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The Aesthetics of Pierre Boulez

David Walters

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PhD Thesis

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Finally, I would like to express my sincere thanks to my brother, Andrew, whose unwavering support and belief in my ability to complete this dissertation I sincerely appreciate and to whom I dedicate this work.

ON THE REFERENCE SYSTEM AND MATTERS OF TRANSLATION

To enable the reader to find references as quickly and easily as possible, I have grouped all references together in the bibliography in alphabetical order. Texts by the same author are distinguished first by year and second, if there are several texts from the same year, by letter. Interviews and writing collaborations (including published correspondence) involving Boulez are also ordered alphabetically.

The year given at the beginning of each bibliographical entry is, in the majority of cases, the year in which the text was first published (*not* necessarily the year of the edition cited). For all writings written by Boulez, I have provided the original title under which the text in question was first published (usually in French). Many articles have subsequently been translated into English and therefore I have decided to provide page references for both versions. For all texts by writers other than Boulez, I have cited the version of the text I have used.

Wherever possible, I have cited the existing English translations of texts originally written in French. However, on many occasions I have considered it necessary to make alterations to the published translations. This is particularly applicable to *Boulez On Music Today* (1971) and *Orientations* (1986), both of which display an often heavy-handed and rather inaccurate approach to the task of translating specific concepts employed by Boulez. In contrast, *Stocktakings of an Apprenticeship* (1991) has required only occasional minor amendments. All changes to the published English translations are acknowledged in the corresponding footnote.

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I have received permission to exceed the word limit from the Graduate School Committee at the University of Durham.

To my brother, Andrew

INTRODUCTION

I am convinced that in every great composer [...] there is an “indestructible kernel of darkness”! He can never destroy this even if he should want to: it is the deep and inexhaustible source of that radiation which will unfailingly resist every purely rational approach. He can degrade it only by either plundering, forgetting (which implies hating), or deriding it. These intentions are not yet mine... I put my faith in the “kernel of darkness”, which will still persist after every momentary flash of illumination.¹

The fear of exposing the ‘kernel of darkness’, the mystery at the heart of creation, to rational analysis is widespread today. The composers that have challenged this view and dared to consider musical composition from a ‘rational’ perspective have often provoked violent reactions. I would argue that, for many people today, the composer who has come to most represent the rationalisation of music is Pierre Boulez.

Boulez’s rational approach to music is probably the chief theme running throughout his various musical endeavours. Today’s concert audiences probably know him primarily as a conductor dedicated to the promotion of twentieth-century music. Music students typically encounter him through one musical composition, *Structure Ia* (1952), which is often presented as *the* exemplar of the Darmstadt School and the pinnacle of modernism’s dead-end foray into extreme rationalisation: total serialism. The French public would, perhaps, most readily identify him with IRCAM, the state-funded institution conceived by Boulez and dedicated to research on music and

¹ [‘Je suis sûr qu’il existe dans tout grand compositeur [...] un “noyau infracassable de nuit”! Quand il le voudrait, il ne pourrait arriver à détruire en lui cette source profonde et inépuisable de radiation (le don, quoi qu’il arrive, résistera à toute approche purement rationnelle) – il ne pourra le dégrader qu’en saccageant, ou en l’oubliant, par haine, ou par dérision. Ces intentions ne sont pas encore miennes... J’ai confiance en ce « noyau de nuit », qui subsistera après l’éclat d’un moment dispersé.’] (My slight alteration to the translation.) Boulez (1963d) p. 552 (in French) and p. 83 (in English). In the English translation in *Orientations* (1986), the line ‘Ces intentions ne sont pas encore miennes’ has not been translated into English and therefore I have translated it. Presumably, this omission is accidental as this line is crucial to an understanding of this passage.

technology. The area that is the focus of this dissertation, however, is firmly entwined with all of his musical activities: his writings² and the ideas on music aesthetics expounded within those writings.

Boulez's writings

Boulez has written numerous essays on music over the course of more than fifty years. Between 1948, the year of his first publication, and today he has, as Bradshaw rightly claims, 'contributed so much to the theoretical basis of present-day musical thinking.'³ The sheer volume of writings produced and their demonstration of his ability to construct powerful arguments and highly memorable phrases have led to an established reputation as a writer. He has written occasional articles for journals which, together with numerous short texts, such as programme notes, record sleeves and acceptance speeches, have been published in two collections of Boulez's writings. These are *Relevés d'apprenti* (1966),⁴ which incorporates his earliest texts up until 1962, and *Points de repère* (1981, new editions 1985, 1995),⁵ consisting of texts from 1950 to 1979.

