formed the larger part of broadcasts at

the BBC, as they did at other stations including Radio Luxembourg and Radio Normandy. However, in an internal memo dated 25 July 1958, Maurice Johnstone, the BBC's Head of Music Programmes (Sound), expressed doubts about the wisdom of relying on live performance for late night broadcasts of classical music:

The edge of a performer's concentration and flexibility is likely to be blunted by 11.00 p.m. and we think that better performances would be obtained in many cases by pre-recording. But we would propose to leave the choice between 'live' performance and pre-recording to the performers.

(BBC Written Archives, 1955-64)

Johnstone's concerns were over the impact on the quality of performance but there were financial considerations too: the limitations of public transport by 11.30 pm, especially in the regions, meant that additional subsistence allowances were payable to the musicians.

The BBC did eventually make the decision to pre-record a greater number of broadcasts although this led to confrontation with the Musicians' Union on the ratio of 'needle time' to live performance, a dispute that lasted for several years and even contributed to the postponement of the launch of the BBC's new music service, Radio 3, until 1967.

Eventually, however, agreement was reached and pre-recorded broadcasts and the greater use of commercial recordings became more common within the schedules.

In the meantime, the arrival of William Glock as Controller of Music in 1959 heralded a new era in the broadcasting of music at the BBC. A trained pianist, Glock had a special interest in contemporary music, as well as experience of programming it in his role as music director at the Dartington Summer School, and brought that experience to bear in promoting contemporary music within and beyond the BBC (Kenyon, 1981, p. 289). One of Glock's first acts was to take control of the programming of the Proms, a task previously undertaken by a committee and which, he said, had resulted in 'a decade of unimaginative planning' (Glock, 1991, p. 101), adding that he had never been tempted to

attend himself. Glock's first Proms in 1960 included first performances at the Proms of works by Stravinsky, Debussy, Schoenberg, Bartok and others, as well as performances of early music, including works by Bach and Tallis. In 1961 Glock invited Glyndebourne Opera to perform at the Proms, and other companies, including Covent Garden, were invited to take part in subsequent seasons. Initially there was some resistance to the change in programming, with Proms audiences falling by nine per cent in 1961 but then rising again the following year (Glock, 1991, pp. 114-117). Glock had also found evidence of resistance to contemporary music within the BBC, especially to works by European composers; during the visit of the *Domaine Musicale* in 1957 seven of the nine senior members of the BBC music division voted against a broadcast of works by Nono, Webern, Stockhausen, and Boulez (Glock, 1991, p. 100). Glock, however, continued to champion the programming of contemporary music and positively encouraged a diverse repertoire. He began to experiment with the Third Programme's Thursday Invitation Concerts by encouraging the programming of chamber music from different periods in the hope that the unusual juxtapositions would allow audiences to gain new insights into the works. The concerts, which took place at the BBC's Maida Vale studios, proved popular and were well attended with an average studio audience of about 400 and a regular radio audience of about 100,000. From 1961 onwards the BBC also began to demonstrate a greater commitment to its support for new works by commissioning 10-12 works per year from British composers for special occasions such as the Invitation Concerts, the Proms, and BBCSO concerts at the Festival Hall. By the 1960s Glock's initiatives had begun to change attitudes within the BBC and had ushered in a new era of musical discovery for both performers and audiences.

Radio remained at the forefront of broadcasting throughout the 1950s, even with the growth of television, and ‘many BBC executives saw television as a trivial diversion from the serious business of radio’ (Sandbrook, 2006, p. 380). The output of the Third Programme, a mixture of music, drama and lectures, was invariably of a high quality and had little competition from television until the launch of arts programmes such as the BBC’s *Monitor*, which first appeared on television in 1958. Television programmes of the era were generally seen as entertainment and not regarded as challenging in terms of their intellectual content. Even news and current affairs programmes were felt to be lacking in rigour, especially as ‘deference infused interviewers’ every syllable’ (Hennessy, 2007, p. 113), with the result that there was no real questioning of authority and little danger of upsetting the status quo. This was reflected in much of the musical journalism of the period, as interviews were a relatively new feature of magazines and interviewers adopted a similarly deferential tone while interviewees rarely disclosed details of their artistic practices at anything other than a superficial level. Therefore, contemporary media reports, while important in providing documentary evidence of developments in music and recording, often take the form of reportage offering little in the way of critical commentary. As far as a study of recording in the 1950s is concerned, they provide few insights into working practices within the recording industry, of its effect on musicians involved in recording, or of the complex interactions between the recording industry and the music profession.

Technology was nonetheless important in changing patterns of social behaviour as the increasing availability of music on television, radio and gramophone records meant not only that people could choose when and where to listen to music but also that there was the potential to create new audiences that might not otherwise have attended concerts or

received much exposure to music. Some saw this as an unwelcome development, and the writers F. R. Leavis and T. S. Eliot expressed concern that what they saw as the moral quality of art 'would be lost in a levelling down of civilisation' due to the influence of television, radio and other forms of popular culture (Shaw & Shaw, 1992, p. 9). Debates over the need to preserve quality while increasing access and meeting public demand for services continued throughout the 1950s and 1960s, particularly with the introduction of commercial television, in the shape of ITV, in September 1955.

One of the more noticeable effects that followed the launch of ITV relates to advertising. Until the 1950s newspapers had been the main marketing vehicle for advertisers but commercial television soon provided competition for the newspaper industry, whose sales began to fall from about 1957 (Hennessy, 2007, pp. 104-106). The rapid growth of television is illustrated by the fact that by 1958 sales of combined television and radio licences had overtaken those of radio-only licences (Hennessy, 2007, p. 557) and this provided a ready market for advertisers. Television advertising clearly played a significant part in influencing social trends and patterns of consumption although it had little direct impact on classical music or the market for classical recordings as both relied on specialist publications for marketing and promotion; the BBC did not carry advertising and classical music received little coverage on commercial television. Therefore radio, and specifically the Third Programme, remained the most significant form of broadcasting throughout the 1950s and 1960s with regard to classical music.

Recordings

One of the most important contributions to the development of musical life in the 1950s was the increased availability of recordings, which were of growing cultural significance

as a means of distributing and accessing music. Rising prosperity, the end of rationing in 1954, and the greater availability of electrical and other products in the post-war period, created what amounted to a democratisation of the gramophone record in the post-war years as more people were able to listen to records and to indulge their interests in music. The excitement created by the advent of the long-playing (LP) record – Decca was the first British company to issue LPs in the UK, in June 1950 – meant that there was a growing market for records, even though the high rate of purchase tax meant that they were still relatively expensive items. As a result 78s and LPs were for many people cherished items, carefully selected and consumed. The writer and broadcaster John Amis recalled buying 78s and listening to them over and over again, often with the score:

I think so many of the 78s are little gem-like performances which you don't get on the whole thing and of course it affects one's way of listening to it. One doesn't concentrate [with an LP] as one did with a 78 10-inch; you don't get to know the music nearly so well unless you play it again and again.

(Amis, 2009)

An interest in record collecting and hi-fi, pursued largely at home, might be seen as a particular manifestation of an English characteristic – an obsessive preoccupation of the type identified by George Orwell as part of ‘the addiction to hobbies and spare-time occupations, the *privateness* of English life’ (Orwell, 1941, p. 15). It could also be seen as a predominantly male pastime and the advertising of the period appeared to be aimed at a largely male audience with the gendered thinking behind the text and images implying that the technology was too complex for women to understand (Taylor, 2001, pp. 80-81). In some contemporary articles the gramophone was even depicted as competing for domestic space (unless the man of the house could retreat with it to some other area), with hi-fi offering an escape from the television and from family life (Keightley, 1996). Yet, even if hi-fi and records had a greater following amongst men, the role of the gramophone in disseminating music to a wider audience cannot be underestimated, enabling a new

generation of listeners, many of whom had little education in music or access to live performance, to experience music on their own terms and to explore repertoire that might not otherwise be available given the conservatism of many concert programmes of the time. For the critic and writer Paul Griffiths, the implications of these developments were ‘so far-reaching, changing music from a social into a private art, that they have to be considered at the start of any discussion of music in modern Britain. So much else is merely contingent’ (P. Griffiths, 1992, p. 49).

The growing cultural significance of recordings can be seen in record sales, and particularly those of the 7-inch 45 rpm disc, launched by RCA-Victor in 1949. With its shorter duration – four to five minutes per side compared with 25 minutes per side on an LP – the 45 was the ideal medium for popular music, due to the average length of a popular song. Its popularity, and rapid acceptance by record buyers, was such that the idea of the singles chart, in use in the USA since the 1930s, was introduced to Britain by the *New Musical Express* in 1952. By 1955, British consumers were buying over 4 million 45s per year and by 1960 this had risen to over 52 million (Sandbrook, 2006, p. 456) with sales of popular music undoubtedly buoyed as a result of the growing number of young people, and teenagers in particular, with the disposable income to buy records.

Popular music may have been ideally suited to the 78 and the 45 rpm single but classical music benefited most from the introduction of the LP, which was able to accommodate longer works, including symphonies and operas. One problem facing consumers at the beginning of the 1950s was that there was often a limited choice of interpretations available when buying records of classical music: there might only be one recording available of a particular work, if it was available at all, and the conservatism that was

typical of many concert programmes of the period was also reflected in the catalogues of record companies. The situation gradually improved with the introduction of the LP record, as competition between record companies and the need to build catalogues of LP recordings meant not only that core repertoire was increasingly available in different versions by a range of artists, but that previously unrecorded works were also becoming available. The expansion in the repertoire available on record served an important educational purpose for record buyers by providing access to works that might have little exposure in the concert hall or on the radio. The increased availability of recordings, together with reviews and comparisons conducted by magazines including *The Gramophone* and *Records and Recording*, also meant that there was a greater awareness of artists and repertoire and that listeners could make informed choices when purchasing records.

Popular classics and the middlebrow canon

With rising sales of LPs, greater airtime for broadcast music and the increasing affordability of hi-fi and wireless equipment, the proportion of people listening to ‘serious’ music increased. Yet despite the growth in the available repertoire on record, it seemed the greatest demand was for the popular classics – works by composers such as Handel, Haydn, Beethoven, and Mendelssohn – and the warhorses familiar to members of music societies and choirs. Record companies sought to cater for this demand but record clubs also played an important role by offering LP recordings of popular classical works at discounted prices, which they achieved by selling direct to members by mail order and by licensing material from record companies and foreign record clubs. By the late 1950s three record clubs operated in Britain – World Record Club, Classics Club, and the Record Society – and although they were criticised by record companies, who feared lost sales and

accused the clubs of undermining retailers, reports suggested that in fact record clubs helped to stimulate interest in classical music and increase sales overall (Heyworth, 1958). There was also interest in what might be termed ‘light’ classics – works in a romantic or sentimental idiom such as Addinsell’s *Warsaw Concerto* or works by John Ireland and Granville Bantock – again reflecting the tastes of a post-war audience seeking solace in music. Many of these works featured strongly in concert programmes of the period and reveal something of a lack of adventure on the part of the majority of promoters and audiences, although the lighter works – the majority of which have since fallen out of the popular repertoire – did at least provide an entrée into classical music for new audiences. The interest in the popular classics also reveals something of the growing divide between ‘middlebrow’ musical tastes, as defined by the historian Ross McKibbin, and more sophisticated ones:

By the early 1950s the middlebrow classical canon was fixed [...] The predominance of modernism in musical high culture largely excluded the middlebrow audience from contemporary music.

(McKibbin, 1998, p. 389)

There may not have been any significant crossover between such different musical audiences but the unique circumstances of the 1950s, with the growing demand for music being met by an expanding recording industry, meant that both could be catered for and according to McKibbin ‘the construction of such a canon, both timeless yet strictly finite, is one of the most striking cultural acts of that period’ (McKibbin, 1998, p. 390).

Summary

Cultural life in Britain in the 1950s was characterised by conservative attitudes that were reflected in unimaginative concert programmes, as well as evidence of a lingering resistance to the influence of European cultural trends. At the same time, variable

standards of musical performance, the causes of which can be attributed to various factors including inadequate training, limited rehearsal time, and poor terms of employment for musicians, were a cause for concern and a source of frustration for audiences, promoters, and record companies. Despite these constraints, the mood of optimism that permeated many aspects of post-war life was reflected in musical life through a greater enthusiasm and demand for music, both live and recorded. There was also a desire for change, and institutions such as the BBC and the recently formed Arts Council of Great Britain played an important role in facilitating and driving initiatives to improve the state of the arts in Britain. Even if progress was slow in this regard, the influence of émigrés from mainland Europe and of other enlightened individuals, including William Glock and Walter Legge, was a notable factor in the development of musical life in the 1950s and 1960s. All were instrumental in changing attitudes and raising standards; their efforts to challenge the complacency of some institutions, and to introduce a greater sense of professionalism amongst musicians, had a profound and lasting impact.

Against this backdrop, the conditions were ideal for an expansion of the recording industry. Its latest products appealed to a generation that believed in the promise of technology to deliver change, and had the disposable income to buy what was on offer. The industry was also well placed to take advantage of the growing interest in music and records, increasing both the quantity and diversity of the repertoire available on disc. The ensuing growth in new recording activity benefited many artists, orchestras, and other ensembles, providing a measure of financial stability that helped to underwrite their concert activities. At the same time, record companies were amongst those calling for higher standards of performance, providing a powerful incentive for improvement amongst those artists and ensembles in competition for the available work. Recording was therefore

a significant part of musical life in the 1950s; it was also another factor in the process of change, the consequences of which would be far-reaching and, once the process had begun, irreversible.

3 Recording in the 1950s

Introduction

The major technological changes affecting recording practice in the 1950s took place over a period of approximately 10 years, beginning with the introduction of tape recording in the late 1940s and reaching a climax with the launch of stereo LPs in 1958. The historical development of recording technology in the 1950s and its implications for the recording industry has been recounted in a number of books (Gelatt, 1977; Gronow & Saunio, 1998; Read & Welch, 1976), but there is generally insufficient coverage of its impact on those working in recording, and the practices that evolved in response to change. The lack of accounts of recording sessions means that it is also difficult to generalise about the extent to which changes in recording practice may have influenced or impacted upon musical activity in the studio, or how the effects of such changes were perceived by others, including critics and consumers. To some extent, however, the impact of technological advances in recording during the 1950s can be gauged via contemporary responses as expressed in the pages of journals including *The Gramophone* and *Records and Recording*. With none of the benefits of hindsight available to later commentators, those writing often express the hopes and frustrations of record buyers at that time, while also reflecting prevailing attitudes towards music and musicians. Articles, letters and commentaries of the period, although far from comprehensive and often fragmentary in nature, provide a valuable resource for study. This chapter therefore presents an account of technical progress in recording during the 1950s, its impact on the recording industry, and its implications for recording practice, based largely on contemporary reports.

Recording before the LP

As early as 1926, Percy Wilson, technical editor of *The Gramophone*, had anticipated an era in which recording would extend beyond the limitations of the 78 rpm disc and its four and a half minute duration (Wilson, 1926). Until then, no matter how persuasive an artist's interpretation of a work or the quality of its recorded sound, the listener's experience would always be compromised by the need to change discs frequently. Wilson speculated on various solutions including the possibility of a system employing a 'flexible ribbon unwinding from a reel across a rotating drum' as a means of recording – one which sounds remarkably like a form of tape recording – although Wilson dismissed it as 'commercially impracticable' on the grounds that it would be expensive to manufacture and sales would necessarily be small as few people would be able to afford the equipment. Instead, he felt that the most likely solution was that with the introduction of new gramophone equipment allowing electrical reproduction it would be possible to reduce the turntable speed and increase the number of grooves on a disc, thereby increasing its duration. If Wilson was correct, as well as the practical convenience of not having to change discs so frequently, a long-playing record would have musical advantages in that it would be possible for listeners to experience longer works in complete and unabridged form (recordings of operas often consisted of excerpts), with more natural breaks between acts or movements. The prospect of such a development would no doubt prove attractive to consumers and might at least encourage record companies to contemplate the recording of previously neglected repertoire, even if the costs of production and the likely market for such products were still unknown. Wilson predicted that these changes would take place within 10-15 years, but progress was not as rapid as anticipated and was interrupted by the Second World War. After the war, however, progress resumed once more and, stimulated by the

technical innovations of the late 1940s, many of which were developed as the by-products of military research, recording could at last begin to move into a new era.

The first of these developments came in June 1945 when Decca announced the arrival of Full Frequency Range Recording (*ffrr*), using technology developed as a result of its war-time research on sonar, which it claimed made possible ‘the recording of the full range of musical frequencies with all their overtones’ (Advertisement, *The Gramophone*, July 1945, p. i). Other companies tried to follow Decca’s lead and in 1947 HMV ‘rather quietly announced T.T. [Transient True] recording’ (Howard-Sorrell, 1948, p. 124), which it claimed could capture frequencies as high as 20 kHz (Decca’s *ffrr* system had an upper limit of 15 kHz). Decca, meanwhile, had capitalised on its technical superiority by bringing out a range of gramophone players designed to exploit the improved tonal response afforded by the new recording method, and its marketing department promoted the advantages of its products with an innovative and stylish series of advertisements in successive issues of *The Gramophone*, using fresh artwork and new text each month.

While some aspects of the recording process had improved, working practices in the studio had changed little since the introduction of electrical recording in the 1920s. Responsibility for the artistic quality of a recorded performance tended to lie with the artists as although Artists and Repertoire (A&R) managers might comment on aspects of ensemble or intonation they were generally non-interventionist in matters of interpretation. Fred Gaisberg, artistic director at EMI until 1939, stated that his aim was ‘to make sound photographs of as many sides as we can get during each session’ (Schwarzkopf, 1982, p. 16) and that he generally deferred to artists on the grounds that ‘I, the mere mortal, must bow down to the god’ (Gaisberg, 1946, p. 91). That attitude changed little before tape

recording and editing became standard practice, as George Martin discovered when he joined EMI in 1950:

It was virtually the same as the manner in which Caruso had been recorded decades before. [...] We did get through a remarkable number of performances, but they were just like live broadcasts – no editing or touching up. What you heard was what the buyer got. Everything was in the preparation, and the artist was expected to be well rehearsed and professional, so that four songs could easily be recorded in a session of three hours.

(Martin, 2002, pp. 36-37)

Before the advent of tape and the LP record, recordings were made using wax as the recording medium. A thick block of wax, carefully prepared and turned on a lathe to produce a smooth surface, was placed on a turntable. Microphones captured the sound in the recording studio, which was converted into electrical signals and transmitted to a cutting head in which a stylus, electrically heated to ease the resistance of the wax, converted the signals into vibrations. The vibrations were then transferred to the disc as the stylus cut a groove in the wax. In the USA some companies adopted the lacquer-cutting process, recording onto metal discs coated in lacquer, but in Britain wax recording remained in use until the early 1950s (Canby, Burke, & Kolodin, 1952, p. 32).

There were considerable disadvantages to the wax recording process as it did not allow for multiple takes or editing – some very basic editing could be achieved by dubbing material from different takes onto a new disc but it was not possible to edit within takes – meaning that recordings had to be made in single takes. There were also limited opportunities for playbacks as playing the wax disc would result in its destruction. Instead, the recorded wax had to be sent away to a processing plant where test pressings could be manufactured. This was a laborious process in which electroplating was used to create an impression of the wax in metal, known as a matrix, which was then used to make the test pressings. This

process could take anything up to two weeks and so there could be a long interval between the recording session and the production of a test pressing.

The lack of editing meant that performances were captured as continuous events taking place in real time and, although sometimes less than perfect, the recorded performances often exhibit the passion and spontaneity of a concert performance. With little or no real opportunity to hear a playback, no editing within takes, and little or no intervention from A&R managers, artists were unable to use the technology to inform or to improve their interpretation and could only repeat their performance until it was deemed acceptable. At this stage, a concept recognisable as an artistically driven approach to recording had yet to develop and in many respects recording practice had adopted what might now be regarded as an ethnomusicological approach, with recording providing a means of documenting musical performance on record rather than the more recognisably modern discipline – characterised by playbacks, editing, and the role of the record producer – that was to emerge later. The approach to recording therefore remained predominantly engineering-led in as much as engineers set out to capture what they could, within the limitations of the recording process as they were at that time. By the 1940s, research within record companies had led to a greater understanding of the science of recording but engineers still relied on empirical evidence, accumulated through trial and error, to establish their working methods. There were also few dedicated recording studios in Britain at this time other than EMI's studios at Abbey Road, purpose-built in 1931, and most classical recordings were made on location. The recording venues then in use were often churches or halls that had been assessed as suitable for recording although the engineers had little or no control over the acoustics or the climate, and even slight changes in temperature or humidity could alter the sound. As a consequence, even though recording teams often

worked regularly with the same artists in the same halls and using the same equipment, results could be highly variable as engineers did not have complete mastery of the end results, especially without the facilities to edit or to remix the sound balance. The imperfection of the recording process in the immediate post-war period was confirmed by Compton Mackenzie in an editorial from *The Gramophone* in July 1945:

The mystery of recording still remains a good deal of a mystery to the recorders themselves, which let me add is one of the pleasures of the gramophone and prevents its standardisation. May the day be far distant when the whole business is so mechanically perfect that recorders will never enjoy what they so often enjoy today, that is, surprise at their own success, or I should say more accurately by their own success.

(Mackenzie, 1945)

Mackenzie may have regarded the recording engineers' inability to capture the elusive quality of performance with any certainty as a positive by-product of the recording process but by August 1948 he was forced to acknowledge that the variable quality of recordings was a source of frustration for many consumers and he even invited readers to vote for the worst recording issued in the previous twelve months (Mackenzie, 1948a). The problems were such that in a quarterly review of recordings in November 1948 Edward Sackville-West complained that 'the present standard of British recording varies more widely than it did during the thirties' (Sackville-West, 1948) and the rare examples of outstanding recordings only served to highlight the problem. Decca's recording of Bruckner's Seventh Symphony with the Concertgebouw Orchestra conducted by Eduard van Beinum was praised as being 'so convincingly beautiful that one wonders why the trick is not more often done' and Sackville-West concluded that 'obvious failures on one side, we do not have to look far to realise how large a part chance still plays in recording' (Sackville-West, 1948).

By 1948 the 78 rpm disc had been the standard recording medium for almost five decades but its limitations were clear. Its limited duration meant that the quality of the listening experience was impaired by the frequent need to change discs. This also imposed restrictions on the availability of certain repertoire as many works could not be recorded without cuts or breaks; operas were often recorded as excerpts where a complete recording was considered commercially unviable. Despite the undoubted technological advances that had been made, the experience of recording and of listening to recordings was compromised by the medium of the 78. The growth of radio broadcasting and the promise of television – still in its infancy – were also factors in raising expectations of recorded music. Radio listeners could hear live broadcasts from the BBC and radio stations across Europe of symphonies and other large-scale works, including opera, uninterrupted and unabridged (Chavez, 2010). The quality of the sound was not limited by the medium of the gramophone disc and, provided that the radio broadcast engineers had been able to place their microphones and balance the sound correctly, the listening experience was often superior to that experienced with gramophone records, drawing attention to the limitations of the 78 once more.

Record buyers were also becoming more knowledgeable about recordings. As a result of increasing consumer interest, circulation figures for *The Gramophone* magazine grew rapidly in the post-war years (Mackenzie, 1954), leading to a better-informed public. Readers not only developed a greater understanding of recordings – benefiting from their increased availability as well as improvements in the sound quality of both discs and playing equipment – but were becoming more critical and more discerning in their choices, as the letters pages of the period show. Readers' letters to *The Gramophone*, quoted in the editorial of February 1946 (Mackenzie, 1946), refer to several Decca *ffrr* recordings,

including that of Weber's *Euryanthe Overture*, performed by the National Symphony Orchestra under Karl Rankl, as having a greater sense of dynamic range and a better sense of tonal balance than other recordings. Based on evidence from *The Gramophone* of August 1948, it also appears that listeners increasingly expected reviewers to be at least as discerning as themselves in their assessment of recordings. The editorial in that issue reported that several readers had written to complain that the reviews of new recordings often dwelt on historical details of the composers and their works but failed to comment at any length on the quality of the recordings themselves, or the standard of performance. Recordings and equipment were developing rapidly but attitudes and expectations amongst record buyers were changing too.

The LP: 'another sprint forward'

By October 1948 Compton Mackenzie felt that the time was 'ripe for another sprint forward' and that the long-playing (LP) record 'in whatever shape it may come' would provide the answer (Mackenzie, 1948b, pp. 71-72). In June 1948 Columbia had announced the production of its 12-inch 33 $\frac{1}{3}$ rpm LP disc at a press launch in New York. It was not the first LP system – others had been tried in the past without success (Haddy, 1960, p. 15) – but the combination of vinyl pressings, a microgroove, and a lower turntable speed, made the Columbia LP record a viable proposition with its reduced surface noise, extended duration, and higher durability when compared with shellac 78s. Despite the obvious advantages of the LP, one major problem remained; recordings were still unable to capture the expansive sound of a live orchestra or the natural ambience of a concert hall, with the result that, in the words of Mackenzie, the music 'remains music coming out of a cupboard, and suffers from the constriction that a cupboard imposes' (Mackenzie, 1948b, p. 71).

Mackenzie may have had his reservations but he also acknowledged the progress made, describing the sound of the timpani on a new recording of Berlioz's *Symphonie Fantastique* conducted by Barbirolli and released by HMV, as 'not quite the tympani [*sic*] of the concert hall yet, but they are 500-gallon tanks to the empty biscuit tins of our gramophonic tympani of once upon a time' (Mackenzie, 1948c, p. 103). There had clearly been great progress in recording and even if it was not an unqualified success a letter quoted in the same editorial pointed to the future with the statement that 'the cure is available [...] The remedy is stereophonic, or binaural, reproduction' (Mackenzie, 1948c, p. 103), referring to research on stereo recording being conducted in the Netherlands.

The fact of the LP and the concept of stereo were at least in the public domain, even if more as a result of rumour than the presence of any tangible products. LPs were not immediately available in the UK, despite the fact that Decca was already producing them for the US market, and although it was possible to import LPs from the USA this was prohibitively expensive. Therefore until LPs became widely available in the UK they remained, frustratingly, out of reach for most people. Stereo, meanwhile, was a concept that would not be realised for several years. Reports of technical advances in *The Gramophone*, the extensive use of marketing by record companies, and feedback from listeners' letters, all provide evidence of the growing expectations of a product that could finally be regarded as musical, in the sense that the LP would enable the reproduction of a musical event free of many of the compromises of the 78. Less evident is the extent to which artists, producers and engineers were working towards these aims, how they went about achieving them, and how they adapted to the changes brought about by the new technology.

Tape recording: introduction and acceptance

A major factor in the success of the LP was the introduction of tape recording. Tape recording had been developed in Germany in the 1930s but only became widely available in the late 1940s when German tape machines, captured at the end of the war, were distributed amongst the Allies to be reverse-engineered and refined by various manufacturers including EMI, whose BTR-1 studio tape recorder became available in 1948. In the early days of tape recording there were frequent failures of both the machines and the tape and so although tape began to be used in professional recording situations in Britain around 1950 (Haddy, 1960) it was used initially as a backup, with the wax disc remaining as the principal recording medium. For the musicians there was no immediate change in the recording process, although the tape did at least permit a playback of each take. The ability to hear a playback was in itself a great advance as it allowed the musicians to review their performance and to make adjustments to their interpretation, even if the primary wax recording still demanded a single-take approach. By the early 1950s, however, as tape recording improved and the equipment became more reliable engineers began to realise the potential of tape as more than a backup. In the era of the LP one of tape's most obvious advantages was its greater duration when compared with wax recording. At first the duration was approximately 15 minutes with a standard length tape running at 30 inches per second (ips), which was regarded as the optimum tape speed for recording music, but as the quality of tape improved the tape speed could be reduced to 15 ips, increasing the duration of a standard length tape to over 30 minutes (Haddy, 1983). In theory, if not in practice, it was now possible to record an entire side of an LP in a single take using one tape. As well as offering the opportunity for playbacks, tape also created the potential for editing, which had been almost impossible with the wax process, even if opportunities for editing were limited at first (Fischer-Dieskau, 2011).

By the early 1950s tape recording had overtaken wax as the primary recording medium and musicians were no longer required to record in single takes. The potential to record multiple takes of a given passage and the facility for instant playbacks helped artists to conceive of recorded performances in more musical terms than previously possible with wax recording, and to consider them in terms of the flow and shape of a complete musical work. There were, however, concerns about potential flaws in the new recording process, with Compton Mackenzie expressing doubts about what he regarded as the ‘un-musical quality of tape-recording’ when used to dub the final master disc, although radio broadcasts from tape were felt to ‘emerge with a more musical result’ (Mackenzie, 1951, p. 145). No further explanation is given as to what made the use of tape in one medium more musical than another, or to indicate whether this was Mackenzie’s personal opinion or a commonly held view. It seems likely, however, that Mackenzie was referring to LP recordings assembled by dubbing a series of 78s onto a single tape, where the necessity of breaking works into segments of no more than four and a half minutes when creating the original 78s could result in a disjointed and ‘un-musical’ performance on the final LP record; by comparison tape recording allowed a performance intended for broadcast to be recorded in its entirety, resulting in a continuous and more naturally musical rendition. If this was the case, then clearly this was a temporary problem that would be largely resolved once tape came into regular usage for original recordings, although the engineers of the day still had much work to do to arrive at an ideal solution and to devise practices that would enable them to realise the true potential of tape (see discussion of recording practices in Chapter 5).

Whether engineers worked to any corporate blueprint is unclear, and there is no indication that they necessarily worked in collaboration or with any input from A&R departments in

developing new practices. For the first fifty years or so, recording had been seen very much as a technical problem to be solved, and the process was led by engineers rather than A&R managers. The aesthetic approach to recording in the late 1940s, if one could be articulated clearly at this point, was still mostly one of documentation with the musicians in control of their performance, the engineers in control of the sound, and the 'recording supervisor' (the term 'record producer' being unknown at this time) there to ensure that the sessions ran to time and within budget. The establishment of tape recording as primary recording medium in the early 1950s had important implications as the improvements in technology began to pose questions for recording crews as to how they should go about the process of recording and what they were aiming to achieve in terms of the sound.

There are few accounts of practice in British record companies in the early 1950s but an article on emerging practices in the USA reveals a number of different opinions as to how to approach a recording session. Dick Mohr, Recording Manager at RCA-Victor, described recording as 'a different artistic medium' and stated that 'the artist who thinks he'll have a concert reproduction as a record is wrong', while David Jones, Musical Director of Capitol Records, disagreed, stating that a recording 'is not a new medium. It is a captured concert' and that Capitol's aim was 'to record just as the orchestra sounds' (Anon., 1952, pp. 28-29). In terms of the sound, Remy Farkas said that at London Records they aimed to convey what a conductor hears from the podium, while David Oppenheimer, A&R manager at Columbia Masterworks, felt that the listener 'should enjoy the illusion of hearing music from the best seat in a concert hall' (Anon., 1952, pp. 28-29). Opinions on what constituted the best perspective for the listener, the correct approach to the recording process, or the very concept of recording itself, clearly varied and were reflected in the results achieved by each company.

Tape and the independent record company

One significant outcome of the availability of tape recording in the 1950s was the emergence of a growing number of small, independent record companies that could see the opportunities offered by the new technology.³ Whereas the wax recording system was both complex and prohibitively expensive, requiring not only the specialist equipment to produce the wax masters but also the technical facilities to process them, tape recording equipment was both affordable and portable, making it possible to record on location with a minimum of staff. Independent record companies often specialised in non-standard or niche repertoire, which meant that they were not necessarily in direct competition with the major companies and so, by identifying gaps in the catalogue, were able to establish their place in the market. Companies such as Vox, Westminster, and Mercury also found that savings could be achieved by contracting younger or lesser-known artists, or by recording in locations such as Vienna, where costs were considerably lower than those of the UK or the USA. Many of the independent record companies relied on the services of specialist companies, who would process the finished master recording, press the LPs, produce the sleeves, and arrange distribution (Hawkyard, 1983; Usill, 1984). In some cases this was even done by major companies including Decca who, realising that the majority of the independent labels posed little threat to their operations, would take advantage of spare capacity in the factory to process the recordings. With few of the overheads of the major companies, none of the costs of running studios and factories, and with the savings made on artists and recording, the independent labels found that they could produce recordings relatively cheaply.

³ When referring to record companies the term ‘independent’ usually refers to smaller record labels operating outside the control of the major companies and reliant on other companies for production and distribution. The term ‘major’ usually refers to large music groups, often incorporating a number of different record labels, with their own production and distribution facilities e.g. Decca, EMI, CBS, RCA-Victor.

The ease with which companies could be set up with relatively little capital investment and operate with a minimal amount of equipment meant that in the USA in the five-year period from August 1949 to August 1954 ‘the number of companies in America publishing LP recordings increased from 11 to almost 200’ (Gelatt, 1977, p. 300). In Britain, too, by the end of the 1950s, alongside major labels such as Decca, EMI, and Pye, there were approximately 25 independent record labels in operation, most of which relied on other companies to process and manufacture their records (Frith, 1987, p. 287). The growth of independent record labels was generally regarded as having a positive effect on recording in that they created more work for artists and ensembles, often nurturing young artists in the process, and increasing the diversity of repertoire available on records. Their presence in the marketplace enhanced the image of a vibrant recording industry and this helped to stimulate sales and interest in recordings, especially through the use of advertising.

The launch of the LP in Britain

Decca’s decision to issue LPs in Britain from June 1950 onwards was greeted warmly, as shown by Compton Mackenzie’s editorial in *The Gramophone* of July 1950:

[W]e have had to wait, what some people have thought was an unreasonably long time, for the Long-Playing Record in this country, but at last here it is, and it is really gratifying to be able to affirm with complete conviction that it was worth waiting for. To Decca belongs the honour of being the first to issue it in this country, and if future records are as well chosen and as well made as the first few I have heard [...] then without doubt a new era for the gramophone has opened.
(Mackenzie, 1950, p. 21)

Those first impressions were soon confirmed in an article in which the author referred to the advantages of the LP as including its ‘silent surface [...] the extraordinary depth and beauty of the tone, the lightness and flexibility of the discs themselves’ (Sackville-West, 1950, p. 37). If there were criticisms they were not necessarily about the LP system itself

but the quality of the discs issued by some record companies. For instance, Lionel Salter, while acknowledging the numerous and immediate advantages of LP over the 78, expressed concerns about the quality of some recordings:

[T]here is some agreement that *at its best* LP produces a more vivid reproduction of an orchestra or of a chamber ensemble. Unfortunately, in all but the best recordings, there is a tendency for upper harmonics to be pinched, so that orchestra violins, for example, emerge with a wiry, insubstantial tone of singular unpleasantness. [...] Complaints are also frequently made of ‘papery’ bass, but that this is not inherent in LP recording can be heard from the Vienna Philharmonic’s issue of Strauss’s *Also Sprach Zarathustra*, which has a full bass as anyone could desire.

(Salter, 1952, p. 156)

These reservations aside, the clear benefits of the LP record and the generally positive reception given to it by critics meant that many other companies, including a number of independent labels, were quick to follow Decca’s lead in issuing LPs although, given the concerns about quality voiced above, some companies may have launched too soon. One notable exception was EMI, which in November 1950 announced that due to uncertainty over which of the various formats would emerge as the new standard – 78, 33 or 45 rpm – it would continue to issue 78s only. This uncertainty arose from the fact that within months of Columbia launching its 12-inch 33 $\frac{1}{3}$ rpm LP record in 1948, RCA-Victor had launched its rival 7-inch 45 rpm record, leading to what became known as ‘The Battle of the Speeds’ as each company sought to promote the merits of its system in order to convince other record companies, and indeed record buyers, to opt for one over the other. A desire on the part of EMI to avoid costly investment in a system that might be unsuccessful or prove unpopular with consumers (who would need to buy new gramophone players as well as the discs themselves) may be understandable, especially as other systems had failed in the marketplace. At the time, however, EMI had distribution arrangements with both American Columbia and RCA-Victor and another explanation for EMI’s reluctance to choose between the systems was that it did not want to risk offending either of its partners

by appearing to favour one system over the other. As well as Decca in the UK, the majority of US record companies soon adopted the LP format and eventually, with sales of Columbia LPs outstripping those of RCA's boxed sets of 45s by a ratio of as much as 30:1 (Magoun, 2002 cited in R. M. Osborne, 2008, p. 125), RCA-Victor was forced to concede defeat and to begin production of LP records in January 1950.

The LP may have won the battle for supremacy in the USA, at least as far as classical music was concerned (the 45 rpm disc would eventually establish itself as an ideal medium for popular music), but in Britain the uncertainty over formats remained until EMI finally released its first LPs in October 1952. Until then, EMI's hesitancy to enter the LP market meant that Desmond Shawe-Taylor could justifiably state that 'In this country, despite the enterprise of Decca, we are as yet only on the fringe of Long Playing' (Shawe-Taylor, 1951, p. 93). A report published in 1951 by the public policy think tank Political and Economic Planning confirmed this view, showing that despite considerable interest in the new medium its future seemed uncertain:

It would be an exaggeration to say that the introduction of the Long Playing Record has caused a revolution in this country. The effects in the United States have been far more spectacular. But the rise of LP provokes certain interesting speculations about the ultimate consequences for the record repertoire.

(Anon., 1951/1990, p. 2306)

Reasons offered for the slow response to the LP in Britain included the small amount of repertoire available, the cost of equipment, and the fact that many retailers refused to stock a wide range of discs while sales remained low. The main reason given, however, was the cost of the discs themselves: the high rate of purchase tax made them expensive, and this was considered to act as a damper on sales, since 'the public will not experiment with novelty when it has to pay so high for it' (Anon., 1951/1990, p. 2308). Consumers nonetheless had high expectations of the new format and, despite the cost of the discs and

the equipment needed to play them, created a demand that could not be adequately met until EMI finally entered the market for LPs in Britain. In the meantime, Decca was able to establish a significant lead over its rivals and sought to maintain this advantage through marketing activity that emphasised its technical innovations, stating that these added up to ‘the label that we could attach, genuinely and exclusively, to Decca long playing records, all of which are *tlp + ffr* – true long playing plus full frequency range recording’ (Advertisement, *The Gramophone*, October 1950). It is noticeable that the language and imagery of Decca’s marketing campaigns of the 1950s promote the company in a very different way from those of its rivals, particularly EMI, and present it as something of a maverick spirit, leading the way in terms of technology, artists, and repertoire. Decca’s company ethos is represented as driven by progress and a willingness to take risks, a message that chimed with the *zeitgeist* of the 1950s in which the public, tired of wartime deprivation, sought new opportunities and believed in the promise of technology to deliver change.

In what Anthony Pollard referred to as ‘some of the hardest-hitting advertisements ever to appear in the pages of *The Gramophone*’ (Pollard, 1998, pp. 90-91) Decca sought to drive home its advantage in the early 1950s through the use of publicity in which Decca’s achievements were celebrated at the expense of EMI. For example, its *Tch: Tch: Tch!* advertisement of 1950 depicts an ostrich with its head buried in the sand and text underneath stating that ‘Progress isn’t going to wait for an ostrich. Long playing is progress’ (*The Gramophone*, December 1950). EMI is not named but the clear implication is that Decca represents progress while EMI, which had announced its decision not to issue LPs in the previous month, is in danger of being left behind by refusing to embrace the latest technology. Another advertisement, *Hoity-toity* (*The Gramophone*, January 1951),

depicts an elderly lady in a wide-brimmed hat and suggests that a ‘maiden lady (all arsenic and old lace)’ – another covert reference to EMI – has complained about some of Decca’s recent advertisements, again portraying EMI as staid and old-fashioned. Despite EMI’s objections, this aggressive form of marketing continued, with Decca’s advertisements celebrating each advance while reminding readers of EMI’s failure to keep pace with developments. Even when EMI finally produced its first batch of 51 LPs in October 1952, Decca was able to run another advertisement, *Striding ahead (The Gramophone, November 1952)*, which celebrated the fact that Decca had already built a catalogue of over 500 LPs and had therefore established a significant lead in the market. The advertisement (see Figure 1, p. 95) depicted a cavalier’s boot striding forward (no doubt representing Decca’s progress) and seemingly about to land on the artist’s name – Hayes – which also happened to be the name of the site of EMI’s factory, a connection that was unlikely to be lost on readers. The decision not to issue LPs in 1950 cost EMI dearly, not just in terms of potential sales income lost but also as a result of losing ground to Decca and other companies and in the damage done to its reputation at home and abroad. It was also indicative of the poor state of management within EMI during the early 1950s. When Sir Joseph Lockwood became chairman of EMI in 1954 he made operational changes in order to improve corporate efficiency and reduce costs but EMI struggled to regain lost

striding ahead...

Striding ahead, Decca presents the fifteenth long playing release. Now, the total of long playing records is 502*.

Following the galaxy of orchestral music found in our thirteenth release, the star items in the fifteenth are three complete operas. From the Paris Opéra-Comique, after their success with *Carmen* and *Manon*, comes *Lakmé*. The great trio of Puccini operas is completed with the issue of *Tosca*, recorded, like *La Bohème* and *Madama Butterfly*, at the Accademia di Santa Cecilia, Rome. Also from Rome, the long awaited recording of Verdi's *Aida* introduces for the first time on Decca long playing records Ebe Stignani, the greatest Italian mezzo-soprano of our time, and Mario del Monaco, considered by many to be the finest dramatic tenor Italy has produced since the war.

Despite these obvious highlights, orchestral music is not neglected. There is, for instance, a fine performance of Sibelius' Fifth Symphony by Erik Tuxen and The Danish State Radio Symphony Orchestra. For lovers of chamber music, the release includes three more Beethoven Violin and Piano Sonatas (including the Kreutzer), played by that superb team Max Rostal and Franz Osborn, and the Shostakovich Piano Quintet Op. 57.

Lastly, there is a fine collection of ballet music, among which *Le Cid* is notable for a brilliant recording which stands out even from the superb quality of other Decca L.P.'s.

DECCA

* The fourteenth release of Decca long playing records consisted of thirteen records of light music

Figure 1: *Striding Ahead*, advertisement, *The Gramophone*, November 1952

momentum and, having lost the initiative to Decca, never quite recovered its status as the leading British record company. Thereafter, competition between Decca and EMI was intense and even fierce at times, as suggested by Decca's advertising campaigns, but

consumers benefited from the range and diversity of the titles released throughout the 1950s as well as improvements in the quality of gramophone records and of recorded sound.

There were, of course, other competitors in the market, including Deutsche Grammophon, which made a particular feature of the technical and artistic excellence of its products. It achieved this by thorough preparation and by a readiness to wait until a product reached its own high standards before it was released to the market, regardless of what rival companies might be doing. For instance, before entering the LP market Deutsche Grammophon made a careful analysis of the existing catalogue of recordings of core repertoire. It then compared the best of the recommended versions of works, based on reviews in *The Gramophone* and elsewhere, with its own recordings of the same works. Having assessed the likely response from the critics and the public Deutsche Grammophon deliberately released only those recordings that it felt sure were superior to those of its rivals (Pollard, 1998, pp. 96-99). At the same time, the company adopted a rigorous approach to quality control, maintaining a very high rejection rate of sub-standard LPs in order to ensure the quality of its pressings. This may have been a costly process but the advantages were clear, and Herbert von Karajan considered Deutsche Grammophon's pressings to be 'light-years ahead of those of rival companies' (R. Osborne, 1998, p. 432). The company also paid close attention to the design and manufacture of its LP sleeves to ensure that each element of the overall package was of an equally high quality:

[They] were virtually bespoke products: elegantly designed with gatefold sleeves individually sewn by ladies working treadles on old-fashioned sewing machines. Inside the sleeves were LPs whose surfaces were famously silent.

(R. Osborne, 1998, p. 432)

This attention to detail and the insistence on the highest standards throughout the production and manufacture of its recordings meant that Deutsche Grammophon consistently obtained good reviews for its records and quickly established a reputation as one of the leading manufacturers of LPs in the field of classical music. The appearance and quality of the sleeves, together with the careful marketing and promotion of artists and records, were undoubtedly factors in this success. Record companies had always invested in promotion and frequently exploited the idea of the 'star' musician but promotion and advertising began to take on new forms in the 1950s and the record sleeve presented an opportunity to promote artists and records in a different manner. Whereas 78s were usually sold in brown paper sleeves, which often carried advertising for the record company or the retailer but were otherwise quite plain, a 12-inch square cardboard outer sleeve was developed for the LP, providing an ideal space for images. Many covers carried reproductions of works of art but original artwork was also used, as were photographs, initially in black and white then increasingly in colour. As Colin Symes has argued, the use of colour images on sleeves allowed retailers to display LPs in a more appealing manner and to use them in window displays that would attract buyers and encourage self-service browsing, leading to increased sales. The new sleeves had other benefits as they often carried liner notes giving details of the performers, and of the works and their composers, further enhancing the attractiveness of the product (Symes, 2004, pp. 100-101). Some companies employed in-house designers to produce the artwork but others sought shortcuts by using images from picture libraries (Shaughnessy, 1996). Photographers were also hired to take pictures of musicians in what became increasingly standardised images, including conductors in dramatic poses on the rostrum, instrumentalists deep in concentration, and singers dressed as characters from operas. The combined effect of these approaches was the creation of what Nicholas Cook has referred to as an 'iconographic vocabulary' of

familiar and in some instances clichéd images associated with certain types of artists and recordings (Cook, 1998, p. 112). As the catalogue expanded and companies issued more LPs, consumers also became familiar with the logos and house styles used by each record company for its record sleeves, so that they eventually began to associate them with various notions of quality, or value for money. Meanwhile, notions of the fidelity of recordings to the original sound were reinforced by the use of slogans such as Mercury's 'Living Presence' trademark, which was taken from a New York Times review of its 1951 recording of Mussorgsky's *Pictures at an Exhibition* (with the Chicago Symphony Orchestra conducted by Rafael Kubelik) in which the critic Howard Taubman praised the sound as giving the impression of being 'in the living presence of the orchestra' (Rooney, 2001, p. 20).

The marketing and promotion of records played a vital role in raising the profile of recordings, in developing artists' careers, and in stimulating demand for the LP as a premium product. The record sleeve was an important tool in this, with the careful use of imagery and slogans serving to increase expectations on the part of the consumer, while the encounter with the artwork and liner notes became an essential part of the ritual of listening to records.

Recording venues

As advances continued to be made in recording technology and the sound quality of recordings improved, the choice of venue was increasingly seen as a critical part of the recording process. The availability of concert halls in London was a problem throughout the 1950s and 1960s but the same was true of recording venues. In the 1950s EMI's Studio No. 1 at Abbey Road was the only one capable of accommodating a full symphony

orchestra; Decca's studios in West Hampstead could only accommodate small ensembles and even when a new, larger studio – Studio 3 – was built in the early 1960s it was used mostly for the recording of popular and light music, with classical recordings made on location at various venues including 'the three Ws' – the town halls at Watford, Wembley and Walthamstow.

One of the most important recording venues in the 1950s was London's Kingsway Hall, used extensively by both Decca and EMI. HMV had used Kingsway Hall for experimental recording sessions as early as 1925 but following the destruction of the Queen's Hall in 1941 – until then another regular recording venue – it rapidly became one of the major venues for recording in London and Decca began to use it too, making its first *ffrr* recordings there in 1944 (Drury, 2004). The Kingsway Hall would seem an unlikely choice for recording since a branch of the London Underground railway passed underneath, with the rumble of trains occasionally audible on recordings, but producers and engineers were prepared to overlook this on account of the fact that the hall was prized for its exceptional acoustics.⁴ As a result Kingsway Hall was the venue of choice for many artists and producers; EMI's Walter Legge preferred it to Abbey Road Studios, and Decca's John Culshaw praised it in his autobiography:

[D]espite the absurdity of its design, its innate hideousness and the fact that underground trains rumbled to and fro directly beneath the hall [...] nothing altered the fact that it had the finest recording acoustic in London. The Royal Festival Hall across the river, which had every imaginable facility, produced a relatively emaciated sound, and the Royal Albert Hall was simply too big. The alternative to Kingsway was one or another of the town halls dotted around the outskirts of London, but they were not in the Kingsway class for sound and were tiresome to reach.

(Culshaw, 1981, p. 311)

⁴ Decca engineers tried to remove or reduce the noise of the underground trains during post-production by using an electronic filter. Tape boxes were then stamped with the words 'Kingsway Filter' in red ink to indicate that the filter had been used.

The expansion in recording activity during the 1950s was such that record companies were not only in competition to find the best recording venues but also to find new artists, and many began to record on a regular basis at various locations in Europe. Vienna in particular emerged as an important centre for recording, offering not only many talented artists looking for work but also several first-class venues and orchestras; the favourable currency exchange rate meant that it was also less expensive to record there than in Britain or the USA. The advantages of recording in Vienna were such that it was not only the major record companies that chose to work in Vienna but also many of the independent companies from Britain and the USA, who would often record there for weeks or even months at a time (see further discussion p. 174).

The fact that large numbers of companies were recording almost continuously in European locations such as London and Vienna is an indication of the exponential growth in recording activity that occurred in the 1950s in response to the need to build catalogues of recordings in the new LP format while also taking advantage of the latest technology. There was also considerable growth in sales, and figures show that between 1950 and 1955 total record sales in the UK (of all types and across all genres) rose by approximately 45% while in the USA total sales more than doubled between 1950 and 1957 (Gronow & Saunio, 1998, p. 118; Patmore, 2009, p. 130). Figures for total record production in the UK (again, across all genres) show that LP production rose steadily from 8.9 million in 1955 to 17 million in 1960 while, in the same period, production of 78s fell from 46.3 million to 3.8 million as they were displaced by LP and 45 rpm records, with a noticeably sharp decline from 1958 onwards – the year that stereo was introduced (British Phonographic

Industry, 1976, p. 196).⁵ It is clear from these figures and from publications of the late 1940s and early 1950s that there was not only considerable interest in the latest developments in recording but that as records and equipment became more affordable a growing number of people were prepared to invest in them.