Boulez has also taught music in classes at the Darmstadt Summer School (1956, 1959, 1960, 1961 and 1965), Harvard University (1963) and the Collège de France (1978-). This teaching material has led to two large-scale written works: *Penser la musique aujourd'hui* (1963),⁶ using material from Darmstadt in 1960, and *Jalons (pour une décennie)* (1989),⁷ drawing from his classes at the Collège de France. The lectures presented at Harvard University, which are concerned with aesthetic issues

² To avoid confusion, throughout this dissertation I shall use the terms 'writings' or 'texts' to be distinguished from 'musical compositions' or 'musical works'.

³ Bradshaw (1986) p. 127 (in English).

⁴ The English version of *Relevés d'apprenti* (1966) is *Stocktakings of an Apprenticeship* (1991). This replaces an earlier English translation of *Relevés d'apprenti* (1966) entitled *Notes of an Apprenticeship* (1968). See: Boulez (1966a), Boulez (1991a) and Boulez (1968a) respectively.

⁵ The English version of *Points de repère* (1981) is *Orientations* (1986) which contains three articles not in the French edition: 'Rite of Spring' (1968), 'Oriental Music: A Lost Paradise' (1967) and 'Technology and the Composer' (1977). See: Boulez (1981a) and Boulez (1986a) respectively.

⁶ Boulez (1963b). This was translated as *Boulez On Music Today* (1971). See: Boulez (1971a).

⁷ Boulez (1989a).

and therefore highly pertinent to this dissertation, have also been published and appear in two parts as 'Nécessité d'une orientation esthétique' (1963) and 'Nécessité d'une orientation esthétique II' (1963).⁸ In these texts written for teaching purposes, the scope for concentrating on specific aspects of music and for elaborating his argument over several classes has resulted in some of Boulez's most important and illuminating passages on aesthetic issues.

His correspondence with many of the leading names of post-war music and literature (e.g. Theodor Adorno, Luciano Berio, René Char, Henri Michaux and Igor Stravinsky) provides a fascinating insight into Boulez's aesthetic preoccupations. Of particular interest is his correspondence with John Cage, which has been published,⁹ and with Karlheinz Stockhausen, which remains largely unpublished.¹⁰

From the late 1960s onward, Boulez has undertaken many interviews, covering a broad spectrum of subjects. The most important of these, and the most relevant to this study, are *Par volonté et par hasard: Entretiens avec Célestin Deliège* (1975),¹¹ *Dialogues with Boulez* (2001)¹² and *Éclats/Boulez* (1986).¹³ Another substantial interview is *Conversations de Pierre Boulez sur le direction d'orchestre avec Jean Vermeil* (1989),¹⁴ although this offers little useful material for this dissertation. Despite the limited scope of the shorter interviews and the inevitable repetition from one conversation to the next, Boulez's interviews are important as, from time to time, they often cast ideas in a new light.

Finally, one curiosity in Boulez's writings is his book on the painter Paul Klee entitled *Le pays fertile: Paul Klee* (1989). This is the amalgamation of three texts

⁸ Boulez (1963d) and Boulez (1963e). In *Orientations* (1986), the footnote incorrectly writes that these two papers were first presented at Darmstadt in 1960. See: Nattiez (1986b) p. 63 (in English).

⁹ This has been published as the *Boulez-Cage Correspondence* (1993). See: Boulez and Cage (1993).

¹⁰ I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished correspondence.

¹¹ Boulez and Cage (1991).

¹² Boulez and Di Pietro (2001).

¹³ Boulez and Samuel (1986).

¹⁴ Boulez and Vermeil (1989).

dating from 1985, 1986 and 1987.¹⁵ In his commentary on Klee, one can discern several important ideas which illuminate Boulez's own conception of artistic practice. It is, therefore, particularly informative for this dissertation.¹⁶

Boulez is not, of course, the first composer to have reflected upon aesthetic issues pertaining to his own discipline. Indeed, it is necessary to consider his writings as part of a history of composers who have attempted to rationalise their practice. This lineage includes Rameau's *Traité de l'harmonie* (1722), Berlioz's *Traité d'orchestration* (1844) which was updated by Richard Strauss in 1905, Wagner's numerous books on various aspects of music, Schoenberg's theoretical essays collected in *Style and Idea* (1950),¹⁷ Hindemith's accounts of music theory and Boulez's teacher, René Leibowitz who wrote several books on serialism. Several composers have written about music not as a means of detailing their own theory of musical technique but in order to make aesthetic judgements on the works of others. In this category, I would place the writings of Debussy, under the pseudonym of Monsieur Croche,¹⁸ and the composer and philosopher Theodor Adorno. In addition, there have been numerous writers and painters who have reflected upon their art, several of whom have influenced Boulez.¹⁹

Although there are individual factors driving each composer to write about their own practice, one can suggest certain common intentions. A major reason is to champion their own aesthetic position. Breatnach claims that composers 'write in order to promote a passionately held vision of music, of its creation and purpose and of its position among the other arts and in society.'²⁰ I would add that composers' essays also serve to help clarification of their own aesthetic approach. In this sense, their essays can also be considered as an expression of their self-critical attitude to artistic creation.

¹⁵ This is explained in the introduction to Boulez's book. See: Boulez (1989c) p. 7 (in French).

¹⁶ For my consideration of Boulez's influence on Klee, see: this dissertation p. 48.

¹⁷ Schoenberg (1975).

¹⁸ Published in English as *Debussy on Music* (1977). See: Debussy (1977).

¹⁹ Almost all of those who have exercised an influence on Boulez have published essays reflecting on their art. I consider this in chapter V. See: this dissertation p. 394.

Boulez's main literary devices to promote his view of music are his polemicism and his capacity to coin memorable phrases. Indeed, as Breatnach again notes, 'Boulez the polemicist [...] is almost as well known as Boulez the composer'.²¹ His most polemical articles manifest a writing tone reminiscent of André Breton's surrealist manifestos.²² Probably the most infamous article is Boulez's 'tribute' to Schoenberg written in response to his recent death entitled 'Schoenberg is Dead!' (1952).²³ As I shall argue later,²⁴ this article constitutes his rejection of Schoenberg's use of tonal forms in serial composition. Several writers have commented on Boulez's polemical style which, particularly in his earliest writings, can border on arrogance.²⁵ However, as Brunner remarks, his writings have become less polemical over the years.²⁶ A distinctive example of a memorable phrase is his proclamation in 1952 that 'creation is only possible when the unforeseeable becomes necessity.'²⁷ As Breatnach notes, even in his most technical essays he often 'uses a memorable aphorism or turn of phrase to sum up or reinforce his argument.'²⁸ However, elsewhere in the same technical essays, and in many other writings by Boulez, comprehension can be difficult due to obscure references and terminology. Heyworth suggests that:

Much of Boulez's writing gives the impression of having been hastily thrown together, for brilliant insights and vivid phrases often lie embedded in thickets of jargon that do less than justice to the clarity and coherence of his ideas.²⁹

²⁰ Breatnach (1996) p. 3 (in English).

²¹ *Ibid.*

²² Piencikowski makes this suggestion. See: Piencikowski (1991a) pp. xvii-xviii (in English). For my examination of the importance of Surrealism on Boulez see: this dissertation p. 36.

²³ See: Boulez (1952a).

²⁴ See: this dissertation p. 65.

²⁵ For example, Blaustein writes that Boulez 'has a virtuosic flair for polemics'. Blaustein (1989) p. 273 (in English). Born describes the 'dogmatic, absolutist tone of his polemics'. Born (1995) p. 95 (in English). Bradshaw writes that Boulez's writings are 'occasionally arrogant'. Bradshaw (1986) p. 129 (in English).

²⁶ See: Brunner (1990) p. 81 (in French).

²⁷ ['il n'y a de création que dans l'imprévisible devenant nécessité.'] Boulez (1952c) p. 288 (in French) and p. 126 (in English).

²⁸ Breatnach (1996) p. 4 (in English).