The advent of stereo recording

The last major development of the 1950s was stereo recording. The principles of stereo recording had been established in the early 1930s as the result of research by one of EMI's leading engineers, Alan Blumlein. Despite the obvious potential of stereo to improve the quality of recorded sound, the disruption of the war years, during which Blumlein was diverted to research in support of the war effort before dying in a plane crash in 1942, meant that EMI's research on stereo recording was suspended. Blumlein did take out patents on many of his ideas but these gradually expired so that EMI eventually lost any technical or commercial advantage (Alexander, 1999, p. 91). Research on stereo recording eventually resumed during the 1950s, with several companies working on it independently (see discussion, p. 180). Record companies were secretive about their progress and the prospects for the issue of stereo recordings, but in June 1956 Compton Mackenzie confidently stated: 'That binaural sound [...] will be the ordinary equipment of every gramophone owner in the future is certain, but it is still in the future' (Mackenzie, 1956, p. 1).

⁵ Figures for record sales and record production are total figures and include existing catalogue items as well as new releases, reissues, and compilations. While demonstrating the growth in the market for records, these figures do not provide a reliable measure of the increase in new recording activity (i.e. recording sessions).

Binaural or stereo sound may have been in the future as far as consumers were concerned but by this time several record companies were already anticipating the day when technological progress would make it possible to issue stereo recordings on LP.⁶ Mono was generally considered to be adequate for solo or chamber music, but orchestral recordings in mono suffered from their inability to capture the expansiveness of orchestral sound or to reproduce the spaciousness of a concert hall acoustic. Stereo recording had the capacity to add that extra spatial dimension and so reproduce the sound of an orchestra in a more realistic and more convincing manner.

The introduction of stereo recording was, however, a long, drawn-out affair; there were many technical obstacles to be overcome and in the mid-1950s both EMI and Decca began to make experimental stereo recordings.⁷ In the meantime, recording engineers began to realise that the main barrier to the production of stereo records was not the recording process but the means of reproduction, as it proved difficult to devise a system utilising two channels on a gramophone record that would allow playback with a conventional, if modified, pickup. Various companies arrived at different solutions, with at least three different systems in existence (Boehm, 1958, p. 111). This led to concern within the industry that unless a common standard could be reached there would be a repeat of the confusion in the marketplace caused by the existence of competing systems when the

⁶ The terms 'binaural' and 'stereo' are often used interchangeably but in fact apply to different effects. With true binaural recordings there is a clear separation of the two channels and they are best experienced through headphones so that each ear hears only one channel. With stereo recordings there is an element of overlap between the channels enabling the stereo image to be reproduced via loudspeakers or headphones.

⁷ An editorial note in *Gramophone* states that EMI's first experimental stereo sessions took place at Abbey Road Studio No. 1 on 18 May 1954 with Karl Haas conducting the London Baroque Ensemble (Jolly, 1993). Decca, meanwhile, had conducted its first experimental stereo sessions as early as November 1953 and made its first commercial stereo recording with the Suisse Romande Orchestra, conducted by Ernst Ansermet, at Victoria Hall, Geneva on 13 May 1954 (Pollard, 1998, pp. 80-82).

mono LP record was launched in the late 1940s. In an attempt to avoid this situation Arthur Haddy travelled to the USA in 1957 to demonstrate Decca's stereo system to representatives from RCA and CBS in New York and Los Angeles with the objective of reaching agreement on technical standards. The meeting was inconclusive but later the same year, in November, a meeting was convened in Zurich at which representatives of all the major European record companies reached agreement on a preferred system, enabling Haddy to return to the USA and negotiate a common standard for stereo. Not only did this reduce the perceived risk for companies proposing to invest in the new format but the absence of competing systems meant that consumers could have confidence in the stereo LP when it was launched the following year (Haddy, 1983).

Re-recording for stereo

Once the manufacturing problems of the stereo LP had been overcome, the challenge remained to produce sufficient numbers of stereo records to persuade consumers to invest in the new format. Therefore record companies had to begin the process of re-recording the catalogues in stereo, leading to another surge in recording activity. Taking the Philharmonia Orchestra as one example, it is possible to gauge the level of recording activity through the 1950s and into the 1960s. In the early 1950s the Philharmonia's contract with EMI stipulated a minimum of 20 recording sessions a year. When a new five-year contract was signed in June 1955 it guaranteed a minimum of 150 sessions per year, of which 75 were to be without any soloists (Pettitt, 1985, p. 75). Over the first few years of the contract the number of sessions grew rapidly, peaking at 309 in 1957. By the late 1950s, however, EMI had recorded a significant part of the core repertoire needed to fill its stereo catalogues, and the number of sessions began to drop – to 225 in 1958, and 176 – little more than the minimum 150 sessions set out in the contract – in 1959 (Pettitt,

1985, p. 95). By the year 1960-61 the number of sessions fell again to the point where EMI was unable to use its quota of 150 sessions and was forced to pay compensation to the Philharmonia, signalling the continuing decline in new recording activity (Pettitt, 1985, pp. 103-105). The changing pattern of recording activity had implications for the music profession as the amount of recording taking place was such that there was virtually full employment for musicians throughout the 1950s. The effect was to create a state of mutual dependency between musicians, who were in competition for recording work, and record companies that needed to build their LP catalogues. With the contraction in new recording activity from the late 1950s onwards, competition for the available work intensified so that artists had to diversify their activities to find alternative sources of work; record companies, meanwhile, had to rationalise their recording schedules and be more selective as to whom and what they recorded.

The launch of stereo

Stereo recordings first became available to consumers in the form of pre-recorded tapes but these were expensive, as were the machines on which to play them. The improved sound was immediately apparent, however, and G. A. Briggs, reporting on a demonstration of HMV Stereosonic tape recordings at the Royal Festival Hall in May 1956, commented that 'positions between the two speakers give a touch of life and a roundness to the tone which are unattainable from single channel working' (G. A. Briggs, 1956). A year later Percy Wilson was able to report on demonstrations of early stereo discs in Britain and the USA. He also revealed that he had heard a stereo disc produced by Decca and had been able to compare it with a mono version of the same recording, noting a remarkable improvement in sound quality and a range of benefits including:

[T]he added richness and sense of power, the increased definition and resolution of instruments, and the wonderful impression of realism at both ends of the scale, as well as the illusions of motion and spaciousness, which true stereophony gives.
(Wilson, 1957)

The advantages were clear but the launch of the stereo LP was not without problems. In the USA the major record companies had been developing their stereo product slowly and carefully, and as late as the summer of 1957 had no launch date in mind for the first stereo LPs. However, a number of independent companies had forced the issue by launching their stereo LPs first, at which point the majors had little choice but to follow suit. It soon became clear that in the rush to produce the first stereo LPs there had been insufficient time to conduct in-depth market research or to develop marketing strategies, and record company executives were particularly concerned that stereo sales would accelerate before all the technical issues had been resolved. Engineers were also concerned that early attempts at stereo recording were already being seen as outmoded in comparison with the latest efforts, and increasingly so as recording techniques and recording technology continued to evolve (Boehm, 1958).

In Britain a potentially similar situation arose when Pye became the first British company to issue stereo LPs, as even at the press launch there were concerns about the quality of its first discs. EMI and Decca had postponed the launch of their first stereo LPs until October 1958, having decided to invest time and effort in testing the transfers and pressings until they could be sure that the discs were of a sufficiently high quality to be released for sale to the general public. Pye, however, decided to launch its stereo discs in April 1958 at an event at the Waldorf Hotel in London. On his way to the event Anthony Pollard, then editor of *The Gramophone* magazine, remembered meeting John Barbirolli, who at that time was principal conductor for Pye and was due to speak at the launch. Barbirolli confided that it was evident that there were problems with the quality of the discs and,

worried as to what he should say, sought Pollard's advice. Pollard suggested that he should be open about the problems:

You should be honest and say it's an enormous step forward and that Pye are producing some of the first stereo recordings. There are problems that you people here [at the reception] will hear but they will be resolved.

(Pollard, 2009)

Pye eventually released its first stereo LPs in June 1958 but there were still problems and a review of those first releases in *The Gramophone* of July 1958 pointed out that comparison of the stereo discs with mono versions of the same recordings often showed no improvement. In the case of one recording, of works by Dvořák performed by the Hallé Orchestra conducted by Barbirolli, it was judged that 'the sound of the stereo disc is nearly everywhere inferior to that of its monaural equivalent' and with another recording, of the London Baroque Ensemble directed by Karl Haas, 'it is difficult to secure [...] any improvement in quality' (Macdonald, 1958). The review was not entirely dismissive, however, as the recordings provided at least an indication of the promise of stereo even if the initial product was far from perfect.

Sales of stereo LPs were slow to build as consumers were reluctant to invest in the necessary equipment on which to play records in the new format until the stereo catalogue had time to grow: while recordings continued to be issued in both stereo and mono versions there was little incentive to change (Walker, 2010). At the outset, therefore, stereo was largely the province of hi-fi enthusiasts who placed great emphasis on the quality of the pressings of the discs – the extent to which they were free of surface noise, warping, and other defects – and on the clarity and realism of the stereo sound. Quality, therefore, was a primary concern for all record companies as they sought to maintain their reputations and secure their share of the stereo market. It was also a concern of the audio

industry, which played an active role in the promotion of stereo through advertising and the demonstration of equipment and LPs at audio fairs and other events. Anthony Pollard recalled that, such was the interest in stereo, manufacturers even staged events in concert halls before an audience:

In the early days [of stereo], maybe before the *Ring* recording, Peter Walker [Quad] and Gilbert Briggs [Wharfedale] would put on performances of Decca records in the Royal Festival Hall – they weren't playing EMI records. Sometimes they'd have say a wind ensemble play live in the Hall then, having recorded them earlier, would play the recording over speakers. [...] It wouldn't work today – no-one would go to the Festival Hall to hear a recording – but then it was an event and they got a lot of publicity.

(Pollard, 2009)

Innovative approaches to the promotion of equipment and LPs by manufacturers were often in contrast to the caution being exercised by record companies who, at the outset of the stereo era, seemed content to re-record the standard repertoire, rather than take risks on less well-known works. Commenting on their conservatism, Evan Senior, editor of *Records and Recording*, sounded a note of warning:

Just as London concert programmes are becoming stereotyped and not always supported because promoters are out of touch with public taste, so there may be a danger that record sales could be affected for the same reason. [...] Recording proved, when LP arrived, that it could change public taste and create a market, that music lovers were not as firmly rooted as is believed today in the standard concert repertoire. It could prove it again.

(Senior, 1959)

Stereo recording: the negative impact

There were undoubtedly valid commercial considerations underlying the conservatism within record companies. Stereo may have been a welcome development for the majority of those concerned with the production and reception of recordings, but it had other less welcome consequences. Record companies found that the costs of recording and producing

stereo LPs were higher than those for mono LPs – by 1960 it was estimated that recording costs had increased by as much as 10 times over 15 years – and the need to re-record repertoire in stereo also required a substantial amount of investment. This put smaller companies at a considerable disadvantage as they operated on narrow profit margins and did not have the financial resources to absorb the additional costs or to invest in a substantial programme of new recordings (Davidson, 1994, pp. 429-430). The major record companies were better able to cope with the changes as they relied on economies of scale, both in terms of the number of titles in their catalogues and the number of records sold, to spread the financial risk and cross-subsidise new recordings. Even so, the major companies were not immune to the rising cost of producing new recordings. The increasing sophistication of stereo recording, and of stereo opera in particular, had significant cost implications as noted by John Culshaw in his observation that ‘Operas which took twelve days to make now take three weeks’ (Culshaw, 1958, p. 136). The financial risks were compounded by the fact that the initial take-up of stereo amongst consumers was slow, making for a poor return on the increased investment needed to build stereo catalogues. The gradual release of seminal recordings, including the four instalments of Decca’s *Ring* cycle with Solti and the VPO, did eventually persuade many record buyers to make the switch to stereo as ‘the realised possibilities of stereo were such that thereafter mono recordings survived on borrowed time’ (Davidson, 1994, p. 430), at least as far as classical music was concerned. In the meantime, many smaller companies in Britain and the USA were overwhelmed by the increase in production costs and ran into financial difficulties with some, including Westminster and Argo, becoming the subject of takeovers and mergers, often consolidating repertoire in the catalogues of the major companies (Usill, 1984; Weber, 1996).

It seems likely that progress also came at some personal cost. There is certainly evidence to suggest that some engineers and producers found the transition difficult, not only in terms of significant technical challenges but also because the new processes demanded changes in working practices (Goodall, 2009; Martin, 1984). It is probable that some musicians found the transition from one form of recording to another equally challenging. In the late 1950s and early 1960s there were certainly many artists whose careers had begun in the era of 78s but had also encompassed that of tape, the LP record and stereo recording, each advance requiring them to adapt their artistry to the needs of the latest technology. Some artists, including the conductors Sir Thomas Beecham and Otto Klemperer, seemed to have little understanding of the recording process – or perhaps feigned ignorance of it – and continued to work in ways that suited them but were not always helpful to the producers and engineers, for instance by insisting on complete takes rather than short extracts when patches were required to correct errors.⁸ Others, including the conductors Herbert von Karajan and Georg Solti, took a keen interest in the recording process and developed an understanding of it that enabled them to work more efficiently in recording situations. Many of Karajan's recordings from the 1950s exhibit the characteristics that enabled him to thrive in the recording studio:

[A] capacity that would ultimately establish him as one of the most complete recording artists in the history of the gramophone; a capacity to enter a recording studio and secure, exactingly but with a minimum of fuss, superbly played performances of established and not-so-established masterworks, orchestral or operatic, grave or gay, grand and not-so-grand, in stylistically well-centred recordings that would bear repeated hearing.

(R. Osborne, 1998, p. 311)

⁸ Beecham may have shown little outward concern for the recording process – Peter Andry described him as ‘impervious to any technical considerations’ (Andry, 1961) – but was nonetheless regarded as a highly experienced recording artist. He was described by Fred Gaisberg as ‘extra vigilant’ in the vetting of test pressings for 78s (Gaisberg, 1946, p. 152) and, in the era of tape recording, known to make extensive use of playbacks to improve his recordings (Patmore, 2001, pp. 128, 262).

Karajan and Solti are perhaps extreme examples of musicians whose knowledge and expertise in the recording studio, together with their ability to cultivate effective working relationships with producers and engineers, enabled them to develop highly successful recording careers. Their positive responses to recording and the ability to adapt to the continuing development of recording technology throughout the 1950s were by no means typical, however, and other musicians found that they were more reliant on the skills of the record producer in negotiating a path through the recording process.

Stereo recording: implications for producers and engineers

Looking back on his career as a producer, George Martin noted that when he joined EMI in 1950 ‘we weren’t even called record producers then. We were known as Artists and Recording Managers, and the job was essentially a supervisory one’ (Martin, 2002, p. 36). The role of the record producer (also commonly referred to as recording manager or recording supervisor) evolved throughout the 1950s in response to the increasing complexity of the recording process, giving producers a greater influence over the artistic outcomes of a recording (see further discussion, p. 139). This was particularly the case in recordings of popular music where the new technology enabled producers to not only correct faults but also improve a poor or indifferent performance through editing, dubbing, and other techniques. In some cases producers of popular music intervened to such an extent that they were effectively part of the creative team and in the 1960s some, including George Martin and Phil Spector, became celebrities in their own right through their association with particular artists and recordings. By comparison, producers of classical music tended to be less interventionist and less reliant on technology. Classical producers also had a lower public profile outside specialist music publications, especially as they were not routinely credited on record sleeves before the 1960s. The influence of the record

producer may have been less obvious in classical music, at least to record buyers, but the changing balance of power within the studio was noticeable to observers, as reported by John Warrack in November 1958:

The most obvious and important [conclusion] is that stereo places a much greater musical responsibility on the recording engineers. [...] Stereo also means, in a less easily definable way, an important shift in authority from the conductor to his recordists. [...] It looks as if the men in the fish-tank, as orchestral players see them, are going to have a more creative musical role than hitherto. [...] Perhaps the day is upon us when a like-minded conductor and engineer must work on the score together and reach full agreement on its interpretation before a note is played. No longer will it be satisfactory for the engineers to confine themselves to capturing what the conductor is doing as accurately as possible when they don't know in advance exactly what that is.

(Warrack, 1958, p. 233)

The challenges of stereo recording were clear, but although engineers appeared to be agreed on its advantages this was not necessarily true of producers. Some, including Walter Legge, were doubtful as to its value and slow to adapt their working practices whereas others, such as John Culshaw, embraced the opportunities it created.⁹ There are few accounts of the working practices of record producers in the 1950s, and many were guarded about their methods, but Culshaw was more open than most and frequently wrote for publications including *The Gramophone* and *Records and Recording*. In the March 1959 issue of *The Gramophone*, Culshaw published an account of the first studio recording of *Das Rheingold* in stereo, made by Decca in Vienna in 1958. Aware of the artistic and financial risks involved, Culshaw had undertaken meticulous preparations for the recording to ensure that the best possible cast was available and that all logistical concerns had been addressed. Culshaw had also given great thought to the planning of the opera 'in terms of stereophonic sound – who moves where, when and why' (Culshaw, 1959, p. 441), which necessitated the making of sketches for the various scenes and rehearsing the

⁹ In a letter to *The Gramophone*, Reg Willard, an engineer at EMI's Central Research Laboratory at Hayes, stated that Legge 'actively disapproved of stereo in the early days' (Willard, 1993).

singers in their movements so as to ensure their correct placement in the stereo sound field. Culshaw's concept for the opera required careful consideration of the various sound effects to be employed, and some ingenuity in improvising and adapting where necessary. For Culshaw, this was the obvious approach:

The stereophonic medium has caused something of a revolution in opera recording technique. One is no longer merely concerned with the correct reproduction of notes and sound, for what has to emerge is a production within a completely new medium, and it has to be conceived as such.

(Culshaw, 1959, p. 444)

Culshaw added that the attention to detail shown in the planning of *Das Rheingold* was typical of 'the standard of careful preparation which now goes into every stereo opera project, and which has no precedent in recording history' (Culshaw, 1959, p. 444). The dramatic aspects of opera and the lack of a visual element clearly called for a new approach in recording because stereo had the potential to expose flaws in those recordings where there had been insufficient consideration of the singers' placement on the sound stage. The more considered kind of preparation described by Culshaw, with the producer working in partnership with artists and engineers to produce results that were both technically and artistically convincing, helped to eliminate such flaws and the results soon became associated with Culshaw and Decca stereo opera recordings. In later articles Culshaw was able to reflect on the advances made in stereo recording and to acknowledge that although it had been realised early on that a new approach was needed, it had taken time to realise the potential of stereo and to develop and refine the working practices required to exploit that potential:

When stereo opera became a practical possibility I thought it a colossal step forward, because at the very least it offered a purer, more musical sound. [...] But beyond this, stereo seemed to imply imaginative developments which even today are only just emerging: for, as always, a new technique takes time to adjust itself to

the demands of the artist, and the artist needs time to learn how to make the best use of the technique.

(Culshaw, 1962, p. 14)

It was not only artists who needed time to adapt; some listeners were slow to be convinced of advances in recording and Culshaw was aware of criticism of the new techniques, and of stereo in particular:

The arguments against stereo opera are advanced on two points: firstly that it is an artificial assembly of hundreds of ‘takes’ which produces a sterile, anti-musical and anti-theatrical sort of perfection: and secondly that the use of stereo to bring off certain effects that are near-impossible in the theatre is not fair play.

(Culshaw, 1962, p. 14)

The idea of ‘perfection’ was certainly at odds with earlier recordings where mistakes and imperfections were accepted more readily; but the possibilities offered by the latest technology encouraged producers such as Culshaw to work towards an idealised version of performance – the notion of what might be achieved in ideal conditions with the best performers and access to the best resources. By the time Culshaw wrote these accounts, the concept of the role of the ‘record producer’ had evolved into something quite distinct from the A&R managers of the previous era. Until recently the *Oxford English Dictionary* contained no entry for ‘record producer’ but an enquiry has confirmed that the term originated in the USA.¹⁰ It is uncertain when it entered common usage in the UK and although there are references to ‘producer’ and ‘recording producer’ in issues of the magazine *Records and Recording* from 1961 and 1962, terms such as ‘recording manager’ continued to be used as well. The gradual change in terminology indicates some public recognition of the fact that the role had evolved from a supervisory one at the beginning of the 1950s to a more interventionist one by the end of the decade, as observed by George Martin (see Chapter 1, p. 27). The inconsistent use of terms and their apparent

¹⁰ Correspondence with researchers at the *Oxford English Dictionary* has established that the first known use of the term ‘record producer’ was in the *New York Times* of 12 September 1954.

interchangeability also suggests that the role was not clearly defined and evolved in response to the demands of the recording process rather than as the result of any design on the part of record companies.

If the evolution of the role of the modern record producer is uncertain, that of the balance engineer is almost completely overlooked in histories of recording, and is often misunderstood as a result. Reviews in publications of the period sometimes give the impression that the engineer was to blame for poor recordings but, as ‘Some Balance Engineers’ explained in a letter to *The Gramophone* in 1959, the engineer worked in consultation with the ‘Artists and Repertoire representative’ and the musicians. According to the letter’s correspondent, ‘few seem to realise that most records nowadays are simply not performances at all, but very intricate mosaics [...] which raise interesting ethical and moral problems’ (Wilson, 1959, p. 41). This is a significant comment showing that by 1959 editing and the use of multiple takes were well established in recording, even if the general public was largely unaware. What is missing, however, is any insight into what this might have meant to musicians. The correspondent to *The Gramophone* does not expand on what the ‘ethical and moral problems’ of recording might be, but these may be taken to refer to concerns over the integrity of a recording compiled from edited takes and a fear that on occasion this could amount to a form of deception on the part of the record company and artists. If artists had similar concerns, it appears that they were reluctant to state them, at least publicly. Memoirs and other accounts by engineers working in the 1950s are extremely rare, so the nature of relationships between engineers, artists, and producers is rarely seen from the engineer’s perspective. The letter is therefore important in at least stating the collaborative nature of recording, even if it does not go on to explain how artists and recording crews negotiated a path between the needs of the recording

process and the needs of the music. The letter also reveals that even in 1959, when editing had been available for the best part of a decade, there were still doubts about the application of the process with regard to classical music. This raises the question, alluded to in Culshaw's comments on the arguments against stereo opera (see quote, p. 113), as to whether or not an edited recording still amounts to a musical performance. In recordings of classical music the need to maintain the illusion of a continuous performance happening in real time means that, even today, there is generally little open discussion of the role of editing or of occasional difficulties experienced during recording sessions. Many musicians take the view that to do so would risk spoiling the illusion and set up negative expectations on the part of listeners who would then listen out for and anticipate faults on every playing of the recording (Hough, 2009); the revelation that Kirsten Flagstad's high Cs had been replaced by those of Elisabeth Schwarzkopf during the 1952 recording of *Tristan und Isolde* proved controversial at the time and is discussed in the case study in Chapter 7 (see p. 220). At the same time, the ethics of classical music are such that there is an expectation that musicians should be able to perform the works being recorded, and that editing should only be used to improve a recording, rather than fabricate a performance of which the artists are not capable. Various scholars have speculated on the nature of recording as performance, expressing a range of opinions: Stan Godlovitch argues that performance is dependent on the performative act and that recordings cannot therefore be regarded as performances (Godlovitch, 1998, p. 14); Theodore Gracyk regards recording as a mediated form of performance, in which a recording offers a reproduction or a representation of a live performance, depending on the degree of intervention in the recording process (Gracyk, 1997, p. 142); while Andrew Kania argues that as far as classical music is concerned a recording is simply a form of performance, and that most musicians, critics, and listeners accept and hear classical recordings as performances

(Kania, 2008). Certainly many musicians, while aware of the need to make concessions to the recording process, have been concerned to replicate the conditions of concert performance as far as possible when recording (Curran, 2007); examples of ways in which musicians approached the recording process in the 1950s and 1960s are discussed in Chapter 4. The illusion of a continuous musical event therefore remains an important element in the recording of classical music and listeners often regard recordings as definitive statements of artistic intent that bear comparison with other interpretations. At the same time, listeners tend to ignore the fact that recordings take place in very different circumstances from those of concert performance, and according to a different set of rules, aspects of which are discussed in relation to the application of Culshaw's approach to recording in the case studies of *Peter Grimes* (see Chapter 8) and *Elektra* (see Chapter 9).

Summary

The study of contemporary reports of recording in the 1950s reveals much about general perceptions of recording, awareness of technological progress achieved, and expectations for the future. The 1950s was undoubtedly a period of major technological change in the recording of classical music, during which the unpredictability of earlier recording methods was replaced by more consistent results as the product of a more thorough approach to the application of technology. The introduction of new equipment required engineers to familiarise themselves with its operation and determine its potential but new technology was often pressed into service before thorough testing could be completed, with the result that recording techniques and studio practices were developed in an ad hoc manner. New technologies could also pose questions about the aesthetics of recording – for instance whether a recording should be regarded as a ‘captured concert’ or ‘a different artistic medium’ – and the answers tended to reflect the convictions of those individuals

with responsibility for a company's particular approach to recording, resulting in a range of different house styles amongst record companies.

Given the advances in technology, those working in recording during the 1950s needed to be responsive to change and flexible in their approach as practices continued to evolve.

The added complexity of the recording process, especially in the stereo era, placed increased demands on artists and engineers and led to the development of the role of the record producer. There were undoubtedly benefits for musicians, particularly in London as the capital's enhanced post-war status as one of Europe's major musical centres (see Chapter 2, p. 53), as well as the fact that both EMI and Decca were based there, meant that it was a natural focus of recording activity in Europe throughout the 1950s and 1960s. The demand for new recordings in LP format to rebuild record company catalogues was such that for much of the 1950s London's musicians were working at full capacity – as was the case in other recording centres that emerged during this period, notably Vienna.

One striking feature discernible in contemporary reports of new technology is the frequent mismatch between the expectations of critics and consumers, and the reality of the products on offer. Rumours of new products or new developments often began to circulate long in advance of any launch, raising expectations that were not always realised when the products finally came to market. In some cases the race to gain a competitive edge over rival companies also meant that products were released too soon, leading to problems with quality control until manufacturing processes could be perfected.

The advances in recording during the 1950s led to changes that had a significant impact on those involved in recording – particularly musicians, engineers, and record producers – yet

there are few detailed accounts of their experiences. Competition within the recording industry encouraged secrecy, leading to little overt discussion of working practices or of the details of technological developments. Record producers working in classical music also had a lower public profile than their counterparts in popular music, although John Culshaw was exceptional in this regard as he wrote extensively on the subject of recording. In general, however, the experiences of those involved in the production of recordings in the 1950s have not been documented to any great extent. The following chapters draw on oral histories gathered from interviews with a representative sample of those who were involved in the recording industry in the 1950s. The interviewees provide a deeper insight into experiences of recording in the 1950s and the impact of recording on musicians and musical life.

Part II:
Oral histories

Introduction

There are few documented accounts of recording practice from the 1950s. Over the years, autobiographies and other publications have appeared that make reference to recordings and recording sessions but these accounts are often written in anecdotal form with scant detail and little or no attempt at analysis. Archival sources are also scarce and those that exist are often incomplete, enabling only a partial view to emerge of practices and developments in recording in the 1950s, and their impact on music and musicians. With so little documentary evidence available, oral history methods form a major part of the methodology for this study and Chapters 4-6 are based on the analysis of 89 interviews with key figures associated with recording and the music profession in the 1950s and 1960s. Research for this aspect of the thesis was conducted in two stages, the first involving the study of a series of recorded interviews held at the British Library Sound Archive under the collective title *Oral History of Recorded Sound*. In the second stage the author conducted original interviews with musicians, producers, engineers and others who were active in the relevant period.

Oral Histories I: British Library Sound Archive *Oral History of Recorded Sound*

The British Library Sound Archive *Oral History of Recorded Sound* consists of over 100 interviews conducted with musicians, producers, engineers and other figures from recording history. The project was initiated in 1983 by Laurence Stapley who was chairman of the Archive Committee at what was then the British Institute of Recorded Sound (now the British Library Sound Archive) and whose former role as a BBC sound engineer meant that he had at least a technical background in recording even if he had little

direct experience of the commercial recording industry. In an article published in *Phonographic Bulletin* Stapley explained his motivation for initiating the project by stating that the cultural significance of the gramophone was such that it was vital to preserve its history (Stapley, 1987). Even in the 1980s there was recognition of a need to act quickly, as acknowledged in an earlier interview in which Stapley said that he felt the project ‘should have been done 15 years ago because several of the pioneers have already died [...] and there are others we feel we must speak to urgently’ (Anderson, 1985, p. 98).

Throughout the project Stapley worked closely with Elizabeth Brett, a former BBC producer, to try to produce a ‘definitive, complete version’ (Anderson, 1985, p. 100) of the history of recording, although the enormity of the task always meant that this was unlikely to be fulfilled. Nor is the collection without its flaws since Stapley’s interview technique did not always produce the best results from interviewees – as in those instances where he asks leading questions, prefaces a question with his own opinion, or fails to ask a follow-up question to an interesting point. Anthony Pollard has commented (Pollard, 2009) that the fact that Stapley had not worked in the recording industry himself meant that he also lacked sufficient knowledge of the subject to challenge obvious errors or questionable opinions on the part of interviewees. The project commenced in September 1983, initially for three months, although it was extended several times as funds permitted. The majority of interviews took place between 1983 and 1985 and the project was essentially complete by 1987, although some additional interviews were conducted in subsequent years (British Library National Sound Archive, 1989).

The collection has not been the subject of any significant academic research to date and most of the material is unknown to the wider research community, especially as transcripts

of the recordings are not available. Nonetheless, the collection is of vital importance for researchers as in many cases these are the only surviving accounts of the individuals concerned and of their experience of the recording industry before and after the Second World War. As far as a study of recording in the 1950s is concerned, the interviews are useful to varying degrees as the interviewees had different roles and were at different stages of their careers at that time. For instance, the recording engineer Bob Gooch joined EMI in 1950 and had first-hand experience of all the major developments of the period whereas others, such as David Bicknell, EMI's head of A&R at that time, were more established in their careers and were able to provide a different narrative comparing what happened in the 1950s with what had gone before. Those in senior management positions within the industry such as Sir Joseph Lockwood, chairman of EMI from 1954 to 1974, were able to offer a different perspective again, having a greater overview of the industry and their place within it.

Having identified what appeared to be the most relevant interviews based on abstracts in the catalogue to the collection (British Library National Sound Archive, 1989), 43 interviews were transcribed from the recordings for further study (see list at Appendix 1). The information gleaned from the transcripts was useful in providing background context for the wider research project and for the interviews conducted in the second stage of this study. The majority of the participants in the British Library project have died since those interviews took place but some are still alive and in a few instances it was possible to interview them again for the current project. In those cases in particular, the transcripts of the recorded interviews at the British Library helped with the preparation for the second stage interviews by providing background on the subject's career and by helping to identify topics for discussion. Overall, however, the transcripts helped to inform the

approach to the second stage interviews in general, particularly with regard to their form and content, and in identifying themes and avenues for further research.

Oral Histories II: Interviews, 2009-15

In the second stage of the oral history study, the aim was to contact musicians and others who were involved in the recording industry in the 1950s and early 1960s with a view to conducting further interviews. Many of the key figures from the period have died, in several cases only relatively recently, and those who remain have often been retired for many years, making it difficult to locate or contact them. Most interviewees were recruited via contacts in the recording industry and music profession, while a few responded to letters in dedicated music publications including *Gramophone* (November 2008), *International Record Review* (Autumn 2009), and *Musician*, the journal of the Musicians' Union (Autumn 2009). Ethical consideration was given to the fact that the interviewees were elderly and initial contact was by letter or an email that included an outline of the research area in order to provide some context for the interview request.¹¹ Consideration was also given to possible issues of confidentiality and participants were made aware that the interviews, and quotes from them, were intended to inform and form part of a thesis. In several cases, following an interview, the interviewee was willing to provide introductions to further potential participants.

Forty-six interviews were conducted between 21 February 2009 and 10 June 2015 (see list at Appendix 2). Four were conducted by telephone but all other interviews were conducted

¹¹ The research methodology for this study was subjected to a research ethics audit on behalf of the Social Sciences and Humanities Inter-Divisional Research Ethics Committee (IDREC) at the University of Oxford and deemed to be in accordance with ethical standards (IDREC Ref No.: SSD/CUREC1A/12-097).

in person. In most cases the interviews were conducted on a one-to-one basis, but in a small number of cases another person – usually a spouse – was present for all or part of the interview. With one exception, all interviews were recorded and the recordings were transcribed. Where requested, or where there was a need for clarification, draft copies of interview transcripts were sent to interviewees for comment. In two cases follow-up meetings were arranged to discuss specific aspects of the transcript. Final copies of transcripts were then sent to interviewees with copyright consent forms with which to indicate permission to quote from the transcripts in full or in part.

At the time of interview the majority (23) of the interviewees were in their eighties, four were in their nineties, 14 were in their seventies, and two were in their sixties. Three interviewees were in their fifties and, while not part of the core group who had worked in recording during the 1950s and early 1960s, were interviewed because of their specialist knowledge of the period. Interviewees also varied in their occupation, expertise, and knowledge of recording:

- musicians included five conductors, three pianists, four singers, three cellists, three violinists, two clarinetists, one percussionist, one guitarist, and one horn player
- record company personnel included six record producers, six recording engineers, and four record company executives
- others included two television producers who were involved in making documentaries about music and recording, four music journalists, and one publisher.

There was no common script for the interviews as the interviewees varied in their roles, experience, and status within the music profession and recording industry. Instead, extensive research on the interviewees' careers was carried out prior to each interview in

order to identify areas of interest and to prepare a list of questions. Interviews usually began with an outline of the research aims followed by general questions, to which interviewees were encouraged to express themselves freely so as not to restrict the conversation, before moving on to more specific questions. The key research areas included:

- the experience of the recording process and comparison with concert performance
- musicians' working relationships with engineers and producers
- the changing balance of power between musicians, engineers, and producers
- the emergence of new working practices in the studio
- attitudes towards technology and its use in recording
- the expansion of repertoire on record and its impact on audiences and musicians
- the influence of recording on concert performance.

Memory

During the interviews conducted in the second stage of this project the participants often recalled events that took place more than 50 years ago and, not unreasonably, there may be some question as to the accuracy and reliability of those memories. However, there is evidence to suggest that particularly momentous or significant events, and especially those that take place in people's formative years, tend to make a deep and lasting impression; memories of those events are therefore likely to be reliable, even when recalled many years later (Yow, 2005, p. 38). The process by which memories are formed and retained is complex but the significance of an event for the individual concerned seems to be an important factor in determining just how much of it is retained in memory. The extent to which an event can be regarded as significant is likely to be highly subjective and related to an individual's life experiences, as well as their hopes and aspirations, but it usually

requires some ‘direct personal involvement’ (Thomson, 2011, p. 85) such that the individual was witness to events or took part in some way. A memory may have additional impact through strong physical or emotional sensations connected with it, and many long-term studies involve war veterans for whom the physical and mental trauma of battle create vivid and often undesirable memories. In the case of musicians, significant events might include a first recording session, taking part in a notable performance, performing at a particular venue, or working with a great artist; all can create the right conditions for a lasting memory.

An important part of the process of establishing and consolidating a long-term memory involves ‘the creation and rehearsal of a memory story’ (Thomson, 2011, p. 85). Repetition plays a vital role in helping to reinforce and maintain a long-term memory through the process of mentally reconstructing the past as we perceive it to have happened, and relating the story to others or at least reliving it in our minds. In several cases the interviewees in this study had written and published their memoirs, for which they had often consulted diaries, letters and other personal documents. Some interviewees were able to elaborate further when questioned about the details of a particular event; in more than one case interviewees produced personal items including photograph albums, notebooks, and correspondence that prompted the recall of further details of a particular story.

During one interview, for example, the singer Dietrich Fischer-Dieskau recalled his experience of the 1952 recording of *Tristan und Isolde* with the conductor Wilhelm Furtwängler, one of his musical heroes. At the time of the interview, in January 2011, almost 60 years had passed since that recording but Fischer-Dieskau retained a clear memory of it and recalled details of the sessions with no sign of doubt or hesitation. The

significance of this event had clearly made an impression on Fischer-Dieskau, enabling him to consolidate a lasting memory of it. Where memories are not consolidated, however, ‘with the passing of time the particulars fade and opportunities multiply for interference – generated by later, similar experiences – to blur our recollections’ (Thomson, 2011, p. 85). In such cases the precise chronology of events may be unreliable or become confused, and there were instances of this in interviews where an interviewee could recall an event but confused the names of those involved or the likely dates. In some cases interviewees could add little to what they remembered of an event and although some of the recollections were clearly stories that had been told many times it appeared that some of the finer details had been lost. This can be explained partly by the fact that in some cases the significance of events may not have been apparent at the time – for instance the early death of Dennis Brain adds a poignancy to his recorded legacy but one that could not have been anticipated by those that worked with him – and so memories of those events may not have been fully consolidated. Also, producers, engineers, and session musicians would have been working on many recordings and with many artists at the same time, creating potential for confusion. In most cases, however, it was possible to correct errors by cross-checking against known facts – for instance, dates and locations of recording sessions, or of personnel, on LP and CD liner notes – or against the transcripts of interviews with others who were present at the same events. In some cases interviewees also corrected errors themselves when they were sent copies of the transcripts.

Finally, consideration needs to be given to the collective nature of cultural memory. Robert Gildea has spoken of the danger that people’s recollection of events can change over the years as they unconsciously absorb the collective memory of events that develops through

the media or through conversation with other witnesses to the same events.¹² This tends to apply more in relation to events that affect a relatively large cross-section of a community and that have been reported widely, but researchers need to be alert to the potential influence of collective memory. In the case of the interviewees in this study, the fact that the topic has not been the subject of any significant study, as well as the fact that these are often the only accounts of the individuals concerned, means that the majority of the memories and opinions reported here are not in the public domain and have not been circulated previously. Therefore, while there may be some normative effect resulting from the sharing of recollections and anecdotes within musical and recording circles over the years, the majority of the interviewees are unlikely to have been subject to undue influence from any collective memory.

Analysis of interview transcripts

The process of transcribing the interviews generated a large volume of data and ATLAS.ti 6.0 software was used during the initial stage of analysis to code the interview transcripts and group the data. It was then possible to identify themes and categories within the data and to begin to study them more closely. The analysis reveals much about the nature of recording in the 1950s and its influence on music and musicians but, rather than provide an exhaustive analysis of the entire data set, the following chapters provide an overview of the main themes and key findings to emerge.¹³ In some cases additional material has been incorporated from publications, media interviews, and notes from public lectures to

¹² Robert Gildea, *The Long Road of Oral History: Around 1968 in France*. Inaugural lecture, University of Oxford, 7 November 2008.

¹³ A selection of extended extracts from interview transcripts can be found at Appendix 3.

illustrate or expand on points. The findings are presented under the following chapter headings:

- People, roles, relationships
- Recording practices
- Musical practice and the influence of recording.

4 People, roles, relationships

The first chapter in this section considers the impact of change on individuals, and their response to it. Changes in the recording process had a profound effect on individuals, whether in terms of its impact on artists and their performance, or in changes to working relationships in the studio. The growing status and authority of the record producer is a notable feature of the accounts of those who were involved in recording in the 1950s, and the names of Walter Legge and John Culshaw feature prominently in them. The chapter begins by considering the experience of musicians in relation to the recording process.

Artists and the experience of recording

For musicians working in the immediate post-war years, recording could be a stressful experience as the technology then current – recording onto a wax disc – did not allow for editing or playbacks. Musicians therefore had no opportunity to hear their performance in order to improve on it and were aware that any errors in their performance would require another complete take. For orchestral players this was particularly stressful as there was considerable pressure on all members of the orchestra to complete a take without errors. Alexander Kok played on one of the Philharmonia Orchestra's first major recordings, with Ginette Neveu playing the Sibelius Violin Concerto under the conductor Walter Süsskind, at Abbey Road Studios in November 1945. There was little rehearsal time and Kok's overwhelming recollection was a sensation of fear as 'I was sight-reading the cello part and, because it was a wax recording, if I'd made a mistake the whole take would have had to be recorded again' (Kok, 2009).

The fear of mistakes was a common concern in the era of wax recording but the introduction of tape recording in Britain in about 1950 (Goodall, 2009; Haddy, 1960) transformed the experience for musicians. Many described the introduction of tape recording in terms such as ‘liberating’ (Rowlands, 2009) as the ability to record in longer takes, safe in the knowledge that errors could be corrected, removed much of the pressure associated with recording and allowed musicians to perform in a less inhibited manner. Tape also gave musicians the ability to hear playbacks, which they could use to listen to a take and note how their performance might be improved before recording another take. The ability to edit allowed engineers to correct most errors although it also required musicians to perform in a more consistent manner so as to permit editing between takes. An awareness of the specific requirements of recording could therefore be seen as an advantage for performers; the violinist Peter Mountain recalled that when he was a student at the Royal Academy of Music in the 1940s his teacher, Rowsby Woof, advised him ‘boy, you’re entering now the age of recording and you’ll be playing into a microphone not a big hall’ and so ‘everything had to be perfect; no changes of position, no bow changes – it had to be smooth’ (Mountain, 2010).

The practical necessities of recording affected artists in a variety of ways that often required them to modify the practices they had developed in concert performance. For instance, the cellist Denis Vigay recalled that the violinist Ginette Neveu ‘was one of these people who moved about so much they [the engineers] had to come out and make a circle and ask her not to move out of the circle’ (Vigay, 2010). Vigay also noted that players frequently had to adapt their playing to the specific needs of the studio and experienced this himself when playing continuo as ‘I felt however much I tried to play normally it came across as too loud so I got into a style of [...] playing very gently, and that worked

balance-wise [although] it never felt quite natural doing it – in other places you do have to project’ (Vigay, 2010). For Vigay, the effect of playing to a microphone acted as a constraint on his natural style but for other musicians the microphone could work in their favour. Vigay recalled working on several recording sessions with the violinist Alfredo Campoli, who made particularly effective use of the microphone:

[Campoli] had quite a small sound, but a beautiful sound, and he used to do a sort of light music thing where he’d creep up to the microphone in the BBC studio until he was a short distance away – he’d be six inches away – and you’d hardly hear him but when you heard the broadcast it was beautiful, sounded fine. Different players had different ideas about recording technique.

(Vigay, 2010)

Singers too had to learn to sing to the microphone in a way that matched their voices to the medium although this did not always successfully reproduce what they were able to achieve in the concert hall. On occasion a singer might have to use special techniques that would allow the engineers to capture the sound without inhibiting their performance or exceeding the operational parameters of the recording equipment. During the making of the BBC television documentary *The Golden Ring* (Burton, 1965), about the Decca recording of Wagner’s *Ring* cycle with Georg Solti, the producer Humphrey Burton noticed that Birgit Nilsson would often take a step back from the microphones before singing *fortissimo* and then lean in during the phrase, a technique she had clearly learnt during her recording career (Burton, 2009). When asked about this the former record producer John Mordler confirmed that ‘it was standard practice to get the singers to lean back from the microphones on high or loud notes, in order to avoid distortion, or indeed for the listener not to be blasted out!’ (J. Mordler, email to author, 3 February 2013).

Some singers, however, had less success in adapting their performance in a way that suited the microphone. Dietrich Fischer-Dieskau, acknowledged by many as one of the finest

singers of the twentieth century, enjoyed a long and successful recording career but Alfred Brendel, who worked with Fischer-Dieskau both in concert and on recordings, is of the opinion that Fischer-Dieskau's recordings do not always compare well with his concert performances. Brendel explained that Fischer-Dieskau had evolved a style of lieder singing that enabled him to project his voice in large halls but that this did not necessarily record well. The result is that the attention to detail, carefully controlled use of dynamics, and clarity of diction for which Fischer-Dieskau was famous in concert can sound overly prominent or even slightly mannered on record. One of the few recordings that Brendel acknowledges as capturing the essence of Fischer-Dieskau's best performances is in fact a live recording of an all-Mahler recital at the Royal Festival Hall in 1970, with Karl Engel at the piano, where Fischer-Dieskau was performing to a concert audience rather than to a microphone (Brendel, 2011).

Fischer-Dieskau took a keen interest in the recording process; elsewhere he is quoted as saying that he resisted attempts by producers to influence his interpretation, and that he always listened to playbacks in order to review his performance (see discussion, pp. 143, 149). If there was a difference between his performance on records and his performance in concert it could be that the style Fischer-Dieskau developed in concert needed to be recorded in a bigger space with more distance between him and the microphone, as in the case of the concert recorded at the Royal Festival Hall. However, Fischer-Dieskau would have heard playbacks at sessions and approved the sound; if he was unaware of any difference himself then it could be because of the difficulty that singers have in hearing themselves as others hear them, except through the medium of recording. It is also possible that the recordings represent what Fischer-Dieskau was aiming for in his concert performances, captured in close-up. This is of course speculation but it is difficult to

discount Brendel's opinion.¹⁴ The issue certainly raises interesting questions as to the extent to which some artists are able to adapt their performance to the different circumstances of the recording studio and to produce recordings that reflect their best performances. Comparisons of live and studio recordings made by the same artists at more or less the same time suggest that there are often similarities in terms of the overall shape and structure of the performances, but it is the ability to take risks that give concert performances their extra vitality, something that may not be easy to replicate on a recording (Philip, 2004, pp. 47-49).

Recording posed considerable challenges for conductors too and each developed their own approach to the situation. The conductor Wilhelm Furtwängler, for instance, was very collegial in his approach and would take soundings from his principals, many of whom would choose to listen to playbacks. Herbert von Karajan, however, tended to dictate and it was noticeable that few players attended his playbacks. Indeed, if Karajan was recording with the Vienna Philharmonic some principal players would regularly declare themselves unavailable for the sessions (Griffith, 1983). Karajan also took a great interest in the recording process and would often change the layout of the orchestra to balance the sound as he wished, with little regard for the likely impact on the recording crew and studio staff, as recalled in one instance by Allen Stagg:

Karajan queried the placement of the orchestra and wanted it turned the other way around. The orchestra was on risers and it was a huge job which took up time. By the time we'd done it everyone was exhausted and Karajan just walked in and said "I'm ready to start."

(Stagg, 2010)

¹⁴ The record producer Suvi Raj Grubb argued that Fischer-Dieskau's 1967 live recording of Schubert's 'Im Abendrot' had a 'special intensity' that was 'not quite equalled' by any of his studio recordings of the work (Grubb, 1986, p. 72). He also wrote of the difficulty in balancing Fischer-Dieskau's voice in the studio because of its 'enormous dynamic range' (Grubb, 1986, pp. 105-106).

Having established the balance Karajan would ‘record straight through and then listen to see how the recording could be improved whereas Furtwängler, or Klemperer, would give their best performance and leave it to the recording crew to capture it’ (Mountain, 2010). In Peter Mountain’s view, Karajan’s approach was ultimately flawed, as recording in short takes and repeating sections meant that the recordings sound ‘so perfect it’s unnatural. A performance has got to be a narration, the whole story’ (Mountain, 2010). This assessment of Karajan’s approach was echoed by Denis Vigay, in whose opinion the attention to detail in Karajan’s orchestral recordings helped to promote the emphasis on perfection that became a common feature of recording practice and was often achieved at the expense of the overall interpretation as ‘it’s got to sound spontaneous, something near to a performance’ (Vigay, 2010). Compared with those of Karajan, the recordings of Sir Adrian Boult were considered to have a more natural feel as ‘Boult wanted the big sweep of the music. If there was a little mistake he didn’t care; he wanted the line, and you can’t do that in bits and pieces’ (Mountain, 2010).

In comparison, Sir Thomas Beecham was meticulous in his attention to detail – in relation to the orchestral balance on a recording, for instance. Rather than allow the recording engineers to manipulate the sound by technical means Beecham ‘would listen to a playback and note what was needed, correcting the balance in the studio, listening to another playback until he was sure it was right’ (Griffith, 1983). In other ways Beecham could be unpredictable, and producers had to be flexible, as Beecham would often change the repertoire at short notice or even during a session if he felt that the session was not going well or if a particular player was not available. The conductor Denis Vaughan worked as Beecham’s assistant in the 1950s and remembered one session where ‘because Gwydion Brooke the bassoonist wasn’t there and as there was an important solo to play he

just changed the programme rather than do it with a player he knew wouldn't give it the character he wanted' (Vaughan, 2009). Such sudden changes in the repertoire to be recorded could have major financial implications for all concerned as Beecham would schedule a series of sessions but 'he didn't decide what he was recording on a particular day until that morning so you'd appear at 10am but might not be needed till later. No-one else would get away with that' (Montagu, 2009). Orchestras, however, enjoyed working with Beecham, a frequent comment being that he 'let them play' (Amis, 2009), and although record companies may have found him difficult to manage, orchestral players were more tolerant of his whims and were likely to play better as a result.

The older generation of conductors including Boult and Beecham often made few concessions to the recording process, treating it as a performance at which microphones were present, rather than performing to or for the microphone. As noted above, Boult was prepared to tolerate the occasional error in a recording while Beecham would often insist on recording another complete take rather than recording patches to correct mistakes. Furtwängler and Klemperer also preferred to work in long takes wherever possible and were suspicious of editing, fearing that this might undermine the integrity of their performance. In part it reflects the limitations of the technology of the time and the lack of sophistication in editing compared with what became possible later, but it also reflects a generational difference, marking a distinction between those who began their recording careers in the era of the 78 and those who were accustomed to the benefits of tape recording and editing.

In some cases, however, long takes were almost a necessity, even with an experienced recording artist such as Sir Georg Solti. Michael Raeburn observed Solti during recording

sessions in Vienna in the early 1960s and noted that he ‘had that sort of dynamism that meant it was hard to do patches’ as it could be difficult to reproduce the energy of a particular moment in order to create patches that would match the original take and enable them to be edited together (M. Raeburn, 2012). Any attempt to suppress that dynamism would most likely result in a lacklustre recording, and so it was in the interests of the recording crews to accommodate Solti’s needs as far as possible in order to capture the vitality and spontaneity of his performance.

The concern to capture an element of spontaneity when recording meant that even those younger artists whose recording careers coincided with the advent of tape recording sometimes expressed nostalgia for an earlier era. Denis Vigay felt that recordings on 78s often managed to capture some of the spontaneity of a live performance: ‘That’s why I like the old recordings, they have blemishes but there’s a sweep and a flow’ (Vigay, 2010). Alfred Brendel has also praised the vitality of many early recordings, particularly those of Alfred Cortot and of the Busch Quartet which, even though the performances may contain occasional slips in the execution of a work, have something of the quality of a live performance. Brendel worked in an era in which errors were no longer acceptable on records but sought, nonetheless, to emulate that spontaneity in his own recordings, attempting to capture some of the tension of a concert while embracing the opportunities offered by tape recording and editing (Brendel, 1990a, 2011).

With such a wide range of approaches to recording, producers and engineers had to be able to adapt to the styles of different artists, while ensuring that the sessions ran to time and within budget, and also that the final recording was of a high enough standard. With an experienced and trusted recording artist they could be more flexible and Sir Neville

Marriner recalled that in the early days of its recording career the Academy of St Martin in the Fields was able to take a flexible approach to recording so that, provided it produced the recording within the number of sessions available, there were few constraints on its working methods. If the orchestra was recording works from its regular concert repertoire, it preferred to record in long takes whenever possible as this was the approach considered most likely to capture the spirit of a live performance. With less familiar or more technically demanding repertoire the orchestra might choose to record in shorter takes although this approach might prove less satisfying. Marriner found, however, that whether recording in long or short takes there were ways to inject vitality into a recorded performance, for instance by adjusting tempi or balance. It could also be a case of creating the right conditions: on one occasion, during a recording of Strauss's *Metamorphosen* at Kingsway Hall, the players were dissatisfied with their efforts and so 'we went away, had a good meal and then came back, sat down and just played it' (Marriner, 2010).

With soloists or chamber groups the recording process could be even more relaxed. The recording career of the Amadeus Quartet began at the end of the 78 era and their first recordings were made on wax, although they soon found themselves recording on tape for LP. The cellist, Martin Lovett, recalled that the quartet avoided recording in short takes and preferred to 'play through the whole piece twice, sometimes a third time. We discussed each time what we should improve. It always worked – you could always cut from one to another without noticing' (Lovett, 2009). By recording in long takes and discussing each performance before recording another take, the quartet felt that they were able to maintain the spirit of a concert performance; in one instance they recorded the entire slow movement of Schubert's String Quintet in C major – approximately 15 minutes long – in one take without cuts. Lovett reported that the quartet made the majority of the

musical decisions themselves although there would be input from a producer who would also comment on technical aspects of the recording or on aspects of the performance, such as intonation, that were beyond acceptable boundaries of taste and would not bear repeated listening.

The variety of approaches adopted by musicians indicates that there was no prescribed approach to recording and engineers and producers often had to take a flexible approach in accommodating the specific needs of an artist or ensemble. The ability of recording crews to respond to individual artists' needs and to nurture relationships within the studio were therefore important skills. In particular, the role of the record producer was a vital component of the new approach even if, as will be seen, there was some initial confusion as to its purpose and even some resentment towards it on the part of engineers.

Producers and engineers

The changes in technology during the 1950s necessitated a change in the relationship between engineers and A&R managers as the possibilities created by tape recording and, later, by stereo recording demanded a greater degree of involvement in the creative process on the part of what would become known as the producer. In the era of the 78 the limitations of the recording process meant that the recording manager or recording supervisor would oversee the session but their role was largely an administrative one as technical matters were the concern of the engineers and musical decisions were often made by the artists even though the supervisor might comment on various takes. The role of the producer evolved in the 1950s as it became clear that the possibilities afforded by playbacks and the ability to edit had increased the complexity of the recording process and demanded a greater consideration of the implications for the musical end-product. The

artists were preoccupied with their performance and therefore not best placed to consider all the variables of the recording process, while the engineers were fully occupied in monitoring the sound, managing the equipment, and documenting the various takes. The role of the producer therefore evolved to meet a need for someone to oversee the process so as to be able to comment objectively on the performance and offer guidance to the artists and engineers. The increasing influence of the producer did not go unnoticed amongst engineers and some regarded it as an unwelcome and unnecessary development, as related by Allen Stagg:

[S]uddenly, instead of the marketing people being in charge, the producers were in charge. The producers assumed the power and exercised it, with the engineers being told what to do, which didn't really work. It's better to have a cohesive team approach.

(Stagg, 2010)

The growing power and influence of the producer is referred to in many interviews but although Stagg refers to power being transferred from marketing executives, other interviewees regarded the power as transferring from conductors to producers (Tschaikov, 2010; Vaughan, 2009) or, in several cases, from engineers to producers (Gooch, 1986; Goodall, 2009; Kehoe, 2009), depending on the perspective of the individual. In most cases it is inferred that producers seized the opportunity to take control and exercised undue influence in the control room, leading to resentment on the part of engineers. Bob Gooch described working with fellow EMI engineer Christopher Parker in the stereo control room at Kingsway Hall during the mid-1950s when recordings were made with separate stereo and mono teams. Gooch and Parker worked together without a producer – the recording was being controlled from the mono control room by Walter Legge – and Gooch referred to this as the ‘golden age of stereo’ as they were able to work without what he saw as the ‘interference’ of producers (Gooch, 1986). At Decca too there was resentment towards the change in the dynamics within the control room. Stan Goodall

recalled that when he first joined Decca in 1949 ‘the engineers were the producers’ (Goodall, 2009) and that there was resistance to the increasing influence of the producer during the 1950s. Goodall, however, recognised that circumstances dictated a change in the balance of power and that the role of the producer was a necessary one:

I often heard Wilkie [Ken Wilkinson, the senior engineer at Decca] say “We don’t need a producer” but we did – we needed someone to be the go-between between the studio and the recording room. The conductor needed someone to talk to who was musical and we in the recording room needed someone who could understand our needs.

(Goodall, 2009)

Even if there was resentment towards producers on the part of some engineers, most managed to establish reasonable working relationships. Occasionally, however, tensions between engineers and producers proved insurmountable. Brian Culverhouse joined EMI in 1949 and shortly afterwards began working as a record producer at Abbey Road Studios. He felt that working relationships between producers and engineers at EMI in the early 1950s were often poor as the rigid hierarchy and strict demarcation of roles did nothing to facilitate collaboration. By the 1950s there were also still many engineers at the Abbey Road studios who had joined EMI before the war and whose expertise was based on wax recording and the production of 78 rpm records. Culverhouse found that some engineers were inflexible in their approach and were reluctant to try new ideas or experiment with recording techniques when confronted with the latest technology. When combined with a resistance to working in collaboration with the producer this often resulted in poor recordings, as in many cases the engineers proved unresponsive to the needs of the musicians or input from the producer, and failed to realise the potential of the recording (Culverhouse, 2010). Matters gradually improved as new engineers, often with backgrounds in electronics and mechanical engineering, were recruited but Culverhouse continued to be frustrated by the situation and, by the early 1960s, had begun to work with

some of the engineers from Abbey Road's popular music division, finding that they took more interest in the sound and were willing to experiment (Culverhouse, 2010). Despite complaints from Culverhouse and other classical record producers the problems continued throughout the 1960s, and it was only after Allen Stagg became manager of Abbey Road Studios in 1967 and confronted the engineers that matters were finally resolved.

Producers and musicians

Musicians also noted the change in relationships within the studio, with some artists citing a reassuring ability of producers to deal with both musicians and engineers as they negotiated the recording process. Sir Neville Marriner recalled that Walter Legge was 'the first person I came across who dealt with both technical and musical matters. [...] I've heard him in the box referring to something technical that he felt was amiss so he knew how to correct faults' (Marriner, 2010). For others though, the producer was viewed with suspicion. According to the engineer Tony Faulkner, musicians of the period would say that 'they didn't know where they were with producers; technical people thought the producers were musical and musical people thought they were technical' (Faulkner, 2009). Problems seemed to arise when artists and producers had different expectations as to what they were trying to achieve and how to go about it. The clarinettist Gervase de Peyer reported that when he was recording his priority was to try to 'forget the machinations and concentrate on the music. [...] As musicians we wanted to get on and perform as we always performed' (de Peyer, 2009). For de Peyer the best producers are 'the ones who keep quiet and absorb and understand how the musical performances are unfolding' rather than those who try to impose their views as 'they get in the way and it's a disaster and all elements of spontaneous music-making are cut out' (de Peyer, 2009). Producers therefore had to employ all their skill and sensitivity to put musicians at ease and enable them to record in a

relaxed manner, especially in the early days of tape recording when artists were less familiar with the process. Yet, even with a trusted producer, some artists were reluctant to delegate control over their recordings. Dietrich Fischer-Dieskau's concern to preserve the nuances of his interpretation on a recording meant that whereas some musicians might be content to leave decisions about takes to the producer, he wanted to retain control and to be involved in decision-making. If there was an opportunity for a playback Fischer-Dieskau 'always wanted to listen – because you don't want to discover mistakes, however small' (Fischer-Dieskau, 2011).

Producers were therefore faced with a potentially hostile situation in which they needed to establish their authority and demonstrate the value of their role, while at the same time facilitating good working relations in the studio. Not only did they have to overcome resistance to the change in relationships but also a failure on the part of some engineers, and some musicians, to fully engage with the latest technology. There was no standard model for the role of the producer and training was virtually non-existent, the most common experience being that new producers would observe and assist at sessions until they were asked to direct a session by themselves. John Mordler, who began his career at Decca in 1963, recalled:

I learnt on the shop floor, so to speak, by assisting and observing my colleagues. There was the producer with the score and the engineer next to him. Between us we had to get a sound which was satisfactory, both for us and for the artists, who would come and listen.

(Mordler, 2009)

Mordler's experience was not untypical and many producers evolved their own idiosyncratic ways of working so that even within the same company working practices could vary considerably. Photographs from Decca opera recording sessions often show John Culshaw (Decca's principal producer from 1956 to 1967) at work at the centre of the

desk in the control room with an engineer on each side, one monitoring the singers, another monitoring the orchestra. This was in contrast to the approach devised by Ray Minshull (who eventually succeeded Culshaw as principal producer at Decca), as described by John Kehoe:

In the control room he'd set up so he was facing the balance engineers but with his back to the speakers. What he wanted (although he was hearing left and right the wrong way round) was to make eye contact with the engineers, without using words. So a raised eyebrow might be enough for a cue, especially with engineers like Ken Wilkinson and Jimmy [Lock] when there was a kind of telepathy. You weren't aware of much going on – he might raise a pencil to cue something – maybe to make sure the violas were caught, or the harp – but it had all been marked up in the score.

(Kehoe, 2009)

Observing sessions also gave Mordler the chance to note the often subtly different ways in which producers managed relationships in the studio, and their general attitude to the role of the producer. For instance, he recalled Ray Minshull saying that he was 'just there to document the artist's interpretation' (Mordler, 2009) whereas John Culshaw favoured a more interventionist approach, although this usually amounted to the subtle use of persuasion rather than overt attempts at directing the performance. Mordler, in common with other young producers, had to find an approach that suited both him and the artists, and finding the right balance could be difficult. His comment that 'perhaps because I was younger or keener, or just more brazen, occasionally I used to try to put in a little bit of my own' (Mordler, 2009) shows that ultimately he leaned more towards the style of Culshaw and saw his role as more than simply documenting a performance.

As well as differences in individual working practice, there were also differences in the corporate approach to the management of relationships between producers and artists. At Decca producers rotated between the artists whereas at EMI artists were allocated to a specific producer, each of whom had their own roster of artists. The advantage of having a

dedicated producer was one of continuity and familiarity for both the artist and producer but there was also a suspicion that the relationship between producer and artist could become too close, and a fear that if this went unchecked the producer might begin to represent the artist to the company rather than promoting the interests of the company at the sessions (Kehoe, 2009). The emphasis on teamwork at Decca meant that it approached recordings in a different way: Culshaw as principal producer would decide on the repertoire to be recorded, with input from other producers and from artists, as well as feedback on proposals from Decca's annual repertoire committee meeting in Paris. Once the recording schedule had been planned for the year Culshaw would allocate projects to producers and Kenneth Wilkinson would do the same with the engineers. Producers often found themselves working with particular engineers but regarded themselves as 'interchangeable' (C. Raeburn, 1987) and although they often developed an affinity with particular artists or venues Decca recording crews found themselves working with a wide range of artists in various locations (Mordler, 2009). This system had advantages for Decca in that it allowed for a greater flexibility in the allocation of human resources, enabling producers and engineers to work in a greater variety of situations and share expertise more widely. It also avoided the dangers of mutual dependencies developing between artists and producers, and encouraged artists to feel confident that they could work with any of the Decca recording teams. The emphasis on teamwork also discouraged any suspicion of a hierarchy of established recording crews, and encouraged different producers and engineers to work together more effectively.

Throughout the interviews, the names of Walter Legge and John Culshaw – principal classical music producers at, respectively, EMI and Decca – occur frequently. Legge and Culshaw were two of the most respected producers of the 1950s and both were highly

influential in their approach to recording, although they developed very different methods of working. Legge worked throughout the mono and stereo eras, while Culshaw is particularly noted for his innovative approach to the recording of stereo opera, and many of the recordings they produced remain in the catalogues today. The following section considers their different approaches to recording and their relationships with artists and engineers.

Walter Legge

Walter Legge joined the Gramophone Company in 1927 as writer and editor of HMV's magazine for retailers but gradually became involved in the production of recordings. As manager of EMI's Columbia label in the post-war years Legge was responsible for building the company's catalogue of classical recordings and also signed many new artists. He therefore had great influence in the industry and was driven by a commitment to the highest standards. Legge is credited with producing many of EMI's great recordings from the 1950s and early 1960s but a fact rarely acknowledged is that Legge worked with a number of assistants, mostly employed on a freelance basis and paid per session. These assistants would often take over sessions or be left in charge of the editing so that Legge only had to listen to the test pressings, but until the late 1960s EMI producers were not credited on LPs. As a result, although his assistants often did much of the work, Legge would take the credit. Malcolm Walker, former EMI employee and editor of *Gramophone* from 1972 to 1980, asserts that in the process Legge's reputation has been exaggerated, and that his assistants deserve to be better known and to have their achievements recognised. This is particularly the case with Walter Jellinek, who worked at EMI from 1954 to 1961 and who Walker considers to be 'the finest EMI producer of his day without exception' (Walker, 2010).

Jellinek was one of a number of assistants employed at various times by Legge, many of whom went on to have distinguished careers. Others included Geraint Jones (harpsichordist), Alec Robertson (music critic and BBC producer), William Mann (music critic, *The Times*), Alan Melville (conductor and chorus master), and Lawrance Collingwood, who worked at EMI from 1926 to 1957 while also working as a conductor. Of all Legge's assistants Suvi Grubb, who worked as an assistant from 1960 to 1964, is probably the best known as, following Legge's departure from EMI, Grubb went on to establish a reputation as a record producer in his own right.

Nicholas Boyle began his career at EMI as one of Legge's assistants and felt that Legge got his own way for so long simply because there was no-one to oppose him. Asked whether Legge ever delegated, Boyle replied that, although he took over some of Legge's sessions with Edwin Fischer and with Alfred Deller, 'I never knew quite what I was with him' (Boyle, 1984). In one respect Boyle's account differs from others, in the assertion that Legge was supportive of technical development and welcomed the introduction of stereo. EMI engineer Bob Gooch disagreed and stated that in fact Legge had little interest in stereo and demonstrated a poor understanding of it:

Legge excelled in mono but didn't really understand stereo. He always aimed at natural sounds – [he] didn't like synthetic sounds or close miking – but sometimes went too far, sometimes too quiet, as he didn't accept the limitations of the time.
(Gooch, 1986)

Malcolm Walker went further and thought that 'Legge was anti-stereo' and that 'Legge's idea of stereo was one speaker on top of another. He wasn't interested. He wanted a mellow, blended mono sound' (Walker, 2010). Legge would also try to influence the sound of a recording and 'would try to interfere but was technically very naive. Some of the things he suggested you had to gloss over tactfully' and in general 'he had no

understanding of other people's difficulties' (Gooch, 1986). This lack of understanding manifested itself in other ways too as Legge was known to be ruthless in his dealings with people. EMI engineer Anthony Griffith observed that Legge could be perfectly charming to artists and engineers while they served his purposes but that once they ceased to be of use to him he could be exceedingly rude to them, something that he had experienced himself (Griffith, 1983). Legge's reputation for ruthlessness was such that orchestral players in London referred to the Philharmonia – the orchestra founded and managed by Legge – as the 'cloak and dagger' orchestra, in which players were likely to be replaced if they failed to live up to Legge's expectations (Mountain, 2010). To an extent this reflects the reality of recording in the 1950s in that work may have been plentiful for musicians but record companies could insist on the highest standards when recording and players were regarded as dispensable if they did not match up to them. It also shows that Legge had become a significant force within the recording industry: not only was he in charge of much of the classical recording at EMI but he also controlled one of the leading recording orchestras, the Philharmonia.

The shifting balance of power within the recording studio clearly suited Legge but his authority was not absolute. Griffith recalled that Legge would often attempt to direct performances by younger musicians who were willing to comply with his demands for the sake of their careers but that more experienced or more assertive musicians would resist such attempts. Otto Klemperer was amongst those who stood up to Legge, frequently clashing with him during sessions, and Wilhelm Furtwängler eventually refused to work with Legge following the completion of the 1952 recording of *Tristan und Isolde*. Similarly, Herbert von Karajan would take notice of comments relating to ensemble or intonation but would ignore Legge's comments in relation to interpretation (Grubb, 1983).

The clarinettist Basil Tschaikov remembered a specific instance during a session with the Philharmonia at Abbey Road Studios, where Karajan and the orchestra were listening to a playback:

Karajan was sitting with his back to the window of the control room where Walter Legge was giving instructions to the orchestra over the intercom. As Legge was giving out instructions – saying: “that’s too loud” or “that’s too soft” – Karajan was surreptitiously [gesturing to show his disagreement], saying to the orchestra: “ignore him, take no notice”.

(Tschaikov, 2010)

Legge’s knowledge of singers and voices was, however, highly regarded and his advice was often sought by opera houses in relation to casting. If, for instance, ‘Siciliani [Director at La Scala, 1957-1966] asked advice about a cast for an opera Legge would tell him and then was proud of seeing that exact cast in place six months later’ (Vaughan, 2009).

Interviews with singers nonetheless revealed differing attitudes to Legge’s interventions.

Christa Ludwig referred to Legge as ‘a god’ who had a real knowledge of voices and of song, and said that she felt she had much to learn from Legge and so ‘didn’t mind’ him

making suggestions as to the interpretation of a song (Ludwig, 2011). When this was mentioned to Dietrich Fischer-Dieskau he was appalled by the idea, concluding that it was not so much that Ludwig ‘didn’t mind’ as that she ‘didn’t care’ about her interpretation.

Fischer-Dieskau clearly felt that an artist must always take responsibility for their interpretation and should never delegate that to a record producer, however knowledgeable or persuasive. Fischer-Dieskau recognised that Legge was knowledgeable but thought that he ‘said too much’ and so made it clear to Legge that he would brook no interference from him in order to ensure that the interpretation remained his own (Fischer-Dieskau, 2011).

Legge appeared to concur with this at the time but elsewhere Fischer-Dieskau has said that Legge ‘never forgave me. Even after his death his memoirs accused me of having been

“difficult” and of not allowing friendship to develop’ (Fischer-Dieskau, 1989, pp. 312-313).

Legge’s interventions became familiar to other musicians, some of them content to take his advice while others who were more certain of their own interpretation and resentful of his interference resisted his attempts to direct the performance. The critic Edward Greenfield had privileged access to many recording sessions during the 1950s and 1960s at which he was able to observe Legge at work, and noted instances of both responses to Legge’s interventions. Greenfield recalled one particular session in January 1961 at which the conductor Carlo Maria Giulini was recording Dvořák’s Ninth Symphony with the Philharmonia at Kingsway Hall. Giulini had never conducted this symphony before and so was receptive to Legge’s suggestions as to the interpretation of the work. Shortly afterwards Greenfield attended another session at which Legge was working with the Philharmonia conducted by Otto Klemperer but at the coffee break ‘I wasn’t allowed in at all because what he [Legge] would say to Klemperer would be quite different; he’d take instructions from Klemperer, Klemperer wouldn’t accept anything otherwise’ (Greenfield, 2009).

Legge’s attempts to direct artists and their performance on recordings often created tension between him and the musicians, and the conductor Denis Vaughan recalled that ‘the conductors hated it – it was like being spanked’ (Vaughan, 2009). In Vaughan’s opinion, Legge’s prescriptive approach was often counterproductive and destroyed much of the continuity of a performance as the constant emphasis on the perfection of individual phrases undermined the overall concept of the interpretation. The approach certainly did not suit the conductor Sir Thomas Beecham, who preferred to record in long takes as if

conducting a concert performance, then listen to a playback, note what corrections were needed, and record another complete take. This produced a more convincing performance on record although it could be both physically and emotionally taxing, particularly if further takes were required:

Beecham got cross once when engineers at Abbey Road didn't tell him that the machine wasn't working during a take and that they weren't recording while he was putting his all into the performance. You've got to put the emotion in – it's the sequence of emotions that makes a recording.

(Vaughan, 2009)

Legge's forceful personality earned him a reputation for being difficult to work with, not only with musicians and engineers but with colleagues at EMI. David Bicknell, who had joined EMI in 1927 as Fred Gaisberg's assistant and was the manager of EMI's International Artists Department from 1957 to 1969, described Legge as 'a disruptive force' at EMI, stating that 'he fought with everybody – even those who were trying to do their best for him – and he fought with all the artists' (Bicknell, 1984). Legge frequently clashed with management too as he would go over budget on recordings in his attempts to achieve perfection, but seemed unconcerned as to the possible effect on the company's balance sheet, confident in the belief that he was indispensable and therefore beyond reproach. Legge had become a cause for concern and Sir Joseph Lockwood (Chairman of EMI, 1954-74), while recognising that Legge was talented and capable of great work, could see that he had been given too much autonomy and needed to be reined in. The tipping point appeared to be Lockwood's realisation that Legge owned the Philharmonia Orchestra, EMI's principal recording orchestra, and was effectively making contracts with himself as an EMI producer by booking the orchestra for sessions. Such an obvious conflict of interest needed to be resolved and even 'hushed up' according to Lockwood as until then the management at EMI had failed to address the issue. Lockwood decided that

‘even at the risk of losing Legge I’d get him under control’ and that ultimately he was ‘prepared for him to go’ for the greater good of the company (Lockwood, 1984).

The constant battles with artists, engineers, and management began to take their toll, and Legge resigned in 1963, although officially he did not leave EMI until 1964. Suvi Grubb later expressed the opinion that when Legge left EMI and attempted to disband the Philharmonia Orchestra in 1964, it was because he felt he had reached the summit of his profession and had also become tired after years of long hours and hard work (Grubb, 1983). Sir Joseph Lockwood’s interview, however, suggests that Legge left for other reasons, most likely out of pique as the influence of EMI’s ICRC repertoire committee began to restrict his autonomy with regard to the choice of artists and repertoire at EMI, which in turn began to impact on his financial and artistic interests with the Philharmonia.

John Culshaw

John Culshaw joined Decca in 1946, initially as a writer although by 1947 he was already supervising recording sessions. In 1953 he left to join Capitol Records, a USA-based company better known for its recordings of jazz and popular music, but which was then building a catalogue of classical recordings. Frank Lee (Head of A&R at Decca from 1952 to 1964) thought that Culshaw was insecure about not being a musician and therefore uncomfortable working under Decca’s principal producer of classical music, Victor Olof (a violinist and conductor), which may have been a factor in his decision to leave. The thought of working with Walter Legge, however, would have been even more unpalatable to Culshaw and when Capitol was bought by EMI in 1955 he returned to Decca. Shortly after, Olof moved to EMI, leaving the way clear for Culshaw to take on the role of principal producer in 1956 (Lee, 1984).

Culshaw's personality was markedly different from that of Walter Legge and even when there were difficulties during a recording session Culshaw was usually able to maintain a calm atmosphere. Culshaw's emphasis on teamwork and his belief in working in collaboration with the artists rather than trying to impose his ideas on them also created a more congenial working atmosphere than was the norm elsewhere. Christopher Raeburn explained that compared with Legge, who could be extremely difficult to work with and was regarded by many as a dictator, Culshaw appeared gentle and softly spoken but 'as a result of total conviction and thorough homework' could also be 'extremely persuasive' although he was 'never a bully' (C. Raeburn, 1987):

He had great respect from the artists. He was trying to do something new all the time. A record for him wasn't something where the producer turns up five minutes before, behaves like a star. He'd discuss the concept in advance with the engineers or, if there were other producers working with him, have conferences about the best way to do it.

(C. Raeburn, 1987)

Culshaw's persuasiveness was also evident to Nella Marcus who joined Decca in 1959 as Culshaw's secretary and later became administrator of the A&R department. For Marcus, Culshaw brought a new sense of direction to Decca's classical division as he had a clear vision for recording and the sort of repertoire that Decca should be recording in the age of stereo and the LP record (Marcus, 2009). Christopher Raeburn believed that Culshaw's strengths lay in his conviction that recording was a medium in its own right, and in his attempts to envisage what the composer would have wanted in ideal circumstances, free of the limitations of the opera house or the concert hall (C. Raeburn, 1987). The fact that an audio recording is limited to sound without video images meant that on occasion Culshaw would have to find an aural equivalent to the imagined effect on stage but he saw this as providing opportunities rather than imposing limitations on the imagination of the producer or the listener at home. Many in Decca remained critical of Culshaw's plans to

record large-scale works such as the complete *Ring* cycle, believing that there was a limited market for such works and that the risks did not justify the investment, but his judgement proved to be correct.

Culshaw and Legge's very different personalities and different ways of working meant that musicians were divided in their opinions as to their relative merits and would often state a preference for working with one or the other. Christa Ludwig reported that she felt happier working with Legge and could only offer qualified praise for Culshaw:

He was very good but he was more interested in the general sound – the sound he got for *Götterdämmerung* was wonderful – the most wonderful sound ever. [...] But Legge knew the most about voices, and was married to an opera singer.

(Ludwig, 2011)

Birgit Nilsson was even more critical of Culshaw in her autobiography, in which she revealed that she lost confidence in him during the recording of *Tristan und Isolde* with Solti in 1960:

In recording such a demanding role as Isolde, the singer needs all the help and support a producer can give her. I was naive enough to believe all producers were as competent as Walter Legge. Did I have a lot to learn! John Culshaw, at that time new to the business, appeared to be shy and self-conscious. He always wore a smile, which had no particular meaning. "Very lovely, indeed" was his stock comment. But what use is "Very lovely, indeed" to one recording Isolde? How I missed Walter Legge!

(Nilsson, 2007, p. 228)

Ludwig and Nilsson seemed to react against Culshaw's English diffidence, feeling that he was never direct enough for them. Culshaw would make suggestions and try to be helpful but they wanted someone to direct them in the manner of Walter Legge and so Culshaw's style neither suited or inspired them. Others, however, perhaps more confident and more secure in their interpretations, appreciated Culshaw's collaborative approach to recording

and many performers, including Benjamin Britten and Georg Solti, enjoyed long and productive partnerships with him.

Although Culshaw's approach and that of Legge are generally characterised as polar opposites, their careers do demonstrate significant common ground. Both thrived in the era of tape recording and the LP record. Both believed in the idea of recording as an art form in its own right, and made extensive use of multiple takes and editing to produce what they considered to be ideal performances. Both aimed for the highest standards of performance and were prepared to invest considerable amounts of time, energy, and resources in order to achieve them. Both nurtured long-term relationships with artists and ensembles. Notable areas in which they seemed to differ were in the extent to which they sought to influence an artist's interpretation when recording, and the extent to which they were prepared to use technology to achieve their vision of an ideal performance. In many ways Legge reacted against what he saw as the documentary recording style of an earlier generation of producers at EMI, led by Fred Gaisberg, in which they recorded an artist's performance with little or no intervention (Greenfield, 2009; Martin, 2002, pp. 36-37). Legge regarded this approach as outdated and inadequate in the age of editing and the LP record, and so treated the act of recording as an art form with which he could try to create ideal performances on record. Culshaw took this approach a stage further by exploring what might be achieved in ideal circumstances with the best resources, rather than limiting himself to the conventions of the opera house and the concert hall. For Culshaw this justified the use of special effects or a focus on details in the score that might be barely audible in a live performance, even if some critics argued that this created an unnatural sound that was not true to concert performance (Greenfield, 2009).

Legge and Culshaw were clearly two of the most influential producers of the 1950s and 1960s and are associated with many of the great recordings from that period. Their careers as record producers effectively ended in 1964 and 1967 when they left, respectively, EMI and Decca and, although both continued to work as producers in a freelance capacity, neither was to hold a similar position of influence within the recording industry. Their influence on subsequent generations of producers, however, was profound and both were instrumental in developing methods that were widely adopted as common practice in the post-war recording industry.

Summary

The experience of recording could be challenging for all concerned and there was evidence of some generational difference between those who found it difficult to adapt to change and those who were more responsive to it. The most notable change of the period was in the emergence of the role of the record producer and the impact this had on working relationships in the studio. There was evidence that the role of the producer was initially met with resentment on the part of some engineers, and producers had to assert their authority while maintaining good relationships. Nonetheless, the general consensus was that the technological advances of the 1950s were of great benefit, enabling musicians to work in a more satisfactory manner and to produce more consistent results. The lack of any standard approach to recording, however, encouraged a diverse range of practices to evolve and this theme is continued in the next chapter.

5 Recording practice

The rapid advances in recording technology in the 1950s, and the changes in working practices that accompanied them, created many new challenges for artists and for A&R managers too as they adapted to the evolving role of the record producer. Changing practices also posed considerable challenges for engineers, many of whom had learnt their skills recording for 78s on wax discs (Martin, 1984). The equipment and the processes associated with tape recording required a different approach and a different range of skills, and some of the older generation of engineers experienced difficulties in adapting to the change (see discussion in Chapter 4, p. 141). There was also evidence of a distrust of the new technology and a reliance on old methods of working. When tape recording began to be used on sessions by Decca and EMI around 1950 it was only used as a backup to the wax master (Culverhouse, 2010; Goodall, 2009; Haddy, 1960). The secondary role of tape at this time was illustrated by Decca engineer Stan Goodall who recalled that the BTR-1 tape recorder in use at Decca's studios in West Hampstead was situated in a room underneath the No. 1 studio, linked by a cable and kept apart from the waxes being cut upstairs (Goodall, 2009). Part of the reluctance to embrace tape recording wholeheartedly was based on the perception of early tapes and tape recorders as fragile and prone to break down, and while this was the case engineers were reluctant to abandon wax recording. It was also partly due to familiarity as the older engineers appreciated the fact that they could tell much about the quality of a recording by the way the cutter moved through the wax or by holding a disc up to the light to see the grooves – the Buchmann-Meyer test – to assess the quality of the wax master (Pollard, 2009). Tape made these skills redundant as the convenience of the playback offered the opportunity for an immediate aural assessment of the quality of sound and the artist's performance.

As engineers began to appreciate the benefits of tape recording and as the quality of tape improved and equipment became more reliable, it started to replace wax. By 1953 tape had become the primary recording medium with wax as the backup (Culverhouse, 2010) and record companies soon abandoned the practice of recording to wax. In these periods of transition from one form of technology to another, working practices were often in a state of flux and this could cause problems for even the most experienced of engineers. For instance, the introduction of stereo recording created a similar situation as even highly respected engineers including Cyril Windebank – regarded by Arthur Haddy as one of Decca’s leading mono engineers – struggled to make the transition from old methods to new (Goodall, 2009). The introduction of new technologies therefore had the potential to disrupt working practices whilst engineers explored the possibilities of new equipment and devised techniques and processes to maximise its potential. Those engineers who failed to adapt moved into other roles or retired, to be replaced by a new generation of engineers with a greater knowledge of acoustics and electronics that enabled them to work effectively with the new equipment.

As well as possessing technical expertise, engineers were expected to have a clear understanding of their role and of their part in a team. When recruiting new engineers Decca’s senior engineer Arthur Haddy insisted that it was important that an engineer should be ‘an engineer and not a frustrated musician’ as he was concerned that if an engineer took too much interest in the musical performance during a recording session he would fail to concentrate on monitoring the sound and the equipment (Haddy, 1983). He went further by pointing to the Tonmeister system developed in Germany, in which the roles of engineer and producer are combined, stating that the Tonmeister was often a ‘frustrated conductor’ and that many classical recordings made in Germany suffered as a

result. The necessity of separating the roles was clear to Haddy, who even expressed disapproval of one Decca engineer who, in his view, had allowed his interest in music to overtake his responsibilities as an engineer:

We had one chap, Gordon Parry, who knew the whole score of the *Ring* – the Germans were astounded – but Parry used to get so excited about the performance that the gear didn't matter and of course the end product in the record business is what you bring out on the disc.

(Haddy, 1983)

Parry was regarded as one of Decca's leading engineers from the late 1950s onwards and was a key part of the team behind the Solti *Ring* cycle, recorded in Vienna in the 1950s and 1960s. Yet, regardless of his standing in the company and his success as an engineer, Haddy was convinced that Parry's enthusiasm for the music during sessions rendered him suspect as it had the potential to impair his judgement and affect the recording. Parry's passion for music was noted by Michael Raeburn, who worked on several Decca sessions in Vienna in the 1960s and made the observation that although teamwork was encouraged so that everyone could have input during sessions, Parry did not restrict himself to technical matters and would often become involved in artistic matters too. There was no doubt, however, that the producer, John Culshaw, was in charge of the sessions and that he had the absolute word on artistic matters (M. Raeburn, 2012). Haddy's distrust of any engineer whose interest in music might be seen to interfere with his duties on a recording session is in many ways a reflection of the changes in working relationships within the recording studio and the change in the relative status of the producer and engineer. Haddy belonged to an earlier generation of engineers who saw recording predominantly as an engineering challenge and who, before the arrival of the record producer, had effectively been in charge of recording sessions. Parry, meanwhile, belonged to a younger generation of engineers who were used to working in a team with a producer and saw their roles very

differently, particularly at Decca, which had a very different company ethos from that of EMI.

Organisational differences and their influence on recording practice

Company ethos was not the only difference between record companies and working practices could be influenced by a range of organisational factors including management structures and decision-making processes. The effects can be illustrated by comparing different approaches to recording, and particularly those of the two dominant companies of the 1950s in Britain, Decca and EMI. The reports of those employed by Decca and EMI at that time reveal that working practices were often strikingly different. Peter Andry was particularly well placed to comment on such differences, since he began his career as a record producer at Decca in 1953 and then left to join EMI in 1956. Such moves were rare as there was an unwritten rule that the two companies would not attempt to recruit each other's staff and employees tended to remain loyal to one company, so there was usually little staff turnover (Andry, 2009). On arriving at EMI Andry was immediately struck by the formality of the company and the hierarchical nature of staff relations, which extended to dress codes and even the way that people addressed each other. He also found that its committee-bound systems of working made it difficult to make decisions or to effect change (Andry, 2009). By comparison Decca was less formal and encouraged teamwork amongst its producers and engineers, while its lack of reliance on committees meant that decisions could be made more quickly.

The situation at EMI can be attributed to a number of factors but was partly due to internal rivalries that had their origins in the formation of EMI through the merger of Columbia and HMV in 1931. Although they were now part of the same company and worked under

the same management, Columbia and HMV staff had continued to operate independently and there was generally poor communication between the two divisions. The problems were compounded by a period of lax management and ineffectual leadership in the immediate post-war years, so that when Sir Joseph Lockwood took up his post as chairman of EMI in 1954 he immediately assessed the company as being in a poor state. In an interview in 1988 Lockwood is reported to have said that although he admired Alfred Clark, Chairman until 1946, he felt that Clark's successors in the intervening years – Sir Ernest Fisk (Managing Director, 1945-52) and Sir Alexander Aikman (Chairman, 1946-54) – 'were both dead losses' and that the board and management of EMI were also 'very ineffective' (Southall, 2009, p. 25). Recognising the dysfunctional nature of the company, Lockwood began to make changes to the systems and management of the company in order to improve efficiency and reduce costs, and also made strenuous efforts to improve communications and facilitate more collaborative working (Lockwood, 1984).

EMI had particularly suffered as a result of the legacy of Sir Ernest Fisk's decision not to produce LPs until 1952, giving Decca, which had launched its first LPs in the USA in 1948 and in the UK in 1950, a significant lead in the marketplace. When Lockwood took up post in 1954 he was surprised to find that EMI's factory at Hayes had only one machine capable of pressing LPs. One of Lockwood's first decisions, therefore, was to increase EMI's capacity for LP production by immediately placing an order for 10 more machines although as production increased more were needed in order to keep up with demand (Lockwood, 1984). The legacy of years of poor management and the lack of investment also meant that much of the equipment in use at EMI's Abbey Road Studios was outdated by comparison with that being used by Decca, which had invested heavily in research and development.

For many smaller record companies and recording studios in the 1950s, research and development was especially important as there was little specialist recording equipment readily available and this could impact on both working practices and the end product. Microphones and tape recorders could be purchased from manufacturers but other equipment, such as mixing desks, had to be made to order or built in-house and most companies employed staff to design, manufacture, and maintain equipment. When Allen Stagg became manager of IBC Studios in 1952 he found that equipment manufacturers were generally keen to work with studios and were willing to loan equipment until it could be paid for, but that otherwise he had to cope with whatever equipment was available. Stagg did not necessarily see this as a disadvantage, as working in the studio with the minimum of equipment encouraged him and other engineers at the studios to concentrate on getting the sound right during the session, knowing that they would be recording straight to 2-track tape and unable to make changes later (Stagg, 2010). For that reason, Stagg felt that it was important for an engineer to have a clear idea of the sound they were expecting to hear and to make constant comparisons between that sound and the sound coming through the monitors. Without, for instance, a clear understanding of orchestral sound or the sound of a string quartet to provide a reference point it was all too easy for an engineer to distort the balance or the sound of an ensemble, whether knowingly or not, or to fail to make the most of the acoustics of the recording venue. Engineers could also be under pressure to produce a sound that might be fashionable but was not necessarily musical. This was particularly the case in the early days of stereo recording when there were often attempts to add intensity to a recording by altering the sound balance or by highlighting individual instruments within an orchestra in a way that sounded unnatural. Stagg referred to recordings made for Pye by Bob Auger (principal engineer at Pye studios, 1956-60 and 1962-69) as particular examples of this approach:

It sounded like he'd sectioned off the orchestra with panels so it sounded like a collection of individual sounds, not a complete sound. Why do something that is so obviously wrong and sounds wrong? I can only assume he had no feeling for it as he must have known the orchestra didn't sound like that.

(Stagg, 2010)

Auger's approach to recording at Pye may have been partly due to the influence of popular music where the use of such effects was not so unusual. Stan Goodall recalled that the experience of recording popular music in the early years of his career at Decca influenced his approach to the recording of classical music as he would often add extra microphones to an otherwise conventional set-up in order to brighten the sound (Goodall, 2009). Auger seems to have taken this approach to an extreme but his approach may also have been a response to a desire on the part of some record companies to try to exploit the novelty value of stereo. In many cases this was achieved by exaggerating the difference between the left and right channels, resulting in a 'ping-pong' effect and the sensation of hearing the musicians in close-up rather than as if several rows back in a concert hall (see the case study of *Scheherazade* in Chapter 10). Allen Stagg encountered this attitude to stereo sound on his first stereo recording, for which he used two microphones and a minimal amount of equipment:

I plugged the mikes into the amplifiers and balanced the levels until I got a definite middle and spread it out until I got a definite picture of the musicians. This got me into trouble as [the recording] was for an American company called [Urania] The record company executive decided that stereo should have a gap in the middle – that was the perception [...] I had to stick to my guns and record in the way I believed was right, or I'd have ended up with the popular misconception of stereo as two channels answering each other.

(Stagg, 2010)

Concerns over the balance of sound on some early stereo recordings raised questions as to the artistic value of stereo, and at Deutsche Grammophon there were 'strong philosophical battles within the company' (Burkowitz, 1985) about how it should be presented to the public. Stereo sampler records were issued by several companies to demonstrate the stereo

effect and many of them featured the sounds of passing cars or trains to give the impression of movement between the speakers. These generated much interest from critics and consumers but Deutsche Grammophon refused to be swayed by novelty or fashion and rejected the use of any exaggerated effects so as not to undermine its reputation for artistic excellence. Instead, the company chose to emphasise the musical potential of stereo by issuing samplers made up of excerpts from its expanding stereo catalogue.

Corporate decisions therefore played an important part in influencing the working practices of engineers and producers. Decisions on whether or not to invest in the latest equipment could dictate the extent to which engineers were able to control the sound of a recording; opinions on different aesthetic approaches to stereo recording could determine working practices and influence the house style of a record label; decisions on whether to follow fashion or to adhere to a company's core values could influence the way its products were perceived in the marketplace. The formality and hierarchical nature of relationships at EMI could act as a barrier to innovation while the teamwork approach at Decca encouraged more collaborative working. Each company developed its own ethos, which would inform working practices and often result in very different experiences for artists and recording crews.

In some cases, however, practices that were perceived to be the result of policy decisions within companies were simply the result of groups of staff working together to reach consensus on how best to respond to a particular challenge. EMI engineer Bob Gooch made the observation that Decca engineers had a remarkable uniformity of sound and stated that although he could often identify the engineer responsible for a particular EMI recording he could not tell Decca recordings apart (Gooch, 1986). Gooch assumed that this

was the result of directives from the senior engineers at Decca to set up and record in a particular way but interviews with Decca engineers show that this was not the case. Rather than there being any internal directives or formal policy about recording practice, most Decca engineers of the 1950s and 1960s simply followed the example of its two senior engineers, Arthur Haddy and Ken Wilkinson; Haddy was behind much of Decca's technical innovation while Wilkinson had been responsible for training all of Decca's new engineers from 1937 onwards (Foreman, 2004). It was inevitable that there should be some influence and as most engineers were satisfied that the methods established by Haddy and Wilkinson produced the best results there was little incentive to change; for Decca executive John Kehoe this explained the consistency of the Decca sound:

It's down to the subliminal effect of a group of men working together over many years and evolving a shared approach to recorded sound. [...] They all have their individual approaches, but they shared a strong family resemblance. This has nothing to do with theory or policy and everything to do with working closely together over decades.

(Kehoe, 2009)

Stan Goodall did make minor changes to the microphone set up, using outriggers to brighten the sound and add detail, but most engineers continued to follow standard Decca practices including use of the 'Decca tree' microphone setup using three microphones, balancing the sound on the session, and recording straight to 2-track tape. In the words of Goodall 'it was sort of expected that you would follow him [Wilkinson] and most of the time we did' (Goodall, 2009).

The principles established by Haddy and Wilkinson remained valid even when multi-track recording became available as the standard practice at Decca was always to record straight to 2-track, with multi-track recording rarely used as more than a backup (Flint, 2012).

Kenneth Wilkinson insisted that the sound had to be right during the session and so Decca

engineers took great care in their choice of recording venues and in their microphone placement, with Wilkinson being of the view that ‘if you can’t get it right in the session, you shouldn’t be sitting in the seat’ (A. Griffiths, 1986). John Kehoe observed Ken Wilkinson at work on numerous recording sessions and noted how he implemented this model of working:

Wilkie would just fold his arms and sit back once the balance was set unless one of the singers projected more than the others – that would normally be fixed by moving them away from the mike but sometimes he used the faders. Or if an orchestral score was particularly complex, like Richard Strauss for example, and maybe the acoustic couldn’t give what you wanted, he might use the faders. But normally he left them alone once the balance was set. [...] The attitude was always that it was the artists’ job to get the balance right; the balance engineer was there to capture it and intervene only when necessary.

(Kehoe, 2009)

The standards set by Wilkinson no doubt influenced the work of subsequent generations of engineers at Decca, even if there was no overt statement of policy with regard to the methods to be followed, so that a recognisable house style emerged. The quality and consistency of sound identified by Bob Gooch was also noted by critics and listeners so that Decca was able to make a virtue of ‘The Decca Sound’ as part of its marketing. Although it seems there was no set policy on how either producers or engineers worked at Decca there was an underlying company ethos, based around teamwork and collaborative working, which informed their decisions and underlined the commitment to the highest standards of record production.

UK versus US working practices

Few companies had access to the scale of finance and resources at the disposal of EMI and Decca and so a wide range of working models emerged, each with advantages and disadvantages for artists and recording crews. American companies recorded in Europe on

a regular basis throughout the 1950s and comparison of practices in UK and US-based record companies shows that American companies were much more pragmatic in their approach to the recording process and what could be achieved within a certain time frame and budget. Paul Myers began his career as a producer in the USA, starting with Kapp Records in 1959 before moving to CBS in 1962. Through the reciprocal distribution agreements that existed between record companies, European companies would often record in Europe on behalf of American companies. For instance, Decca would often record on behalf of RCA, using Decca engineers and sometimes a Decca producer too if RCA did not provide one. EMI was also willing to hire out its studios at Abbey Road to other companies and would provide staff if necessary. During the 1960s Myers frequently recorded in London, often working with British engineers, and noted several differences in US and UK recording practices.

The most notable difference in terms of working relationships was that in the American system the producer was responsible for all aspects of the recording, and was regarded as all-powerful. Strict union rules meant that engineers were not allowed to read scores and producers were not allowed to operate the recording equipment, but the producer would direct the engineers on sessions and supervise the editing. In British record companies engineers enjoyed a greater level of autonomy so that they were responsible for the sound and were allowed to complete the editing unsupervised, but at CBS 'every edit was done [...] with the producer signalling to the engineer where to stop' (Myers, 2009). For Myers the emphasis on teamwork and collaboration within British companies created a shared sense of responsibility for a recording that did not exist in the American system. Myers recalled observing a recording session in Vienna at which the producer John Culshaw worked with a large team of engineers, whereas at CBS Myers would often work with one

engineer. In the American system of recording the producer was therefore under greater pressure, being ‘the sole person responsible for the entire production, as opposed to Decca where the recording engineers are extremely possessive when it comes to their contribution to the sound’ (Myers, 2009). The difference in approach was forcefully demonstrated to Myers after he joined Decca and was ‘dressed down by [engineer] Jimmy Lock [...] because I suggested adding some EQ [...] and he felt I was going into territory I shouldn’t be’ (Myers, 2009).

American recording crews also worked at a considerable disadvantage in terms of the venues they used and the amount of time available in which to complete a recording. American companies were prepared to alter the sound and balance of a recording after a session and, as a consequence, did not place such great emphasis on the choice of recording venue, instructing producers that ‘whatever venue you get, make the most of it and work out how to make it sound good’ (Myers, 2009). Decca engineers, by contrast, were insistent that the sound should be balanced during the session and so ‘Decca in London, being very proud of its sound, would cancel a recording if the venue wasn’t good enough’ (Myers, 2009). American crews were also disadvantaged in terms of the amount of time they had to complete a recording as British record companies were prepared to invest considerably more in their recordings than their American counterparts and this extended to the number of sessions to be allocated. Paul Myers recalled being asked how many sessions it had taken CBS to record an opera ‘and I said nine and was told that was ridiculous; Decca would have done 18 or 20’ (Myers, 2009). The combined effect of these limitations was that American recording crews often worked in difficult circumstances as the fact that they recorded in unsatisfactory venues and relied on remixing the sound at a later date restricted their ability to achieve a sound balance that would assist producers and

artists when listening to playbacks. The limited number of sessions also meant that there was less opportunity to explore alternative takes or to pay attention to the finer details of a work and inevitably there were compromises to be made. The overall result was that it was difficult for US companies to maintain the quality or consistency of sound on their recordings, or to match the artistic standards being achieved by their UK rivals.

Inevitably, Decca's commitment to quality in every aspect of its operations, from the choice of venues to the use of more sessions, required a significant financial outlay. This could be justified on the grounds that Decca needed to maintain its reputation in the market and because a high-quality recording would be more likely to gain favourable reviews. A successful recording could remain in the catalogue indefinitely and sustained sales over a long period would allow all but the most expensive recordings to recover their costs and become profitable, even though this might take as long as 10 years for an orchestral recording or 20 years for an opera. To a large extent this belief has been borne out by the fact that many of the recordings made by Decca and EMI in the 1950s and 1960s remain in the catalogues to this day, continuing to fare well in comparative reviews and featuring prominently in listings of recommended recordings.