Regardless of whether Boulez's writings are 'hastily thrown together' or not, I would identify four factors which increase the difficulty of reading his texts. First, the content of his writings often concerns complex issues in musical technique inherently resistant to literary description. Second, he refers to a wide range of sources from not only music but also from the visual arts, literature and philosophy. This is highlighted by Breatnach, who writes that Boulez's writings 'contain numerous philosophical references and his arguments are often couched in terms which reflect extensive knowledge of history and philosophy.'³⁰ Third, Boulez has a tendency not to provide any references. Fourth, he often uses his own terminology to describe a certain concept or aspect of musical technique without providing clear definitions of the way in which he understands these terms. This is especially apparent in writings up to around the middle of the 1960s. I would suggest that the confusion caused and perhaps deliberate obfuscation that resulted is indicative of the young composer's relative insecurity on his own aesthetic ideas. I suggest this as his later writings, despite describing ideas which remain as complex as before, are much more clearly articulated.³¹

An important element to remember when reading Boulez's writings is that he is a practising composer: as Jameux notes 'Boulez is neither a musicologist nor a true theoretician'.³² His writings typically assume the viewpoint of the composer whilst not stating this fact. Nowhere is this more obvious than in his discussion of musical analysis which, for him, is a prelude to composition.³³ Similarly, his accounts of musical technique often do not clearly establish what they are intended to achieve. They can easily appear to be 'objective' academic studies seeking to ascertain and clarify issues concerning the musical language and not, as they really are, Boulez's own findings and speculations as a composer.

²⁹ Heyworth (1973) p. 33 (in English).

³⁰ Breatnach (1996) p. 5 (in English).

³¹ I examine this problem of terminology, in relation to *Penser la musique aujourd'hui* (1963), in more detail later. See: this dissertation p. 294.

³² Jameux (1991) p.33 (in English).

³³ See: this dissertation p. 276.

In addition to these stylistic features, there are three primary concepts in his texts I would like to highlight.

Three primary concepts: *chance*, *necessity* and *freedom*

I would agree with Nattiez who claims that 'Boulez's thought is characterised by a relatively small number of pivotal ideas, which are identifiable from very early on.'³⁴ The consistency of his aesthetic principles is arguably the most striking feature of his writings. Bennett writes that even in his early texts 'Boulez possessed [...] a remarkably sure and consistent aesthetic judgement'.³⁵ Similarly, Breatnach argues that what his writings 'reveal above all is the remarkable consistency in the author's aims throughout his creative life.'³⁶

I would like to propose that there are three primary concepts in Boulez's writings under which his aesthetic approach can be understood. These are *chance*, *necessity* and *freedom*. These 'large-scale' concepts embrace numerous other concepts of a 'lower order' in a complex theoretical network. Throughout this dissertation, these concepts will be italicised in order to aid comprehension.

Chance concerns the contingent 'pre-rationalised' material inherited by the composer. This material is all that the composer has initially at his disposal. This collective historical inheritance is regarded by Boulez as not belonging to oneself. Concepts that are closely connected with the concept of chance include 'contingency', 'material', 'accident' and 'automatism'.

*Necessity*³⁷ involves taking the contingent material and 'forgetting' it in order to make it necessary to one's thought. The most obvious related concept is that of 'consistency', also described as 'purity'. The principle of consistency is

³⁴ Nattiez (1993) p. 8 (in English).

³⁵ Bennett (1986) p. 82 (in English).

³⁶ Breatnach (1996) p. 6 (in English).

³⁷ Throughout this dissertation, I also italicise the word *necessary*.

characterised by the attempt to eliminate contradictions in the inherited concepts in order to arrive at a more consistent synthesis. Consistency is one of three key principles that can be considered under the category of necessity. The other two principles are 'renewal' (the constant revitalisation of one's approach) and 'dissociation' (the tendency towards 'analysing' (i.e. dismantling) complex concepts into their increasingly smaller constituent parts). All three principles and the large-scale category of necessity are the foundation for Boulez's utopian vision of the 'pure work', alternatively described as 'original instrument'. This refers to a work in which the composer has 'dominated contingency'³⁸ and made every aspect of the work *necessary*. In achieving this, the composer arrives at a work that is a paradigm of the high modernist paradox: a work which aspires towards complete expression but, perversely, constitutes a total annihilation of the subject. This leads to the third primary concept: *freedom*.