Independent labels

Differences in working practices were even more pronounced in the small, independent record companies that proliferated during the 1950s. Before the introduction of tape recording the complexity of the wax recording process was such that it was only open to those with sufficient finance to invest in staff, equipment, and the technical facilities necessary to process the wax discs. Tape recording, however, was relatively inexpensive and as smaller and more portable tape recorders became available the costs began to fall,

bringing them within the reach of enthusiasts and those with ambitions to create their own record labels. Harley Usill was one of the many entrepreneurs that founded small record companies in the 1950s, establishing Ambassador Records – which eventually became Argo – in 1951. The company possessed little equipment although it had its own tape recorder and a disc cutter with which it could produce a master ready for production, the LPs then being pressed by a small processing factory. Initial production runs were deliberately kept low, as orders of less than 100 discs did not attract purchase tax and had the added advantage of removing the need to hold large amounts of stock, thereby reducing overheads (Usill, 1984). As the company became more successful, however, it began to expand its operations and its LPs were pressed by Pye or Decca and distributed by Selecta, Decca's distribution company. There was a resultant increase in both the quality and profile of Argo records but also an increase in costs, as detailed by Usill:

LPs cost 39s of which purchase tax was 7s. A Decca pressing cost 7s 6d. Decca also did the distribution at about 17-20%, the dealer took 33%, copyright took 6.25%, and artists took 5-10%, leaving about 20% for overheads and making a net profit of about 10-15d.¹⁵

(Usill, 1984)

Operating on such small profit margins, and without the staff and resources available to the major record companies, the working methods employed by independent record companies were often similarly pared down. Richard Itter founded the Lyrita record company in 1958 with the aim of recording works by British composers that had been neglected by the major record companies. One of Lyrita's early projects was the recording of the complete piano works of John Ireland, performed by Alan Rowlands and recorded between January 1959 and March 1963 for release on five LPs. During the recording sessions there was no

¹⁵ According to the National Archive's currency converter, 39 shillings in 1955 had a spending power equivalent to £54.87 in 2005, while Usill's estimated profit of 10 to 15 pence would be equivalent to between £0.73 and £1.09.
<http://apps.nationalarchives.gov.uk/currency> (Accessed 14 July 2014).

one else present but Rowlands and Itter, who acted as both producer and engineer.

Rowlands spoke of the particular pressures involved in recording the first LP as there was no editing available, partly as the result of an ideological stance on the part of Itter but also due to his lack of technical ability. The lack of editing required Rowlands to record works and movements in single takes, although he questioned this at the time:

[Itter] just told me that was the way it had to be, I had no choice – whether he had a choice I don't remember. He just said we can't do that, even though I think I was aware even then that it was a possibility to join up bits of tape from different performances; but he, certainly at first, wasn't keen on doing it.

(Rowlands, 2009)

As well as being reluctant to edit, Rowlands recalled that Itter seemed to take a minimalist approach to his role as a producer:

[Itter] never intervened, he never made any comments; it was directed by me. He was an enthusiastic amateur. I don't remember him making a comment except if I'd been in doubt as to which of two takes was best; he might have offered an opinion then I suppose.

(Rowlands, 2009)

The lack of any artistic input from a producer meant that Rowlands was very much dependent on his own skill to produce a satisfactory take, especially as he had been required to learn many of the works specifically for the recordings without the opportunity to perform them in public or to develop his interpretations. To a large extent, therefore, Rowlands was his own producer and, despite the fact that his early recordings were made on tape, enabling long takes and playbacks, the lack of editing or of any significant input from a producer meant that his experience had much in common with that of artists recording in the era of the 78. This included a fear of making mistakes, as by recording in single takes Rowlands was essentially giving a concert performance each time, aware that any error would mean repeating the entire take. Despite the pressure of the situation Rowlands described the process as informal:

I would go down there in the morning and try the piano and then try to record something and I would play it two or three or four times I suppose, until we got a good result. [...] Itter had a very simple, calm and reassuring presence, so I didn't really feel too nervous, although I'd never done anything like that before, and he seemed to have plenty of patience, and we managed to do what we'd set out to do. (Rowlands, 2009)

The relaxed atmosphere in the studio and the ability of Rowlands to work at his own pace rather than to any set schedule may have alleviated some of the pressure of having to record in single takes but the lack of editing continued to act as a constraint on his performance. When editing was finally made available, from the second LP in the series onwards, it was described by Rowlands as 'liberating, it definitely was [...] you felt you could let yourself go a little more in the performance' (Rowlands, 2009). Rowlands' experience with Lyrita was certainly not typical of recording in the late 1950s or of practice in independent record companies: editing had been standard practice for several years and the role of the producer was firmly established. Practices at Lyrita – the amateurish approach and the general lack of facilities or technical resources – therefore represent an extreme example of working practice at odds with practice elsewhere.

The diversity of practices illustrated so far shows that the experience of recording could be very different. Artists recording for one of the major record companies would have the luxury of a large number of sessions, supported by an experienced team of staff using the latest equipment; artists recording for one of the US-based companies operating in London might find that they had fewer sessions in which to complete a recording and had to make greater use of editing but would, nonetheless, still have access to the latest technology and support from producers and engineers; those recording for independent labels might find that the general lack of finance and resources imposed restrictions on what could be achieved in the time available and that further compromises were necessary.

Such a diverse range of practices not only posed challenges for artists, producers and engineers; it may also have contributed to what might be seen as a misplaced confidence in technology. It may even have contributed to the emergence of myths and fantasies about the recording process and what it could achieve. Allen Stagg thought that the psychology of the studio was an important part of recording and that engineers needed to understand not only their equipment but the personalities they worked with too. At times this could mean managing expectations, as people were often seduced by claims for the potential of technology and were all too easily ‘impressed by illusions’ (Stagg, 2010). Stagg discussed this with colleagues at the time but they were not convinced and so in order to test his theory he devised a simple experiment:

We constructed a box with a knob on the front which wasn’t connected to anything. We agreed we wouldn’t talk about it with anyone and then placed it in the studio. There was a producer working for Pye called Mike Berkeley who used to come in to supervise the cutting. He noticed the box and we told him that it could be used to improve the sound. After a while he said it was fantastic and wanted to use it on every session – he was prepared to pay to make it exclusive to Pye. People believe what they want to believe.

(Stagg, 2010)

The results of this ‘experiment’ are of course anecdotal and there is no empirical evidence to substantiate Stagg’s claim, but it seems that individuals often allowed their judgement to be swayed by their willingness to believe in the power of technology to improve the sound, even if there was no audible improvement. Peter Andry also experienced this when working with singers who were suspicious of the technology of recording and would claim that it changed the sound of their voice. This could cause difficulties if they were unhappy with the sound or the relative balance of their voice, and so a means was devised to placate them:

[W]e had to put in a dummy mike with wires leading off which were never plugged in. Every singer liked to feel that they had a special microphone and we would

push it nearer them if they wanted because they used to like to think it was helping, but in actual fact it didn't make the slightest difference to the recording.
(Southall, Vince, & Rouse, 2002, p. 51)

The rapid advances in technology of the 1950s, and manufacturers' marketing and publicity, may have created an environment in which people were willing to believe in the claims made for recording and its ability to reproduce a musical performance in high-fidelity sound. The exclusive nature of the recording studio and the secrecy that surrounded practices in different companies enabled myths to develop about recording and the work of producers and engineers. Artists, and occasionally producers, could entertain their own fantasies as to the potential of recording and engineers had to negotiate all of these situations in a sensitive manner.

Recording in Vienna

London may have provided the focus for recording activity in Britain but Vienna also emerged as an important centre for recording in the 1950s, partly as a result of favourable post-war exchange rates that made it attractive for British and American companies to record there. The relatively high costs of recording in Britain and the USA, and particularly the cost of hiring an orchestra, meant that even allowing for the costs of sending staff and equipment there for weeks at a time, it was still less expensive to record in Vienna. Other compelling reasons were the presence of world-class orchestras and soloists, the availability of several excellent recording venues, and the considerable marketing appeal offered by the city's reputation for music, which added a certain cachet to recordings so that 'the names Vienna or Berlin on the label would mean a 20% increase in sales' (Marriner, 2010).

Most record companies worked in Vienna for a few weeks or a few months at a time. In an unpublished autobiography, the founder of Westminster Records, James Grayson, described how, once the engineers had set up their equipment in Vienna's Konzerthaus, he would schedule three sessions per day, each lasting three hours. This way there could be three recordings in progress at the same time – typically an orchestral session in the morning, a chamber ensemble in the afternoon, and soloists in the evening – so as to maximise the use of the venue and the equipment without overtaxing the musicians or preventing them from carrying on with their regular work (Grayson, 1980). Decca recorded throughout the year in Vienna and even installed a permanent control room at the Sofiensaal, a former dance hall that it used as a recording venue. Decca also had the use of a flat within the Sofiensaal and recording crews lived and worked together for much of the time. This could be difficult for those who found themselves working in Vienna for extended periods of time. Decca engineer Jack Law first worked on sessions in Vienna in 1954 and then regularly as part of the team responsible for recording stereo operas including Solti's *Ring* cycle, amongst other works. He recalled that 'I used to be in Vienna for three months of the year. I asked for it to be cut down, because it was too long, and it got down to three weeks in the end' (Law, 2009).

Despite the difficulties of being away from home the emphasis on teamwork encouraged a relaxed working environment. Sir Neville Marriner often visited the Decca team while he was in Vienna and noted that the atmosphere at the Sofiensaal was 'like a family affair. They lived on the premises and the artists were close by too – it was one big party and was very pleasant' (Marriner, 2010). Nonetheless working conditions at the Sofiensaal were not always ideal and Jack Law recalled that when he was editing he would have to pack up one of the EMI TR90 tape recorders in use at that time and take it to another room.

Although the TR90 was the portable version of EMI's BTR studio recorders it was heavy and had to be separated into three bulky units, making it 'difficult carrying it from one end of the Sofiensaal to the other. You'd be editing at one end. Then you'd have to put it back as it was, ready for playback with Solti or whoever in the morning' (Law, 2009).

As well as having many fine musicians available for recording sessions, Vienna also possessed many fine concert halls suitable for recording. The Konzerthaus in Vienna contains a number of halls of varying size, of which the Mozartsaal was especially prized for the recording of chamber music and piano recitals. Pianist Paul Badura-Skoda recorded there regularly with the Westminster record company and recalled that the placement of the piano was critical as, although the Mozartsaal was regarded as a perfect concert hall with a balanced acoustic, the reverberation was too great when there was no audience present. The engineers realised that by placing the piano at the centre of the hall the reverberation could be halved and this became standard practice when recording in this and similar halls (Badura-Skoda, 2009). In some cases, however, the reverberation within a concert hall without an audience was simply too great. The Musikverein is generally regarded as having some of Vienna's finest concert halls but Decca's senior engineer Arthur Haddy refused to record in the largest hall, the Grosser Musikvereinssaal, as tests showed that without an audience present the reverb was as much as six seconds and therefore too great for recording orchestras and large ensembles (Haddy, 1983). Some of the independent record companies regarded the smaller halls at the Musikverein, including the Brahms-Saal, as suitable for recording chamber ensembles and the Deller Consort was amongst those that recorded there regularly for the Vanguard label. Mark Deller recalled that the usual set up would involve the use of several microphones suspended on booms

above the ensemble rather than individual microphones close to the instruments (Deller, 2009).

Musicians benefited greatly from the presence of record companies in Vienna and the scale of recording activity was such that artists and ensembles frequently resorted to the use of pseudonyms in order to be able to undertake the maximum amount of work without overexposure in the market and without breaching the terms of any contracts. The practice was particularly common amongst orchestras; the Vienna Symphony Orchestra recorded under various names including ‘Vienna State Philharmonia’ and ‘Vienna Philharmonia Orchestra’ and the practice became so widespread that even the Vienna State Opera Orchestra made recordings as the ‘Vienna Philharmusica’ (Kluge, 1997). With so much activity taking place in Vienna, the importance of recording to the commercial and cultural life of the city meant that recording was accorded a status that afforded special treatment. Michael Raeburn illustrated this with his recollection that when Decca was recording at the Sofiensaal the manager of the hall ‘used to get trams diverted [...] Where else could you do that?’ (M. Raeburn, 2012). James Grayson also recalled how during a recording of works by Kodály at the Musikverein in December 1949 Vienna suffered one of its then frequent power cuts. Grayson immediately contacted the Vienna city power station and, even though it was New Year’s Eve, persuaded staff to restore power to the Musikverein so that the recording could be completed, with the recording crew working through the night to edit the tapes (Grayson, 1980).

Editing

In the early days of tape recording, editing was carried out under the supervision of a producer who would follow his markings in the score from the sessions to select the takes,

decide where to edit, and then cue the engineer to cut the tape at the right moment. This arrangement proved unsatisfactory for both the engineer and the producer and many engineers resented the inference that they were incapable of editing unsupervised. When practice began to change, it was more as a result of informal arrangements between producers and engineers than any change in policy. As mentioned above, when recording in Vienna, Jack Law often had to edit the tapes overnight so that they could be ready for playback the next morning. He realised that he could work more quickly by himself and so suggested to the producer Christopher Raeburn that he mark the edits in the score and then leave Law to complete the editing, returning later to listen to the edited tape. Raeburn agreed to this and gradually this practice was adopted by other producers and engineers at Decca as a more productive way of working (Law, 2009).

At some of the smaller, independent labels, however, the artists frequently became involved in the editing process. For instance, Alfred Brendel supervised the editing of many of his early recordings, working with an engineer who made the edits. From about 1951 Brendel also had his own tape recorder, an early Revox machine, which he used to record and review his playing. This enabled him to become used to hearing himself and to familiarise himself with the notion of playbacks, all invaluable experience that he felt gave him a good understanding of the recording process and enabled him to work more effectively in the studio (Brendel, 2011). Elsewhere Brendel has expanded on this and spoken of the importance of recording as ‘hugely important in teaching me to listen to myself. To see how the inner vision corresponds with what is played, and to see what doesn’t correspond, and whether it corresponds at all’ (Brendel, Meyer, & Stokes, 2002, pp. 45-46).

The general lack of sophistication in the editing process at this time meant that the sort of micro-editing now common in digital recording was simply impossible. It was therefore necessary for artists, wherever possible, to begin and end takes in such a manner that there was a substantial ‘overlap of sound’ (Carewe, 2009) that would allow an edit to be made between takes. This in turn meant that there needed to be a high degree of consistency between takes, especially when recording patches to correct errors. Some artists became especially skilled at this and Neville Marriner devised a technique whereby if a piece had a sudden change in tempo ‘he might get the band to play across the double bar in the old tempo, go back and play again in the new tempo, then cut and switch the two takes together’ (Tyler, 2009, p. 76).

Marriner was also sensitive to the technical requirements of recording and the need to compensate for the lack of a visual element when listening to recordings. Studio techniques included adopting a faster tempo to add excitement, shortening crotchets to quavers and quaver rests in fast passages, and experimenting with the instrumentation or the number of players to a part (Tyler, 2009, pp. 74-75). Marriner attributed some of his skill in recording to conversations he had with the director of music at Mercury Records, Harold Lawrence, who gave him advice on microphones and studio techniques, and influenced Marriner’s thinking on orchestral sound and balance. The examples of Brendel and Marriner and their involvement in the recording process support the assertion that those artists who took an interest in recording and learnt about the different stages of the process could become highly effective in the studio by adapting their performance to the requirements of the medium.

Stereo recording

During the early development phase of stereo recording both EMI and Decca made experimental recordings, many of which were conducted covertly for fear that musicians would seek to renegotiate contracts or that stereo playbacks would unsettle them while the technology was still evolving (Culshaw, 1981, pp. 132-133). The producer Paul Myers explained that artists sometimes had difficulty in understanding the balance during a playback, since they would be hearing the sound from a different perspective – whether they were a conductor standing in front of an orchestra, an instrumentalist sitting in the middle of an orchestra, or a soloist hearing the sound of a violin under their chin (Myers, 2009). Hearing a stereo playback, especially in an experimental form, might only lead to further confusion. Therefore, experimental stereo recordings were made in secret alongside mono recordings, with separate teams of engineers working in separate control rooms. The fact that artists were unaware of this arrangement meant that they only had interaction with the producer and engineers in the mono control room and only heard playbacks in mono. This created considerable technical challenges for those engineers working in the stereo control room as they had no opportunity to alter microphone placements once a session was under way and there was usually no producer present, leaving the engineers in sole charge of the stereo recording. EMI's leading stereo engineer in the 1950s, Christopher Parker, recalled that in the early days of stereo recording he used one microphone and so was forced to use simple techniques, with limited opportunity to experiment. Later, Decca started to use multi-miking techniques and EMI eventually followed suit, although Parker came to doubt the value of this practice after listening to an experimental version of Karajan's 1956 *Falstaff* recording made with two stereo pairs of microphones. Parker felt that this recording had a more natural sound and a clarity that was far superior to what had been achieved with multi-miking, forcing another change (Parker, 1984). Even after record

companies became open about the practice of dual recording in 1957 (Culshaw, 1981, pp. 132-133), the mono and stereo teams continued to work in separate control rooms. While sales of mono LPs still outnumbered those of stereo, the mono team continued to have priority and sessions were directed by the mono teams until about 1960. As stereo sales increased the positions were gradually reversed and the practice of dual recording finally stopped around 1961 as it was realised that it was possible to create an acceptable mono recording from the stereo version by combining the signals and re-balancing the sound (Walker, 2010).

The introduction of stereo recording created challenges for producers as well as engineers and required new methods of working, particularly when recording opera in stereo.

Christopher Raeburn joined Decca on a permanent contract in 1958 – he had already undertaken work for Decca on a casual basis while living in Vienna from 1954 to 1957 – and so was present at the beginning of the stereo era. Raeburn worked closely with Decca's principal producer, John Culshaw, and was involved in some of the earliest stereo opera recordings. He recalled that, given the extra spatial dimension provided by stereo, Culshaw was concerned that a stereo recording should sound realistic in terms of the balance and placement of the singers. As a result, stereo operas needed to be planned in advance to determine where the singers should stand, both in relation to each other and to the microphones. This required a detailed consideration of each scene based on a study of the score and libretto and taking into account the possible staging and effects required. The various positions of the singers and the movements necessary were then plotted with reference to a grid that was marked on the stage or onto a sheet placed over the stage (C. Raeburn, 1987).

In many accounts of the development of Decca's approach to stereo opera it has been assumed that Culshaw devised the use of a grid system to plot the movements of the singers in the stereo sound spectrum. In Christopher Raeburn's 1987 interview for the British Library, however, he states that in fact he developed this system himself, based on his experience of working in the theatre, but that the team approach at Decca meant that no one person was credited with such innovations. Raeburn reported that Decca crews had experimented with a basic version of the grid system while recording Lehár's *Merry Widow* in Vienna in March 1958 but that he had developed the system further during a recording of Puccini's *La fanciulla del West* later that year in Rome. Raeburn acknowledged that his experiments were not well received at the time and led to complaints from the engineers, but Culshaw recognised that the concept had merit and that, with further development, could be applied to all studio opera recordings (C. Raeburn, 1987). Raeburn is widely regarded as one of the leading record producers of opera recordings in the late twentieth century but his role in the development of studio techniques in relation to the recording of opera in stereo deserves wider recognition.

As well as consideration of the placement of the singers the planning process also involved devising a schedule, since it was common practice to record operas out of sequence. This was done for commercial rather than artistic reasons as it made financial sense to record all the chorus items at the same time rather than have the chorus on standby for long periods. EMI engineer Bob Gooch was of the opinion that although there may have been sound commercial reasons for this approach, the end product often suffered as it lacked the vitality of an opera house performance and the performers lost the sense of continuity in the opera (Gooch, 1986). Companies also had to ensure that singers were available when needed and this often involved lengthy negotiations with artists and their agents. Decca

tried to avoid problems when recording operas in Vienna by asking singers to sign contracts stipulating that they would not leave the city and would be on call for the duration of the recording, in case there was any need for re-takes or other changes to the schedule (Myers, 2009).

Once the planning had been done, the setting out of the stage and the grid could be left to the engineers or, in the case of Decca, the staff at the Sofiensaal or at whichever venue they happened to be recording. A tarpaulin, with the grid already marked out, would then be stretched over the stage and a marker, usually a piece of cloth in the shape of a cat (Culshaw was fond of cats), would be attached to a microphone stand at one side of the stage thus providing an additional reference point to help with stage directions as singers could be directed towards or away from the marker (Law, 2009).

The excitement generated by the development of stereo recording was such that ‘everyone wanted to exploit the stereo idiom as much as they could’ (Mordler, 2009) but the early days of stereo recording required a period of experimentation and shared learning before engineers and producers were able to exploit its full potential. Artists too had to learn to work with the medium of stereo although this did not come naturally to some singers who found it difficult to think about their movements as well as their musical performance. John Mordler recalled that producers ‘tried to make the artists write the moves into their scores but when you’re in the middle of a great coloratura aria the last thing you think about is moving’ (Mordler, 2009). It soon became apparent that during sessions an assistant producer was needed in the recording auditorium to cue the singers when they were required to move and even, where necessary, to guide them around the stage as otherwise they were likely to forget or to be hesitant in their movement, spoiling the

dramatic effect on the recording (C. Raeburn, 1987). The role of the assistant producer therefore became a vital element in the recording of stereo opera, providing guidance to the artists in the recording auditorium and liaising with the producer and engineers in the control room.

Despite all the effort that went into making a stereo opera, Mordler found that studio recordings rarely managed to capture the atmosphere of a live performance in an opera house. Humphrey Burton was also dubious about the value of Culshaw's approach as he came to the conclusion that it added little to the experience of listening to recordings and was barely noticeable most of the time (Burton, 2009; Mordler, 2009). As Culshaw pointed out in his autobiography, however, in the early days of stereo when recordings were made simultaneously in mono and stereo the mono recording would take precedence and so the artists were not required to move. On the stereo recording the fact that the singers remained static meant that often they were not in the correct spatial relationship for the drama and their voices were not always balanced correctly, leading to what Culshaw regarded as some 'bizarre or downright comical results' (Culshaw, 1981, pp. 132-133). Culshaw was therefore anxious to avoid similar scenarios and even if the attention to detail within his methods did go unremarked at times – Culshaw's use of technology to create special effects was also the subject of criticism (see the case study of *Elektra* in Chapter 9) – it is arguable that listeners would have noticed if Culshaw and others had not gone to such lengths. This is surely a measure of Culshaw's success in creating recordings that emphasise the drama of the music rather than drawing attention to themselves through their technical deficiencies.

Summary

As with many aspects of recording in the 1950s, practices varied widely between record companies and were influenced by a range of factors including corporate ethos and the availability of staff and resources. The growth of independent record companies was a particular feature of the 1950s, made possible by the availability of affordable recording equipment and the willingness of major record companies to manufacture and distribute their records. The boom in recording activity also encouraged record companies to seek new recording locations, with Vienna emerging as an important centre of operations for many of them. Technology continued to evolve and the development of stereo recording in the mid-1950s encouraged a further burst of activity as companies began to re-record repertoire for the medium of the stereo LP. Once more, this called for new practices to be devised, particularly in relation to the stereo recording of opera, in which Decca was at the forefront of innovation.

6 Musical practice and the influence of recording

One of the assertions frequently made about the effects of recording on concert performance is that recording helped to raise standards of performance, which were cited as generally poor by many interviewees commenting on the early 1950s. John Amis recalled that at orchestral concerts there were often problems with the orchestra, remarking on the standard of horn playing in particular ('they wobbled, they were all over the place'), and noting that audiences 'were accustomed to things being very often second-rate' (Amis, 2009). Variable standards were not confined to London, and even in Vienna, with its abundance of outstanding musicians and fine concert venues, there were occasional problems. Michael Raeburn recalled going to the Theater an der Wien in Vienna in 1955, to hear the Vienna State Opera's production of *Tales of Hoffman*. During the performance '[Julius] Patzak sang Hoffman and George London sang the baritone roles. But George London didn't know it in German so he sang it in French and everyone else sang it in German. That was considered perfectly acceptable' (M. Raeburn, 2012).

The acceptance of lower standards did have one advantage: young artists were subject to less scrutiny than today and could learn their craft without the same pressures and expectations. The singer Christa Ludwig related how early in her career in the immediate post-war years she had apprentice contracts at Giessen and, later, at the Frankfurt Oper. At the time, mistakes in performance were not uncommon and she found herself cast in roles where her voice frequently cracked on the high notes (Ludwig, 2011). In one production, of Gounod's *Faust*, she was cast in the role of Siebel but 'I always cracked' on the high note. She eventually approached the director to ask to be released from the role but was told 'Miss Ludwig, you have plenty of time to develop yourself while you're here'

(Ludwig & Domeraski, 1999, pp. 26-27). The comment shows a remarkable acceptance of imperfections in performance but increasing exposure to flawless performances on LP records changed perceptions of what was an acceptable or tolerable level of performance, and raised expectations amongst audiences and promoters. The rate of change and its precise impact on artists are hard to measure, but recordings undoubtedly set new standards against which performances could be judged, making comparisons inevitable.

Orchestral standards

Inconsistent and at times poor standards of performance were of concern to a number of organisations, including the Arts Council of Great Britain, especially in relation to orchestral practice. A contributory problem noted by Neville Marriner and others was the lack of sufficient rehearsal time, which meant that orchestras frequently performed works that had not been rehearsed in full, leading to problems in concert including incorrect entries, poor ensemble, and flawed solos. Another factor in the ability of musicians to produce their best performance in concert was the quality of the available venues. With the loss of the Queen's Hall during the war, many performances in London were felt to be compromised by the lack of an outstanding venue on a par with the Musikverein in Vienna, or the Concertgebouw in Amsterdam, and until the opening of the Royal Festival Hall 'it was the Albert Hall or nothing' (Marriner, 2010). The lack of sufficient rehearsal time and the lack of suitable venues meant that London orchestras such as the Philharmonia considered themselves to be at a disadvantage when compared with some of the leading European orchestras:

[Whereas] the Vienna Phil or Berlin Phil could rehearse and take hours to achieve their best, the Philharmonia had to concentrate on merely getting things acceptable as quickly as possible. This put us at a disadvantage as we didn't have the financial resources to rehearse enjoyed by our European colleagues. [...] Conditions in Berlin

and Vienna were much better. Nevertheless, although we weren't as good as the main European orchestras to begin with, we benefited from training under Karajan, especially his quest for accent-less music and tone control. It was a very cultured, intellectual assessment of what could be done.

(Kok, 2009)

Karajan worked extensively with the Philharmonia Orchestra in the 1950s until his appointment as conductor of the Berlin Philharmonic Orchestra. During this time Karajan conducted the orchestra on many recording sessions and was known for his attention to detail and his tendency to work the orchestra hard in the quest for perfection. Karajan also had an in-depth knowledge of recording, based on experience and an interest in the medium, and so the Philharmonia benefited from his coaching not just in orchestral performance but in recording techniques. The view of Karajan as an expert orchestral trainer was one reiterated by Denis Vigay, although his praise was somewhat qualified:

I think [the emphasis on perfection] started with Karajan; he was a fine orchestral trainer. I'm not keen on his interpretations but I worked with him a few times [...] The older members of the orchestra were divided about Karajan's influence. Mostly they admired him as an orchestral trainer – he really pulled the orchestra up – but he wasn't all that popular as a person. He was like a super chromium-plated vacuum, everything had to be correct.

(Vigay, 2010)

Karajan's skill in recording and his insistence that 'everything had to be correct' had important implications as under his leadership the Philharmonia soon began to set new standards in orchestral playing in Britain. The Philharmonia was able to secure a significant amount of the recording work in London, not only because Walter Legge was both owner of the Philharmonia and a producer at EMI, but also because of the reputation it gained for the quality of its performance on recordings. However, Peter Mountain recalled that Karajan's approach to recording did not always produce the best concert performances as, unlike many conductors who prefer to record a work after a series of concert performances, Karajan would often record before a concert. Karajan's preferred recording method was one of rehearse-record, whereby the orchestra would rehearse

sections of music and then record them. As he chose to record in small takes the rehearsals would necessarily be in small sections too, meaning that the orchestra rarely got to play a work or a movement in its entirety and this could sometimes cause problems in concert (Mountain, 2010). In the long term, however, the discipline and rigour that Karajan instilled in the orchestra when recording helped to raise the quality of the Philharmonia's concert performances and it rapidly gained in status both at home and abroad.

The benefits of recording, both artistic and commercial, were clear and other orchestras sought to compete for the available work. When the London Symphony Orchestra (LSO) appointed Ernest Fleischmann as General Manager in 1959, he instigated a revival in its fortunes, partly through the recruitment of new players but also because Fleischmann realised the potential of recordings to promote the orchestra (Marriner, 2010). The London Philharmonic Orchestra meanwhile, which had been regarded as one of London's finest orchestras before the war, struggled to match the standards of its rivals; the conductor John Carewe, who worked as an editor and producer for both Everest Records and EMI during the 1950s, recalled that the LPO was only used if the LSO was unavailable (Carewe, 2009).

There were other disadvantages to competition and it did not necessarily result in the best recordings as orchestras would often accept work that was not well paid and therefore required artistic compromises to make up for the fact that there was insufficient rehearsal time or a limited number of sessions in which to complete the work. During the 1950s and 1960s American record companies frequently chose to record in London and mainland Europe where orchestras were less expensive and union rules were less restrictive than those in the USA. From 1955 to 1965 the LSO recorded every summer for the Mercury

label, working under the conductor Antal Dorati. The terms of the contract were such that there was considerable financial pressure to record as much as possible in the number of sessions booked and works were often recorded quickly and out of sequence. In one instance Neville Marriner recalled recording a series of Haydn symphonies where ‘we’d record three slow movements in one session and two finales in another; we never did a complete work, and that was a series of very forgettable recordings!’ (Marriner, 2010).

As well as limited rehearsal time, a lack of suitable venues, and competition amongst orchestras, interviewees also cited the lack of permanent contracts for orchestral players as a further contributory factor in poor standards of performance. Most orchestral musicians were employed on a freelance basis with little or no job security and would seek the most lucrative or the most prestigious work, substituting a deputy if a more attractive offer arose. This could prove problematic in concert, especially if the deputy had not attended rehearsals, but the problems caused by deputising or ‘depping’ became even more acute when recording as changes in orchestral personnel between sessions could lead to problems with continuity and affect the ability to edit between takes. Nor was the problem confined to British orchestras: depping was also common practice in Vienna where the best players might appear with several orchestras or other ensembles. The Vienna Philharmonic – a large orchestra with many players on its roster – was notorious for depping amongst its players, and the problem became so bad that the conductor George Szell refused to work with the orchestra unless it could guarantee to have the same players at rehearsals and performances, whether for concerts or recordings (Mordler, 2009). The founder of Westminster Records, James Grayson, even recalled an occasion during a recording of Berlioz’s *The Trojans in Carthage* in Paris with the Orchestre de la Société des Concerts du Conservatoire, where the conductor, Hermann Scherchen, was forced to

abandon sessions until the orchestra agreed that there would be no more depping (Grayson, 1980). The problem was difficult to control while players were not contracted to a particular orchestra and some musicians, particularly the better players who had a greater choice of job offers, appreciated the freedom that this gave them. Some feared that signing a contract would ‘kill the feeling of spontaneity that existed as a free-lance player’ (Kok, 2009) and many agreements were in fact verbal. This gave players freedom but little in the way of job security, meaning that they often played regularly in multiple orchestras and ensembles and might perform several times a week. This, combined with the use of deputies and the lack of adequate rehearsal time, meant that all too frequently concerts were under-rehearsed and the players often tired and unable to play at their best.

Recording, however, usually offered better terms of employment compared to concert activity, due to higher fees, fewer unsocial hours, and less travelling. Musicians were understandably keen to take on recording work and during the peak of recording activity in the late 1950s there was so much work available that some players found themselves working several sessions per day, often with different ensembles. The clarinettist Basil Tschaikov recalled that he could be engaged for as many as three sessions a day, seven days a week, and that he did not restrict himself to playing in symphony orchestras but also played light music under Mantovani and Eric Robinson as well as ‘loads of film sessions, which were very well paid’ (Tschaikov, 2010). Although the rotating line-up of orchestras could be financially advantageous for musicians, it could lead to problems with discipline, as noted by Alexander Kok:

[I] used to get irritated with players who weren’t listening to the conductor and consequently didn’t know where to begin in the middle of the movement. Often they would talk into the red light and even when the engineer had asked for silence some nevertheless tried to finish their chat. It was not only a lack of consideration

for the soloist but I sometimes wondered if some of the more politically minded were trying to make the session longer and so possibly qualify for overtime.

(Kok, 2009)

The problem of indiscipline during recording sessions is borne out in correspondence between the founder of the Philharmonia Orchestra, Walter Legge, and Jane Withers (Managing Director, Philharmonia Orchestra, 1952-64). In a letter dated 12 October 1953, Legge wrote to say that he was concerned by reports about the orchestra's lack of discipline when recording:

The matter is quite simply the lack of manners and inattention of the Philharmonia Orchestra. In the last two years only Toscanini and a very few other conductors – and also soloists – have not commented privately to me about the Orchestra's lack of attention and its noisiness during rehearsals and recording sessions. It goes further than this – The Gramophone Company's staff also complains because the Philharmonia are late to start; late back after the interval; they ignore signals; they are best known as the noisiest Orchestra. All this is a waste of the Gramophone Company's money.

(Sanders, 1998, p. 129)

Legge seemed reluctant to confront the orchestra himself and made it clear to Withers that he expected her to deal with the situation: 'Either you see that the Orchestra behaves itself as well as it plays or we part company. It is up to you to see that their manners are as good as their finest performance' (Sanders, 1998, p. 130). According to the cellist Denis Vigay this reluctance to deal with the situation was typical of Legge – regarded by Vigay as 'a very unpredictable man; a mixture of bombast and cowardice' (Vigay, 2010) – as he observed at first-hand:

I remember once at a rehearsal with Karl Böhm things weren't going well [but] Legge wouldn't come in and do anything about it. He sent in Jane Withers, the orchestra manager, to confront anyone if there were difficult situations – very strange because in other ways he could be very overbearing and autocratic.

(Vigay, 2010)

Discipline in the studio and the substitution of deputies on recording sessions remained a concern, especially while there was sufficient work to enable the best musicians to have a

choice as to which engagements they accepted or rejected. Orchestras seemed unable or unwilling to address the problem and without contracts they had little power over individual musicians other than to remove them from the rosters. The best players knew that they were in demand and that while there was an abundance of work they could continue to choose which jobs to accept. Inevitably, with players taking on so much work there was a risk of them being unavailable for recording sessions and, as a result, leading orchestras including the RPO and the Philharmonia tried to limit this by putting certain players on retainers that would give the orchestra first call on their services. Even then, 'star' players such as the horn player Dennis Brain were in such demand that they were able to play in both orchestras as they chose, and there were still problems of depping amongst the rank and file players. Eventually, Walter Legge and Herbert von Karajan devised a solution, realising that if the Philharmonia scheduled its recording sessions from 5pm to 8pm 'they could prevent players doing three-session days, and therefore playing in both orchestras' (Vaughan, 2009). Forcing players to choose which orchestra they played with helped to promote a more consistent line-up of players at recording sessions, a development welcomed both by conductors and record producers.

Despite such strictures, occasionally there were problems that impacted on recording sessions but which were difficult or even impossible to control – such as rivalries between artists. Throughout their careers there was an intense rivalry between the conductors Herbert von Karajan and Georg Solti. Karajan was artistic director of the Vienna State Opera from 1957 to 1964, during which time Solti conducted the Vienna Philharmonic in several of Decca's finest recordings, including parts of Wagner's *Ring* cycle. This created the potential for difficulties as the members of the Vienna Philharmonic are drawn from the same pool of players that make up the opera orchestra and the Decca recording crew

believed that if Karajan knew that Decca were recording at the Sofiensaal he would deliberately over-rehearse the opera orchestra so as to tire the players in an attempt to sabotage Solti's efforts (M. Raeburn, 2012). Whether Karajan's strategy was successful or not is impossible to tell but there was little that Solti or Decca could do about it even though – or perhaps because – Karajan also recorded occasionally for Decca with the VPO from 1959 onwards. Rivalry was understandable given the power of recordings to bolster a conductor's career through marketing and global distribution. Recording could affect careers in other ways too as it had the potential to distort the market for conductors seeking new appointments. When orchestras were seeking to appoint a new conductor they might well take into consideration whether a particular artist had a recording contract that would guarantee income for the orchestra. Similarly, there could be implications for record companies if a conductor managed to secure an appointment with a major orchestra as they might insist on recording certain repertoire as part of re-negotiating a contract. In turn, this could influence an orchestra's concert programming as a conductor scheduled to record a particular work would almost invariably want to programme it in concerts beforehand (Faulkner, 2009). Rivalry between artists was in many ways unwelcome but, given the rewards at stake, largely unavoidable.

Changing fortunes: orchestras in the 1960s

At the peak of recording activity in the 1950s there was enough recording work to support all the London orchestras. By the early 1960s, however, the number of available recording sessions was in decline (see illustration in Chapter 3, p. 103), and orchestras that had flourished during the recording boom found themselves under financial pressure.

Following the death of Sir Thomas Beecham in March 1961, the RPO endured uncertainty about its future, becoming a self-governed orchestra in 1963. In the same year, however,

the Royal Philharmonic Society decided to sever its links with the orchestra, arguing that the right to the use of the name 'Royal Philharmonic' was based on a verbal agreement with Sir Thomas and that this agreement had lapsed with his death. John Carewe speculated that there was a feeling within the establishment that if one of the London orchestras were to fail it would reduce the competition for the diminishing amount of work available and also help to drive up standards as a smaller number of orchestras would be able to compete for the best players (Carewe, 2009). Carewe wrote an article under the title 'Orchestricide' in which he argued that the RPO's survival was dependent on its ability to retain its identity, stating that it was important for record companies to be able to hire an orchestra with 'a name that has pull' and that at that moment the RPO had '£100,000 worth of business which depends on the use of its title' (Carewe, 1964).

By the time the article appeared another crisis had arisen following Walter Legge's attempt to disband the Philharmonia Orchestra in March 1964. Legge did not disclose the true reason behind his actions but it was most likely related to the fact that his contract with EMI had come to an end at the same time, thereby limiting his ability to secure recording work on favourable terms for himself and the orchestra. Within a week, the orchestra had elected to continue as a self-governing body but as Legge refused to concede to the continued use of the name 'Philharmonia Orchestra' it was forced to rebrand itself as the 'New Philharmonia Orchestra' instead. In the cases of both the RPO and the Philharmonia, the continued use of the orchestra's name was seen as vital in securing future recording work as the orchestral 'brand' was an important guarantee of quality both to record companies and to record buyers. These cases also serve to illustrate the mutual dependency at the heart of the relationship between record companies and orchestras and the importance of those connections in ensuring the financial viability of orchestras. The

decline in recording activity in the early 1960s clearly had a profound effect on the musical profession as orchestral musicians saw an important source of revenue diminishing, leading to even more intense competition to secure the available recording work.

Young artists: recording as opportunity

Recording also had a great impact on the careers of individual artists during the 1950s and 1960s, many of whom prospered as a result of recording activity, finding that it was of great benefit in building and sustaining their careers. Paul Badura-Skoda and Alfred Brendel both lived and worked in Vienna during the 1950s and found that with so much recording activity taking place in the city, for both major and independent record companies, there were plenty of offers of work for good musicians (Badura-Skoda, 2009; Brendel, 2011). Both were in their twenties at the time and, in common with other young musicians, experienced the recording boom of the 1950s as a period of great opportunity. Not only were they able to secure regular work but recordings could be distributed far and wide, giving them exposure with audiences at a national and international level although in many cases recordings by American companies had little distribution outside the USA. There was no doubt that having a recording contract also conferred a higher status on musicians since recording was still a relatively exclusive activity and, therefore, to have made a recording was a sign of recognition. Yet there were drawbacks too. Young artists, including Brendel, Badura-Skoda, and Alan Rowlands, often found that they were asked to record specific works that were not in their repertoire, and had to learn works especially for recording sessions without necessarily having the opportunity to perform them in public. In some cases, as with Brendel's 1952 recording of Prokofiev's Fifth Piano Concerto, it could also mean recording with an unfamiliar conductor and orchestra, with limited opportunity for rehearsal. Recording under such circumstances was clearly less

than ideal and did not always result in the best performances but at that stage in their careers the artists felt that they were not in a position to refuse and were glad of the work. They also realised that as their careers progressed and as their reputations grew they would have a greater input into the choice of repertoire and artists on subsequent recordings, and most were content to bide their time (Badura-Skoda, 2009; Brendel, 2011; Rowlands, 2009).

Despite its drawbacks, recording generally remained an attractive and lucrative activity for those who were offered work. This meant that there was often great competition between artists and ensembles to secure the best work, and amongst record companies to secure the best artists. For those young artists who were able to cope with recording unfamiliar works at short notice and with previously unknown collaborators, there was considerable potential for recording to help in establishing careers. For more established artists the fact of a recording contract could unlock further career opportunities, whether in the form of concert bookings or consideration for prestigious conducting posts. Recording undoubtedly had the power to influence and shape artists' careers and for those able to benefit it was seen as a positive element in the life of the professional musician.

Artists in competition with their own recordings

Two unexpected and less welcome effects of recording were the influence it began to have over concert performance, and the perception that concert artists often had to compete with their own recordings. The regular hours and the lack of travelling meant that many musicians regarded recording as an attractive alternative to the demands of touring and concert life; some orchestral musicians found that they were spending more time in the recording studio than performing in concert, and could be engaged for two or even three

sessions a day, several days a week. At the same time, audiences familiar with technically flawless recordings and the illusion of seamless performances began to expect to hear the same standard of performances in the concert hall. Whether it was a conscious response to audience expectations, or simply the result of so many recording sessions, musicians found that gradually 'we began to emulate what we were doing in the studio and the concert playing became more and more like the playing in the studio' (Tschaikov, 2010). Alfred Brendel has implied that in some cases this could be a deliberate act, stating that constant exposure to records and recording 'induces some artists to play in a concert as though for a record, in the fear that the audience is listening as though to a record' (Brendel, 1990b, pp. 202-204). Interestingly, in the same article Brendel suggests that a greater use of live recordings might provide a way of injecting some spontaneity into recorded performances and realigning the expectations of audiences and performers. Over 20 years later, live recordings have become increasingly common as a low-cost way for orchestras and other ensembles to make recordings, and listeners have become accustomed to hearing recorded performances that may have imperfections but also have a vitality that some find lacking in studio recordings (Philip, 2004, pp. 47-49).

Audience expectations could be particularly problematic for artists on tour as several interviewees, including Alfred Brendel and Sir Neville Marriner, reported that they often felt that they had to compete with their own recordings when giving concerts. The widespread availability of recordings and their ability to establish the reputations of artists on a worldwide basis could lead to artists being engaged on the strength of their recordings. In many cases this had a beneficial effect on artists' careers as it meant that even when appearing somewhere for the first time they had an established audience familiar with their recordings and eager to hear them in person. This was generally

considered a positive factor where it involved performances in established musical centres such as New York, with dedicated concert halls, access to first-class pianos, and knowledgeable audiences. The realities of touring in parts of rural America or small towns in Australia, however, were very different as musicians often found themselves performing in community centres or similar venues with unsympathetic acoustics and poor-quality pianos. Artists were therefore unable to reproduce the sound or the performances that listeners had heard on their recordings, sometimes leading to unfavourable comparisons by audiences and critics (Brendel, 2011; Marriner, 2010). In some cases the fault was not with the venues or pianos, but the fact that some artists were overly reliant on editing when recording and were simply unable to ‘match the standards they had apparently achieved in recording’ with the result that they ‘recorded themselves off the public platform’ (Ponsonby, 1984).

Competing with one’s recordings could also have long-term implications for artists as noted by both Paul Badura-Skoda and Alfred Brendel. Both pianists felt that they benefited from the exposure gained through the recordings that they made early in their careers for independent labels working in Vienna, such as Vox and Westminster. But later, the fact that they had already recorded so much of the standard repertoire acted as a barrier in their efforts to secure contracts with major record companies. A&R managers rebuffed approaches from Brendel and Badura-Skoda on the basis that there was little point in re-recording the same repertoire with them as any new recording would have to compete with their previous recordings, many of which were already available at mid- or even budget price. Despite this, Brendel was offered contracts by several companies following a particularly successful concert in London in the late 1960s, and eventually signed with the Philips label. Badura-Skoda, meanwhile, found that his early success continued to hamper

his later career, even after the Westminster label ceased trading and his early recordings had been deleted from the catalogue. Despite his reputation as a fine concert pianist, and although he continued to make recordings for a number of different labels, Badura-Skoda never managed to secure a contract with a major record company; he eventually found his career eclipsed by those of other pianists who benefited not only from the higher status but also the greater marketing potential afforded by a contract with one of the majors (Badura-Skoda, 2009; Brendel, 2011).

As well as the frustrations, there were other more positive aspects to the influence of recording on careers as there were elements of the recording process that artists felt were of benefit to them in informing their concert practice. Listening to playbacks, both in the studio and on his own tape recorder, was noted by Alfred Brendel as important in informing his understanding of both the recording process and his performance. Other artists also found that recording could help them to review their approach to concert performance. For instance, Sir David Willcocks acknowledged the tremendous impact of recording on performers and the way in which it had changed his outlook on interpretation and performance, saying that it had forced him to ‘question everything I’ve done and everything I was taught to do over phrasing and the scale of performances’ (Willcocks, 1984). Performers also found that techniques learnt in the studio as part of recording practice could be used to their advantage in concert situations. Following a career as a producer for both Decca and EMI, John Mordler became director of the Monte Carlo Opera and noted that conductors often applied recording techniques in the opera house:

Conductors learnt a lot from recording as far as balance was concerned. Simple things like if you’ve got first violins doubling a soprano and they’re playing *forte* you’re never going to hear the singer; in fact any line that’s doubling the singer in

the same register – keep it down! They learnt to put that in use in the opera house as well.

(Mordler, 2009)

The expansion of repertoire

Possibly one of the greatest outcomes of the recording boom of the 1950s was in the expansion of the repertoire available on disc. As listeners were exposed to a greater diversity of works and musical genres they became more receptive to unfamiliar concert repertoire, encouraging artists to experiment with concert programmes. There were sound technical reasons behind the need to re-record repertoire following the development of first the mono and then the stereo LP, since the refinements in sound quality demanded new recordings to match. But the need to re-record repertoire was not based on technical developments alone as there was a realisation that a record company's catalogue needs to reflect the artists of the day and their interpretations even if, inevitably, this means re-recording the same or similar repertoire. Maurice Oberstein, chairman and chief executive of CBS (UK) explained this by describing a record company's catalogue as 'a vital thing – it can diminish in value without new interpretations, new artists' (Oberstein, 1984). There was, therefore, a constant cycle of recording and re-recording of repertoire by different artists but the peculiar circumstances of the 1950s meant that this escalated to an unprecedented level of activity. At the same time, having invested heavily in building their catalogues, record companies were understandably reluctant simply to discard older recordings and began to exploit their back catalogues by re-issuing deleted titles on budget labels and using alternative distribution networks such as supermarkets to reach new audiences and avoid direct competition with record shops selling the latest recordings. This added to the perception that there was a large amount of repertoire available although inevitably there was much duplication.

Robert Ponsonby, former BBC Controller of Music (1972-85), was highly critical of what he regarded as the record companies' conservative approach to repertoire, feeling that their concern for the commercial aspects of recording meant that they often failed to demonstrate imagination or flair in their choice of repertoire (Ponsonby, 1984). Edward Greenfield was also critical of the major companies, as he thought that on too many occasions both EMI and Decca released records that simply duplicated existing titles in the catalogues without necessarily improving on them. Instead, Greenfield thought that they should be making a conscious effort to produce recordings that offered some advance over previous versions of the same works (Greenfield, 2009). Setting out to improve on existing recordings had proved a highly successful strategy for Deutsche Grammophon when it entered the LP market, since by only releasing those recordings that it judged to be better than those of its rivals it soon established a reputation for the quality of its recordings.

Yet these criticisms seem unfair: if the record companies' approach to repertoire did seem conservative at times it was because they were only too well aware of the need to balance the risks associated with new and unfamiliar repertoire against the certainties of the established core repertoire. In order to reduce some of the risk involved in the selection of repertoire to be recorded, both EMI and Decca formed repertoire committees to consider the commercial viability of proposals for new recordings. Peter Andry was instrumental in establishing EMI's International Classical Repertoire Committee (ICRC), which met annually from May 1959 onwards. Andry explained that the committee included representatives of EMI's subsidiary companies from around the world as well as executives from the parent company. The committee would be presented with proposals for new recordings and the various representatives would give feedback on estimated sales figures based on their knowledge of local markets (Andry, 2009). Sir Joseph Lockwood

immediately saw the benefits of the committee as it meant that ‘recordings were no longer made on a whim’ (Lockwood, 1984) and decisions about the choice of artists and repertoire were made on a more commercial basis, improving efficiency and reducing costs. Decca also had a repertoire committee that met annually with representatives from its two subsidiary companies (London in the USA and Teldec in Germany) as well as associate companies to which it licensed recordings – unlike EMI it did not have subsidiaries in each territory. This type of commercial relationship meant that Decca’s committee had a slightly different purpose in that its meetings tended to inform associate companies of Decca’s recording plans rather than consult them on repertoire and artists, although informal discussions did take place outside the main meeting (Kehoe, 2009). Meanwhile, smaller, independent labels could be more flexible in their approach to repertoire, since with few of the overheads of the major companies they could keep costs to a minimum and take more risks. Consequently, they were less dependent on high sales and were able to expand into niche repertoire such as contemporary music or early music, both of which had to a large extent been neglected by the major labels. In many cases the major labels were happy with this arrangement as the small labels were not in direct competition with them, and by expanding the repertoire available on disc they contributed to the overall development of new audiences and new markets for recordings.

The choice of repertoire on records at the major labels, meanwhile, was increasingly influenced by committees, and some artists were concerned that where the choice of repertoire was influenced by, rather than merely informed by, commercial concerns it could ultimately be at the expense of a balanced catalogue. Martin Lovett, cellist with the Amadeus Quartet, recalled that many of the quartet’s early recordings from 1950 to 1958 were made for EMI’s HMV label at its Abbey Road studios. By the end of the 1950s,

however, HMV had decided to discontinue the recording of chamber music as sales were too small, even though the costs involved in recording such repertoire were low and chamber music recordings therefore represented little long-term risk in terms of the investment required. Despite this, chamber music's low sales figures meant that it could take many years for a recording to break even and for a major record company with significant overheads cash flow was a concern. Fortunately, the Amadeus Quartet was able to transfer to Deutsche Grammophon, which regarded chamber music as an essential part of its core repertoire and with which the quartet made the majority of its recordings over the next 25 years. In light of the growing reputation of the quartet and the prestige attached to its recordings for Deutsche Grammophon, Lovett felt that EMI eventually came to regret its decision (Lovett, 2009).

Proof that the commercial realities of the industry could not be ignored is demonstrated by the fact that by the time the British Library's *Oral History of Recorded Sound* interviews were made in the 1980s the record industry had undergone considerable contraction as a result of the recession of the 1970s. Decca and EMI were both sold – to Polygram and Thorn respectively – and many of the smaller, independent companies were forced to merge or to cease operations. Inevitably savings had to be made and Ken Townsend, manager of Abbey Road Studios, commented on the ways in which costs were reduced, for instance by cutting the number of sessions for a classical recording from four to three, and by being even more careful in deciding who and what was to be recorded (Townsend, 1983). The decision to cut the number of sessions would have implications for the way in which recordings were made as, with less time in which to record the works, there would inevitably be pressure to make greater use of editing and to record in shorter takes. By contrast the 1950s was a decade in which record companies could afford to be indulgent as

they rebuilt their catalogues with new recordings, first for the mono LP and then again for stereo, and artists generally had more time in which to record. Deutsche Grammophon was also shielded from the need to generate any significant return on its recordings as it was effectively subsidised by its parent company, Siemens (Faulkner, 2009). It can be argued that to some extent this distorted the marketplace as EMI and Decca had to be more commercially minded and at times cautious, although they aspired to similar high artistic standards and were at times prepared to invest in recordings with little chance of commercial success.¹⁶ Deutsche Grammophon, meanwhile, could concentrate on quality in every aspect of its operation and issue recordings with less concern as to their commercial viability.

Despite the criticisms and some of the caution shown by record companies, the repertoire available on recordings did increase throughout the 1950s. As well as increasing the range of repertoire available on LPs, recording also encouraged musicians to explore alternative repertoire when programming for the concert hall. Throughout the 1950s concert programmes in general were regarded as highly conservative, promoting a relatively narrow range of works, and orchestras were particularly risk-averse as without sponsorship or state funding they could not afford to sustain a loss at the box-office with an unpopular programme. As the repertoire on records began to expand, however, this created opportunities for change. Before the 1950s, for instance, the works of composers such as Mahler and Bruckner were rarely heard in UK concert halls and were unknown to the majority of concert-goers, but as the availability of recordings of their works increased, promoters and performers gained sufficient confidence to begin programming them (Kehoe, 2009; Pollard, 2009).

¹⁶ When Decca recorded Strauss's opera *Die Frau ohne Schatten* in 1992 it was estimated to have cost £1 million to produce but was never expected to make a profit.

Early music

One of the major beneficiaries of the expansion of the repertoire on recordings was the early music movement. At the beginning of the 1950s, the early music movement in Britain was at an early stage in its development. Pioneering artists such as Alfred Deller and Karl Haas had done much to raise the profile of early music but otherwise few programmed it regularly in the concert hall. There were also limited opportunities to study early music in Britain as, although events such as the Dartington Summer School provided some opportunity for tuition and the exchange of ideas, it was not taught in conservatoires and many of the leading figures of the early music movement were essentially self-taught (Amis, 2009; Deller, 2009). Works by composers such as Vivaldi and Monteverdi were largely unknown amongst audiences and, with limited knowledge of period style, performances of works by Bach and others were frequently given by large ensembles in what would be regarded now as an inappropriate manner (Amis, 2009; Walker, 2010). Therefore early music was seen as something of a niche market and the major record companies were reluctant to record it, believing that the records would not sell. Independent companies, however, realised that it was relatively inexpensive to record early music ensembles and, with steady sales and little competition in the marketplace, that there was little financial risk (Pollard, 2009). The recording industry soon became instrumental in the development of early music in the 1950s as recording activity provided a vital source of income for emerging ensembles, enabling them to subsidise concert performances, while also helping to stimulate interest amongst promoters and audiences. This enabled the formation of larger ensembles including the Academy of St Martin in the Fields, founded in 1958 as a chamber orchestra specialising in baroque repertoire. The Academy was an attractive proposition for record companies as the flexibility of the

ensemble and its choice of repertoire provided further opportunities to record new and unusual repertoire that would fill gaps in the existing record catalogues.

By the end of the 1950s the boom in new recording activity had already peaked and the number of sessions was in decline but the range of repertoire available on record was greater than ever before. Early music, which had little representation on recordings before the 1950s, was now an established genre within record company catalogues. The works of previously lesser-known composers, including Mahler and Bruckner, began to feature in new recordings, helping to raise awareness and develop audiences for them.¹⁷ Recordings of operas by composers including Wagner and Britten, which record company executives had assumed would be impossible to sell in sufficient numbers to justify the cost of making them, had proved popular with record buyers. The interest in recordings encouraged artists and promoters to be more adventurous in their concert programming and the income from recording activity, particularly in the case of orchestras, enabled them to take risks with unfamiliar repertoire and unorthodox concert programmes. The impact of the expansion of repertoire on recordings in the 1950s on musical practice is impossible to measure but the testimony of those who worked through those years bears witness to its influence.

Summary

The accounts of those involved in recording in the 1950s and 1960s reveal the diversity of working practices that existed. The fragmented nature of the industry meant that the

¹⁷ Listings in *The World's Encyclopaedia of Recorded Music* show an increasing number of recordings of works by Mahler and Bruckner (Clough & Cuming, 1952a, 1952b, 1953, 1957). In the 1950s Decca alone released several works each by Mahler and Bruckner in recordings with the Vienna Philharmonic and Concertgebouw orchestras.

experience of musicians varied widely according to the particular ethos of each record company, its resources and facilities, and the skills and expertise of its staff. Those working for the major record companies typically had access to the best resources and the latest technology but, as seen in Alan Rowlands' account (see Chapter 5, pp. 170-172), some independent companies struggled to keep up with developments and artists were often forced to work in less than ideal circumstances. Artists nonetheless recognised the importance of recording to their careers and, while some older artists made few concessions to the needs of recording, others proved to be highly adaptable in adapting their performance as necessary. Many saw the 1950s as a period of great opportunity, particularly for young artists eager to make their first recordings and launch their careers, and artists including Alfred Brendel and Sir Neville Marriner spoke of the importance of recording in providing them with opportunities for work and in promoting them on an international basis.

One of the most significant changes in working practices came with the development of the role of the record producer in response to the increasing complexity of the recording process and the need for an informed observer who could negotiate with both artists and engineers. The growing influence of the producer, discussed in Chapter 4, led to a shift in the balance of power within the studio that was often met with resentment on the part of engineers and mistrust from musicians. Producers therefore had to work hard to establish their authority and gain the trust of artists and engineers; with no standard model and no training available, producers also had to develop their own style of working.

Recording also had an impact beyond the studio as the boom in recording activity created employment for musicians while record companies continued to re-record their catalogues

for the mono and then the stereo LP. It was also linked to changes in musical practice as the emphasis on technical perfection on recordings encouraged artists to raise their standards of performance in concert. It led to an expansion of the repertoire on record, which in turn encouraged artists and promoters to programme a greater diversity of works in the concert hall. However, there were also less desirable effects as musicians found that their playing in concert began to resemble that on records, while familiarity with recordings led to increased audience expectations, which meant that artists were often in competition with their own recordings. This last point in particular demonstrates the extraordinary influence of recording in the 1950s: at the beginning of the decade recording was only beginning to move beyond the documentary style of recording common in the era of the 78 rpm record but by the late 1950s and early 1960s recordings were beginning to influence concert practice.

The complexity of the picture that emerges makes it difficult to generalise about working practices in the 1950s – in many ways it can be seen as a transitional period in which musicians, producers, and engineers, confronted by advances in technology, were forced to negotiate a path through the changes. The continued technical development meant that working practices did not remain static and continued to evolve throughout the 1950s. By the end of the decade, the rate of technical development had slowed – as had the scale of recording activity – and although working practices continued to develop in relation to stereo recording they were generally more settled. Recording in the 1950s could be challenging and uncertain but many of those interviewed in this study look back on the period with fondness, regarding it as an exciting moment in their careers and as a golden age in recording history.

Part III:
Case studies

Introduction

This section of the thesis consists of five case studies. In the first four, specific recordings have been selected for consideration as studies representing different phases in the development of recording during the 1950s and 1960s. The first study considers HMV's 1952 mono recording of Wagner's *Tristan und Isolde*, conducted by Wilhelm Furtwängler – significant not only as the first complete studio version of *Tristan*, but also as the first large-scale operatic recording to be made by EMI in London using tape recording. The study draws on the available literature and on original interviews conducted by the author with Dietrich Fischer-Dieskau, who sang the role of Kurwenal, and members of the Philharmonia Orchestra who also took part in the recording. The second case study considers Decca's 1958 stereo recording of Britten's *Peter Grimes*, conducted by the composer. *Peter Grimes* was one of the first stereo opera recordings to be made using the grid system developed by Decca to plot the movement and placement of singers, and is an early example of the stereo opera productions associated with John Culshaw. As well as considering the available literature, this study draws on archive material including a rare and possibly unique copy of the Decca recording production notes. The third case study considers Decca's 1966-67 recording of Strauss's *Elektra*, one of Culshaw's last major projects for Decca. By this time stereo recording and Culshaw's production methods were well established but critics did not always respond favourably and *Elektra* was the subject of a prolonged debate in the pages of *High Fidelity* magazine about the legitimacy of aspects of Decca's approach to stereo opera. Although this recording is slightly outside the core period of this thesis it falls into what might be termed 'the long 1950s' as the methods of production used on *Elektra* were the same as those developed for *Peter Grimes* and other stereo opera recordings from the late 1950s onwards. Therefore the recording and

critical responses to it as discussed in *High Fidelity* are typical of the period in question and relevant to a discussion of the aesthetics of stereo opera. The fourth case study considers the 1964 recording of Rimsky-Korsakov's *Scheherazade* for Decca's Phase 4 Stereo label. Concert-hall realism was the dominant aesthetic in the recording of classical music in the 1950s and 1960s but the creative potential of stereo encouraged some record labels to experiment with alternative approaches. In many cases these amounted to little more than the use of gimmicks to produce stereo samplers or novelty records (see discussion pp. 162-164) but other labels adopted a more sophisticated approach. Amongst these was Decca's Phase 4 Stereo, which made a feature of extreme stereo effects, using multiple microphones and a 20-channel mixer to enable engineers to alter the balance and highlight instruments or sections of the orchestra. It therefore represents a very different approach from that of Decca's mainstream classical recordings. The final case study is of a television programme, *The Anatomy of a Record*, made by London Weekend Television in 1975 and documenting the recording of Mozart's Piano Concerto No. 27 in B flat, K. 595, performed by Alfred Brendel (piano) and the Academy of St Martin in the Fields conducted by Sir Neville Marriner. As well as providing documentary evidence of recording practice in the era of tape and the LP, the programme also reveals some of the interpersonal dynamics at work during sessions and the tensions that can arise between individuals.

Each study includes some evaluation of the recording in question in comparison with contemporary recordings of the same works. All the recordings are currently available on CD or as digital downloads and these were used during the listening exercises although copies of the original LPs were also consulted in the case of *Elektra*. One possible concern was that in the process of transferring the recordings from analogue to digital media

changes may have been made to the balance and sound of the recordings. During an interview with Tony Faulkner, a highly respected engineer with considerable experience of ADRM (analogue to digital remastering) transfers, the issue was raised as to whether a modern listener encountering a recording from the 1950s remastered in a digital format would have a similar audio experience to someone listening to the same recording on LPs. In Faulkner's opinion 'there's not a lot of scope for messing around with them [...] You can turn the treble up or turn the treble down, or you can put a bit of echo on, but generally you leave it alone' (Faulkner, 2009). As far as recordings of classical music are concerned there is generally no opportunity to refer to the session tapes when remastering as in most companies the standard practice was to retain session tapes for a limited period after a recording had been issued; the tapes would then be erased and used again. Working from the master tape generally leaves little scope to change the sound or balance of the original recording and most digital remastering involves removing extraneous noises and improving edits to render them inaudible or less noticeable. Therefore there is unlikely to be any great difference between the sound of the original recording as heard on LP and the same recording digitally remastered. The CDs and digital downloads used in the listening exercise are therefore assumed to be a fair representation of the recordings as heard originally and differences in the listening experience are largely in terms of the quality of reproduction.

Three CDs, containing copies of the tracks for which references are given in the case studies, are enclosed with this thesis. A list of the tracks on each CD and their sources is provided at Appendix 6 while references for the original recordings are provided in the discography on p. 347.

7 *Tristan und Isolde* (1952)

Introduction

Before the introduction of tape recording and the long-playing record, complete recordings of the operas of Richard Wagner were generally considered commercially unviable, as the limited duration of the 78 rpm record meant that any such recording would need to be issued on dozens of discs. Instead, recordings of the operas were generally released in abridged form or as collections of excerpts. Unless they could attend performances, for many people the only way to experience an entire Wagner opera was by listening to live broadcasts on the BBC or on foreign radio stations broadcasting from European opera houses via long wave (Chavez, 2010).

The LP record finally made complete opera recordings a realistic proposition but although various recordings were made of live performances of *Tristan und Isolde* and other Wagner operas during the 1950s, most were not released at the time and complete recordings remained a relative rarity.¹⁸ HMV's 1952 mono recording of *Tristan und Isolde*, conducted by Wilhelm Furtwängler, was therefore a landmark in recording history as the first complete studio recording of the work and also HMV's first large-scale operatic production to be made entirely using magnetic tape. The 1952 *Tristan* was a major undertaking with many challenges, both technical and artistic. There were also significant financial risks; despite critical acclaim for the recording, a quote from Walter Legge confirmed the continued reluctance of record companies to invest in recordings that were unlikely to generate sufficient revenue to recoup their costs:

¹⁸ Details of live and studio recordings of *Tristan und Isolde* made before and during the 1950s can be found at: <http://www.operadis-opera-discography.org.uk/CLWATRIS.HTM>

HMV's *Tristan* with Furtwängler, Flagstad and Fischer-Dieskau (one of the great glories of gramophone history) and the Furtwängler *Walküre* [1954] produced such poor sales in relation to the great costs of making these that EMI have prudently shown no inclination to invest tens of thousands of pounds in works which seem unlikely to produce even ten thousand sales.

(Mann, 1960, p. 5)

Indeed, there have been few studio recordings of *Tristan* since then and live recordings, which are less expensive to make and can be produced more quickly, are more numerous in the catalogues. For many, Furtwängler's recording remains one of the finest interpretations of *Tristan* on record, despite the presence of later renderings that benefited from stereo sound and other advances, and continues to be the benchmark against which other recordings of the work are judged (Brown, 2000, pp. 14-15; Holloway, 1979, p. 367).

Casting

One factor in the continued success of the 1952 Furtwängler recording is its casting as it succeeded in capturing several outstanding Wagnerian singers of the era including Josef Greindl, Ludwig Suthaus and Kirsten Flagstad. Flagstad in particular – although coming to the end of her career by 1952 – was regarded as one of the finest and most experienced singers in the role of Isolde on the operatic stage. However, some aspects of the casting were less well received and critics have frequently expressed reservations as to the casting of Blanche Thebom as Brangäne. Thebom was chosen at Flagstad's suggestion as a replacement for Martha Mödl, who was unavailable, but Thebom's performance was felt to be disappointing and below the calibre of the rest of the cast. The casting of Dietrich Fischer-Dieskau in the role of Kurwenal also gave rise to doubts, as expressed in Alec Robertson's review in *The Gramophone*:

Fischer-Dieskau [...] is most touching in Kurwenal's tender moments, in his devotion to Tristan, but his voice coarsens in tone when he has to exert it to the

full, and I had the feeling that he was not so entirely in the skin of the part as he was in the admittedly less taxing part of Wolfram in *Tannhäuser* when I heard him sing it.

(Robertson, 1953)

In an interview towards the end of his life Fischer-Dieskau admitted that he had been reluctant to take part but had been persuaded to do so by Furtwängler:

Fischer-Dieskau: Yes, I did that against my will as I didn't consider myself as a Kurwenal; I wasn't a heroic baritone. But [Furtwängler] invited me to his flat in Dahlem and spoke to me about it, and about his ideas for the piece and for the part and the singer he needed, and he persuaded me to do it; there was no way out and I had to say 'yes'.

Curran: In your autobiography you said you thought it was too early for you.

Fischer-Dieskau: He always said "we shall see ... I will do the orchestra softly and very slow". It was a very natural *forte* all the time, which Kurwenal calls for, but it needed a bigger voice and that caused difficulties. [...] In that recording I sound lighter and brighter than the tenor! The tenor sounds like a baritone and I sound very light but that was what Furtwängler wanted.

(Fischer-Dieskau, 2011)

Despite Furtwängler's conviction that Fischer-Dieskau was right for the role of Kurwenal, the singer himself had continued to have reservations about his suitability. In an earlier interview he recalled that these doubts had even led him to try to modify the sound of his voice until he was dissuaded by Furtwängler, who then advised him on how to approach the part.

I tried to get an 'older' vocal timbre and a heroic tone by darkening my voice. [Furtwängler] turned that down with the remark that I should just listen to the sound of my own voice – and let it remain 'natural'. And the beginner never forgot that piece of advice.

(Neunzig & Whitton, 1998, p. 58)

Furtwängler and recording

Furtwängler was known to dislike recording, particularly if it involved recording works in takes or out of sequence, and preferred the concert experience (Shirakawa, 1992, p. 377).

Part of the reason may be what Fischer-Dieskau remembered as Furtwängler's insistence on a 'natural' approach to music, in which he envisaged a work as an organic whole, an

approach that was likely to be disrupted by the recording process (Neunzig & Whitton, 1998, p. 58). Manoug Parikian recalled that Furtwängler was ‘impatient with anybody who interfered with the continuity of his thoughts and of the performance’ (Gillis, 1965, pp. 167-168) and he was known to be intolerant of what he regarded as interference from producers. Furtwängler also expressed little interest in the technology of recording and Peter Mountain claimed that ‘Furtwängler wouldn’t have anything to do with the engineers – he said it was their business’ (Mountain, 2010) although EMI engineer Anthony Griffith stated that Furtwängler was nevertheless receptive to advice (Furtwängler, 1993, p. 102).¹⁹

During the *Tristan* sessions, therefore, Furtwängler made few concessions to the recording process, even refusing to follow standard practice and record the opera out of sequence, something that ‘must have been unique in the studio recording of opera in that it was recorded from the first note until the final note in score order’ (M. Walker, email to author, 28 April 2012). Furtwängler also said little during the sessions and the lack of communication could be disconcerting for members of the orchestra who were sometimes confused by what they regarded as Furtwängler’s ‘uncertain’ beat (Kok, 2002, p. 349). However, he was known to consult members of the orchestra during playbacks and seek their opinion before making changes (Shirakawa, 1992, pp. 378-379) and this collaborative approach to music-making was appreciated by the musicians. The fact that most of the orchestra and cast had worked with Furtwängler and were familiar with his methods was also a considerable advantage:

¹⁹ John Culshaw recalled an occasion when Furtwängler was recording with the LPO at Kingsway Hall in 1948. Furtwängler was unfamiliar with the microphone setup and insisted that it be changed, despite objections from the engineers. The result was that instead of the usual ‘warmth and clarity’ of the Decca sound it was ‘diffuse and muddy’ and, in Culshaw’s opinion, ‘it was the conductor’s fault’ (Culshaw, 1981, p. 69).

Fischer-Dieskau: Furtwängler didn't speak any English and he didn't say one word to the orchestra on that recording, which was the Philharmonia. So he just conducted and might speak a bit of Italian here or there but never straight to the musicians.

Curran: Did they know him well enough to tell what he wanted?

Fischer-Dieskau: Yes, he had already worked with them with Flagstad on some Brünnhildes and Strauss's *Four Last Songs*.

(Fischer-Dieskau, 2011)

The sessions called for physical stamina as they took place over 18 days, with two three-hour sessions per day. Furtwängler's preference for long takes also meant that players and singers could find themselves working for long periods each day. It was particularly demanding for the singers: Ludwig Suthaus recalled that Furtwängler's vision of a recording that would give the impression of a performance in the opera house meant that 'singers had to sing out over the large Wagner orchestra exactly as in a live performance. Long sections were repeated as many as six times' (Gillis, 1965, p. 171). Furtwängler's approach may have proved taxing for the singers but, according to violinist Peter Mountain, worked well for the orchestra:

We'd turn up, rehearse a few bits, then play for 20 minutes straight through, then we'd have coffee for half an hour while they listened to the tapes. Then we'd come back, do the whole thing again, pack up, go home. No retakes.

(Mountain, 2010)

Mountain's overall impression was of the sessions being a relaxed affair and although 'working with [Furtwängler] could be difficult and he could often be edgy [...] in this recording he was in perfect rapport with the music and everything flowed effortlessly' (P. Mountain, letter to author, 3 May 2012). This is consistent with other accounts of the sessions, for instance that of Ludwig Suthaus who recalled that although Furtwängler 'made the greatest demands on his singers [...] when one understood him, everything was easy' (Gillis, 1965, p. 171). If there were any disagreements during the recording they were largely between Furtwängler and the producer, Walter Legge. There were already tensions between the two men but shortly before the *Tristan* sessions were due to begin a

crisis arose that threatened to postpone or even cancel the project. Furtwängler learnt that Legge had been making disparaging remarks about him and on 25 April 1952 he wrote to Brenchley Mittell, manager of EMI's International Artists' Department, to say that he did not wish to undertake the sessions with Legge as producer and that he was prepared to withdraw from his contract if necessary (Shirakawa, 1992, p. 388); Furtwängler only relented when Flagstad intervened, stating that she wanted Furtwängler to conduct and Legge to act as producer. Legge was eventually persuaded to make an apology but by now his relationship with Furtwängler had deteriorated to the extent that Isabella Wallich was employed to act as a buffer between them (Wallich, 2001, p. 144).

Despite all efforts to avoid confrontation the underlying tensions resurfaced when a disagreement following a playback led to Furtwängler storming out of Kingsway Hall even though there was still half of an hour of that session remaining. The incident was confirmed by both Manoug Parikian (Gillis, 1965, pp. 167-168) and Edgar Evans (Walker, 2004) although Wallich dismissed it as 'happily insignificant' and ascribed it to 'the tension caused by the difficult and highly charged emotions that the great work engendered' (Wallich, 2001, p. 144). When asked about this, Fischer-Dieskau replied that, despite their disagreements, Legge and Furtwängler had a mutual respect for each other's skills and expertise and that they 'worked very well together – they trusted each other' (Fischer-Dieskau, 2011). Whatever the case, they managed to overcome their differences and were able to complete the recording. Furtwängler was rarely satisfied with his recordings but during the *Tristan* sessions his attitude seemed to change as he began to appreciate the benefits of tape recording and editing. After listening to the test pressings several times he is reported to have conceded that 'they have reached the point where they can make records' (Furtwängler, 1993, p. 99) and even acknowledged Legge's input,

stating that his name should be on the label too (Mountain, 2010; Schönzeler, 1990, p. 151). It was, however, the last time that Furtwängler and Legge worked together and following completion of the *Tristan* sessions Furtwängler insisted that Lawrence Collingwood supervise his recordings from then on.

High Cs

Furtwängler came to appreciate the benefits of tape recording as it enabled him to record in a more satisfactory and a more musical manner. But the new processes also introduced possibilities that had implications for the ethics of recording – what was and was not acceptable – that artists and producers would have to confront. On 4 March 1954 an article appeared in *The Daily Mail* (see Figure 2, p. 225) revealing the fact that Kirsten Flagstad had been unable to sing two top Cs during the recording of *Tristan* and that they had been substituted by Elisabeth Schwarzkopf (the relevant passages occur in the love duet in Act 2 and not, as stated in the article, the Liebestod in Act 3). The story had been an open secret for some time as members of the Philharmonia Orchestra were known to have spoken about the session in question (M. Walker, email to author, 28 April 2012) and John Culshaw later wrote that he had learnt of the event on the day it took place (Culshaw, 1967, p. 55). Despite this, the story had evaded any media coverage and only emerged when it was inadvertently revealed by an EMI producer in conversation with a journalist.

The revelation had far-reaching consequences. Not only did it cause considerable embarrassment to Flagstad – she subsequently refused to make any further recordings for EMI or to renew her contract when it expired – but led to recriminations within EMI, with the producer concerned, Brian Culverhouse, severely reprimanded for his indiscretion (M. Walker, email to author, 28 April 2012). The fact that the story was considered

controversial enough to be covered in a national newspaper may be partly due to the fact that it involved Flagstad, whose status as a leading opera singer attracted considerable media interest. Nonetheless, the article raises interesting questions about contemporary attitudes towards the ethics of recording and how much was known about the recording process. For example, in a letter to *The Gramophone* by ‘Some Balance Engineers’, it is claimed that few people were aware ‘that most records nowadays are simply not performances at all, but very intricate mosaics [...] which raise interesting ethical and moral problems’ (Wilson, 1959). Listeners may indeed have believed in the authenticity of a performance on record and, even if they were familiar with the concept of editing, would have the illusory experience of a single performance happening in real time. Even the realisation that editing could be used to improve a recorded performance by substituting one take for another might be considered acceptable on the understanding that the musicians had performed each of the takes and were at least capable of a high standard of performance. In fact, editing was not used to replace Flagstad’s high notes – they were simply substituted by Schwarzkopf during the session – but the media controversy that was generated indicates general disquiet at the notion that a recorded performance could be falsified in some way. In effect, the moral contract between record company and listener appeared to be undermined, the illusion of a complete performance dispelled, and the integrity of the performance compromised.

Whatever the media reaction to this story – Culshaw described it as ‘the silliest outburst of moral indignation on the part of a few opera critics that it has ever been my misfortune to read’ (Culshaw, 1967, p. 56) – the decision to substitute two notes in an opera lasting almost four hours appears to have been of no real concern to Furtwängler or the singers involved. In an interview, Schwarzkopf explained that the deception was necessary as

Flagstad had said that although she could sing a top C in concert she could not do so repeatedly in a recording session. Schwarzkopf also challenged any assertion that the two notes had been recorded separately and edited in later:

Nobody cut anything in. I stood behind her and crept into the two high notes and sang them. You would never have noticed it. Top notes among all sopranos are usually similar. It is under the top notes where the timbre begins. So anybody could have done it. Even I cannot discern it.

(Shirakawa, 1992, pp. 395-396)

Flagstad's admission that she could not reliably sing the high notes repeatedly over several takes on a session was not in itself a revelation – reviews from the 1950s suggest that the limitations of Flagstad's voice towards the end of her career were well known.

Schwarzkopf had in fact performed the same function in 1949 when Flagstad recorded the love duet from *Tristan* with Set Svanholm and the Philharmonia, conducted by Karl Böhm, as part of a series of Wagner extracts for HMV (R. Osborne, 2001), which may explain why Flagstad was insistent on having Legge as producer on the 1952 recording: having been party to the earlier substitution he was unlikely to raise objections. While Furtwängler's general reservations about the recording process are well known, there is no evidence to suggest that he objected to the substitution of Flagstad's high Cs with those of Schwarzkopf. Indeed, his collegial approach may have meant that if those concerned were agreeable then he was willing to accept it. Nor is there any evidence to suggest that the decision to substitute those two notes caused any major disagreement at the time – an impression of events confirmed by Dietrich Fischer-Dieskau who said that there was no drama or subterfuge involved and that it was an 'easy' recording, adding that 'people have written a lot of things but it was all fine' (Fischer-Dieskau, 2011).

The Flagstad-Schwarzkopf substitution has, nonetheless, been the subject of debate over the years and was cited by Glenn Gould as an example of what some might see as an abuse

of the recording process that offends against ‘aesthetic morality’ (Gould, 1966, p. 53). In the same article the critic B. H. Haggin discussed the case in similar terms:

As for the morality of splicing, I suppose there should be no objection to Toscanini’s not liking what an oboe did on the first take and not liking what a flute did in the second and then taking the best parts of each take to make a whole. It’s still essentially Toscanini. Whatever moral uneasiness I have about such things is just a holdover from the past and perhaps I should adapt myself to the possibilities of the present. But I don’t like the idea of Schwarzkopf putting her high C on Flagstad’s recording.

(Gould, 1966, p. 51)

The idea of ‘morality’ informing the recording process may seem quaint in the digital era when sound can be manipulated in ever-more sophisticated ways. In recordings of popular music it is not uncommon for technology to be used to create effects impossible in live performance, and to improve the performance of artists lacking in technical ability. In classical music, however, there is still an unwritten ethical code that dictates that editing may be used to improve a recorded performance but not to create a recording that would be beyond the abilities of the performers (Hough, 2009; Keener, 2009). Moreover, artists and producers rarely disclose what occurs in the studio or in the editing suite in the belief that any discussion of the recording process threatens not only the illusion of a continuous, flawless performance but listeners’ enjoyment too. The negative publicity surrounding the *Daily Mail* article drew attention to the substitution of Schwarzkopf’s high notes for those of Flagstad and, once the listener is aware of the fact, it is difficult to hear the relevant passages without anticipating and listening for Schwarzkopf’s high Cs.

A question remains as to Flagstad’s attitude to the ethics of recording. Given her admission that she could not repeatedly sing a high C for a recording, she must have realised that it would be necessary for Schwarzkopf to interpolate Isolde’s high notes. She would have had time to reflect on her first use of this technique in 1949 and so presumably had no

misgivings about repeating the act once more. However, Flagstad's reaction to the media scrutiny suggests that she regretted the incident and the perceived slight on her reputation, although she never spoke publicly about the affair and John Culshaw reported that she 'hated any mention' of it (Culshaw, 1967, p. 56). It is unclear whether her decision to sever links with EMI was because she felt she had been misled as to the full implications of the deception, or had been naive in agreeing to it, or simply that she held EMI responsible for the fact that she had been humiliated in public.

The introduction of tape and the LP in the early 1950s provided considerable benefits for artists and producers but also presented challenges as practices were evolving quickly, with little time to reflect on possible implications. The secrecy surrounding recording sessions meant that it was difficult to share experience and artists therefore relied on producers to guide them as to best practice. The use of studio techniques to solve the dilemma of Flagstad's inability to sing high notes repeatedly and reliably was, arguably, an inevitable choice given the promise held out to the artist by the technology and, presumably, the assurances of the producer. But for the media and general public, naive at the time as to the possibilities of the recording process, the substitution represented a moral choice rather than an aesthetic one, and was censured as a result. It was to prove a significant landmark in emerging perceptions and attitudes surrounding recording, both inside and beyond the studio. It was also a salutary reminder for artists of the need to establish clear boundaries as to acceptable practice when recording, and of the possible consequences for being seen to transgress those boundaries. A media exposé such as that of *The Daily Mail* article seems unlikely today but the fact that the decision to falsify two notes of an opera recording was considered of public interest in a national newspaper in 1954 suggests that not only did musicians and producers have to confront issues of ethics

when recording; the general public's understanding and expectations of recording had to undergo a similar process of evolution.



Figure 2: Opera star borrows 'Top C', *Daily Mail*, 4 March 1954

Comparative listening

When the Furtwängler recording was released in 1953 there was only one other complete recording of *Tristan und Isolde* available, a recording originally made for radio broadcast by the Mitteldeutsche Rundfunk, Leipzig and recorded at the Leipzig Gewandhaus in October 1950 with the Leipzig Gewandhaus Orchestra conducted by Franz Konwitschny. The recording was subsequently released on five LPs by Urania, a small American label that often issued recordings originating in Eastern Europe, and is now available on CD (see discography, p. 347). Comparison of the Konwitschny and Furtwängler recordings illustrates what was available to consumers in the early 1950s; at the time there was certainly no other competition in the marketplace for a complete recording of the work. Throughout this section timing references (mm:ss) relate to the time codes of the tracks on the CDs, listed at Appendix 6; unless stated otherwise, page numbers refer to the Schirmer vocal score of the opera (Wagner, 1906).

The fact that the Urania recording was originally produced for radio broadcast means that the recording crew did not have the luxury of unlimited sessions. Each act was rehearsed and recorded in a single day, meaning that opportunities for additional takes, or for editing, were limited (Patmore, 2011, p. 26). It is also unlikely that the *Aufnahmeleiter* or recording manager had a commercial recording in mind when supervising the sessions and the decision to release the recording with Urania may have been an opportunistic one.

HMV approached its recording from a very different perspective as, bearing in mind the financial commitment required to produce a commercial recording on this scale and the need to recoup those costs, it had to be prepared to allocate sufficient time and resources in order to be sure of achieving the highest standards. To that end it was also prepared to

indulge Furtwängler's methods, including his request that the work be recorded in sequence. It may seem ironic that Furtwängler chose to record in long takes when there was at least the possibility of editing but in many ways this was key to the success of his recording. Furtwängler found the process of recording for 78s frustrating whereas the ability to record in long takes freed him to work in long musical phrases and therefore approach the sort of 'organic' unity that he sought to create in concert. In any case, editing was still relatively basic in 1952 and there was none of the fine editing that became possible later in the 1950s as engineers refined their techniques and as the quality of tape and equipment improved.

Prelude to Act 1

First impressions on hearing the opening Prelude to Act 1 provide a reliable measure of what to expect on each of the two recordings. The sound on the 1950 Konwitschny recording (CD1, track 1) is somewhat thin and slightly compressed in comparison with the Furtwängler recording (CD1, track 2), which has a brighter, clearer, and fuller sound. Some of the orchestral playing is poor on the Konwitschny recording, especially in terms of phrasing and ensemble at cadences, when compared with the precision of the Philharmonia under Furtwängler – particularly in the string sections. In fact, throughout the 1950 recording the orchestral sound is often muffled and constrained and there is occasional distortion. The real problem, however, lies in the variable balance, as it is noticeable that the singers are always given prominence over the orchestra and the orchestra tends to fade in and out so that it is always heard underneath the singers and is never in competition with them.

Act 1, Scene 1

In the sailor's song that opens Scene 1 of Act 1, 'Westwärts schweift der Blick', the stage direction states that the sailor is heard 'from above, as if from the mast head' (Wagner, 1906, p. 6) but on the 1950 Konwitschny recording (CD1, track 3) the sailor (sung by Gert Lutze) sounds too present to suggest that he is at the mast head and at times (0:30) sounds close by. When Isolde (Margarete Bäumer) enters with 'Brangäne, du? Sag – wo sind wir?' (CD1, track 3, 1:10; p. 6) the orchestra sounds slightly muffled and seems to fade into the background whenever the singers are heard.

On the 1952 recording (CD1, track 4) the effect of the singing from the mast head is more convincing and the sailor (Rudolf Schock) is heard as if from above with the resonant and reverberant sound of his voice conveying a sense of distance. When Isolde (Kirsten Flagstad) sings (CD1, track 4, 1:10) she sounds closer and more forward in the balance and so there is a definite change in perspective. The richness of the orchestral sound underneath is immediately noticeable too and these factors taken together demonstrate the technical superiority of the HMV recording.

Act 2, Scene 2

Act 2, Scene 2 also requires the use of perspective to suggest distance as Brangäne watches over Tristan and Isolde from a castle tower; the stage direction states that when she sings 'Einsam wachend in der Nacht' she should be heard as if 'from the turret, invisible' (p. 169). On the 1950 recording the voice of Brangäne (Erna Westenberger) does sound slightly distant, suggesting perspective (CD1, track 5, 5:05), and although the effect is not entirely convincing (given that she is supposedly singing from a tower) it does acknowledge the fact that although her part is marked *p* she needs to be heard over the

sound of the orchestra. Later in the scene when Brangäne sings her warning from the tower, ‘Habet Acht!’ (CD1, track 6, 2:05; p. 180), the effect is more convincing as she sounds more distant than before, possibly as a result of the fact that although she now sings *f* the orchestra is also playing louder. Throughout this scene the level of the orchestra fades in and out to give the singers prominence, which distracts from the performance – particularly at one point where the orchestral level drops suddenly (CD1, track 6, 6:25).

On the 1952 recording the sound throughout this scene is much more immediate, and although the singers are more prominent in the balance this is not at the expense of the orchestral sound, which is more powerful than on the 1950 recording. Brangäne (Blanche Thebom) is heard softly when she first sings from the tower (CD1, track 7), which adds to the impression of distance. Brangäne’s warning is also suitably distant sounding (CD1, track 8) and although the orchestra is more prominent the balance is even throughout, giving a more satisfying performance.

Love duet (high Cs)

Act 2, Scene 2 is also notable for the two high Cs sung by Isolde during the love duet, and the controversy surrounding the substitution of Kirsten Flagstad’s high notes with those of Elisabeth Schwarzkopf. Listening to the 1952 recording the first of the high Cs is heard on the word ‘Seele’ (CD1, track 9, 0:58; p. 134) but there is a slight overlap in the downward transition from C to A and on first hearing it sounds like a poor edit. On further listening, however, it becomes apparent that not only are the two notes slightly mistimed but that Flagstad’s A sounds heavier than Schwarzkopf’s C and therefore the intended impression of one singer and one clean phrase is lost; the fact that it is sung on an open vowel also makes it harder to sing. The second of the two high Cs can be heard on the word ‘Himmel’

(CD1, track 9, 1:15; p. 136). Here there is a downward transition from C to G but this is done cleanly and convincingly so that it is hard to detect anything unusual about the phrase and it is unlikely that listeners would be aware of Schwarzkopf's substitution without prior knowledge. The difficulties with the first high C, however, may have alerted listeners to a problem, even if they were unaware of its cause and its unorthodox solution.

Act 3

One author has claimed that in Act 3 of the Furtwängler recording 'more than anywhere else [...] it becomes unquestioningly evident that Walter Legge produced the recording with Bayreuth and its unique acoustics in mind' and that Legge's ability 'to create a sense of the Bayreuth "reverb" so naturally with audio equipment that was paleolithic by today's standards is a mark of his brilliance as a producer' (Shirakawa, 1992, pp. 398-399). Far from being 'unquestioningly evident' this claim is suspect on several grounds. Firstly, the recording was engineered by Douglas Larter, one of EMI's leading engineers at the time, and while Legge may have expressed an opinion on the sound Larter would have had ultimate control of it. Secondly, there is evidence that Legge had little real understanding of technology and that engineers frequently achieved good results in spite of him (Gooch, 1986; Griffith, 1983; Walker, 2010). Finally, the recording was made at Kingsway Hall and the extent to which it would have been possible or desirable for engineers to imitate the sound of another venue in 1952 is debatable; in any case, as Shirakawa reports, Legge denied that he made any attempt to imitate the sound of Bayreuth. Such claims do, however, demonstrate the near-mythical status given to this recording.

Overall, the differences between the two recordings demonstrate why the Furtwängler recording had such an impact when it was released in 1953. Previous recordings of *Tristan*

had consisted of excerpts, often in poor-quality sound, and the one complete version issued by Urania was flawed to the extent that it could only be regarded as a stop-gap until a better quality recording became available. Not only was HMV's version technically superior in terms of the quality of its sound and production, it was also artistically superior and included performances by several leading interpreters of Wagner, including Flagstad. The success of the recording can be attributed in no small part to the introduction of new recording processes that finally enabled Furtwängler, who had previously found recording a difficult and frustrating experience, to record in a manner more like his concert performances and to lay down a recording with which even he could be satisfied. The recording has its imperfections too but even the revelation that Flagstad's high Cs were not her own has failed to diminish its reputation and, in the words of one critic, 'the flaws that can be detected in this huge undertaking vanish beside the overwhelming beauty of the performance as a whole' (Shawe-Taylor, 1953, p. 277). These factors combined help to explain why the 1952 HMV *Tristan* is still regarded as an outstanding achievement and, over 60 years later, one that has stood the test of time.

8 *Peter Grimes* (1958)

Introduction

When Decca's recording of Benjamin Britten's *Peter Grimes* was issued in 1959 it was met with widespread approval by critics and consumers. At the same time, there was a sense of disbelief that audiences had waited 14 years for a recording, given that the opera had received critical acclaim on its first performance in 1945 and had rapidly gained an international reputation with productions in Europe, the USA, and Australia. In the October 1959 issue of *The Gramophone*, the producer, Erik Smith, pointed out that 'record companies rarely obtain sales large enough to cover the cost of recording contemporary music' (Smith, 1959, p. 160). Concern over potential sales was undoubtedly a factor in the delay but it was not the only reason, and in fact there had been previous attempts to record the work. Nor was the delay without its advantages as by the time the sessions took place in 1958 stereo recording was available. *Peter Grimes* was therefore amongst the first opera recordings to be conceived of in stereo and is important as a demonstration of the potential of stereo to enhance the experience of opera on record. The following case study considers the background to the recording of *Peter Grimes*, the planning behind it, and the ways in which stereo recording techniques were applied. The study includes a comparison of passages from three recordings of the opera: a recording of excerpts made by HMV in 1948, a recording of a performance at the Royal Opera House in February 1958, and the Decca recording from December 1958. The differences illustrate the advances made in recording over the course of 10 years and the impact of stereo on the production and reception of opera on record. They also demonstrate the significance of the 1958 Decca

recording as an early example of a stereo opera recording employing the production techniques that became associated with John Culshaw.

Recording *Peter Grimes*: 1945-48

The first attempt to record *Peter Grimes* began soon after its premiere performance at Sadler's Wells on 7 June 1945. The work was an immediate success and came to the attention of the British Council, which had a policy of subsidising the recording of new works in order to promote them abroad. Less than three weeks after the first performance the chairman of the Council's music committee, Ernest Makower, wrote to the vice-chairman of the Council, Lord Riverdale, stating that *Peter Grimes* had caused a 'sensation [...] throughout the musical world' and should be recorded as a matter of urgency (British Council, 1945-46, 26 June 1945). Arrangements were made to record the work in September 1945 but shortly afterwards it transpired that the Sadler's Wells Opera Company had been engaged for an ENSA tour and was unavailable. Attempts to make alternative arrangements proved unsuccessful and an interim plan to record the orchestral Interludes alone in November 1945 had to be abandoned at one hour's notice when Britten fell ill and was unable to conduct. At this point the assistant director of music at the British Council, Evelyn Donald, wrote to Decca to say that they must abandon plans to record the complete opera as it would only have succeeded if it could have been done quickly to 'boost the work abroad' and that they had 'missed the boat' (British Council, 1945-46, 11 December 1945). Despite the British Council's belief that the work no longer needed promoting abroad, there was considerable interest in a recording of *Peter Grimes*, as illustrated by Alec Robertson's comments in *The Gramophone* in 1948:

It was rumoured some time ago that the British Council were to sponsor a complete recording of 'Peter Grimes,' but the project appears either to have been held up or

to have been abandoned. I hope, nevertheless, that 'Peter Grimes' will be recorded one day, for every time one hears the opera it reveals new strength and beauty.
(Robertson, 1948)

There seemed no immediate prospect of a complete recording of *Peter Grimes* but agreement was reached for HMV to record excerpts from the opera with Reginald Goodall conducting the Orchestra of the Royal Opera House and the BBC Theatre Chorus with Peter Pears (Peter Grimes), Joan Cross (Ellen Orford) and Tom Culbert (Rector). The sessions took place in July 1948 under Britten's supervision but Britten refused to allow the recording to be issued at the time and only allowed a partial release of the excerpts in 1972. The reasons for this are unclear but in a letter (dated 22 October 1948) to Leonard Smith at HMV with his comments on the test pressings, Britten expressed concerns at the poor playing of the orchestra, adding that 'I fear that with that particular orchestra it cannot be better' (Mitchell, Reed, & Cooke, 2004, p. 425). These and other reservations led Britten to conclude that the relevant parts needed to be recorded again but, although there are indications that arrangements were made, no further sessions appear to have taken place and the project eventually lapsed (Mitchell et al., 2004, p. 427). Britten justified his position at the end of the letter by stating that 'these are the first vocal extracts of the opera to be recorded and therefore have the air of authenticity. Please let us get them then as good as possible' (Mitchell et al., 2004, p. 426), emphasising the importance that he attached to the first recordings of his works. However, the various setbacks in attempts to record the opera and Britten's refusal to release any vocal excerpts meant that other than recordings of the orchestral Interludes and Passacaglia the public would have to wait until 1959 for a recording of *Peter Grimes*.

Decca and the recording of *Peter Grimes* in stereo

Correspondence at the Britten-Pears Library shows that planning for the complete recording of *Peter Grimes* began in 1956. In a letter to Anthony Gishford at Boosey & Hawkes, dated 13 April 1956, Britten reported that he had received a request to record *Peter Grimes* with Philips in Amsterdam but that he ‘had to discourage [...] them, since Decca seem to be determined to do it this coming year [...] With all these offers, Grimes must be recorded soon, but I am determined it shall be well done’ (Reed, Cooke, & Mitchell, 2008, p. 438). Britten’s belief that the first recording of a work carries ‘the air of authenticity’ strengthened his determination that the first recording of *Peter Grimes* should be the best possible and he knew that with the skills and resources at its disposal Decca was the company most likely to achieve that. Britten had already begun discussions with Decca and the Royal Opera House about a possible collaboration and in July 1956 it was confirmed that all parties were agreeable to a recording (Britten-Pears Library, 1956). Agreement had been reached in principle but there remained the question of obtaining final approval from Decca’s repertoire committee. In his autobiography John Culshaw revealed that Decca executives had been resistant to his repeated proposals to record *Peter Grimes*, as they regarded it as too great a commercial risk. Therefore Culshaw had to employ his finest negotiating skills when the work was discussed at a meeting of the committee in 1957:

By the end of 1957, Benjamin Britten had been associated with Decca for about twelve years [...] Yet no steps had been taken to record any of his major operatic works. [...] The obvious way to make a start was with *Peter Grimes* [...] But the idea was at first greeted with derision. Lewis [Decca’s chairman] said little, but worried about the costs; I don’t think Rosengarten [Decca’s financial director] had ever heard of the piece, and Farkas [Decca’s US representative] said that he might be able to give away six copies in the United States. I had to tread carefully at that point, but I said that if we rejected the idea we should give some thought to abandoning our ‘exclusive’ agreement with Britten and thus give him a chance to try his luck with other companies. [...] It was at that stage that Rosengarten began

to worry, for he could never bear the idea of the competition stealing the lead on Decca.

(Culshaw, 1981, pp. 176-177)

Rosengarten may well have been justified in his fears. Although Culshaw stated in his autobiography that Britten had not put pressure on Decca to record *Peter Grimes*, in one letter to Frank Lee at Decca, dated 4 August 1959, Britten expressed frustration at the delay in recording several of his works and ended with a rebuke: 'Must every work of mine wait fourteen years for recording, like *Peter Grimes*?' (Britten-Pears Library, 1959). Once the committee had given approval, Culshaw could begin planning in earnest, although an initial proposal to record during the Covent Garden production of *Peter Grimes* in February 1958 was abandoned following sound tests at the Royal Opera House. In a letter to Britten dated 18 December 1957 Frank Lee explained the decision on the grounds that the sound 'would not do justice to the opera' and 'by today's standards' would not justify the costs but also that Decca was 'anxious to make this a real Hi-Fi recording' (Britten-Pears Library, 1957). This meant a postponement of the recording so that a suitable venue could be found. Decca staff were also under no illusion as to the challenges involved in recording a complete opera in stereo and had no desire to rush the project, as confirmed in a letter from Culshaw to Britten:

All of us here are enthusiastic about the Grimes project (and as anxious to see it realised as you yourself and the artists), but we do feel very strongly that any attempt to compromise or rush the recording will jeopardise the whole affair. I think we have to reconcile ourselves to the fact that it simply cannot be done at the present time without lowering the artistic and technical standards which we have set out to achieve.

(Britten-Pears Library, 1958a, 13 January)

The postponement had other consequences as in the meantime it was announced that Rafael Kubelik, whose conducting Britten admired, was to leave Covent Garden (Britten eventually agreed to conduct), and Sylvia Fisher, who had sung the role of Ellen Orford, was unavailable. Culshaw too was unavailable as he was already committed to recording

sessions in Vienna, leaving Erik Smith to take over as producer, with Christopher Raeburn as assistant producer. Culshaw was nonetheless heavily involved in the planning of the recording and later wrote of the lengthy process leading up to it:

For 'Peter Grimes' there was a pre-recording schedule that must have run fairly close to that of 'Ben-Hur'. Every detail was discussed with Benjamin Britten, not in order to make the record an exact copy of the Covent Garden production, but to give it its own identity.