Freedom is the largely unwritten *raison d'être* of Boulez's music. He seeks to overcome the limitations of the *chance* material by making it *necessary* in order to realise his freedom as an autonomous subject. The concept of freedom is typically denoted in Boulez's writings by the terms of the 'imagination' and the 'imaginary' and is associated with the concept of 'mobility'. The realisation of this freedom manifests itself in the appearance of the 'unforeseen' which demonstrates that one has overcome the means-to-an-end limitations of the inherited material.

These three 'meta-concepts' of *chance*, *necessity* and *freedom* recur throughout this dissertation and become part of Boulez's mature, consciously dialectical, aesthetic approach.

³⁸ ['dominer la contingence'.] (My translation.) Boulez (1985a) p. 26.

Aims and approach

The overall aim of this study is to examine the aesthetic framework underpinning Boulez's writings. To this end, I chart the major developments in his aesthetic thought over the course of his life and identify the key themes and influences. I intend to enable the reader to situate Boulez's ideas, most of which are manifested in a fragmentary way in essays, into what I see as his overall aesthetic theory. The claim that Boulez's writings should be understood as manifesting a coherent theory is open to conjecture. As it will emerge throughout this dissertation, I would argue that one can establish the consistent application of theoretical principles in Boulez's writings, particularly in those published after 1957. I hope that whilst undertaking a thorough examination of his ideas for readers familiar with his output this dissertation can also be considered as an introduction to his writings and a clarification of their meanings and references. As with all literary texts, Boulez's writings have a tendency to be taken out of context and misquoted. I hope to counter-balance this by re-considering the frames of reference in which his texts originated. A primary example of this is the neglect given to the occasional nature of almost all of his writings.³⁹ The majority of his texts are conceived for and targeted at particular audiences for specific occasions, a factor that inevitably shapes the form and content of each individual text.

I would argue that one can distinguish between two main approaches towards making a study of Boulez's aesthetics. A *chronological* approach is advantageous, as it retains a sense of concepts and influences being developed or rejected and avoids the presentation of ideas as if they suddenly appeared fully-formed. However, this approach can lead to a lightweight examination of ideas and not touch upon the larger framework in which they are conceived. In opposition to this approach, one can analyse Boulez's theory from a *theoretical* standpoint and consider its overall 'geometry'. This is advantageous as it enables one to examine ideas in detail and the

³⁹ Nattiez notes that most of Boulez's writings are written specifically for an occasion See: Nattiez (1995) p. 12 (in English).

way in which they work. However, this approach tends to eliminate the inevitable fluctuations and developments of the individual as well as that of the cultural and social context in which their ideas grew. This results in making the aesthetic theory appear 'absolute' and unchanging.

I attempt to retain the advantages of both the chronological and theoretical approaches as I show how Boulez's early thought develops into his mature theory. For Boulez's early period (covered in chapters I and II), I examine his ideas and principles by means of both approaches. At the point at which his aesthetic thought matures in 1957, I consider his theory in its entirety (chapter III). In chapter IV, I bring together a 'chronological' and 'theoretical' approach by taking specific facets of Boulez's writings (e.g. music technology) and tracing how they appear throughout his writings and also how they relate to his dialectical conception of music considered in chapter III.

Up to now, there has not been a thorough 'global' study of Boulez's aesthetic position. Stacey's *Boulez and the Modern Concept* (1987)⁴⁰ briefly examines his influences separately and provides a broad view of the type of ideas that shaped his thought. It does not attempt, however, to establish the conceptual framework underpinning Boulez's theory. Similarly, whilst Aguila's *Le Domaine Musical: Pierre Boulez et vingt ans de création contemporaine* (1992)⁴¹ offers a far greater examination of Boulez's influences and tackles aesthetic issues concerning his attempt to 'institutionalise the avant-garde', it does not consider his aesthetics as a whole.

I have attempted to keep biographical details to a minimum. Occasionally however, I have provided some of the biographical context in which Boulez's aesthetic development occurred for the purposes of clarity. Several books provide a biographical account of Boulez's life and career. Goléa's biographical portrait

⁴⁰ Stacey (1987).