(Culshaw, 1960, p. 75)

This reflected Culshaw's belief that a recording should be more than a document of a performance but a work in its own right in which the composer's intentions could be fully realised. Britten's involvement in the process was therefore of vital importance and all the more so given the complexities of recording in stereo. After one meeting Culshaw wrote to thank Britten, stating that 'it means a lot to us to have such interest and support in this new and rather more difficult medium' (Britten-Pears Library, 1958a). The 'new and rather more difficult' medium of stereo required detailed consideration and so there were numerous internal meetings at Decca, as well as those with Britten, before Culshaw was able to finalise plans for the opera, as confirmed by Erik Smith:

We discussed every point of movement on the stage, and how to get all the sounds just right [...] A series of about 25 plans was then produced to cover the whole opera for all stage movements and all special effects. [...] Since recording is largely an empirical science, these plans were sometimes amended on the session; but they were the basis of our work.

(Smith, 1959, p. 162)

A copy of the production plans survives at the Britten-Pears Library. It shows the elaborate choreography of soloists and chorus devised for each scene in order to convey the drama of the opera and the movement of the characters on stage. It begins with a covering memo to the engineers and producers, dated 21 November 1958, in which Culshaw explains that the plans are indicative and to be adapted as necessary, in line with Smith's comment above. Also included are: a checklist of special effects, 15 pages of 'stereophonic

production notes' with diagrams indicating the movement of soloists and chorus (for examples see Figures 3-5, pp. 250-252), a cast list, and schedules for the rehearsals and recording sessions (Britten-Pears Library, 1958b). It is clear that the plans were revised as there was a further meeting with Britten on 26 November in response to the composer's concerns, as set out in a letter from Culshaw to Raeburn, dated 14 November 1958:

All sorts of problems are cropping up about Peter Grimes [...] Ben is very dissatisfied with every stage production he has seen except the original version at Sadler's Wells. He feels that all essential effects are already printed in the vocal score and is particularly anxious not to have any of the extra and rather irrelevant business which has been introduced in later productions.

(British Library, 2011)

Following this meeting, Culshaw issued an internal memo, dated 27 November 1958, with a list of action points concerning sound effects. Changes were evidently made to the movement and placement of the singers too – Culshaw states that 'Christopher has a note of all revised moves' (British Library, 2011) – but these are not listed and there are no amendments or annotations to the plans. The intention was to re-create the drama of the opera house by the careful planning of the placement and movement of soloists and chorus in each scene. Movements were referenced against a grid marked on the floor and an article in the October 1959 issue of *The Gramophone* included pictures from the sessions that 'clearly revealed the Decca technique of marking out the acting stage in numbered squares [...] something which at the time was a closely guarded secret' (Greenfield, 1968). With the introduction of stereo recording came a significant realisation: the ability to convey an impression of the relative placement and movement of singers depended on movements being made while they were singing. This was 'not always popular with artists' (Smith, 1959, p. 162) and singers, preoccupied with their vocal performance and deprived of the usual props and scenery of the opera house, might fail to initiate the required movement at the correct moment. It was therefore necessary to have an assistant

producer, in this case Christopher Raeburn, on stage to provide visual cues and to guide the singers. Smith considered this essential in realising the sense of drama since ‘the artists themselves will, unconsciously perhaps, put more drama into their performance when working in something like theatre conditions’ (Smith, 1959, p. 162).

The recording of *Peter Grimes* in stereo clearly posed many challenges and in a letter to Britten dated 29 December 1958, shortly after the recording was completed, Smith wrote that in spite of ‘all the many worries and that Black Sunday, I look back on the “Grimes” recordings as a great experience’ (Britten-Pears Library, 1958b). There is no further explanation as to what might have occurred on ‘Black Sunday’ – the final day of the sessions – but in another account of the recording Patrick Strevens, a horn player in the orchestra, concurred with Smith’s assessment, describing it as ‘one of the finest recordings in which I have participated’ and noting that members of the chorus and orchestra were enthused by Britten’s approach and that playbacks were often crowded, especially as many had never heard stereo before (Strevens, 1960, p. 50).

Comparative listening

In this part of the study comparison is made of passages from three recordings of *Peter Grimes*: a recording of excerpts made by HMV in July 1948; an off-air recording of a performance from the Royal Opera House broadcast by the BBC on 6 February 1958; and the studio recording made by Decca in December 1958 (see discography, p. 347). Peter Pears is the only soloist to appear on all three recordings but the cast lists for the two recordings from 1958 include many of the same artists, one notable exception being Sylvia Fisher (Ellen Orford in the Covent Garden production) who was unavailable and was replaced by Claire Watson. All three recordings feature the Orchestra of the Royal Opera

House conducted, respectively, by Reginald Goodall, Rafael Kubelik, and Benjamin Britten. All are available on CD or as downloads but only the Decca recording is available in true stereo; the HMV recording was made in mono and, although the off-air recording has been issued in stereo, BBC broadcasts were mono only in 1958.²⁰ Three passages have been selected for comparison: i) the scene inside The Boar at the beginning of Act 1, scene 2 (vocal score pp. 118-141); ii) the Sunday morning church scene at the beginning of Act 2, scene 1 (pp. 177-206); and iii) Grimes's 'mad scene' from Act 3, scene 2 (pp. 363-371). Throughout this section timing references (mm:ss) relate to the time codes of the tracks on the CDs, listed at Appendix 6; unless stated otherwise, page numbers refer to the Boosey & Hawkes vocal score of the opera (Britten & Slater, 1945).

Act 1, scene 2: Inside The Boar (pp.118-144)

This scene is set inside The Boar pub where various characters take refuge from the storm. The stage directions indicate that as people enter 'they push the door shut with difficulty' (p. 118), that 'the wind howls through the door' when it is open (p. 120), and that 'the window-shutters blow open' (p. 121). The last person to enter is Grimes, who sings the aria 'Now the Great Bear' (pp. 139-141).

The HMV recording does not include the complete passage and the excerpt consists solely of Grimes's 'Now the Great Bear' aria. Grimes is largely static throughout this aria and there is no sense of movement, although at times Pears's voice sounds slightly distant (CD1, track 10, 1:00). The balance with the orchestra is often poor: at times Pears's voice appears to come from within the orchestra and at one point is almost overwhelmed by it

²⁰ It should be noted that in 1948 HMV was still recording on wax discs whereas the two recordings from 1958 were both recorded on tape. The two studio recordings were also created using different methods of production, each reflecting the technology and working practices of their time.

(CD1, track 10, 2:30). This is not the case with the other recordings, where there is a much better balance of voice and orchestra, although on the live recording Pears's voice sounds somewhat constrained, particularly in comparison with the 1948 recording; this was noted in contemporary reviews of the Covent Garden production in both *The Times*, which referred to evidence of 'vocal restraint' on the part of Pears, and *The Observer*, in which Peter Heyworth commented that Pears 'seemed oddly ill at ease in the title role' (Reed & Cooke, 2010, pp. 16-18). On the 1948 recording the bass of the string section has a tendency to boom, for instance where Grimes sings 'Who can decipher [...] the written character' (CD1, track 10, 1:45), even though the parts are marked *pp*. As the HMV recording was engineered by Douglas Larter, one of HMV's leading mono engineers, this most likely reflects the limitations of the recording process at that time rather than any fault of the engineer; the fact that this problem is not heard on either of the 1958 recordings illustrates the advances made in the space of ten years.

The live recording relies on the music to convey the impression of a storm; despite references to a gale in the stage directions there is no attempt to imitate the sound of a storm. Equally, there are frequent stage directions in the score relating to the opening and closing of the pub door, and at one point Balstrode, Keene, and the chorus even sing 'Mind that door' (p. 136), yet the sound of the door is barely audible much of the time (CD1, tracks 11-14). In the opera house the audience would of course benefit from the visual effect and there would be no need to exaggerate the sound. Decca's stereo recording allows us to hear the door opening and closing at the left of the stereo image as various characters enter. Having entered, they then move from the door on the left to the bar on the right. The spatial effect is also used to emphasise the isolation of Grimes, placing him centre stage during the 'Great Bear' aria (CD2, track 4) to set him apart from the rest of the

cast on the right. These are all in keeping with Culshaw's direction in the stereophonic production notes that the scene should be 'imagined aurally in terms of constant movement away from the door and the storm raging outside' (see Figure 3, p. 250). The Decca recording also makes extensive use of sound effects including a wind machine to create the sound of the storm raging outside the pub. In his memo of 27 November 1958 Culshaw was quite specific in his instructions as to how the effects should be heard:

Great care must be taken to synchronise the effects in Act 1, Scene 2 so that, with certain exceptions, one hears the following sequence:

- (a) Door blows open and wind machine begins.
- (b) Door closed and wind machine instantly silent.

(British Library, 2011)

The Decca recording also highlights sounds that are barely heard on other recordings or in live performance, such as Balstrode's whistle as he enters the pub (CD2, track 1, 0:25) or the sound of the window-shutters banging (CD2, track 1, 1:10). Elsewhere, sounds not indicated in the score have been added, for instance the laughter of the crowd when Balstrode mocks the nieces by singing in a falsetto voice, or the gasps of the crowd when Boles, the drunken Methodist preacher, sings 'I want her' as he lusts after women (CD2, track 1, 3:55). All add to the portrayal of the scene in a way that is neither gratuitous or intrusive but that enhances the dramatic effect on record. In other cases directions that refer to brief moments on the stage are expanded, for instance on pp. 129-130 where the direction '[Boles] hits Balstrode, who quickly overpowers him' is heard as a prolonged scuffle at the centre of the stage (CD2, track 1, 4:10), again increasing the dramatic effect by placing the action at the centre of the stereo image. Overall, the balance between voices and orchestra is much more convincing and the near-whisper of the chorus when singing 'talk of the devil' is particularly effective in portraying the menace felt by the townsfolk when Grimes enters the pub (CD2, track 3, 1:00; p. 137).

Act 2, scene 1: Sunday morning: Glitter of waves (pp. 177-205)

In this scene Ellen sits by the beach with Grimes's new apprentice while a church service can be heard in the distance; in the opera house the Rector, chorus, and organ are all positioned off-stage to achieve that effect. On the 1948 recording, however, the balance is poor and the entries by the organ (CD2, track 5, 0:28) and the chorus (CD2, track 5, 1:30) are both too loud, threatening to overwhelm the voice of Ellen and failing to create the impression of distance. The voice of the Rector also sounds forced at times (CD2, track 6, 0:00, 0:49, 1:05), possibly as the limitations of the wax-recording equipment made it difficult to capture his voice while placed off-stage and so he had to compensate by projecting his voice in a way that sounds unnatural. On the 1958 live recording the sound balance is more realistic, providing a more convincing impression of distance between the church service taking place off-stage and the voice of Ellen on-stage. The voice of the Rector is more natural (CD2, track 7, 4:00, 4:40, 4:58) and again suitably distant, but the mono recording means that although the off-stage chorus and organ are placed to one side of the stage in the opera house they are heard as being at the rear of the sound field. The lack of spatial separation can also result in a blurring of the voices, for instance at 'Found the woes' (p. 186) where the chorus has a crescendo beginning on *f* while Ellen has a crescendo ending on *f* (CD2, track 7, 3:00). Only on the Decca recording is there a realistic impression of relative distance and a true separation of voices with the chorus and organ heard in the distance and placed at the left of the stereo sound field (CD2, track 8), while the voice of Ellen is heard on the right (see Figure 4, p. 251). Not only does this correspond more closely with the stage directions but it highlights more vividly the contrast between the calm order of life in *The Borough* and the drama that unfolds when Ellen discovers a bruise on the neck of the apprentice.

Act 3, scene 2: Steady! There you are! (pp. 363-371)

John Culshaw wrote: ‘More than almost any other contemporary opera I can think of [...] *Peter Grimes* depends above all on the atmosphere of its particular setting’ (Culshaw, 1961, p. 47). This is particularly relevant to what is usually referred to as the ‘mad scene’ in which Grimes, by now quite deranged, is pursued across a fog-bound landscape by the townsfolk, while a fog horn sounds ominously in the distance. In the production notes for the Decca recording the checklist of special effects includes the remark: ‘Off-stage chorus in various perspectives approaching and receding plus fog horn’ while p. 15 of the stereophonic production notes (see Figure 5, p. 252) includes the instruction: ‘Throughout this scene the distant chorus shouts of “Grimes” must advance and recede exactly as marked in the score’ (Britten-Pears Library, 1958b). The stage directions in the score suggest that the chorus, off-stage in the opera house, should give the impression of changing perspectives through the use of dynamics. For instance, in the opening bars of this passage the chorus sings *pp* in line with the direction that ‘the cries of the searchers can be heard distantly’ whereas on p. 367 the chorus sings *mf* to correspond with the direction that ‘the voices are now close at hand and very distinct’ (Britten & Slater, 1945, pp. 363-371). Elsewhere the proximity of the searchers is indicated purely by dynamics.

Of the three recordings, only the Decca production gives a convincing portrayal of the searchers moving through the landscape. On the 1948 HMV recording there is some evidence of this being achieved through changes in dynamics, for instance at rehearsal number 48 (CD2, track 9, 1:20; p. 364), where the score indicates a rapid change from *pp* to *piu f* and then *mf* within the space of a few bars. The overall sound balance is poor, however, and the voice of Grimes is very much in the foreground and therefore too present. At bar eight after rehearsal number 50 (p. 367), however, where the stage

direction is that the chorus voices are ‘close at hand and very distinct’ there appears to be a sudden change in the relative balance between Grimes and the chorus (CD2, track 9, 3:15), suggesting that the chorus has moved closer to the microphone but with none of the subtlety of the Decca recording.

In the 1958 live recording the chorus often seems distant in the sound balance and at times barely audible, especially when singing *pp* (CD2, track 10, 3:30). This perhaps reflects the fact that in this recording, unlike the two studio recordings, the chorus had to remain off-stage throughout and therefore had to rely entirely on changes in dynamics for effect. The stage requirements for the performance also meant that the BBC engineers would have been limited in their microphone placement, with no opportunity to move their microphones once the performance had begun.

In Grimes’s solo the HMV recording provides little sense of movement and Pears’s voice appears fixed. In the live recording there is at least some sensation of movement backwards and forwards as the dynamics and perspectives change according to Pears’s position in relation to the microphone – for instance when he moves to the rear of the stage to sing ‘Ellen, give me your hand’ (CD2, track 11, 1:10) – but without stereo recording there is no sense of movement across the stage. On the Decca recording, Pears is heard to make full use of the stage, as indicated by the plan from Decca’s production notes (see Figure 5, p. 252). This is particularly noticeable on pp. 365-366 of the score where Grimes grows more agitated and his voice can be heard moving about the stage as he imagines an argument with Ellen before singing ‘To hell with all your mercy’ (CD2, track 12, 3:20).

At the end of this passage, when Ellen sings ‘Peter, we’ve come to take you home’, the Decca recording is again the only one to convey a real sense of space and relative distance. On the HMV recording Ellen’s entry is sudden, despite the stage direction at the top of the page in the score, which states: ‘Ellen and Balstrode come in, and stand waiting till Peter has calmed’ (Britten & Slater, 1945, p. 369). On the live recording, although there are stage noises suggesting movement, without Grimes singing too there is no sense of relative space or of Ellen’s proximity to him. On the Decca recording, however, Ellen and Balstrode are heard to enter at the back of the stage (CD2, track 12, 4:50) and when Ellen makes her entry she begins on the left but gradually moves to the centre (CD2, track 13, 0:18). A key factor in the dramatic realisation of this passage on the Decca recording was the fact that it was recorded in a single take, something that the producer Erik Smith remembered as making ‘an emotional impression’ on those present (Britten-Pears Library, 1958b; Smith, 1959, p. 162). Another factor in the success of the Decca recording, and particularly in this passage, was the way in which effects suggesting distance and movement were achieved without multi-track recording: ‘the crowd movements were real movements in the hall, the distant effects were done by real distances’ (C. Raeburn & Smith, 2004). This attention to detail ensured that there was a real sense of the searchers growing nearer and moving away again, and of the individual characters in this scene – Grimes, Ellen, and Balstrode – moving within the space created by the stereo image, details that are absent on the other recordings. These points alone illustrate the effectiveness of stereo in enhancing the experience of opera on record and justified the extensive planning of placement and movement that became a standard feature of Decca’s stereo opera productions.

Reception

Decca's release of *Peter Grimes* was delayed by a month in order to prepare the elaborate boxed set, in both stereo and mono versions, but when it was finally released in October 1959 *Opera* magazine described it as 'a triumph for all concerned' (Anon., 1959).

Evidently Britten was pleased too and wrote to Culshaw to congratulate him on 'a really splendid production. The whole thing is beautifully done, and crowned by some really superb photographs' (Britten-Pears Library, 1959, 27 October 1959). The delay in recording the work had been a source of frustration for many, including the composer, but ultimately it had benefited from innovations in technology and methods of production. Those advances were noted and appreciated by critics, who were unanimous in their assessment of *Peter Grimes* as both a great technical achievement and a demonstration of the artistic potential of stereo:

Decca [...] prove once again with this stereo set that recording can now do so much more than merely attempt to reproduce the actual sound of a stage performance of a work. They have given us a master piece imaginatively transferred to a new medium – and one which allows us to appreciate it in an entirely new, rewarding light.

(Barker, 1959)

Record buyers were equally enthusiastic and sales figures show that in the 12 months from 1 February 1959 there were over 2,600 sales of *Peter Grimes* in the UK in both mono and stereo sets. That figure would be outstripped by initial sales of later recordings of his works, including *War Requiem* (1962) and *Billy Budd* (1968), but it was the success of this recording that demonstrated there was 'a sizeable British market for Britten's music' and finally 'cemented Britten's relationship with Decca' (Kildea, 2002, p. 224).

Summary

The recording of *Peter Grimes* in 1958 was a landmark in recording history as it demonstrated to critics and consumers that stereo recording could be used to enhance the experience of opera on record. In order to convey a sense of the drama of the work, the recording had required detailed planning and thoughtful consideration as to the placement and movement of singers, as seen in the Decca production plans. Such planning would become a standard feature of Decca opera productions on record and, although the method would be adapted and modified over the following years, the essentials were in place and had been shown to work. The recording had also benefited from the input of the composer on aspects of staging and sound effects and in that sense, possibly more than any other stereo opera recording, *Peter Grimes* reflects Culshaw's vision of stereo opera as an art form with the potential to realise a composer's intentions more effectively than a stage production (Symes, 2004, p. 83).²¹ The involvement of Britten and Pears added to the 'air of authenticity' that the composer attached to a first recording, and consumers could feel confident that this represented a definitive statement about the work. They would also have been aware of the huge advances that had been made in recording technology, both in the quality of recorded sound and the sophistication of the Decca production, as demonstrated by comparison of the stereo and mono recordings.

Culshaw had been vindicated in his belief that the time was right to record *Peter Grimes* and, despite misgivings on the part of members of Decca's repertoire committee, the recording captured the imagination of the public and proved to be a great success. Since 1958 there have been other recordings of *Peter Grimes*, but none has had the impact of the

²¹ Culshaw's view was that by being free of the compromises necessary in performance at the majority of opera houses, and by utilising the creative potential of stereo, recorded opera could better reflect the composer's intentions (Culshaw, 1960, 1962, 1968a).

Decca production or challenged its status; nearly 60 years later it is still widely regarded as the leading interpretation of the work on record, produced in collaboration with the composer and the artist most closely associated with the title role.

Act 1, Scene 2, PART ONE (VS pp 118 - 144)

Inside the Boar. Door on extreme left. Bar at right back. Entire scene imagined aurally in terms of constant movement away from the door and the storm raging outside.

All first entries sung from left moving eventually to right with the exception of Nieces who remain right throughout.

Boles moves centre p. 129 for his clash with Balstrode.

Chorus remains right throughout establishing right bias to throw

Peter's entry (left) into highest relief. Suggest Peter moves to centre at least by his cue "Who, who, who" p. 141.

NOTES. Wind machine required extreme left whenever door is opened.

The cues are all in the score. p. 121 window shutters blow open.

P. 129 I do not feel we need to hear Boles hit Balstrode as this is conveyed in the orchestra.

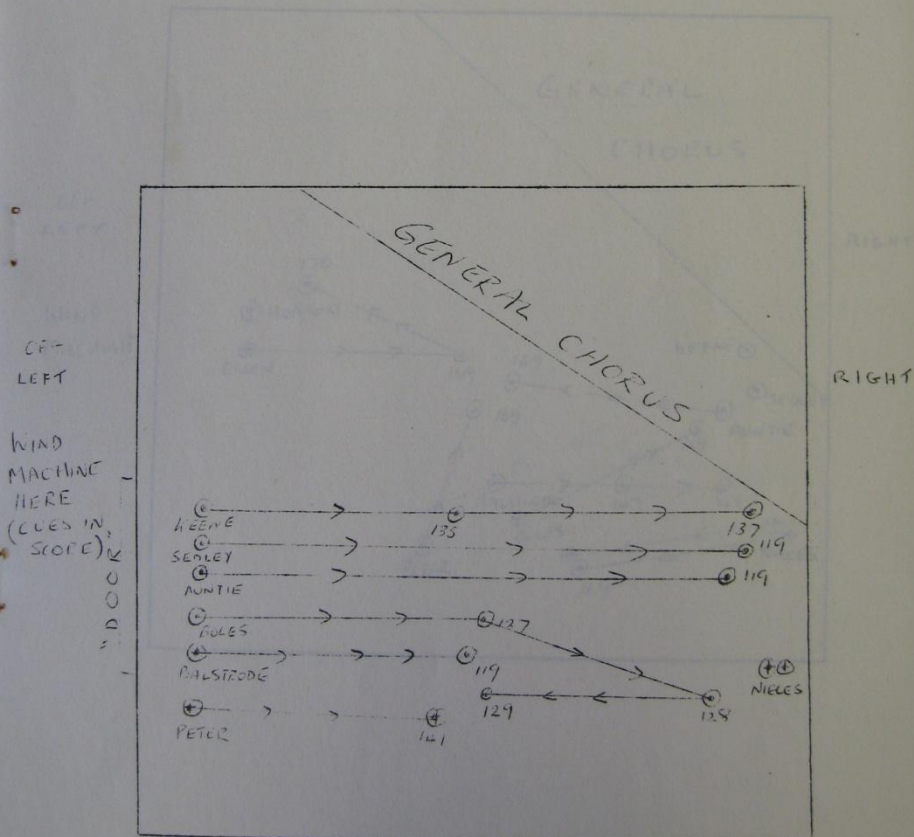


Figure 3: Page 4 from the 'stereophonic production notes' for the Decca recording of *Peter Grimes*, 1958: Act 1, scene 2, part 1 (Vocal score pp. 118-144)

Act 2, Scene 1, PART ONE (VS pp 177 - 206)

Setting as for Act 1, Scene 1.

The very simple movement required in this section is shown on the plan.

NOTES. Organ, Choir and voice of Rector must be heard as if from within church on extreme left.

Ep. 177 - 182 Church bells B flat and E flat to be heard on extreme left. Would much prefer real bells rather than tubular bells if possible.

P. 205 Ellen, having been struck by Peter, drops her work basket.

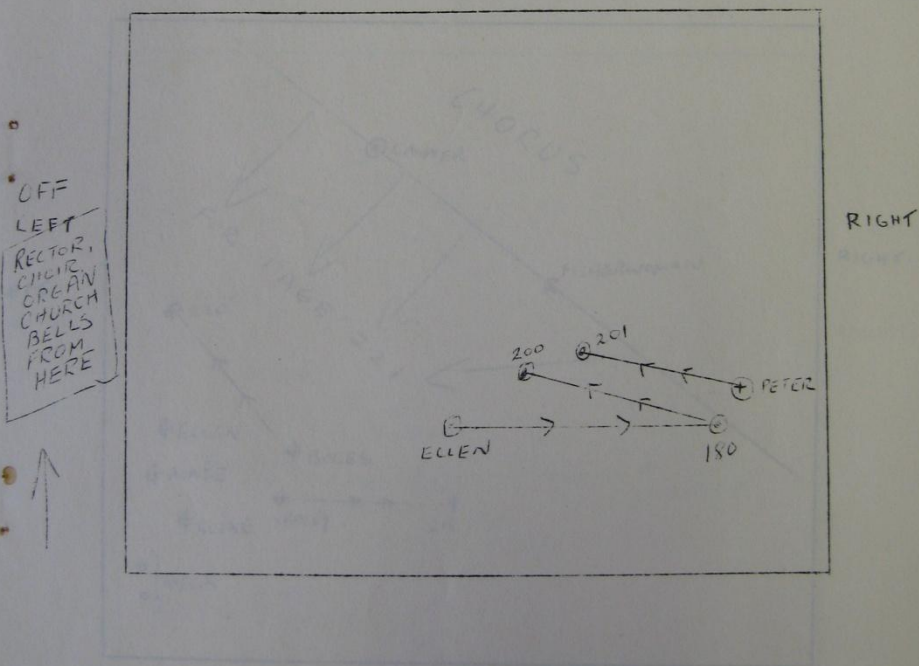


Figure 4: Page 6 from the 'stereophonic production notes' for the Decca recording of *Peter Grimes*, 1958: Act 2, scene 1, part 1 (Vocal score pp. 177-206)

9 *Elektra* (1966-67)

Introduction

The introduction of the stereo LP, and the release of recordings including *Das Rheingold* and *Peter Grimes* (both made by Decca in 1958), created much excitement amongst critics and consumers, who marvelled at the improved quality of sound and at details of works that were previously unheard. Over the following years producers and engineers continued to develop their approach to stereo and the recording of opera in stereo, refining working practices as necessary. By the mid-1960s practices were well established and record companies had amassed a substantial catalogue of stereo LPs. But despite the general praise, there were also dissenting voices, concerned that the desire to realise operatic drama by making full use of the stereo medium led to unrealistic productions. John Culshaw was a leading advocate of the use of technology to enhance the recorded experience of opera, believing that that ‘the ideal stereo version of any opera must be a production in its own right *within its own medium*’ (Culshaw, 1960, p. 74), unfettered by limitations of theatrical time and place. Although many critics supported this position in principle, they were not always convinced by the results and Decca’s recording of *Elektra*, produced by Culshaw in 1966-67, was the subject of a prolonged debate in the pages of *High Fidelity* magazine.

Recording *Elektra*

By the mid-1960s John Culshaw had been in charge of Decca’s classical recording for over a decade. Before his departure in 1967 to take up the post of Head of Music at BBC Television, Culshaw embarked on the recording of Strauss’s *Elektra*, one of his last major

projects at the company. Writing in *The Gramophone* (Culshaw, 1968b) he described the recording and its planning, which employed his by now well-established methods including extensive preparation, careful consideration of the placement and movement of singers, and the use of sound effects. *Elektra* had been one of Culshaw's long-term projects, marked by his determination not to record it until the right cast was available. Having identified Birgit Nilsson as his ideal Elektra several years before, he had been prepared to wait for her to learn the part and to record it when she was ready. Culshaw was also insistent that *Elektra* should be a complete recording, with any cuts normally made in the opera house reinstated. This was to prove problematic, as Culshaw later admitted:

The cuts in *Elektra* gave me one of the worst administrative headaches of my career. Solti, Gordon Parry and I were sure that they should be reinstated; but Miss Nilsson, armed with a letter from Karl Böhm, was equally sure they should not. Böhm's argument was based simply on the fact that Strauss had sanctioned the cuts – which was never in dispute anyway. [...] It was solely a question of deciding whether *Elektra* was a better or worse work with the cuts put back, and of this I had no doubt whatsoever.

(Culshaw, 1968b, p. 473)

Concern to restore the cuts was typical of Decca's thoroughness: when Decca recorded *Ariadne auf Naxos* with Erich Leinsdorf in 1959 Christopher Raeburn sought permission to use the original version of the opera on the basis that if the recording was to be 'definitive' then it should contain material normally cut in performance (British Library, 2011). As for *Elektra*, Culshaw argued that Strauss had made the cuts to overcome problems in performance, not necessarily intending them to be permanent. Despite Culshaw's thorough research (consulting Boosey & Hawkes and reading all that Strauss had said on the subject), Nilsson could not be convinced before the sessions began in 1966; she was finally persuaded to record the additional material but stipulated that the extra session take place on a particular day in February 1967 when she was available. The logistical and technical obstacles were not insignificant. The Vienna Philharmonic

Orchestra was on tour at that time and the available members of the VPO had to be supplemented by players from other orchestras, but Solti was able to reschedule his diary, and fortunately the Sofiensaal was available. Next, engineers had to recreate the sound of the previous year's sessions and be ready to edit the additional material into the first recording, made six months earlier with a substantially different orchestra and with little overlap in the takes. In the meantime, an additional problem had arisen before the first sessions when the soprano cast in the role of Chrysothemis withdrew; her replacement, Marie Collier, had to be recorded separately and her part dubbed into the original recording, even though it was made at a different location. For Culshaw, the judicious use of technology to add the additional parts was wholly justified by the final results:

Whatever some critics may say, I feel that this is a case where technology really came to the service of music, for without 'immoral' splices, and without superimposition, there would be no complete *Elektra* on the market today.

(Culshaw, 1968b, p. 474)

High Fidelity (1968-69): Osborne versus Culshaw

Reviews of *Elektra* included that of Conrad Osborne, published in *High Fidelity* magazine in February 1968 (C. L. Osborne, 1968), in which he was highly critical of Culshaw's approach and of stereo opera in general. Criticism of Decca's approach was nothing new: as early as 1959 in a review of the company's recording of Boito's *Mefistofele* (1958), Robert Lawrence stated that in its efforts to convey the drama the Decca team had created 'only aural distraction, a series of sound effects imposed upon the score with little regard for its musical design' (Lawrence, 1959). Later, reviewing Decca's recording of Strauss's *Salome* (1961), Lawrence concluded that Culshaw's approach encouraged effects that disturbed the sound balance and undermined the work of the conductor, the focus on detail leaving the impression that 'one cannot taste the honey for the busy bees' (Lawrence, 1962). What was unusual in the case of *Elektra* was that Culshaw chose to respond, in an

article in the October 1968 issue of *High Fidelity* (Culshaw, 1968a). By then, Culshaw had left Decca and no longer felt the need for restraint or concern about antagonising critics and being drawn into argument. The exchange of opinions provoked much debate, reflected in the letters pages of *High Fidelity* over several months, and Osborne wrote a response to Culshaw's comments, which the magazine published in April 1969 (C. L. Osborne, 1969). The debate provides a unique insight into the concept behind the recording and its reception by critics and consumers.

The title of Osborne's review set the tone for the debate: '*Elektra*: A stage work violated? Or a new sonic miracle?' Although stating that he regarded *Elektra* as 'a highly sophisticated piece of work', in Osborne's opinion Culshaw had gone beyond the 'radio mellerdrummer sound effects' of other Decca recordings, which he regarded as 'occasionally helpful, but more often heavy-handed and tasteless' (C. L. Osborne, 1968, p. 77). Osborne also alleged that Culshaw had attempted 'to establish a recognizable sound environment for each scene, sometimes for different characters within a scene' and that the two principal characters, *Elektra* and *Klytemnestra* 'exchange lines across a sonic boundary; they inhabit different worlds' (C. L. Osborne, 1968, p. 77). While acknowledging that record producers work solely in an aural environment without recourse to the visual cues of the opera house, Osborne nevertheless wondered aloud: 'can a work conceived and written by masters of the live theatre be translated into this new medium without extensive alteration?' (C. L. Osborne, 1968, p. 78). For Osborne at any rate, such 'extensive alteration' ran the risk of the listener becoming confused and disorientated:

Where *are* we? What *is* the audience/performer relationship? If *Elektra* and her mother occupy different worlds (do they? Did Hofmannsthal think so? And Strauss?), how is it that they inhabit the same musical texture, share the same stage, hold converse with each other? Are we here in the room with *Elektra*? Really? Then why does she sing so loudly? Why isn't the whole scene whispered? Because

this is an opera, that's why, and the performers have spent years learning how to project words and music to the back wall of a big theatre over the sound of a huge orchestra. If, assisted by their acting talents and the *mise en scene*, they succeed, we are convinced. On a recording, they must sing and play with all the more abandon and passion – but that is really all that's needed.

(C. L. Osborne, 1968, p. 78)

Osborne's assertion that musicians only need to sing and play with 'all the more abandon and passion' to make a convincing recording was unlikely to sit well with Culshaw's views, which he had outlined in various publications over the years. For Culshaw, a producer needed a clear concept in mind when embarking on a recording and 'it should be there to start with, for the catalogues are full of examples to show what happens when it isn't' (Culshaw, 1968b, p. 474). Allied to this was the need to consider fully the drama implied by the music and text, and how it was affected by the movement and placement of singers:

There are two ways of getting 'action' into stereo opera productions: you can keep your singers standing still and have them seem to move about by mixer control, or you can leave the mixer alone and make the singers actually move around. To my mind the first system is only a useful adjunct to the second. [...] The singers have to act, and in acting they move.

(Culshaw, 1958, p. 45)

In his article in *High Fidelity*, Culshaw asserted that the use of the word 'violation' by Osborne suggested that the critic was only concerned to preserve opera house traditions on behalf of 'that very tiny minority of people who constitute the world's opera house audience' whereas a record producer needed to think about the wider audience at home and to produce a record with 'impact' if it was to be commercially successful:

The way to reach this extra audience, especially in the case of a relatively unpopular and 'difficult' work like *Elektra*, is to make the sound of the music more immediate than it could ever be when heard from most seats in most opera houses.

(Culshaw, 1968a, p. 68)

According to Culshaw, Osborne seemed to be suggesting that in relocating *Elektra* 'from its right and proper environment in the theatre' to that of a recording, Culshaw had

‘massacred a masterpiece’ (Culshaw, 1968a, p. 68). Culshaw goes on to make it clear that the recording was a collaborative effort, and with some irony points out that ‘while the massacre was going on nobody at all raised a finger in protest’ (Culshaw, 1968a, p. 68). Certainly there is nothing to suggest that there were any objections from the conductor or the soloists during the recording and even though the special effects were captured separately and added in post-production the artists would have been aware of them when they heard the first edit and test pressings. In retrospect, some artists did have misgivings about aspects of Decca’s stereo opera recordings; in later years Birgit Nilsson was critical of Decca’s efforts to exploit the stereo effect on its recordings, not only with regard to the use of effects – which she thought were often overdone and sounded artificial – but also in relation to the balance:

The efforts of all withstanding, I have to admit I am not wholly satisfied with the Decca recordings. [...] We were often covered by the enormous volume of the orchestra, far, far too often. Throughout, the orchestra was too loud. [...] Possibly the Decca Boys were so taken with the idea of getting in *all* of the effects previously unheard that they temporarily forgot that opera is actually singing with orchestral accompaniment.

(Nilsson, 2007, pp. 236-237)

Later, some record buyers also began to feel that perhaps they had allowed their judgement to be swayed by the novelty and excitement of stereo opera, and that some of the extremes of balance – particularly the relationship between singers and orchestra – or the use of sound effects and spatial separation to suggest movement and relative distance, now seemed excessive or unmusical (Chavez, 2010; Pollard, 2009; Swains, 2009). In the case of *Elektra*, however, Culshaw denied that he had sought to establish a different and recognisable sound environment for each scene – referring to them as ‘Osborne’s fantasies’:

I’m not saying that we didn’t provide any special effects in *Elektra*; but I am saying that we didn’t create, or even try to create, a different sound environment for

different scenes. Yet Osborne heard, or thought he heard, such a difference, because he has become abnormally sensitive to what he supposes to be the power of the recording producer. His imagination is revealing wondrous and wicked things to him.

(Culshaw, 1968a, p. 69)

Culshaw did allow that there was a slight aural difference between the sound of Clytemnestra's voice on her first entry when she appears at a window and later when she is at Elektra's side but stressed that the difference was minimal and 'the only instance of a special acoustic for an *on-stage* voice in the entire recording' (Culshaw, 1968a, p. 69). However, Osborne was not the only critic to claim to detect differences in the acoustics; William Mann also commented on what he heard as attempts to create a distinct acoustic for different scenes and different characters:

Elektra is an opera about psychological disturbance, and John Culshaw and Gordon Parry have created acoustical atmospheres which convey the changing ambiances of the music – not only the situations and words, but what the characters are feeling at a particular moment. The opera takes place out of doors, in the courtyard of King Agamemnon's palace. At the start, when the serving-maids are drawing water, this alfresco setting is made audible; but when Elektra re-enters alone we are made acoustically to share her sense of claustrophobia, and when she dreams of revenge we follow her in aural imagination into the bathroom where her father was assassinated. The terrible haunted world of Clytemnestra is conveyed by other changes of acoustic suited to the situation or the thought; and when, at the end of this scene, Clytemnestra receives secret news of Oreste's death her maniacal laughter shifts and echoes distortedly all round the invisible stage with bloodcurdling effect.

(Mann, 1967, p. 276)

If two established critics, writing for separate publications and presumably unaware of each other's views, claimed to have heard acoustical differences that Culshaw clearly states were neither deliberate or intended, the question arises as to what the critics might have heard. The recording is available in at least three different formats: the original LPs, the 1986 ADRM transfer for CD reissue in 16-bit digital sound, and the 2007 remastering for CD reissue in 24-bit digital sound (see discography, p. 347). In the following discussion of the recording, timing references (mm:ss) are given for the tracks on the CDs,

listed at Appendix 6; unless stated otherwise, page numbers refer to the Boosey & Hawkes vocal score of the opera (Strauss & Hofmannsthal, 1943). In all three versions of the recording it is difficult to detect the acoustical differences that Osborne and Mann claimed to have heard and where there are differences in the sound they tend to be subtle and momentary. For instance, when Elektra (sung by Birgit Nilsson) first enters, her voice sounds somewhat distant and ethereal (CD2, track 14, 0:15; p. 18) but by the time she sings 'Der Vater fort' (CD2, track 14, 0:47; p. 19) her voice is fuller and more natural. The stage direction at the beginning of this section states that 'Elektra comes from the house' (p. 18) and one possible explanation for the difference in sound is that Nilsson began her part at the back of the grid marked on the sound stage and moved in towards the microphones (on opera sessions the stage at the Sofiensaal was extended into the hall). Photographs of the Sofiensaal show a proscenium arch over the stage and if Nilsson was far enough to the rear of the sound stage this may have added a quality to the sound of her voice that made it seem artificial. Later, when Chrysothemis (sung by Marie Collier) enters, she is heard on the left of the stereo field and Elektra on the right so that there is a clear spatial separation (CD2, track 15; p. 32) but otherwise there is little discernible difference in the recording of the two voices. At times Chrysothemis sounds more 'present' and slightly more forward in the balance while Elektra sounds more distant, but again this may be a reflection of the stage directions that Chrysothemis 'stands in the doorway' (p. 32) and then 'stands close to the door' (p. 33), suggesting that there should be a slight difference of perspective.

Attention to the details of the score, including stage directions, would certainly concur with Culshaw's assertion that 'we followed the score in all its complexities' (Culshaw, 1968a, p. 69) and his belief that the recording, free of the compromises necessary in the

opera house, was capable of reflecting Strauss's intentions better than most productions in the theatre. This alone, however, would be unlikely to explain the perceived acoustical differences in the recording. Another explanation may be that recording the work out of sequence meant that some scenes, although adjacent to each other on the recording, were in fact recorded hours or days apart – there was a total of 12 days of sessions for *Elektra* spread over a period of 12 months. Engineers were aware that changes in temperature or humidity could affect a venue's acoustics and although they made allowance for variations in the sound there may have been subtle differences in the background ambience that were detectable on the final recording. Yvonne Minton, who sang the role of Third Maid, confirmed that the opening scene with the maids in the courtyard was recorded separately in one day and that there was no contact with Nilsson or Collier, singing the roles of Chrysothemis and Elektra in the scene immediately after (Minton, 2014). Collier was, of course, not present at the original sessions and would most likely have recorded her part while listening to the first sessions on headphones, adapting her performance to fit as necessary. Minton had done this herself on other recordings and explained that it was not necessarily difficult if the artist had performed the role or at least rehearsed it with the conductor, although it is not known whether Collier had this opportunity. Matching the additional part to the original recording would no doubt have posed some challenges but Minton recalled that the Decca engineers took great pride in their ability to resolve technical difficulties (Minton, 2014). By the late 1960s Decca engineers still recorded direct to 2-track stereo but had a 4-track recorder running as a backup on opera sessions. The 4-track tape would have enabled engineers to dub Collier's part into the recording, re-balance the sound as far as possible to accommodate differences in the sound, then re-record it to 2-track stereo. It is possible, however, that residual differences in the sound were heard by Osborne and Mann and interpreted as part of attempts to create distinct

acoustic environments for different characters.²² Their willingness to ascribe perceived differences in the sound to the influence of the producer and engineers attests to Culshaw's belief that critics, accustomed to the use of effects on previous stereo opera productions, had come to expect them and so imagined 'wondrous and wicked things' even when no effects had been employed.²³

Osborne also found fault with some of the effects that were used on the Decca recording, referring to Klytemnestra's exit when she is told that Orest has died as 'botched' because of what he regarded as the excessive manipulation of the sound of her laughter using echo. Culshaw countered this by arguing that the effect was necessary on the grounds that 'theatre stages are acoustically dead, and thus all you can hope to get in a live performance is a series of short 'dry' laughs – which don't, of course, convey the terrible madness of the scene' (Culshaw, 1968a, p. 69). At the time Decca's *Elektra* was released there was only one other studio version of the work in the catalogues, recorded by Deutsche Grammophon in 1960 with Karl Böhm and the Staatskapelle Dresden. Comparison of the two recordings reveals the different approaches taken to Klytemnestra's exit. Throughout the passage, numerous stage directions indicate the scene's changing mood as Klytemnestra learns of Orest's death and faces Elektra with 'a look of evil triumph' before, 'glutted with wild joy', she 'hurries eagerly into the palace' (Strauss & Hofmannsthal, 1943, pp. 106-109). Many of these stage directions are impossible to convey on a recording (most of the conversation is whispered and therefore inaudible) and the drama of

²² Dubbing between tracks and between tapes would have increased tape noise on the master tape and this may have contributed to perceived differences in the sound.

²³ Staff at Decca were reportedly bemused by Osborne's claims; former producer John Mordler said that he was aware of the dispute between Osborne and Culshaw but 'like everyone else, never took it very seriously' (J. Mordler, email to author, 3 February 2013). Ray Staff, one of the engineers responsible for remastering *Elektra* for the Speakers Corner label reissue on LP, working from the analogue master tapes, was also dismissive of Osborne's claims (R. Staff, email to author, 4 August 2015).

this passage therefore risks being lost. On the Deutsche Grammophon recording, other than Klytemnestra's commands for 'Lichter' (CD2, track 16, 2:27; p. 106) and 'Mehr lichter' (CD2, track 16, 2:55; p. 107) there is little to indicate the state of her mind until we hear a single series of laughs (CD2, track 16, 3:30; pp. 108-109). This laughter is very much stage laughter, sounding contrived and unconvincing given the unfolding drama, and warranting Culshaw's description of it as 'very silly' (Culshaw, 1968a, p. 70). On the Decca recording Klytemnestra's utterances of 'Lichter' (CD2, track 17, 0:16; p. 106) and 'Mehr lichter' (CD2, track 17, 0:30; p. 107) are each preceded and followed by laughter, rising in pitch, duration, and intensity with each instance. The laughter then begins to recede into the distance (CD2, track 17, 1:20; p. 108) before reaching a climax with a piercing scream of laughter (CD2, track 17, 1:30; p. 109). The sound has clearly been manipulated through the use of echo to create the impression of Klytemnestra's increasingly manic laughter echoing throughout the castle as she disappears into the distance. We are under no illusion that it is intended to sound realistic and even if it does sound somewhat melodramatic it adds immeasurably to the drama of the moment. For Culshaw, Osborne's failure to entertain the possibility that this could be a valid device suggested 'a serious failure of imagination somewhere, and I don't think it was ours' (Culshaw, 1968a, p. 70).

Culshaw regarded the use of technology as a legitimate response to the need to create 'impact' on a recording, bearing in mind that the average record consumer would be hearing the work at home without the visual stimulus of a staged production. It was also an acknowledgment that when we listen to a recording 'we are where music belongs: in the mind and in the emotions and in the imagination' (Culshaw, 1968a, p. 71). Therefore a

recording *had* to be different, something that Culshaw felt Osborne was unable to appreciate:

Conrad Osborne completely missed the point about *Elektra*: we set out consciously to do the one thing that no other recording of the opera had even attempted; we wanted to make it extremely disturbing, because it *is* disturbing. We didn't want to make a nice comfortable recording for the canary fanciers to chatter about: we wanted it to hurt in the way that Strauss meant it to hurt, and to involve in the way that Strauss meant it to involve. This is what really matters, because it is what the composer wrote.

(Culshaw, 1968a, p. 71)

The exchange between Osborne and Culshaw prompted several readers to express their disapproval in the letters page of subsequent issues of *High Fidelity*, one correspondent referring to the 'wounded vanity and temper tantrums displayed by John Culshaw' (Kronemeyer, 1968). Some were critical of the recording itself, stating, for instance, that 'the *Elektra* musicians sound like a bunch of soloists playing without regard for their relationship as a group' (Bodge, Fregosi, Glass, Kennedy, & McClure, 1969). Others wrote in Culshaw's defence, one stating that he 'thoroughly enjoyed John Culshaw's legitimate rebuke of Conrad L. Osborne's absurd criticism of the recent London *Elektra*' while another correspondent expressed his appreciation of Culshaw's consideration of the needs of the listener at home:

I think Mr. Culshaw gets to the heart of it when he writes that an opera recording should not be a souvenir. [...] When I slip a record onto my turntable, I don't want to be reminded of a huge hall and a relatively small stage. An opera is certainly more than music, and the more immediacy that can be provided, the more the drama becomes real to the listener.

(Clarke, 1969)

In Osborne's response, he conceded a number of points, including Culshaw's argument that record producers had to bear in mind the need to produce recordings that were commercially viable. However, Osborne remained insistent that this did not waive the critic's duty to discuss their artistic merits. He was also dismissive of Culshaw's claim that

the focus on details of the work could reveal Strauss's intentions and transcend the limitations of the opera house:

The unheard notes contribute to textures and over-all effects; if Strauss had badly wanted them to be heard, he would have scored them in such a manner as to make them audible. Mr Culshaw is fascinated by the workings of the clock; we only want to know what time it is. [...] I suppose the industry's idea of operatic modernity will continue to consist of slathering century-old stage works with irrelevant melodramatic sound effects.

(C. L. Osborne, 1969, p. 25)

Despite Osborne's reservations, others judged Culshaw's work more favourably. John McClure, a producer at CBS, wrote that if opera was to survive it had to broaden its appeal and so needed 'the creativity and innovative enterprise of the Culshaws to rock the operatic boat' (Bodge et al., 1969). The critical response to *Elektra* was also generally more favourable than Osborne's review would suggest and at the 1968 Montreux International Record Awards it was awarded the Gold Prize by an international panel of critics, as reported by its chair, Roland Gelatt:

The decision to give the gold prize to Decca/London's recording of *Elektra* came as no great surprise. Whatever one may think about individual details in John Culshaw's production, there can be no question that it presents the work through stereo loudspeakers with singular imagination and intensity.

(Gelatt, 1969)

If Osborne had 'missed the point' Gelatt and others seem to have understood what Culshaw was trying to achieve. *Elektra* was not intended to be a representation of what might be heard in a stage production. It took advantage of technology to transform the experience of opera for listeners at home by making it more vivid, more dramatic. Culshaw's starting point was a concept for the opera that was realised through careful planning and the considered application of technology. The result was a production that was intended to be considered on its own terms, rather than judged by the standards of the theatre. With the recording of *Elektra*, stereo opera had reached its ultimate stage of

development. By the mid-1960s Culshaw and others had shown what could be achieved through the thoughtful use of stereo and the careful application of selected sound effects. The criticisms of Osborne and Lawrence demonstrate that not everybody was convinced by Culshaw's approach and in retrospect some have admitted that they were swayed by the novelty of stereo. In many ways the recording of *Elektra* marks the end of an era, as with Culshaw's departure from Decca in 1967 the British record industry had lost the two most influential figures of the recording boom of the 1950s and 1960s (Walter Legge had left EMI in 1964). Both companies continued to record opera in stereo, although David Patmore has suggested that once Culshaw left Decca his ideas ceased to have influence and his approach to stereo opera was soon abandoned (Patmore, 2008, pp. 35-36). This view is disputed by John Mordler, a record producer at both Decca (1963-73) and EMI (1973-83), who worked closely on many recordings with Culshaw and who maintains that not only did Culshaw's methods of production continue to be applied after his departure but that Mordler applied the same techniques when he moved to EMI (J. Mordler, email to author, 3 February 2013). Michael Haas also recalled that when he joined Decca in 1975 many of the sound stage concepts were evident on opera recording sessions and continued to be used as 'they were very much in the fabric of the company's recording aesthetic' (M. Haas, email to author, 10 June 2014). There was possibly a change in emphasis and less use of the more extreme type of sound effects favoured by Culshaw, but others, including Gordon Parry and Christopher Raeburn, had a considerable personal investment in the development of the sound stage concept and were unlikely to abandon it so easily. Even Culshaw's replacement, Ray Minshull – a divisive figure who was unpopular with staff and several of Decca's leading artists, including Britten and Solti, and who might have been expected to make changes – continued to apply Culshaw's methods (M. Haas, email to author, 10 June 2014).

Significant change occurred following the recession of the 1970s when EMI merged with Thorn (1979) and Decca was bought by Polygram (1980). At Decca there were changes in personnel and several of the long-serving members of staff chose to retire. The financial constraints imposed by the new management gradually brought about an enforced change in practice, motivated by diminishing record sales and the need to reduce the costs of record production. Artist rosters were reduced, the number of new releases began to decline, and studio opera productions became increasingly rare. Seen in context, the recording boom of the 1950s and 1960s was clearly a ‘golden age’ for artists, record companies, and those who worked in recording. But regardless of changes in the industry or in technology, the key elements of modern recording practice that were developed in the 1950s and 1960s – including recording in takes, the use of editing, and the role of the producer – remain in use today and, along with recordings such as *Elektra*, form an important part of the legacy of that era.

10 Phase 4 Stereo: *Scheherazade* (1964)

Introduction

Throughout the 1950s and 1960s the ideology most commonly voiced by producers in relation to the recording of classical music was one informed by a concern for realism and fidelity to the concert-hall experience – the idea that a recording should give the listener the illusion of experiencing a performance as if heard from the best seat in a concert hall (Symes, 2004, pp. 72-73). There may have been slight variations in aesthetic approach but the vast majority of classical recordings were produced on this basis, particularly with the advent of stereo recording, which gave producers the ability to replicate the relative placement and balance of instruments and voices in a realistic manner. Even John Culshaw can be said to have operated within the same context in his stereo opera productions (Cook, 2013, p. 381), with his use of the stereo medium and of special effects amounting to a form of ‘super-realism’ (Symes, 2004, p. 83). Some record labels, however, sought to exploit the potential of stereo recording still further to create a distinctly phonographic experience; prominent amongst these was Decca’s Phase 4 Stereo.

Decca Phase 4 Stereo

Decca’s Phase 4 Stereo label was launched in 1961 at the instigation of London Records, Decca’s subsidiary in the USA, as explained by Phase 4 record producer Tim McDonald:

[London Records’] executives were disappointed at what they regarded as the British studios’ rather ‘tame’ deployment of the then fairly novel concept of stereophony. They wanted something which exploited the left-right potential much more dramatically [...] The basic philosophy of the label was simple. The record was a quite individual medium, with its own characteristics and potential. It wasn’t a concert hall, a recital hall or any other performance venue – it was a unique

environment in which it was possible to create effects and sensation unobtainable in any other context.

(McDonald, 2014)

The original concept for Phase 4 may have originated in America but in fact most of the recordings were made in Britain, and an American producer, Tony D'Amato, was sent to London to manage the label. The concept was realised using a multi-channel mixer – 10 channels at first but quickly upgraded to 20 – that allowed engineers to use a wide spread of microphones, enabling them to change the balance and highlight instruments or sections of an orchestra at will. Not only that, but the microphones were placed lower and closer to the instruments than usual, so that the balance of sound was further forward, giving the listener the impression of being closer to the music. In the words of Decca engineer Stan Goodall it was 'an up-front sound and the intention was to put as many decibels as you possibly could on the disc' (Tolansky, 2014). This approach differed greatly from that used for most conventional recordings, particularly of classical music, and D'Amato's initial proposals were dismissed by staff at Decca who 'said they were into quality, they weren't into gimmicks' (Green, 1997).

The provenance of the name 'Phase 4' is uncertain. When asked, D'Amato himself said that 'he didn't know, he had no idea' (McDonald, 2015) – but it was suggestive of progress and innovation. Decca alluded to these attributes in its marketing materials in which it proclaimed the Phase 4 concept to be the latest stage in the development of stereo recording, and 'Decca's trademark for the most advanced and flexible of all stereo recording techniques' (Decca, 2014). At first, the label issued recordings of popular and light music but in 1964 the Phase 4 process was extended to classical music, mostly of popular and lighter repertoire, with the introduction of the Phase 4 Stereo Concert Series.

***Scheherazade* (1964)**

Amongst the early releases in the Concert Series was Rimsky-Korsakov's *Scheherazade*, recorded in September 1964 with Leopold Stokowski conducting the London Symphony Orchestra. Stokowski was an inspired choice for the Phase 4 label as he was known for his keen interest in recording and technology and was receptive to the creative possibilities afforded by the Phase 4 process. At a meeting to discuss the proposal with London Records producer Marty Wargo in June 1964, Stokowski stipulated that he wanted to be involved in every aspect of the record's production including 'the preliminary plans, the recording, the selection of takes, the transfer from tape, the artwork. Everything' (Wargo, 1965). With any other artist this might have been a cause for concern but Wargo asserted that the recording had benefited from Stokowski's experience:

He was fascinated by the 20-channel mixer and all the other exotic paraphernalia of phase 4 recording equipment; he immediately understood both its operations and its potential. His suggestions for microphone placement, sound levels and every other aspect of the recording process were valid, creative, and effective.

(Wargo, 1965)

D'Amato also appreciated Stokowski's experience. In particular, his understanding of the dynamic limitations of the recording medium meant that he was able to balance the orchestra effectively. In D'Amato's opinion this was a great asset:

If you've got a conductor who knows where everything needs to be it's perfection. [...] The engineer wouldn't have a problem. I mean, with some conductors I'd have to tell Arthur [Lilley] "we need more viola", and he'd say "where?", and I'd let him know, and we'd take care of it next time around. But the conductors who were able to do that for themselves extracted the best sounds.

(Green, 1997)

For the musicians too, Stokowski's experience was seen as a benefit. Erich Gruenberg was leader of the LSO at that time and recalled that rather than direct him on how to play the violin solos in *Scheherazade* Stokowski 'told me "just play it as you feel it" – he left me very free' (Gruenberg, 2015). Stokowski also asked 'not for unified bowings but for

everyone to phrase like I do but play it their own way. Generally the first violins take the same bowings but with him, no, he said free bowings but my phrasing' (Gruenberg, 2015). As well as giving the players some freedom this also gave a fuller string sound, a technique Stokowski had developed with the Philadelphia Orchestra.

Roger Wimbush attended the *Scheherazade* sessions and noted Stokowski's ease with the recording process and his ability to work quickly so that often 'there was no more than a matter of seconds between "takes", his instructions brief and to the point' (Wimbush, 1964). Wimbush was aware of the Phase 4 process and expressed concern that one 'could take a score, and by highlighting certain passages and instruments by using multi-channel recording produce a totally different piece of music, though the original score had, in fact, been played' (Wimbush, 1964). Having seen them at work, however, Wimbush was convinced that neither Stokowski nor D'Amato would permit the Phase 4 process 'to debauch the art in which they have devoted their lives and from which they have distilled so much for the edification and delight of the rest of us' (Wimbush, 1964).

The session proceeded much like any other and any effects were added afterwards, as the tapes 'were re-mixed after the session, using the multi-tracking, although on *Scheherazade* they only went down to 4-tracks so there wasn't a great deal of mixing to be done' (McDonald, 2015). Stokowski was present during the various stages of post-production although his involvement in the process was not always helpful, as recalled by McDonald:

With Stokowski we used to have to keep him under control because he insisted on sitting at the desk and I remember Arthur Lilley saying quietly 'No, Maestro, you can't do that' because Stokowski would be pushing the faders right up saying 'that's what I want'.

(McDonald, 2015)

Comparative listening

When the Phase 4 recording of *Scheherazade* was released in 1965 there were already many other versions of the work in the catalogues and Stokowski had recorded it several times himself. Stereo recordings available included two made by Decca with Ernest Ansermet conducting both the Paris Conservatoire Orchestra (1954) and the Suisse Romande Orchestra (1960).²⁴ The latter version in particular was praised for its sound quality, with Edward Greenfield stating that never in his experience had ‘the illusion of instruments actually in my presence been so vivid [...] This, then, easily surpasses any rival technically’ (Greenfield, 1961). The 1960 Ansermet recording therefore provides a useful benchmark against which to compare Stokowski’s 1964 recording; considered together, the two recordings illustrate the different approaches employed for Decca’s mainstream classical recordings and those of Phase 4 (see discography, p. 347). Throughout this section timing references (mm:ss) relate to the time codes of the tracks on the CDs, listed at Appendix 6; unless stated otherwise, page numbers refer to the edition of the score published by the State Music Publishers, Moscow (Rimsky-Korsakov, 1973).

The Phase 4 approach is immediately obvious in the ‘up-front sound’ of the Stokowski recording and the sensation of being closer to the orchestra than usual; the Ansermet recording uses a more conventional balance to create the impression of hearing the orchestra as if from a good seat in a concert hall (CD3, track 1; CD3, track 2).

Occasionally, however, the extreme recording level of the Stokowski recording spills over into distortion, particularly in the bass, and examples of this can be heard in bar 36 of the

²⁴ Decca had also made stereo recordings of the work on behalf of both RCA and Readers’ Digest with, respectively, Pierre Monteux conducting the LSO (1957) and James Walker conducting the RPO (1962).

second movement, where the harp plays a chord marked *sf* (CD3, track 3, 1:30; p. 62), or in the strings in the chord at bar 259 of the fourth movement (CD3, track 5, 4:00; p. 225).

Solo instruments are invariably given prominence in the balance on the Stokowski recording, and are brought forward in the balance as necessary. Sometimes they also appear to change position within the balance, moving from left to right or vice versa to increase the separation between instruments. Stokowski was known to experiment with orchestral layout in order to achieve a better balance, both in concert and when recording, but in this case the instruments of the LSO appear to be arranged in a conventional layout. Instead, the effects were created by using the multi-channel mixer to change the relative location and balance of instruments within the stereo sound picture. In the series of antiphonal calls between the trombones and a muted trumpet beginning in bars 108-109 of the second movement (p. 70), the trumpet is heard in the foreground on the left (CD3, track 3, 3:30) whereas previously it has been heard within the brass section, slightly to the right of centre within the orchestra. In contrast, the Ansermet recording preserves a natural balance throughout (CD3, track 4, 3:10). Later in the Stokowski recording, a clarinet solo in bars 162-166 of the second movement (pp. 76-78) appears on the extreme right (CD3, track 3, 4:40) whereas the clarinet has previously been heard in the woodwind section at the left, to the rear of the orchestra. However, in the Ansermet recording the instruments maintain their positions and relative dynamic levels within the balance (CD3, track 4, 4:30).

The foregrounding of instruments in the balance is not confined to those playing solo passages or thematic material and can also be heard in accompanying material; in bars 153-169 (pp. 39-42) of the first movement the second clarinet plays a series of arpeggios

while the cello and instruments from the woodwind section, including the first clarinet, play solos above. In the Ansermet recording the arpeggios are heard in the background (CD3, track 2, 6:40) but in the Stokowski version the arpeggios are more prominent and compete for attention with the melodic material (CD3, track 1, 6:25). In some cases such foregrounding of instruments can be distracting; the entry of the first violins in the chord at the beginning of bar 46 of the first movement sounds brash (CD3, track 1, 2:19; p. 11) in comparison with the Ansermet version, where the sound is more blended (CD3, track 2, 2:40). Sometimes the effect can even be disconcerting, for instance where this leads to sudden changes in perspective. In the fourth movement, at bars 73, 77, and 81 (pp. 192-193), a cymbal is heard in its correct position within the percussion section at the rear left of the orchestra in what appears to be a natural balance in relation to the other instruments (CD3, track 5, 1:35). Moments later, however, in bars 85 and 88-89 the balance changes so that the cymbal is heard in the foreground and is unnaturally loud so that it stands out instead of blending with the other instruments (CD3, track 5, 1:45).

Similar effects are heard throughout the Stokowski recording and while it could be argued that they add to the drama and excitement of the work they can also be regarded as artificial and contrived, and likely to distract from an otherwise outstanding performance from Stokowski and the LSO. Ansermet's recording, on the other hand, demonstrates poise and restraint, with a more realistic sound – both in terms of the placement of instruments and their relative balance – and a complete absence of effects. When comparing the two recordings it is clear why the Phase 4 approach met with disapproval within Decca; a balance that places the sound of the orchestra so far forward in the sound field and the lack of subtlety when highlighting instruments would almost certainly have been frowned upon by Decca's senior engineers, Kenneth Wilkinson and Arthur Haddy, while the obvious

examples of distortion to be heard on the Stokowski recording would not have been tolerated on Decca's mainstream classical recordings.²⁵

Reception

Critics were divided in their opinions of Stokowski's *Scheherazade*. Trevor Harvey expressed reservations about a recording technique that 'puts the recording supervisor in control of what it sounds like – not the conductor' but stated that he was 'not greatly alarmed' by the results (Harvey, 1965). Thomas Heinitz, however, regarded it as 'a musical crime' on the basis that what could have been a 'stunning' recording – he expressed admiration for both Stokowski's interpretation and the LSO's performance – had been ruined by the Phase 4 process and therefore amounted to 'nothing less than a betrayal' on the part of Decca (Heinitz, 1965). R. D. Darrell, meanwhile, described it as 'a new "landmark" in the recording art' but added that 'the question of whether or not the "landmark" represents true progress is likely to be the subject of hot controversy' (Darrell, 1965). Controversy arose, Darrell argued, because listeners were also likely to be divided over the Phase 4 approach and fall into two camps: those who held that concert-hall realism was 'the only aesthetically valid aim of recorded music' and those for whom 'the highest virtue of recording is its potentiality for conveying maximal sonic effects' (Darrell, 1965).

²⁵ Kenneth Wilkinson is listed as recording engineer on one Phase 4 recording, of Orff's *Carmina Burana*, recorded in February 1976 with the Royal Philharmonic Orchestra conducted by Antal Dorati (Decca LP PFS4368, reissued on Decca CD 478 7247). It is noticeable that on this recording the overall balance is closer to that of a conventional Decca recording and that there is none of the extreme spotlighting of voices and instruments evident on other Phase 4 records.

Despite these criticisms *Scheherazade* was deemed a success and the Phase 4 Concert Series catalogue continued to expand throughout the 1960s and 1970s. Stokowski made several further recordings and D'Amato recruited several other well-known conductors – including Antal Dorati, Charles Munch, and Anatole Fistoulari – to record for the label. Arguments over Phase 4's style continued to trouble critics, however, and in the late 1960s Robert Layton expressed reservations about changing trends in recorded sound as heard on a number of labels including Phase 4:

I am sceptical about the search for a larger-than-life perspective and a brighter-than-bright sound such as we get from some transatlantic sources and from Phase 4 on Decca. This kind of balance represents to my mind a genuine danger in that it serves to create false appetites and unreal expectations.

(Layton, 1969)

The use of Phase 4 techniques for the recording of classical music 'was, and remained, a controversial move' and as well as dividing critical opinion it 'created considerable tensions between the label and the Decca establishment in London' (McDonald, 2014). The Phase 4 style contrasted sharply with Decca's mainstream classical recordings and the claims made for Phase 4 in its publicity materials may have been regarded as undermining Decca's efforts to promote its classical recordings as its premier products, even though Phase 4 had its own identity. Controversial though it may have been within Decca (even its chairman, Sir Edward Lewis, was known to dislike the label), Phase 4 sales figures were good, particularly in America and Japan, and the label could not be easily dismissed. At the same time, D'Amato could not ignore the criticisms completely and, in an interview with David Green, claimed that adjustments were made to accommodate British tastes:

There was still a great deal of trouble with the company in England. The attitude was that it may be good enough for America, but not for us. [...] And it was much maligned for that reason, even to the point where they would cut two masters of the recordings. One for England with a bit less emphasis on the 'levels', because you

know the British don't care much for gimmicks. So, they would get a different mix than everyone else.

(Green, 1997)

Precisely what D'Amato meant is unclear and Green did not invite him to elaborate further but the claim that different masters were cut for different markets may be open to question given that changes are not usually made at the cutting stage and 'a different mix' would normally require the production of a new master tape.²⁶ Tim McDonald certainly expressed surprise at D'Amato's claim, stating that he 'knew nothing about that. As far as I was concerned we produced the master tape and the masters never left the studio. [...] We created the master and that was it' (McDonald, 2015). Stan Goodall was also sceptical about this claim; before becoming a balance engineer he had worked as a cutting engineer and had cut many of the Phase 4 masters with D'Amato:

I'm pretty sure that there was no duplication of any master material. I cut many masters and the level was Tony's only consideration, not only on the recorded tape but also on the disc. [...] I destroyed quite a few Neumann cutter heads before Tony was happy.

(S. Goodall, email to author, 14 June 2015)

In the absence of further evidence one can only speculate as to the true meaning behind D'Amato's statement. It is possible, for instance, that D'Amato was referring to a specific number of recordings rather than Phase 4 recordings in general, or that some LP masters were cut in the USA with slight variations in equalisation (EQ) levels, but it seems unlikely that neither McDonald nor Goodall would be aware if separate masters were being cut as a matter of routine.²⁷ Any ambiguity in D'Amato's statement, however, is

²⁶ If separate master tapes were created for different versions of the same recording, for instance versions in mono and stereo, the tapes would be allocated different matrix numbers – to avoid confusion in the studios or at the factory – and should be identifiable.

²⁷ Some LP masters were cut in the USA using copies of master tapes – master tapes never left the studios – but Decca was reluctant to permit this as copying would increase tape noise and reduce sound quality. Most Decca/London LPs were mastered and pressed in England.

only likely to fuel the myths that seem to surround Phase 4.²⁸ In McDonald's opinion much of Phase 4's reputation is the product of marketing hype by which 'this aura was created. The sixties was this heady time with stereo, hi-fidelity and other advances – and the marketing guys jumped on it. [...] A mystique has grown up around [Phase 4] but it wasn't that radical' (McDonald, 2015).

By the end of the 1970s the Phase 4 label had amassed nearly 200 titles in its Concert Series catalogue. However, fashions had changed and stereo had lost its novelty value; although sales were still relatively good, production of new recordings was brought to an end, with the last Concert Series sessions taking place in 1978. Many of the recordings have been reissued in recent years but Phase 4's legacy seems uncertain; the recordings certainly have their enthusiasts but are dismissed by others for whom the effects, many of which now seem crude and dated, are a distraction from the musical performance. Although the Phase 4 Stereo Concert Series recordings still divide opinion, they nevertheless represent an attempt to reach beyond the boundaries of conventional recording ideology to create a product with a distinctive character and identity. As such they stand as a significant development in the recording of classical music.

²⁸In the same interview D'Amato states that Phase 4 masters were cut at half-speed. He does not elaborate on this and a reader might assume that this was a special attribute of Phase 4 records but in fact all Decca stereo LP masters were cut at half-speed until the late 1960s in order to avoid overloading the cutter heads (Goodall, 2009; Gray, 1986).

11 *The Anatomy of a Record (1975)*

Introduction

In classical music, recording sessions are usually private affairs at which only the artists and recording crew are present. As so much recording activity takes place behind closed doors the general public often has little real understanding of the process. This was particularly the case in the 1950s and 1960s as record companies were often secretive about their methods, although journalists did occasionally report on sessions to which they had been granted access and producers – including John Culshaw, Erik Smith, and Ray Minshull – sometimes wrote articles for publications including *The Gramophone*. Insights could also be gained from the occasional release of ‘bonus’ tracks or even discs of material from sessions; for example, when Decca released its 1960 recording of *Tristan und Isolde* it included an extra disc – *The Birth of an Opera* – featuring excerpts from rehearsals and sessions plus a commentary by John Culshaw (Culshaw, 1961/2002). In general, however, classical recording sessions have not been the subject of any substantial documentation and video footage is especially rare as record producers have, understandably, been reluctant to admit cameras and film crews in case they disrupt the recording or distract the artists. Humphrey Burton’s *The Golden Ring* (Burton, 1965), made for the BBC’s *Workshop* arts series, was one of the first television programmes to document the recording process in any detail by filming the final sessions of Decca’s 1964 recording of Wagner’s *Götterdämmerung* with Solti and the Vienna Philharmonic Orchestra. The programme illustrated the complexity of a large recording project as well as ‘the camaraderie and shared aspirations’ of those involved although, according to its assistant television producer, John Drummond, it ignored many of the tensions behind the scenes

(Drummond, 2000, p. 152). Ten years later, however, Humphrey Burton returned to the subject of recording in another television documentary, *The Anatomy of a Record* (Burton, 1975). In addition to illustrating the processes involved in the production and manufacture of a recording, this programme revealed much about the complex and sometimes difficult relationships that can exist between artists and record producers on sessions and these are explored in the following case study.

The Anatomy of a Record

The Anatomy of a Record, made for London Weekend Television's *Aquarius* arts series, was first broadcast on 16 February 1975. Although this is later than the core period for this thesis, the recording process of the mid-1970s was essentially the same as that established twenty years earlier.²⁹ *The Anatomy of a Record* programme is therefore of relevance in illustrating working relationships in recording.

The programme documents the recording by Philips of Mozart's Piano Concerto No. 27 in B flat, K. 595, performed by Alfred Brendel (piano) and the Academy of St Martin in the Fields conducted by Sir Neville Marriner. The sessions were filmed at Brent Town Hall in December 1974 and required careful planning as Humphrey Burton noted that 'in those days the cameras were heavier and the lighting was stronger [...] you could see Neville Marriner shading his eyes occasionally' (Burton, 2009). At one point in the programme, at the beginning of a take for the opening of the second movement of the concerto, Alfred Brendel stops, turns to face the camera and places a finger to his lips, gesturing for silence

²⁹ By 1975 analogue recording had reached the peak of its development through steady improvements in tape and equipment. Recording techniques had also been refined, for instance in relation to editing and stereo, but the underlying technology and associated processes of recording were essentially the same as those developed in the 1950s.

before starting again, but otherwise there is no indication that the cameras were a major distraction. As well as showing extracts from the sessions, the programme features interviews with Brendel and Marriner, a briefing to Philips sales personnel, and film footage of various stages in the LP manufacturing process.

The influence of the Tonmeister

The recording was made with a team sent from Philips' headquarters in the Netherlands, including the record producer, Wilhelm Hellweg. In the programme Marriner admitted to having a 'prickly' relationship with Hellweg, largely as a result of the producer's imposition of a sound balance that favoured the piano over the orchestra. Marriner explained that part of the problem was that Hellweg's training as a Tonmeister meant that he often had particular views as to the sound and balance of a recording, and would also come to the sessions with his own preconceived views about the interpretation.³⁰ In a recent interview Marriner has said that the problem was compounded by the fact that Hellweg 'would always say "yes" to Alfred [Brendel] whose idea of piano concertos was that the piano was there in your face all the time' (Marriner, 2010). Marriner went on to explain that he would have preferred a more natural balance but, as Brendel was Philips' star pianist at that time, Hellweg tended to indulge Brendel at the expense of Marriner and the orchestra. For Marriner, the problems over the balance meant that 'the orchestral texture was disappointing and you'd get lots of piano arpeggios when the orchestra was playing thematic material, which wasn't heard enough. So I was never comfortable with that' (Marriner, 2010).

³⁰ In Britain and the USA the roles of record producer and recording engineer are traditionally separate but in some countries, especially Germany, Austria and Switzerland, the roles may be combined. The term 'Tonmeister' implies that the individual is skilled in both music and engineering as the result of a specific method of training first developed in the 1940s at Detmold in Germany.

Comparative listening

The Philips recording was issued on LP in February 1975 and is currently available on a Decca CD. At the time it was released the work was already well represented in the catalogues and it was recorded several times in the 1970s; a recording made by Decca in 1970 with Clifford Curzon (piano) and the English Chamber Orchestra conducted by Benjamin Britten has been selected for comparison (see discography, p. 347).³¹ In the following discussion timing references (mm:ss) relate to the time codes of the tracks on the CDs, listed at Appendix 6; unless stated otherwise, page numbers refer to the Eulenberg edition of the score (Mozart, 1937).

Listening to the beginning of the first movement it is possible to hear the differences in balance alluded to by Marriner. The orchestral balance is similar in both the Philips and Decca recordings but when the piano enters at bar 74 (p. 8) of the first movement the differences in the relative placement of the piano are obvious. In the 1970 Decca recording the piano is heard in what appears to be a natural relationship with the orchestra, with the sound balanced in a realistic and convincing manner (CD3, track 6, 2:45). In the 1974 Philips version, however, the piano appears to be unnaturally forward in the balance, as though the piano is closer to the listener; the balance is slightly unreal and at times the piano sounds somewhat detached from the orchestra (CD3, track 7, 2:40). In the Philips recording there is little evidence of the foregrounding of the piano while the orchestra is playing thematic material but K. 595 was part of a long-term project to record all of the Mozart piano concertos and Marriner may have been referring to the series as a whole or to other concertos in particular.

³¹ The recording with Curzon, Britten and the ECO was not released until 1982 – although Curzon made three recordings of K. 595 with Decca he did not approve any of them – but is representative of the Decca sound in the 1970s.

Hellweg's imposition of a particular sound balance reflects not only a difference in aesthetic approach but the greater influence of the Tonmeister over recordings when compared with that of producers in British record companies; the conductor John Carewe frequently worked with Tonmeisters when recording in Germany and noted that they had 'very definite views' about balance and interpretation and 'could be very abrasive' (Carewe, 2009). Hellweg certainly had 'definite views' about the balance of the recording and was later described by Quita Chavez – seen in the programme giving a briefing to the Philips sales force – as difficult to work with (Chavez, 2010). Seen in this context, Marriner's frustrations are all the more understandable and perhaps explain why he was willing to be so candid when interviewed.

Power struggles and back-seat conducting

Relationships between producers and artists or between producers and engineers (although in this instance Hellweg was both producer and engineer) were only part of the equation as the act of recording also had the potential to change the nature of working relationships between artists in the studio. Humphrey Burton observed this at first hand during the making of the programme as he noticed that not only were there tensions between Marriner and Hellweg, but also between Marriner and Brendel (Burton, 2009). The tensions between the two artists appeared to stem from Brendel's desire to impose his interpretation of the work on Marriner. In the programme Brendel tried to justify this approach by stating that in his opinion only the soloist can have a complete overview of a concerto and therefore must be 'the guiding mind' – from Brendel's point of view the ideal conductor is one who 'understands' and is even prepared to 'give up ideas of his own'. More recently Brendel has stated that the relationship between the producer and the

musicians depended ‘very much on the conductor’ but that as far as the soloist was concerned it was another matter:

Generally, conductors are helpful people. If they notice that the soloist knows the piece well, the whole piece, and asks for things that are not absurd, then they try to be of assistance [...] Some have a brilliant memory and can retain everything you said, and have a certain ambition of doing it also.

(Brendel, 2011)

Brendel clearly felt that the conductor should acquiesce to the demands of the soloist – while viewing the programme with the author Burton commented: ‘it’s breathtaking, the arrogance’ (Burton, 2009) – and although Marriner appeared to be doing his best to accommodate Brendel this was clearly another source of friction. These tensions are apparent in the programme and in one passage there is an instance of what Burton refers to as ‘back-seat conducting’ on Brendel’s part (Burton, 1975). Marriner is giving directions to the woodwind section on the phrasing of a particular passage where the melody alternates between the flute and the piano in bars 102-123 of the third movement (pp. 61-63), but in the background Brendel appears to be trying to direct the orchestra from the piano by attracting the attention of the players and repeatedly playing the passage as he thinks it should be phrased. Marriner attempts to make light of the situation and jokingly refers to Brendel as ‘very rude’ before continuing with the session, but Brendel has made his point.

A similar power struggle can sometimes exist between soloist and conductor in a concert situation, but the ephemeral nature of concert performance might at least encourage compromise if not collaboration. In this case the act of recording, and the knowledge that a recording fixes an interpretation for posterity, seemed to exaggerate this behaviour and intensify the tensions between soloist, conductor, and producer as each sought to impose their views on the others and on the recording. Similar tensions have been reported in other

artist-producer relationships, for instance that of Otto Klemperer and Walter Legge, or of Dietrich Fischer-Dieskau and Legge. However, few have been documented so clearly and the programme is a useful illustration of the sometimes problematic nature of working relationships when recording, and their impact on the success or otherwise of the final outcome.

The Anatomy of a Record was the first of two related programmes. A week after it was first shown a second programme, *Brendel plays Mozart*, was broadcast in which Brendel, Marriner, and the Academy of St Martin in the Fields gave a live performance of the same Mozart concerto at the *Aquarius* studios. This performance was filmed a few days after completing the Philips recording sessions and Burton reported that ‘in some ways Alfred thinks it’s even better than the record’ (Burton, 1975). In a review of the two programmes Keith Spence made the point that ‘by attempting absolute fidelity to the written notes, the urgency of a live performance can easily be lost’ on a recording and in his opinion the live performance was the better of the two:

It seemed to me that the live performance was altogether smoother. On the record the cadenzas are rushed; and on the box Brendel caught the lilt of the rondo theme better than he has done on disc.

(Spence, 1975)

There could be several reasons for this. It could be that the intensity of the recording sessions provided an ideal preparation for the live performance, or that the nature of a live performance encouraged a greater sense of spontaneity and collaboration between artists. However, it may well be that the tensions observed during the recording sessions were also a contributory factor in preventing the performers from achieving their best performance on record.

Interpersonal dynamics were not the only cause of stress, however, and towards the end of the programme Burton noted that the sessions were running late but that they had yet to achieve ‘a perfect take of the slow movement’. Marriner explained that time was a constant pressure on sessions as they were limited by the cost of the orchestra and the fact that record companies are concerned about the need to generate profits, especially when classical music represents such a small part of the market. At the end of the next take there is a lengthy telephone conversation between Hellweg in the control room and Marriner in the studio, resulting in Hellweg having to negotiate for more time and Marriner consulting the orchestra to ask them to stay for one more take before the recording is finally complete.

The Anatomy of a Record is effective in providing a realistic overview of the process of recording. It shows how the various participants approach the sessions, how they interact, and how conflicting interests and differences of opinion can lead to friction. It shows how time factors and financial concerns can mitigate against artistic interests but also how the professionalism of all concerned ensures completion of the recording. As well as illustrating the process of recording, the documentary provides film footage of what Burton describes as the ‘brutal process of mass production’ as LPs are pressed, labels applied, and sleeves printed. Seen 40 years later, the recording technology on view is dated in comparison with the latest digital equipment, and the crude mechanical processes involved in the manufacture of LPs – not to mention the noise and dirt – have little in common with the precision of a CD production line. By the end of the 1970s digital recording had begun to replace magnetic tape as the industry standard, at least in professional recording situations, and with the introduction of the CD in 1983 it was only a matter of time before LP record production was phased out by the major record companies. After more than 30 years, the technologies that had transformed the fortunes of the post-

war recording industry and which had been central to the recording boom in the 1950s were, with the advent of the CD, all but consigned to history. *The Anatomy of a Record* is important, therefore, not only as a document of a specific recording but also as a representative illustration of an era in recording history that was already drawing to a close.

Part IV:

Summary and conclusions

Summary

The final section consists of a summary review of the thesis followed by an outline of the main conclusions relating to the significance and influence of recording in the 1950s.

Part I provided a survey of the background to the period to set the subject in context, beginning with a literature review in Chapter 1. This showed that there is little coverage of the specifics of the recording of classical music in the 1950s in the current literature, and that what does exist tends to be fragmented and distributed amongst a wide range of publications. Issues such as the experience of recording or its impact on musical practice generally receive little more than cursory treatment and even where they are discussed in more detail, for instance in the works of Timothy Day or Robert Philip, discussion of the 1950s is often minimal. This is a problem common to many of the works considered, as attempts to produce a comprehensive account of the history of recording in a single volume limit the ability to provide more than superficial coverage of the issues. Therefore, based on the current literature, it is difficult to construct a convincing or comprehensive account of the impact of recording on music and musicians in the 1950s. However, this means that there is considerable scope for research that is focused on this period and that can present a more unified narrative.

Chapter 2 consisted of an overview of the cultural history of the 1950s in Britain with regard to the state of classical music. This showed that concerts of classical music were often marred by the variable standards of performance that were common at the time. The conservatism of programming also meant that audiences were offered a limited repertoire based largely on the canonical works of the nineteenth century; that said, audiences could

be equally conservative and attempts at more innovative programming were often met with poor attendance figures. The recently formed Arts Council of Great Britain was influential in attempts to improve standards and build audiences for music. There were also a number of outstanding individuals, many of whom held leading positions in arts institutions such as Glyndebourne and Covent Garden, who played a significant role in changing attitudes and in imparting a greater sense of discipline and professionalism amongst musicians. There was a growing audience for classical music in the 1950s, and events such as the Festival of Britain did much to increase interest. Recordings were therefore of increasing cultural significance as a means of accessing music and increasing awareness of repertoire and artists. Recording can also be seen as a catalyst for change within the music profession as the boom in recording activity provided a rich source of income, leading to competition for the available work amongst artists and arts organisations. This provided a further incentive to raise standards of performance and also provided opportunities to explore new repertoire, both on record and in concert.

The changing technology of recording and the expansion of the recording industry were considered in Chapter 3. This showed that the limitations of the recording process during the era of the 78 rpm record made it difficult for engineers to produce consistently good results or to capture the full sound of a symphony orchestra – points that were noted by critics and consumers alike. With the introduction of tape recording and the launch of the LP, recording finally came of age – not only because the sound was greatly improved but also because it was possible to issue recordings of long works in unabridged form without cuts. Tape and the LP transformed the experience of recording for artists while also posing questions as to the aesthetics of musical performance on record, with practice varying widely between record companies. The availability of tape recording enabled independent

companies to flourish, which contributed greatly to an expansion in the range and diversity of repertoire available on record, and to a corresponding increase in the amount of recording activity. In the post-war years the growing interest in records led to increased sales and also to an increase in the circulation figures of magazines including *The Gramophone*. The letters pages of magazines show that listeners were not only more knowledgeable about music and recordings but also more critical, and that they had increasing expectations of both records and critics. The introduction of stereo recording was therefore greeted with enthusiasm by critics and consumers and led to a further surge in recording activity from the mid-1950s onwards. Stereo was undoubtedly a great improvement but it was technically challenging and also more costly, forcing many independent labels to merge with other companies or cease operations. If progress came at a price it was seen to be justified by the benefits, and the advances of the 1950s, both technical and artistic, were regarded as a great achievement.

Part II dealt with the evidence of oral history, based on the qualitative analysis of transcripts of interviews held at the British Library, as well as original interviews conducted by the author. Both sources proved to be of vital importance to this study given the limited amount of material available from other sources, and Chapters 4-6 provided an overview of the key points to emerge from the analysis.

Chapter 4 considered the impact of recording on people, roles, and working relationships. Some of the artists interviewed for this study began their recording careers in the era of the 78 and spoke of the fear that frequently accompanied recording sessions because of the pressure to avoid mistakes. Therefore the introduction of tape recording came as a great relief for artists, who found that the new process gave them the freedom to record longer

takes, secure in the knowledge that minor errors could be corrected by editing, and with the opportunity to listen to playbacks by which they could improve their performance. There was some evidence of a generational difference in attitude between those artists, particularly conductors, who were reluctant to adapt their performance to the new recording processes, and those who embraced the possibilities. Ultimately, however, there was no prescribed method and producers and engineers had to take a flexible approach to accommodate the differing needs of artists. Working relationships continued to develop in response to changes in technology and the need to develop new practices. The development of the role of the record producer was reported to have been a cause for resentment on the part of engineers and suspicion on the part of musicians, and there was some initial confusion as to whether the producer fulfilled a technical or artistic function. The general consensus seemed to be that producers effectively wrested control of the recording process for themselves, although a variety of views were expressed as to how this was achieved. Record companies seemed to exercise little control over producers and they often developed highly idiosyncratic methods of working. These suited some artists better than others and interviewees frequently referred to their contrasting experiences of working with the two leading producers of the 1950s – Walter Legge and John Culshaw.

In Chapter 5 there was an exploration of the evolution of working practices in relation to recording and it was seen that these varied widely according to the type and size of each record company, its corporate ethos, and the staff and resources available to it. The experience of musicians when recording was correspondingly varied and, as Alan Rowlands found when recording for Lyrita, the limited resources of some independent record companies could create challenging conditions in which to work. The transition from one technology to another, for instance between wax recording and tape recording,

could be unsettling for engineers too, as practices evolved rapidly to keep up with change. This was especially the case during the boom in recording activity due to the need to re-record repertoire – first for the mono LP and again, later, for stereo. The expansion in activity led to record companies seeking new venues and locations, with Vienna emerging as one of the most important recording centres outside London. Working at such a distance from base, often with limited resources, recording crews had to adapt their practices to suit local circumstances and be inventive in finding solutions to problems.

The final chapter in this section, Chapter 6, concerned the effect of recording on wider musical practice. For young artists especially, the 1950s was a period of opportunity as the boom in recording activity provided a rich source of income and many well-known artists began their careers by recording for small, independent labels. Orchestras too benefited from the opportunities presented by recording and there was competition for the most prestigious and most lucrative work. One of the most notable effects of recording in this period was the rise in standards of performance as the goal of technical perfection meant that record companies insisted on having the best players available, increasing competition between orchestras still further. There were long-term consequences as the mutual dependency that developed between orchestras and record companies caused problems when recording activity began to decline in the late 1950s; the problems faced by the Philharmonia following Legge's attempt to disband it and those faced by the RPO following the death of Sir Thomas Beecham show the extent to which an orchestra's survival was dependent on such activity. Meanwhile, individual artists found that the recordings they made early in their careers could prove to be a barrier to securing contracts later on as record companies were reluctant to sign artists to record repertoire that they had already recorded for other labels. Several artists also reported that audience expectations

created by exposure to recordings meant that artists effectively had to compete with their own recordings when performing in concert; the effect being that musicians found that their concert performances increasingly came to resemble their recordings. Despite this, most regarded recording as a positive influence on their careers. For instance, the expansion of the repertoire on record enabled musicians to explore new repertoire when recording; this had advantages for audience development, which in turn encouraged musicians and promoters to be more daring in their programming of concerts. Several of those interviewed also acknowledged that without recording they could not have enjoyed the same level of success, and that it had been fortunate for them that their careers had coincided with the prime years of the recording industry.

The case studies in Part III reveal much about the recordings under consideration, but also about changing practices, relationships in the studio, and attitudes to recording as they evolved throughout the 1950s and 1960s. The first case study, of HMV's 1952 recording of *Tristan und Isolde* in Chapter 7, demonstrated how tape recording and the LP record transformed the experience of recording for a generation of artists, many of whom had found recording for 78s on wax discs a frustrating experience. The new processes allowed artists to record in long takes and perform to the microphone in a manner more akin to that of concert performance, enabling them to produce recordings that could be regarded as truly representative of their artistry. At the same time, the new processes created the potential to edit, which in turn posed questions about the ethics of recording – what was and was not acceptable – that artists and producers had yet to resolve. Some artists, including Wilhelm Furtwängler, were opposed to editing in principle but others warmed to its possibilities. However, the speed at which practices were evolving meant that there was not always sufficient consideration given to the ethics of what was being done, as seen in

the case of Kirsten Flagstad's high Cs. The reaction to the revelation that Flagstad's high notes had in fact been sung by Elisabeth Schwarzkopf suggests that the public were unaware of the possibilities of recording in the era of tape and the LP and, in this case at least, that some felt a line had been crossed. Flagstad herself seemed to regret the act and, although it provided a means to the desired end, it might be seen as an error of judgement on the part of Walter Legge. The incident was a warning to artists and producers that they needed to develop ethical practices that would enable the production of the desired effect without resorting to means that undermined the artistic integrity of a recording.

By 1958, when Decca recorded *Peter Grimes* (the subject of the second case study in Chapter 8), engineers had perfected the process of recording to tape and of editing between and within takes. In the meantime, the development of stereo recording presented considerable opportunities for the further development of recording as an art form in its own right and John Culshaw was amongst those who recognised its potential to enhance the experience of opera on record by giving due consideration to the dramatic potential of stereo. Culshaw realised that the added spatial dimension of stereo sound necessitated at least some consideration of the relative placement of singers. The production plans for the recording of *Peter Grimes* – which may well be unique – show that the placement and movement of singers, and the use of special effects, were essential features of Culshaw's concept. The need for movement while recording posed challenges for the singers who, deprived of the visual elements of a stage production and with continuity disrupted by the need to record out of sequence, would often miss their cues. As a result the role of the assistant producer became a vital part of opera recording sessions as an aid to the artists in the recording space and the producer in the control room.

One of Culshaw's final recording projects before he left Decca to join the BBC was *Elektra*, recorded in 1966-67 and the subject of the third case study in Chapter 9. By the late 1960s Culshaw's methods were well established but the critical response to *Elektra* shows that not everyone agreed with Decca's approach to stereo opera and some critics thought Culshaw had gone too far, especially in his use of effects. The study also revealed something of the perceived power of producers and how this could lead to misunderstandings, even amongst experienced critics. It seems that critics had almost come to expect the sensational in Decca's opera productions and at least two – Conrad Osborne and William Mann – claimed to have heard effects in *Elektra* where none were present. The critics appear to have misinterpreted what they heard and, familiar with previous Culshaw productions, assumed that any slight change in sound must be intentional; a close listening to the recording suggests that there may be other, more innocent, explanations. The subsequent correspondence in the pages of *High Fidelity* revealed the differing expectations of critics and consumers as to the role of recording and whether it should simply aim to capture a theatre performance or should take advantage of technology to create a production suited specifically to the medium of the LP record. *Elektra* has an added significance in marking the end of an era as by the time it was released both Culshaw and Legge had left the recording industry although their influence continued to be felt through the work of their various colleagues and protégés.

The case study of *Scheherazade* (1964) in Chapter 10 considered the development of an alternative approach to the conventional ideology of concert-hall realism in the recording of classical music. Decca's Phase 4 label used multi-channel recording and close-miking techniques to give producers and engineers the ability to change the balance and to highlight instruments and sections of an orchestra. The recorded sound gave listeners the

impression of being closer to the music than usual, while the use of effects to highlight instruments or to pan sounds from one side to the other gave the sensation of hearing instruments or parts from new perspectives. Critics and audiences were divided in their response to the label and tended to fall into two camps; those who appreciated the use of technology to enhance the listening experience, and those who thought that recordings should seek to emulate the concert-hall experience. Phase 4 also proved controversial within Decca as its style did not suit British tastes – the label was created in 1961 at the instigation of Decca’s US subsidiary, London Records – and was disliked by Decca staff including the chairman, Sir Edward Lewis. Its commercial success, however, guaranteed its future and it continued until the late 1970s, gradually amassing some 200 titles in its Concert Series catalogue of classical recordings.

The television programme *The Anatomy of a Record* (1975) was the subject of the final case study in Chapter 11. The programme follows the recording of a Mozart piano concerto and is a rare example of a television documentary devoted to the subject of recording. As well as providing an insight into the recording process, the programme revealed much about the interpersonal dynamics between the key participants and the potential for tension between individuals when recording. This was especially evident in interviews with the principal artists, pianist Alfred Brendel and conductor Sir Neville Marriner, and instances of what the programme’s director, Humphrey Burton, referred to as ‘back-seat conducting’ on the part of Brendel. Produced shortly before the introduction of digital recording, the programme is also significant as a document illustrating the recording process in the era of tape recording and the LP record.

Conclusions

The 1950s was an extraordinary period in recording history: a decade in which a series of technological advances transformed the experience of recording and set in train a process of change with wide implications for music and musicians. This thesis has considered the complex interplay between people, processes, and transformative technologies. It shows that recording made a significant contribution to the legacy of the 1950s, most notably in the form of a greatly expanded repertoire; higher performance standards; established processes and methods of working; a larger and more discerning audience for classical music; the careers of many distinguished artists, whose achievements are often closely linked with those of the recording industry; and of course the many recordings produced.

With regard to repertoire – a key area to come under the industry’s influence – growing consumer interest and the increased availability of works contributed towards undeniably positive outcomes. Works once considered commercially unviable, for instance many large-scale orchestral and operatic works, were finally recorded and made available to the public. Companies also invested considerable time and resources in developing new markets and stimulating demand for them, recording works by lesser-known composers, adding to the repertoire of contemporary music on record, and effectively subsidising the growth of the early music movement. Companies also invested heavily to ensure the quality of their recordings, to the extent that many of the recordings made during the period – especially opera recordings – are still highly regarded over 50 years later. Taken as a whole, the origins of today’s diverse repertoire of recorded music can be traced to the 1950s, an era of intense activity in the race to build catalogues of new recordings.

In another key area of influence, recording activity helped the progression towards higher standards of performance, both technical and musical, which have since become the norm in classical music. Recorded music itself provides a medium for charting this progress, with improving standards discernible in recordings made over the course of the twentieth century. Improvement can be attributed to a number of factors but recording played a vital role, not least by confronting poor standards and adding to an already competitive environment for musicians by insisting on the highest levels of performance from the artists and ensembles engaged in the studio.

An added impetus for the rise in musical standards was the increasing expectation of a larger, more knowledgeable audience for classical music. As beneficiaries of an expanded catalogue giving access to a vast range of artists and works on record, concertgoers of the 1950s became accustomed to listening at home to note-perfect performances on records that were the product of multiple takes and editing. Listening in the concert hall, they fully expected artists to live up to the same standards. By the end of the decade, the variable standards of concert performance experienced by previous generations of concertgoers had become increasingly unacceptable. However, higher expectations also had implications for artists, who often felt that they were in competition with their own recordings. Skills and techniques developed for the studio eventually began to inform concert practice, contributing to debates over the gradual homogenisation of performance styles and perceived lack of risk-taking in performance, topics that remain current and valid today.

As technological progress continued through the 1950s, new methods and practices came into being that enabled artists to work efficiently and to perform in a more natural and more musical manner than had previously been possible in the studio. However, the pace

of change and competition between rival companies was such that processes were often rushed into use before they had been properly evaluated, leading to problems with quality control – as in the case of early LP pressings – or products being released to the market too soon, as with the first stereo LPs released in both the UK and the USA. The rush to develop new practices could also lead to errors of judgement in relation to the ethics of recording and the use of questionable artistic practices for the sake of expediency, as in the case of Flagstad's high Cs. Recording was a powerful tool and, although in theory it was there to serve the needs of music and the artists, without the exercise of proper controls or consideration of ethical practices there was a danger that the process could begin to drive artistic decisions.

Musicians were at the centre of such issues and exposed to a variety of experiences that reflected the range of non-standard processes prevalent across the industry. Practices varied widely according to the size of a company, the skills and expertise of its staff, its corporate ethos, and the resources available to it. The experience of musicians was therefore correspondingly varied and the lack of resources at some independent companies meant that musicians often had to make compromises, as in the case of Alan Rowlands recording in single takes without recourse to editing, or Alfred Brendel supervising the editing of his recordings. With compromise came the risk of creating what Sir Neville Marriner described as 'forgettable' recordings, or even what John Culshaw referred to as 'comic' results – challenges to professional reputations and personal integrity that were as significant as the opportunities presented by new technologies and practices.

There was therefore a need to consider these and other issues and the role of the producer evolved in response to the increasing complexity of recording processes. The evolution of

the role of the producer was undoubtedly one of the most significant developments of recording in the 1950s and the gradual shift in the balance of power on sessions towards producers and away from musicians and engineers created a producer-led recording environment. Practices varied widely, but the influence of the producer was undeniable and the methods of Walter Legge and John Culshaw illustrate two contrasting models of producer-artist interaction. For Legge and Culshaw the availability of tape recording and editing created the opportunity for the development of a more considered approach to the aesthetics of recording. They appreciated the possibilities afforded by the new processes, seeing them as a means of realising the potential of recording to transcend the mere documentation of a performance and to create idealised performances in optimum conditions. Such innovation would lead to the dominant recording aesthetic of the next half century, characterised by fidelity to concert-hall realism, the pursuit of perfection, and the development of performance practices attuned to the specific needs of recording.

A final key point to be drawn from the research concerns the development of artistic careers through recording during the 1950s. The urgent need to re-record repertoire in new formats created significant employment opportunities, enabling talented artists to establish their careers and gain exposure with audiences at a national and international level. At the same time many opera companies, orchestras, and other ensembles enjoyed a sustained period of financial stability through the income generated by recording activity. Musicians were well aware of the impact of recording on their careers and many interviewees acknowledged their indebtedness to the recording industry. As a result, they were prepared to adapt their playing to ‘the age of recording’ – as noted in examples given by Peter Mountain and Denis Vigay amongst others – and to seize the opportunities that it presented. Orchestras and ensembles were also sensitive to the requirements of recording

and would compete for the services of the best players in order to maintain the highest level of performance.

It is difficult to overestimate the cultural and socioeconomic impact of recording on the music profession and the general public during the 1950s. Until now, however, the work of those who were in the vanguard of change has been poorly documented and the contribution of many individuals whose names do not feature prominently in existing accounts – for instance those of producers Lawrence Collingwood and Walter Jellinek – deserves greater recognition. The legacy of the producers, engineers, and artists active in the 1950s includes a substantial number of outstanding recordings, many of which are still in the catalogues. As outlined above, their legacy also includes methods of working that set the standards for the industry and which, despite further advances in technology, remain familiar today.

With growing interest in recording as a subject for academic research, there is certainly scope for further study of the 1950s. Possible topics might include an appraisal of the contribution of producers other than Legge and Culshaw in the 1950s, and the recent donation of the late Christopher Raeburn's personal papers to the British Library (British Library, 2011) provides one major resource for research in this area. Surveys of the scale of recording activity in Vienna or of the rise and fall of independent record companies in the 1950s might also prove to be fruitful avenues of research. However, the limitations of the current literature, the scarcity of archival material, and the difficulty in accessing record company archives, as well as the fact that the period is rapidly disappearing from living memory, will continue to make research difficult. Certainly this thesis would not have been possible without the help of those who consented to take part in interviews.

During the interviews one person summed up the sentiments of many of the interviewees by saying that it was important that their stories should be told. I have been privileged to meet many extraordinary people through this study, all with valuable personal testimonies to share and all keen that their memories should be captured and recorded for posterity. This thesis is a small beginning towards that end.

Appendices, discography, references

Appendix 1: Selected interviews, *Oral History of Recorded*

Sound

Bicknell, David	Record producer, Head of A&R (HMV)
Bishop, Christopher	Record producer (EMI), orchestral manager (Philharmonia)
Borwick, John	Writer, engineer (BBC)
Boyle, Nicholas	Record producer (EMI)
Burkowitz, Peter	Recording engineer (Deutsche Grammophon)
Ellis, Chris	Repertoire manager (EMI Music Publishing)
Farmer, Adrian	Artistic director and senior producer (Nimbus)
Gooch, Robert (Bob)	Recording engineer (EMI)
Griffith, Anthony	Record producer (EMI)
Griffiths, Anthony	Engineer, studio manager (BBC, Decca)
Groves, Charles	Conductor
Grubb, Suvi Raj	Record producer (EMI)
Haddy, Arthur	Recording engineer, technical director (Decca)
Hawkyard, Madeline	Record company secretary (Pye)
Kaine, Alfred	Repertoire manager (Deutsche Grammophon)
Labinsky, Alexander	Record company director (Nimbus)
Lee, Frank	Artists manager (Decca)
Lockwood, Sir Joseph	Chairman (EMI)
Martin, George	Record producer (EMI)
Menuhin, Yehudi	Violinist, conductor
Monson, Philip	Engineer (BBC)
Mosely, John	Chief engineer (Pye)

Naegler, Karl-August	Tonmeister (Deutsche Grammophon)
Newbrook, Peter	Record company director (Esquire)
Oberstein, Maurice	Record company chairman and CEO (CBS-UK)
Parker, Christopher	Recording engineer (EMI)
Pollard, Anthony	Editor, publisher (<i>The Gramophone</i>)
Ponsonby, Robert	BBC Controller of Music
Pulling, Martin	Deputy director of engineering (BBC)
Raeburn, Christopher	Record producer (Decca)
Ridley, Walter	A&R manager (EMI)
Roach, Maurice	Advertising manager (Decca)
Schwarz, Harvey	Engineer (Brunswick, Decca)
Stephenson, Tom	Studio manager (Decca)
Townsend, Kenneth	Studio manager (Abbey Road)
Townsley, Bill	Executive director (Decca)
Usill, Harley	Record company director (Argo)
Wallich, Isabella	Record producer (Delyse)
Walton, Jean	Research & development engineer
Whittle, John	Marketing director (EMI)
Willcocks, David	Conductor, director (Royal College of Music)
Wohlert, Otto	Quality controller (Deutsche Grammophon)
Wood, Leonard	Executive director (EMI)

Appendix 2: Interviews, 2009-15

Amis, John	Writer, broadcaster, administrator
Andry, Peter	Record producer, senior executive (Decca, EMI, Warner)
Badura-Skoda, Paul	Pianist, musicologist
Bailey, Sheila	Horn player (Hallé Orchestra)
Bishop, Christopher	Record producer (EMI), orchestral manager (Philharmonia)
Brendel, Alfred	Pianist
Burton, Humphrey	Television producer, director (BBC, ITV)
Carewe, John	Conductor
Chavez, Quita	PR executive (Decca, Philips, CBS), editor (<i>The Gramophone</i>)
Culverhouse, Brian	Record producer (EMI)
Cunningham, Judy	Violinist
Deller, Mark	Singer, conductor, director (Deller Consort)
Faulkner, Tony	Recording engineer (Independent)
Fischer-Dieskau, Dietrich	Singer
Gooch, Robert (Bob)	Recording engineer (EMI)
Goodall, Stan	Recording engineer (Decca)
Goodwin, Peter	Conductor, lecturer
Greenfield, Edward	Music critic (<i>The Guardian</i>)
Gruenberg, Erich	Violinist
Kehoe, John	Record company executive (Decca, Conifer)
Kok, Alexander	Cellist (Philharmonia, BBC SO)
Law, Jack	Recording engineer (Decca)

Lovett, Martin	Cellist (Amadeus Quartet)
Ludwig, Christa	Singer
Marcus, Nella	A&R administrator (Decca)
Marriner, Sir Neville	Conductor, violinist
McDonald, Tim	Record producer (Decca)
Minton, Yvonne	Singer
Montagu, Jeremy	Percussionist
Mordler, John	Record producer (Decca, EMI), director (Monte Carlo Opera)
Mountain, Peter	Violinist
Myers, Paul	Record producer (CBS, Decca, Naxos)
Peyer, Gervase de	Clarinetist
Pollard, Anthony	Editor, publisher (<i>The Gramophone</i>)
Raeburn, Michael	Publisher
Rowlands, Alan	Pianist
Solti, Lady Valerie	Producer, broadcaster (BBC)
Staff, Ray	Recording engineer (Trident, Sony, Air Studios)
Stagg, Allen	Recording engineer, studio manager (IBC, Abbey Road)
Swains, Ronald	Record retailer
Tschaikov, Basil	Clarinetist
Vaughan, Denis	Conductor (Royal Opera House)
Vigay, Denis	Cellist (Philharmonia, RLPO, ASMIF, BBC SO)
Walker, Malcolm	Editor (<i>The Gramophone</i>), marketing executive (EMI)
Willcocks, David	Conductor, director (Royal College of Music)
Williams, John	Guitarist

Appendix 3: Extracts from interviews

The following extracts have been selected from transcripts of interviews with the author and provide a fuller insight into the thoughts expressed and language used by the interviewees.

John Amis on record producer Walter Legge

John Amis (JA): Walter Legge was a marvellous influence but it's a terrible shame that he made most of his recordings in the studio – 90%, or perhaps more – whereas some of the ones he did of live performances are often much better. For example Beecham recorded Beethoven's Symphony No. 7 twice within weeks of each other, once for the radio and once in the studio. The one in the studio is quite good but the one in the concert hall suddenly comes alive. It's one of the most exciting recordings of Beethoven No. 7 that I've heard, really terrific, but that's the difference. It doesn't always work; a lot of the studio performances are very good, the Furtwängler *Tristan* for example, and a lot of the Karajan recordings. Legge took immense trouble; he had a fantastic memory.

Terence Curran (TC): You were working with Beecham at the RPO?

JA: Yes, for a couple of years.

TC: So you would have been on sessions with Legge?

JA: Yes, he was doing *A Village Romeo and Juliet* at that time, and studio performances of *Elektra* at the BBC.

TC: Were you able to observe how Legge worked, with the engineers etc?

JA: I don't think he was terribly interested, I think sometimes they got it in spite of him.

But he knew what he was doing; he would listen very carefully. It must have been a

terrible bore for the company because sometimes he wouldn't allow them to issue a recording for five or even 10 years.

TC: Because he thought they weren't good enough?

JA: Something was wrong, but sometimes those recordings have come out later and they were perfectly alright.

TC: Legge is often described as an autocrat but others spoke of Legge's kindness to young musicians.

JA: He could be an absolute shit and they used to say that if he put his arm round you at the interval that you were for it and were going to get sacked. But he was also very good to musicians and helped people, and very often his rehearsals were like master classes.

Geoffrey Parsons worked with Schwarzkopf and Legge and said that it really taught him most of what he knew about accompanying because Legge wouldn't pass anything; every breath, every phrase, every note was thought about, chewed over – sometimes too much – but Geoffrey said he learnt such a lot.

Paul Badura-Skoda on early recording

Paul Badura-Skoda (PB): A great invention for recording technique was the recording tape, it changed the outlook considerably. Before [in the era of the 78], you were bound to play and no corrections could be made. In a way we regretted it because it was the only way to make authentic recordings; none of those from later are authentic in the sense that it is what has been played. Even if you have so-called 'live' recordings – I am always amused because when we make studio recordings we are not dead yet – even then a lot of mixtures and corrections are made later. I heard from Gary Graffman, who was perhaps the only real student of Horowitz, that when Horowitz after his long absence came back and played at the Carnegie Hall he spent the whole night replaying passages and making

corrections. So when you get his so-called 'live' recital after his return it is not what he really played. Most of it is authentic but he played the Schumann Fantasy and there is a tricky passage at the end of the second movement where nearly every pianist plays wrong notes, and apparently he did so in the concert as well, but in his 'live' recording there is not one wrong note.

Harold Schonberg [music critic, New York Times] made a lot of research about recording techniques and he found that on 78s if something went wrong – say you had a mistake in the third minute and you had to start again – he found that on the pressing of the 78 shellac record you could see how many attempts were made to finish one side of a record. And he noticed that the one artist who never needed more than one take was Benno Moisevitch. He had such an ease and such an absolute assurance that he played a piece and that was it. Sometimes he refused a take for artistic reasons but a wrong note, that didn't occur. I also knew in the earlier period some other great pianists who had the same capacity to play simply without wrong notes. Walter Gieseking was one of them in his great period. After the war he stopped practising and then occasionally, but only occasionally, hit a wrong note. And another one famous for absolutely neat recording was Emil von Sauer – I have some old Columbia 78s and it's absolutely faultless playing, and that long before tape recording came into existence.

[...]

My own teacher Edwin Fischer, who had problems with nerves but was a great, great artist, needed several attempts before a record was fit for publishing. At the very end of his career he recorded Schumann's Fantasy and he complained that they selected for the final pressing the second-best version, much to his regret. So I wonder if the archives of HMV might still have other samples left.

Sheila Bailey on orchestral life in northern England in the 1950s

Sheila Bailey (SB): There was a lot going on in Manchester. They had the BBC, the Hallé, and the Free Trade Hall – that was new [damaged in the war, it reopened in 1951] and I remember people firing pistol shots to test the acoustics. The Hallé used to do a tremendous amount of travelling. In Sheffield they had the Philharmonic season with the Hallé coming every week or every fortnight, something like that. It was just one rehearsal and the concert, unless it was something special. The Liverpool Phil also did a lot of travelling. The Hallé tried to have their season so they were playing more or less the same things in different places. They used to have plebiscite concerts where at the end of the season people used to vote for what they wanted. Tastes have changed quite a lot as the thing that was most popular then was ‘Fingal’s Cave’ – you don’t hear it much now.

TC: You mentioned the venues...

SB: Some of them were terrible. The modern halls gave you the feeling that you were the only person playing. I didn’t play in the Royal Festival Hall (RFH) but people used to hate it. The older Methodist-style halls which were made of wood gave a lovely sound. The Sheffield hall was notorious because the stage was split in two with two big lions on either side of the green room entrance so that one side could neither see nor hear what the other side was doing. I think they’ve changed it.

TC: Musicians complained of not being able to hear each other at the RFH...

SB: It was the same at the Free Trade Hall, which was supposed to be better than the RFH; you couldn’t really gel with anybody, you felt as though you were the only person playing and the sound was amplified in your ear. The Festival Hall wasn’t liked at all by musicians.

John Carewe on working as a record producer in the late 1950s

John Carewe (JC): I must have started in 1958 or 1959. What happened was I'd been a music student in Paris and had come back. John Cruft, who was then manager of the LSO, suddenly got in touch and said: 'We've got an American company [Everest] coming to London to record for a month and they want an A&R man.' Basically they got me in as a raw 25 year old to sit at the back of Walthamstow Town Hall with a recording engineer and tell the likes of Adrian Boult to 'do it again' – I had a whale of a time! We worked six hours a day and all weekends. I enjoyed it for a month and towards the end started editing. I remember once we worked solidly through the weekend doing the editing.

I had a brilliant recording engineer called Aaron Nathanson, who I believe was the second-highest paid American sound engineer – I learnt a huge amount from him. We were recording on half-inch tape in three-channel stereo – left, right and centre. All I did was listen to the music with the score, and say: 'That's good, that's not good, do it again.'

[...]

Everest used the LSO unless they weren't free, then they'd use the LPO, and Goosens, Susskind and Boult were the three conductors.

TC: It sounds as though you were thrown in at the deep end. Did you get any training?

JC: None at all. I'd never been in a recording studio in my life.

TC: Did Boult know that?

JC: Probably, but I never had trouble except when I was overheard complaining backstage that the LPO was not nearly as good as the LSO, which 'put the fat in the pan' – but otherwise I got on very well with everyone.

Aaron was completely in charge of the sound. He said he could make anybody a vocal star and he proved it to me on that long weekend of editing. Late on the Saturday night as we went out to get some food we walked through the main hall, where there was a Saturday night hop going on. There was a band playing but only about seven or eight couples on the dance floor. So Aaron spoke to the manager and said ‘do you mind if I fiddle around a bit’ and went on stage and moved the mikes around. Very soon after he’d finished the dance floor was full when it had been half empty – the hall manager offered to pay him to come every week! So yes, he was in charge of the balance and sound quality. I had an input and occasionally would say we need more of one instrument or another but my main job was judging the quality of the take and what to retake, which takes to use. Aaron had little to say about that – I don’t think he could read music – but it wasn’t my job to say ‘move the mikes’ or anything like that.

I remember once Boult was doing Mahler’s First Symphony – we were recording all the time and recorded the rehearsal. After two days rehearsal we recorded the opening of the last movement but I discarded it all and used the very first take from when they were sight-reading in the rehearsal. It was a wonderful experience and one of several occasions – with Beecham as well as Boult – where I felt we couldn’t improve on the performance.

TC: Working with Boult, did you ever disagree on musical points?

JC: No, all the conductors came in and conducted as they wanted it and we recorded it.

That was it. I don’t remember any discussions. It was more a matter of recording the conductor’s interpretation and pointing out matters of ensemble or tuning, and then saying: ‘Let’s have one more go.’ Then I’d stitch it together, but they left those decisions to me – I don’t think they [the conductors] bothered to listen.

TC: Did Boult come into the control room?

JC: He may have once or twice. The players came in a bit as they were amazed by the sound – this was the cutting edge of sound at the time. Everest was a company run by audiophiles for audiophiles and they were interested in a big sound.

Brian Culverhouse on the introduction of tape recording at Abbey Road Studios

Brian Culverhouse (BC): When I joined the company [EMI] in 1949 they were still recording in mono on wax discs. There had been experiments with tape and by about 1952-53 we were recording on tape as well. There was a crossover period where we were still recording on wax, with tape in reserve. One of the problems was that in the early days the tape sometimes broke down – it happened to me on at least two recordings – so we had both tape and wax running at the same time. By the mid-1950s there were no problems and it was tape all the time, although still in mono. We began using experimental stereo in 1954 and that became quite a regular thing, as a backup. So we were recording in both formats, mono and stereo, but again there were problems as sometimes the stereo tape didn't work. On one occasion, on a recording of the Rachmaninov Third Piano Concerto with Gina Bachauer, there was a telephone call from the control room saying the stereo had broken down so, as with several others, that recording only appeared in mono. This sort of thing happened in the early days but gradually things improved and we did away with mono but for a while we were issuing both mono and stereo LPs.

Mark Deller on early music, Alfred Deller and the Deller Consort

Mark Deller (MD): Alfred Deller had been discovered by Michael Tippett in 1943 when Tippett and Walter Bergman were reviving Purcell and were looking for someone to sing the countertenor roles. He had engagements in London doing Purcell Odes and then, in 1946, was invited to sing in the BBC Third Programme's inaugural programme, which

included *Come Ye Sons of Art*, conducted by Boult. [...] Then in 1947 he moved from Canterbury to London to sing at St Paul's. Once in London he became something of a cult figure in the world of early music, which was a very small world in the 1940s. Just after the war there had been a blossoming in research into early music by the likes of Thurston Dart, Dennis Stevens, Jack Westrup and Anthony Lewis. These researchers were unearthing lots of new material and Alfred was there ready to perform it. He was in the right place at the right time. But there weren't many groups performing this repertoire so Alfred joined a group called the Golden Age Singers run by Margaret Field-Hyde – one of the first early music vocal ensembles. They did interesting repertoire and also foreign tours, which was unusual for the time, but Alfred became frustrated with the overall quality and decided to set up a group to do this repertoire, which is how the Deller Consort came into being in 1950.

[...]

Once the Consort started they did a lot for the Third Programme – they were on 8-10 times a year and they weren't recordings but live sessions. I went along to Maida Vale as a boy to listen. I think the Consort's first recording was of Orlando Gibbons for the Archiv label in 1955. Alfred had done occasional records as soloist for different labels but wasn't on contract to anyone. In the meantime, Seymour Solomon wanted to start a classical wing [of the Vanguard label], which he called the Bach Guild. He was very astute and had got wind of Alfred somehow. Seymour offered him four LPs a year and whatever repertoire he wanted – solo, consort etc. Alfred got a royalty on them – maybe 10% – and so the prospect of four records a year was fantastic.

Most LPs of the day came out with quite plain wrappers but Vanguard came out with something very different – sleeves in colour and with prints on. One disc of Purcell,

Jenkins and Elizabethan and Jacobean music was with Gustav Leonhardt and the Consort of Viols. So that's when he started to work with Leonhardt [c. 1954] and that's when they started to work with early instruments. Some of the playing sounds pretty ropery to our ears now, but this was the early days of early instrument playing. The early music instrumental happening didn't really happen until the late 70s and 80s and in the early 1950s the only people dabbling around with early instruments were Leonhardt and Nikolaus Harnoncourt, who did that in his spare time from the Vienna Phil.

[...]

Alfred went on recording with Vanguard until 1965 and probably produced about 60 LPs with them, both solo and with the Consort. Seymour Solomon was a very good producer (he was a loveable bastard!) and the quality of sound and recording was brilliant for that period. That was another plus of the Vanguard years although one of their problems was that they had hardly any distribution outlets here.

TC: So at the peak of his career there were no recordings available?

MD: No, there were hardly any available here but some got to the Continent and there were plenty in America so his career took off there in a big way.

Stan Goodall on forging a career as a recording engineer at Decca

Stan Goodall (SG): I joined Decca on 28 December 1949. I started by running backwards and forwards to Buck & Ryan picking up guns for sound effects for Billy Cotton records. Then I started shaving waxes. We had these enormous 17-inch waxes which they used to make and they came up rough to the studios. We had a wax-shaving machine that turned at 3,000 revs with no guard on it. It had a cutting tool that went across it and ironed out all the bits then a sapphire polishing tool so you ended up with a polished wax. That was kept in a room with a wax oven and when it was needed the wax went out to the cutting room.

Then I graduated from there to cutting the eccentric to concentric lead-out groove. I put it on the turntable, not knowing the potential value of the recording, and would cut the eccentric/concentric, meaning that when the arm of the record player got to the middle it would lift and go back automatically. That was my first job.

TC: How much training did you get?

SG: None. I don't think anyone got any training in the industry in those days. You just watched and listened and did it. I worked for Ken Wilkinson for 18 months and I once asked him 'how do you do that? How do you know where to put that mike?' He replied that he just knew. I remember back in the 1950s we had a BTR-1 [tape recorder]. There was a corridor at West Hampstead and our room was right at the end, underneath the No. 1 studio, and we had this BTR-1 on the other side of the room; we hadn't had the machine very long. Enrico Mainardi was upstairs playing some solo cello [Bach cello suites, recorded January 1950] and they piped a feed down to the BTR-1 recording on mono while they cut the masters on acetate upstairs. The machine would run and when it ran out I would put another tape on and press record and mark them up as reel 1, reel 2, etc and pile them up until people came down and collected them. But I don't think there was a real feel that we wanted to swap over to tape.

TC: When did that happen, the switch to tape?

SG: In the early 1950s. [...] So when I'd had enough of one thing I moved on to another. Arthur Haddy, the boss, didn't openly encourage you to do that, but let you find your own level. [...] I went from there to tape stores and eventually got into cutting in mono with Ron Mason. Then I moved on from cutting mono to cutting stereo. I think I was enthusiastic about just moving on all the time, though I'm not aware of having an ambition. Cyril Windebank was the motivator for our stereo recordings – he used to wind

the cutter heads. We cut at half-speed on the first issues – the cutter wouldn't take 20,000 Hz, it would probably only go up to about seven or eight kHz at half-speed. There was a record called 'Persuasive Percussion' [issued by Command Records] that had maracas on it and the sound was far superior to ours so we had to do something about it and we developed better cutters. We had a moving-coil cutter that provided a softer 'ss' and 'ff' sound whereas RCA had a moving-line cutter, which had a harder, brittle sound. Tony Hawkins used to cut all the RCA stuff and I used to cut all the Decca stuff but I got a bit fed up with it after a few years. I was great buddies with Mike Mailes and so I went down to Kingsway Hall to help unload the truck and thought this was great fun. Then I had a spell in the pop studio with Arthur Lilley, Arthur Bannister, Bill Price, Gus Dudgeon, Mike Smith, Hugh Mendl, and it was nice and varied – never the same thing year after year.

In 1963 I first went to Vienna with Gordon Parry – he was a great engineer who liked to give everyone a chance – working as tape op on some of his sessions for two or three weeks. I did a first recording with Tony D'Amato – it was an audition with Tony Burrows up in No. 1 studio – and from then I did a lot of work with Argo. Nobody wanted to do a lot of that stuff but I thought it was a good opportunity for me to get experience of a lot of recording work. In those days we would set up, record, and operate the machines ourselves – we didn't have a tape operator. I worked a lot with David Munrow and the Early Music Consort, Peggy Seeger, Ewan MacColl, London Wind Soloists – I did a lot of peripheral work then, getting the feel of things.

Peter Mountain on recording with orchestras in the 1950s

TC: Can you remember much about making 78s?

Peter Mountain (PM): We did a lot with the Boyd Neel Orchestra. You had to do a four-minute take and it had to be right. You couldn't hear it [playback] as that would destroy the wax. We did some records with Fred Grinke, who was leading at the time. He was a marvellous player but not very reliable technically and he got more and more nervous and did take after take of the Bach E major first page. I remember my teacher, Rowsby Woof who was Grinke's teacher too and the most famous teacher in England at the time, he said: 'Boy, you're entering now the age of recording and you'll be playing into a microphone not a big hall.' So everything had to be perfect, no changes of position, no bow changes, it had to be smooth. He got his reputation from his star pupil Jean Pougnet, who was a wonderfully smooth player. In those days you really listened to records – you bought a record, put it on the turntable, sharpened the needle and listened to it whereas now you put it on and do the washing up. There's too much using music as background which you didn't in those days. I think music should be a special occasion so you listen to it.

[...]

In about 1950 I joined the Philharmonia; Manoug Parikian got me in – he was leading the Philharmonia at that time. That was before stereo and when stereo records did come out we were recording non-stop as we had to re-record the whole of the repertoire. Kingsway Hall was *the* place to record. Karajan used to say the ideal thing is Kingsway Hall when the atmosphere is very dry and the sound is absolutely perfect. But the trouble is when the atmosphere is dry you can hear the tube trains and many takes were ruined.

TC: Did you record elsewhere?

PM: Walthamstow Town Hall we used a lot, Abbey Road too but the sound wasn't as good. Karajan wanted Kingsway all the time. We did *Tristan* with Furtwängler at

Kingsway. Furtwängler hated Walter Legge – they were daggers drawn – and when he was recording *Tristan* he resisted having Legge as producer but had him anyway. Afterwards they listened to the recording and Furtwängler said: ‘My name will be on this recording but your name should be on it too.’ Talking of recording techniques, Furtwängler wouldn’t have anything to do with the engineers, he said it was their business. We’d turn up, rehearse a few bits, then play for 20 minutes straight through, then we’d have coffee for half an hour while they listened to the tapes. Then we’d come back, do the whole thing again, pack up, go home. No retakes – the absolute opposite to Karajan. Karajan was a genius at recording, he knew more than the engineers. He’d mess around with the orchestra, move people here and there. The first thing he’d do at a session would be to go straight through whatever we were doing and record it. Then he’d listen and think ‘how can we improve this’ – it was all manufactured – whereas with Furtwängler and Klemperer it would be ‘this is what I want, it’s up to you’.

TC: Did you have much contact with Legge?

PM: I was there for five years and hardly said two words to him but when I announced I was leaving to lead the Liverpool Phil he was all over me saying ‘we need you’ – he was a very ruthless character. We used to call it the ‘cloak and dagger’ orchestra; the principal bass (Jim Merritt) went on holiday once and heard that Stuart Knussen had been offered his job but didn’t want it. The orchestra had a marvellous spirit because they were all united against Walter Legge. He was the perfect example of someone who knew about everything and could talk about everything but couldn’t do it himself. We were recording once with a conductor called Otto Ackermann who recorded Viennese operettas, *Fledermaus*, things like that. There’s a champagne aria and Walter was going to do the champagne pop but he couldn’t get it in time and had to get one of the singers to do it; he

couldn't follow the conductor. We did a lot with Schwarzkopf and she was wonderful – Legge told her how to sing, how to do it.

TC: I wonder where Legge got his ideas from about what he wanted on a record. Was he trying to imitate what you'd hear in the concert hall or create something different?

PM: I think it's different. We had a setup where Karajan would record something during the week and then perform it at the Festival Hall, and it would save rehearsal time as we could go straight in and do it. Once we recorded *Jeux de Cartes*, Stravinsky, and we rehearsed all week and got a really good record out but the concert was a flop as we'd never played it through, we'd just done a bit here and a bit there. If it had been Klemperer it would have been alright because he would have been playing long stretches in the recording. But with Karajan you just did a snippet, it was all manufactured, stuck together. [...]

I think the best thing is when conductors work in long spells. Later on it was better because you could play back what you'd done but before that you had to hope that it was alright. Nowadays it's much easier and less nerve-wracking.

Paul Myers on working as a record producer in the USA, 1958-62

Paul Myers (PM): I started recording in America, I got to New York in 1958 and started in February 1959. America has a totally different approach to recording. I started in a small company called Kapp, later bought by MCA, and I had a radio show on their behalf. Schuyler Chapin, who was head of CBS Masterworks, heard me on the air and was looking for a producer, so I accidentally found my way into CBS. The difference was that the American recording producer is the sole person responsible for the entire production, as opposed to Decca where the recording engineers are extremely possessive when it

comes to their contribution to the sound. In America, in Columbia for example, the engineers were in a union and the union agreement was that, by union rules, no engineer could read a score and if an engineer was caught reading a score they could be fined or kicked out of the union but the producer couldn't touch the equipment. So every edit was done with the producer signalling to the engineer where to stop. [...] That was how editing worked and it changed what a producer was all about, because a producer in America was the be all and end all of it, including a great deal of electronic fiddling and knowledge. Whereas Decca in London, being very proud of its sound, would cancel a recording if the venue wasn't good enough, CBS and RCA said whatever venue you get make the most of it and work out how to make it sound good.

[...]

In America, because of the engineers' exclusive status, producers were always responsible for signing the artists, planning the repertoire. The first man I worked for, David Kapp – he was Bing Crosby's producer and had discovered Woody Herman, Harry Belafonte, Eartha Kitt – was an old-time producer. He started in the days when they went down to the southern states and hired a couple of hotel rooms; he and the engineer would sit in one and the local cowboys and singers would sit in the other, and that's how they made records.

[...]

I was in seventh heaven as Kapp would bring in Jonny Mercer and other songwriters – my room had a piano – and he liked to audition people live. When I went to CBS in 1962 the producers all worked on the same floor so we all saw each other, classical and pop, so there was no great divide.

TC: But you were one or the other – classical or pop?

PM: Yes, although you could cross over between the two. For example original cast recordings were always classical producers because pop producers couldn't necessarily

read music or rearrange the score for recording. They didn't use the pit orchestra; they used an extended orchestra and very often better players than the hacks that turned up at theatres. They had to use those players but also hired the famous session musicians, who were a breed apart, and that's why those original cast recordings sound so good. So they all mixed together.

Anthony Pollard on Abbey Road Studios in 1949

Anthony Pollard (AP): I worked in the EMI studios for three months in 1949. I'd come out of the army and was on vocational training with the government paying my salary. I did some time in the factory and head office but principally worked in the Abbey Road studios. This was May 1949 – a very interesting time. All the recording rooms at Abbey Road were set up for 78rpm recording. The classical sessions were on wax discs and there were some they called 'flowcoat' as wax came from Russia and was hard to get hold of during the war. So they had the idea of taking wax and floating it over a glass disc and then cutting the wax on these glass discs – but the real engineers preferred the thick chunky waxes which sat on the lathe comfortably. That breed of engineer – for example Arthur Clarke who was chief recording engineer, Laurie Bamber, George Dillnut, Douglas Larter – had been brought up recording on wax. They all carried around little boxes with their recording heads in. They would have a different type of head for a different type of session, whether voice, chamber, full orchestra. They would go into the recording room and make their recordings on the wax discs using lathes that were weight-driven – not so long ago you could still see the tackle up in the roof where the weights used to be suspended.

By this time a lot of the pop stuff was recorded on acetate. The acetate wasn't as good as the flowcoat, which wasn't as good as the proper wax discs, but it was horses for courses – it depended on repertoire. Charlie Anderson, who recorded dance bands including Joe Loss and Victor Silvester, would use acetates where previously they had used wax. Possibly cost was a factor or perhaps they were forced in the direction of using acetates by the difficulty of getting hold of the wax.

In 1949 EMI produced their own tape recorder, the BTR-1 (BTR stood for British Tape Recorder). This was part of the carving up of the spoils of war from the fall of Germany. The Germans had had the Magnetophon tape recorder, which the Americans got the lion's share of, but EMI gained enough knowledge to build their own machine. So the BTR was there in the sessions but the engineers didn't use it as they didn't like it. The old engineers would use the Buchmann-Meyer test. You could take a wax disc and hold it up to the light and you could read the music from the cut of the grooves. Also they could keep an eye on the cutter as it sat on the lathe, and they could tell a lot about the quality of the sound they were getting from watching the cutter going through the wax. So if you suggested they should move away from wax and just use the potentiometer on the tape machine they weren't pleased, so there was opposition to using tape. But the more forward-looking engineers, perhaps the younger ones, recognised the enormous advantages in recording on a piece of tape, particularly for editing purposes. In all other previous formats you would do several takes but if you played a take back as a test you ruined it. Even with acetates the factory wouldn't be happy to process an acetate which had already been played back. So you would probably play back the first take so that the producer, artists, engineers, could listen back and then you'd go for a take. This was fine as long as nothing went wrong. Sometimes a take had to be completely aborted or you might do another take. Probably all

the takes would go to the factory for processing and then the artists etc would listen to the test discs of the waxes all to choose which take to go into production. This would all become history once the tape recorder slotted into position. There was opposition to tape like the situation in the late 1970s and 1980s where there was opposition to digital when it replaced analogue. [...] That's where I came in to the business – a very interesting time – there was a lot going on.

Michael Raeburn on Decca recording sessions in Vienna, 1961-62

Michael Raeburn (MR): John Culshaw was definitely the leader of the group in Vienna. He was astonishingly articulate and extremely nice. I was 21 and had an Austrian government scholarship to do research on Mozart's clarinet music in the National Library. At the same time I was studying German at Oxford so I attended language courses.

Whenever there were any big recordings going on I was welcomed at the Sofiensaal and I would go and sit in the box at the side. It was a typical dance hall, a long oblong building with a stage at one end where the singers moved around – I think the orchestra was down below so that there was a relationship in height etc that you would have had at an opera house. Whenever there were playbacks I was allowed in to the control room so I experienced everything that was going on. This was 1961-62 so the main opera recordings at that time were *Salome* and *Siegfried* – I was there for all of *Salome* and some of *Siegfried*. I was writing news from Vienna for *Records and Recording* at the time and they published a photograph of a cake I'd made – it says it was papier mache but it wasn't, it was fruit cake in the form of the head of John the Baptist on a charger and it was eaten by the orchestra in the interval. There were some orchestral recordings with Pierre Monteux,

which were remarkable, and I sat through all the sessions for the Clifford Curzon Liszt B minor piano sonata which was amazing, absolutely astonishing.

TC: In the Sofiensaal? It's interesting that Curzon chose to do it there and not in London.

MR: I don't know why, maybe he was there for concerts – he hated Vienna. The team were still high from the *Ring* and I had the impression that was a pioneering recording in terms of pushing sound values as far as they could possibly go. John Culshaw was a great Wagnerian but the engineer Gordon Parry was amazing – he would find ways of doing things, technically. There were three other engineers (James Brown, James Lock, and Jack Law); I don't know how they felt about Gordon but Gordon tended to divide people. He was physically very big and could get angry very easily – he was not a good-tempered person. He could also be extremely sweet and nice but he was volatile. He was in charge really, certainly when I was there, and he was very good and very much respected by the musicians.

Decca had a flat above the Sofiensaal that was used for rehearsal and there were certain members of the orchestra who were part of the group that hung around the flat, particularly the first horn player, Roland Berger. The orchestra was in an odd situation because it was also the opera orchestra and I know, certainly during the recordings of the *Ring*, that if Karajan was doing performances at the opera and knew there were recording sessions he would tend to keep the orchestra on and make sure that the brass repeated everything as long as possible in order to sabotage Solti – the two of them couldn't stand each other.

[...]

The group, apart from the engineers, was John, Christopher [Raeburn], Erik Smith, and Ray Minshull. Erik was by far the best musician – John was a very good musician but not an executant musician – and was enormously knowledgeable. [...] Christopher provided a

real technical knowledge of singing – when he started working with singers he felt he should know more about how the ‘instrument’ worked so he went to a teacher and had singing lessons. [...] So they were interesting as a team because they all overlapped, but certain of them really had expertise – Christopher and Erik also spoke the best German. The recording team were very close to a number of members of the orchestra, which made a big difference as they had to negotiate with the manager of the orchestra, who was the lead trumpet player, and he was a significant factor in everything because there were constant negotiations about timing and everything else. They felt a huge amount of frustration with the orchestra at times – and the singers – but the orchestra was a kind of collective prima donna a lot of the time. [...] With hindsight it’s astonishing how nice everyone was to me in allowing me to stick around so much of the time and to be there during playbacks and discussions with artists and engineers. I was a sort of fly on the wall and I learnt a lot.

Allen Stagg on recording studios in London in the 1950s

Allen Stagg (AS): I worked for about 40 years with Isabella Wallich, the niece of Fred Gaisberg, and her connection went right back to the beginning of recording. Until the 1950s it was a very compact business; when I first entered the business there were only three music recording studios in London – Decca, EMI and IBC. IBC had an important role, which we didn’t realise at the time, as we did recording for Pye, Philips and all the independent labels, so we were competing with Decca and EMI. But the lack of communication between the studios meant you never really knew your position.

I started at Radio Luxembourg and then joined IBC and that’s where I really started learning. We did lots of drama shows [for radio] using the stage personalities of the day.

We got through them in a highly productive manner – my job was to do the editing, with a pair of scissors. I developed some techniques and set myself a target of editing the reels as they came in and would try to finish one before the next one came up so that the show was complete by the end of the session. Then commercial television was introduced in 1956 and the whole of the staff moved to TV which meant I was the only one left; I was literally on my own. So we had a studio which was fully booked with sessions and no staff. There was one person I knew – Eric Tomlinson – and I phoned him and he started a couple of weeks later. During that time I learnt about managing a studio although to say I was unprepared was an understatement! I learnt just by doing it, it was survival. I moved into the studio and slept on the floor with a blanket as I couldn't leave the studio – I knew that the next morning I'd be starting another session.

TC: Who owned the studio at this time?

AS: It was owned by Captain Leonard Plugge who wasn't interested in the studio, only what he could get out of it. I was in a good position as everyone had left and had an interview the week before where we agreed the terms on which I'd manage it. He was a dictator and not used to negotiating but didn't have much choice but to accept. He never interfered and that made it possible for me to borrow equipment from manufacturers and pay them as and when we could – manufacturers were keen to get into studios. You could buy tape recorders and microphones but a lot of equipment you had to make so we had to set up an R&D department. You couldn't buy a professional mixer and some of the Decca things were like railway signals, they were so primitive. So we had no choice but to make it or do without it. All the early stereo recordings we made were done with the mikes plugged straight into the tape machine, with no mixer. If you listen to them now they sound incredibly realistic as there's nothing to interfere.

Basil Tschaikov on recording, orchestral life, and instrumental standards

Basil Tschaikov (BT): When I first started recording it was still on 78s and the situation was totally different. When we were recording 78s we were only recording four minutes at a time so each recording was like a performance, a one-off. It couldn't be edited so if somebody made a mistake and you'd had a difficult solo you just had to do it again, sometimes many times. So it was much more nerve-wracking. Even when they started recording on tape we still recorded as if we were on 78s until about 1951. As soon as tape came in everything changed, and to my mind entirely for the worse – you changed into a note-making machine. If something went wrong – a mistake or a poor entry – you would just go back a few bars and go over it again. A recorded performance might be made up of hundreds of bits and you never knew which bit they might use. Even the conductor might not have control over which bits they used – at the playback he might indicate which takes he liked but the recording people might use a different one. [...] The main difference [with tape] was that instead of the conductors being in charge it was the producers.

[...]

I was 17 when I joined the LPO. [...] In those days not many people came from the colleges of music – most brass players came from military bands or brass bands and many of the woodwind players came from the military bands. I was one of the first people from the new generation who'd been to public school and went on to the RCM, RAM, Guildhall etc. But the difference between then and now is astonishing. Virtuosity now is commonplace, on all instruments, particularly the woodwind and brass but also the standard in string players is astonishing. All the orchestras then had players who wouldn't get a place in an orchestra now. But you have to distinguish between technical standards and musical standards – there's very little playing that I find exciting today.

When I first played with the Philharmonia as a deputy (I was still in the RPO) in 1948 Reginald Kell was principal clarinet – one of the greatest clarinetists around who went to America in the 1950s. He didn't come to the rehearsal, just came to the concert. It was the first time I'd met him and I was in awe of him. He came in for the concert and introduced himself to me. People who were with Kell in the LPO with Beecham said Kell didn't speak to others in the section. That's how different it was. The star players then really were stars because there were so few of them. But if you're a principal in an orchestra now you know that there are at least half a dozen equal players who can do your job so you behave yourself. [...] I was professor at the RCM from 1964-84 and by the end of the 1970s there were players of such a high standard that they were far better than I was when I joined the LPO but they couldn't get work. Many of my pupils at the College didn't go into the profession even though they were really good, or they went abroad. It's much more difficult now.

[...]

Certainly the record companies became more and more demanding. I remember the principal trumpet in the Philharmonia was a very fine player but didn't have a strong lip and when the recording engineers wanted to do repeated takes of high passages he'd find it difficult and ask not to have to do it again. As chairman of the Orchestra I had to deal with the record company (EMI), who didn't want to use him. I'd known him since we were at college together and I had to give him the sack. That would never have happened years before, that the record company told you who to book.

[...]

The music business changed so much in the time I worked in it. They were halcyon days then, from 1945 to the late 1970s. There was so much work – I was very fortunate – there was a tremendous amount of recording. I did not just the symphony orchestras but also

Mantovani, Eric Robinson, and all sorts of ensembles. Also loads of film sessions, which were very well paid, and a lot of good music written by English composers.

Denis Vigay on orchestral venues, recording with the Philharmonia and the Academy of St Martin in the Fields, and session work with the Beatles

Denis Vigay (DV): If you asked me for my favourite hall from an orchestral point of view I'd probably say the Victoria Hall in Geneva, where the Suisse Romande played. It's a beautiful hall and I've been there a number of times with small ensembles. I used to say 'who wants a Strad' as any instrument sounds fantastic there. It's the quality of the sound and the potential for difference, different timbres and colours. That's my favourite but there's the Concertgebouw and the Tonhalle (Zurich) – Switzerland's got lots of good halls. One thing I found with the Tonhalle was that when you rehearsed it sounded a bit like a railway station, it's so resonant, but when it's full it's just perfect. So those early planners, they accommodated the acoustic. At the Festival Hall they did something to the back of the seats – they've done everything they can to the hall, all sorts of acoustic tests – but it was a long time before they worked out what the sound should be.

TC: Were you recording at Kingsway as well?

DV: Yes, I spent two years with the Philharmonia and it was wonderful. We used to use it for the Academy of St Martin in the Fields too but sometimes the recording was interrupted by the underground trains. [...] Kingsway, I always used to say, that had a sort of 'gold' sound. Then we went to St John's, Smith Square, which to me was not so good, I called that 'silver'. It made a difference if you played on the stage, most of the recordings were done in the auditorium – they cleared the seats so it was done in the front of the building and there was a much better sound, much easier to play. I liked Henry Wood Hall

too; it's a little overpowering, a little bit strange and I think sometimes the violins don't like it as much as the lower lines. There aren't many others – they used to go out to different places.

[...]

Walter Legge was very good but he wouldn't record in the afternoon. He would claim it was something to do with the acoustic but afternoons aren't very conducive, they have a post-prandial feel. It didn't stop others from working but he didn't unless it was Klemperer. The main lot I did [with the Philharmonia] were with Giulini, Maazel, and one or two others. Klemperer was an amazing old boy because he seemed completely oblivious to anything to do with recording; he just went his own way. I've often wondered how we ever finished those recordings; he always had his pipe handy and sometimes it would drop and make a noise, sometimes he looked as though he'd fallen asleep.

There were these strange things they used to do. The Verdi Requiem we did – not with Klemperer but with Giulini – Schwarzkopf had trouble with her high notes [the *pianissimo* B flat in the Requiem aeternam]. Legge wasn't psychologically good with her, he was always getting at her; in fact he wasn't psychologically good with anyone. She couldn't really pull it off and I heard later that they got Heather Harper in to sing the top note. I thought this sounded a bit far-fetched but I saw her about a year ago and asked her if it was true and she said yes.

[...]

TC: You mentioned Legge and his psychological approach.

DV: He was a bit intimidating at concerts as he'd always sit on the front row at the Festival Hall or the Musikverein, glowering at the orchestra. It rarely happened but if there was any slight error you'd see these glasses go up – he had about five pairs of glasses –

and he'd be saying 'who was that?' There was a slight reign of terror about Legge. Somebody once told me that they'd asked Legge if there were any vacancies in the orchestra and Legge said: 'No, we never have vacancies, but we make changes from time to time.' But funnily enough when I was in the Philharmonia he didn't make any changes, it was a very settled orchestra, and he was very loyal to his players, particularly the woodwind and brass. For me, it was the best orchestra I've ever played in.

[...]

I also did a lot of session work, including the Beatles' *Sergeant Pepper* – I did a couple of interviews about it for the World Service.

TC: Was it very different, working in a pop environment?

DV: It was different to anything we'd done before. During that phase the Beatles took over EMI [Abbey Road] for a couple of months or more – they had the free run of the studio. It used to be irritating as they'd ring you up and ask you to come in at 10pm – they'd work all night. So you'd get there and you'd hang around for hours – they had no idea of three-hour sessions with overtime – and some people with work the next day would walk out. They were learning about classical musicians, it was very interesting. George Martin was the referee, the go between [...] he used to smooth things over.

Malcolm Walker on Walter Legge and his assistants at EMI

Malcolm Walker (MW): When I first went to Abbey Road in April 1961 the stereo was downstairs in No. 1 – the engineer used to sit in front with the producer behind – and the mono was done upstairs in what had been the stereo room. But there were parallel producers and the records were edited in both mono and stereo. There were some isolated examples where things were done on location, for example if EMI went to Rome to do opera they would take just the stereo gear and the Italian branch would be responsible for

the mono recording, because that's probably what they would issue. The stereo takes would come back to Abbey Road to be edited and they'd attempt to take a mono copy from them. During the 1961 period they tried to electronically combine the two signals into a single one to create mono. So they were still issuing in both stereo and mono although it wasn't really a mono recording. And it did produce extraordinary results as things that were on the stereo didn't seem to be there on the mono, probably due to balance.

In the late 1950s EMI started its great recordings of the twentieth century series. It was supervised by Hayes but done in France, by Eric Macleod. Metals were sent to France, processed and copied to tape. It was all fairly primitive, there was none of the electronic gadgetry that we have today, but it meant the back catalogue could be exploited and re-marketed. The sleeves were quite elaborate in France but just a simple laminated cover here. They were very unadventurous: red for vocal, green for instrumental, blue for Columbia. Sales started to drop off in the mid-1960s and it faded away.

There was an attempt to issue budget historical. Decca had introduced *Ace of Clubs* in June 1958, just before the launch of stereo LP. EMI didn't follow until a year later but actually produced new recordings for their Concert Classics label, which was originally mono only and then mono and stereo. There was no compromise on the recording although if they could be done in fewer sessions this would make it more profitable. For example the Harty arrangements of Handel's *Water Music* and *Music for the Royal Fireworks* were recorded by George Weldon and the RPO in two sessions in 1960. The normal number of sessions in those days for an LP was about four; some artists demanded more and some

producers might try to get more out of a less experienced artist per session but Klemperer, Beecham etc were used to working at their own speeds.

TC: Did that vary according to the producer? For example, Legge was said to have stretched out sessions by asking for more takes.

MW: I think Legge's reputation is far in excess of what he actually did. He was very enthusiastic about signing people. He signed an American violinist, Michael Rabin – having dropped Johanna Martzy who was very good but he couldn't be bothered making any more records with her – and Legge got all excited but in the end only produced one and a half sessions for someone who made six or seven LPs; he couldn't be bothered and handed it over to his sidekicks. He had a plethora of people he used to employ; the prime one, who has never been given his full credit, was Walter Jellinek, in my view the finest EMI producer of his day without exception. Walter Jellinek worked at EMI from about 1954 to 1961 and produced all the stereo LPs that Legge is supposed to have been involved with, because Legge was anti-stereo. An old engineering colleague, Bob Gooch, said that Legge's idea of stereo was one speaker on top of another – he wasn't interested, he wanted a mellow, blended mono sound. Jellinek was employed as a freelance per session but Legge used other people: Geraint Jones, Alec Robertson, William Mann, Alan Melville. These were people that were all used by Legge but he took the credit. So Legge would find an excuse to do something else and ask one of these people to take the session – even Lawrence Collingwood would be asked to take sessions. So a lot of things that Legge was said to have done, he didn't – Jellinek used to look after all the editing for example and Legge would just listen to the white label. The money he cost EMI in excessive studio/factory time... The last major thing he did was a Verdi Requiem which was due to come out in June 1964 but he got into so many recuts; it got to version 19 of

side one because of the distortion, which he intended because he wanted the Dies Irae to sound like the Day of Wrath (the engineer Neville Boyling had told me what he wanted) but the studio wouldn't pass anything with distortion to protect their reputation. So Legge almost ruined that recording because of his bloody-mindedness.

[...]

I'm not saying he wasn't a gifted man, he was a brilliant impresario and his legacy will be for the standards he set, they were exemplary. I won't hear a word said against what was achieved but he wasn't responsible for a lot of the work that was produced.

Appendix 4: Archives consulted

Arts Council of Great Britain Archives, V&A Archive and Library, Blythe House,
23 Blythe Road, London, W14 0QX.

BBC Written Archives, Caversham Park, Peppard Road, Reading, RG4 8TZ.

British Council Archives, The National Archives, Kew, Richmond, Surrey, TW9 4DU.

British Film Institute National Archive, BFI Southbank, Belvedere Road, South Bank,
London, SE1 8XT.

British Library Sound Archive, The British Library, 96 Euston Road, London, NW1 2DB.

British Universities Film & Video Council, 77 Wells Street, London, W1T 3QJ.

Britten-Pears Library, The Red House, Golf Lane, Aldeburgh, Suffolk, IP15 5PZ.

Christopher Raeburn Archive, The British Library, 96 Euston Road, London, NW1 2DB.

Daily Mail Archives, Associated Newspapers Limited, Northcliffe House, 2 Derry Street,
London, W8 5TT.

ITV Archive, ITN Source, 200 Gray's Inn Road, London, WC1X 8XZ.

Sir Georg Solti Archive (1947-1997), St John's Wood, London [Since rehoused at: Loeb
Music Library, Harvard University, Cambridge, MA.]

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Appendix 6: CD track listings

CD1

Track(s)	Title	Source
<i>Tristan und Isolde</i>		
1	Prelude to Act 1	Walhall CD1, track 1
2	Prelude to Act 1	EMI CD1, track 1
3	‘Westwärts schweift/Brangäne, du?’	Walhall CD1, track 2
4	‘Westwärts schweift/Brangäne, du?’	EMI CD1, track 2
5	‘Einsam wachend in der Nacht’	Walhall CD2, track 5
6	‘Habet Acht!’	Walhall CD2, track 7
7	‘Einsam wachend in der Nacht’	EMI CD2, track 20
8	‘Habet Acht!’	EMI CD3, track 3
9	Love duet (high Cs)	EMI CD2, track 13
<i>Peter Grimes</i>		
10	‘Now the Great Bear’	EMI CD2, track 18
11-14	Inside the Boar	mpLIVE, tracks 14-17

CD2

Track(s)	Title	Source
<i>Peter Grimes</i> (continued)		
1-3	Inside the Boar	Decca CD1, tracks 14-16
4	'Now the Great Bear'	Decca CD1, track 17
5-6	Sunday morning: 'Glitter of waves'	EMI CD2, tracks 20-21
7	Sunday morning: 'Glitter of waves'	mpLIVE, track 21
8	Sunday morning: 'Glitter of waves'	Decca CD1, track 21
9	'Steady! There you are!'	EMI CD2, track 26
10-11	'Steady! There you are!'	mpLIVE, tracks 41-42
12-13	'Steady! There you are!'	Decca CD2, tracks 17-18
<i>Elektra</i>		
14	Elektra: 'Allein!'	Decca CD1, track 2
15	Chrysothemis: 'Elektra!'	Decca CD1, track 3
16	Klytemnestra's exit	DG CD1, track 10
17	Klytemnestra's exit	Decca CD1, track 12

CD3

Track(s)	Title	Source
<i>Scheherazade</i>		
1	I. The Sea & Sinbad's Ship	Decca CD (Stokowski), track 1
2	I. The Sea & Sinbad's Ship	Decca CD1 (Ansermet), track 1
3	II. The Story of the Kalendar Prince	Decca CD (Stokowski), track 2
4	II. The Story of the Kalendar Prince	Decca CD1 (Ansermet), track 2
5	IV. Festival In Baghdad, etc.	Decca CD (Stokowski), track 4
<i>Mozart: Piano Concerto No. 27 in B flat, K. 595</i>		
6	I. Allegro	Decca CD (Curzon), track 1
7	I. Allegro	Decca CD (Brendel), track 1

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