⁴¹ Aguila (1992). In addition to the books of Stacey and Aguila, one should note Padilla's *Dialectica y Musica: Espacio sonoro y tiempo musical en la obra de Pierre Boulez* (1995). See: Padilla (1995).

entitled *Rencontres avec Pierre Boulez* (1958)⁴² provides a personal account of Goléa's direct contact with the young composer.⁴³ Peyser's *Boulez: Composer, Conductor, Enigma* (1976) is a self-titled 'psychobiography'⁴⁴ but offers little that can contribute to this study. The most accurate and comprehensive book to present Boulez's biography is simply entitled *Pierre Boulez* (1991) by Jameux.⁴⁵ This provides not only biographical details but also short commentaries on Boulez's compositions and texts. In its breadth of scope and academic standard, Jameux's study is highly impressive and should be the first point of call for the reader seeking a broad view of Boulez's life and works.

As with my effort to keep biographical details to a minimum, I have also avoided becoming involved with analysing Boulez's musical compositions. This is because this dissertation focuses upon his aesthetic ideas as manifested in his writings. I am concerned with the consistency and integrity of his statements on aesthetic matters and not with measuring the impact of his application, or non-application, of his ideas in musical practice. In other words, this study does not consider whether Boulez's aesthetic ideas have been successfully put into practice in his composition: my primary aim is to examine his theory as a theoretical system. I inevitably refer, however, to his compositions, particularly the first book of *Structures* (1952) and the Third Piano Sonata (1957), but purely as a means of understanding and illustrating his conceptual framework.

There are many in-depth analyses undertaken on individual compositions by Boulez, several of which touch upon aesthetic ideas. The first major study of one of his works is Ligeti's 1958 analysis of *Structure 1a*.⁴⁶ Although the title of Manfred

⁴² Goléa (1958a).

⁴³ Questions have been raised concerning Goléa's literary standards. See: Piencikowski (1991a) p. xx, footnote 15 (in English). I would also add that Goléa's article 'Pierre Boulez et la révolution de la jeune musique depuis 1955' in *Carré rouge* no. 7 Summer 1958 displays a mistake not only in the title (it is clear from the article that the title should read 'depuis 1945') but also Boulez's birthdate reads 25.3.1925 rather than the correct 26.3.1925. See: Goléa (1958b).

⁴⁴ Peyser uses this term. See: Peyser (1976) p. 7 (in English).

⁴⁵ Jameux (1991).

⁴⁶ Ligeti (1958).

Stahnke's *Struktur und Ästhetik bei Boulez* (1979)⁴⁷ might suggest a study of Boulez's aesthetic ideas, as presented in his writings, it is primarily a musical analysis of 'Trope' from the Third Piano Sonata (1957). The two commentaries in Ulrich Siegele's *Zwei Kommentare zum "Marteau sans maître" von Pierre Boulez* (1979) are concerned with 'form' (i.e. large-scale, macro-structural features such as comparisons of tempi) and 'technique' (the micro-structural aspects of serial manipulation).⁴⁸ Two other important analyses of *Le marteau sans maître* (1955) are Lev Koblyakov's *Pierre Boulez: A World of Harmony* (1990),⁴⁹ which concentrates on pitch structure in an extensive analysis, and Piencikowski's *René Char et Pierre Boulez* (1980).⁵⁰ In addition, it is necessary to mention the hundreds of reviews of both Boulez's compositions and the works he has conducted, most of which are irrelevant for my dissertation and therefore are not included in my bibliography. There are also several works written on Boulez which aim to provide a broad view of Boulez's compositional activity by the inclusion of short commentaries on his musical works. Examples are Derrien's 'Pierre Boulez' (1970),⁵¹ Griffiths' *Boulez* (1978)⁵² and Hirsbrunner's *Pierre Boulez und sein Werk* (1985).⁵³

Structure of the dissertation

The main argument of this dissertation is that between 1952 and 1957 Boulez formulates a dialectical approach to musical composition which is reflected in all aspects of his musical activity. This argument is presented in five chapters.

In chapter I, I analyse Boulez's earliest writings up to 1952. During this time he encountered many of the influences that would shape his musical career. I consider these influences in part 1 of this chapter entitled 'Orientations'. In part 2, entitled

⁴⁷ Stahnke (1979).

⁴⁸ Siegele (1979).

⁴⁹ Koblyakov (1990).

⁵⁰ Piencikowski (1980).

⁵¹ Derrien (1970).

⁵² Griffiths (1978a).

⁵³ Hirsbrunner (1985).

'Écriture', I identify the key principles underpinning his writings from this time which, as yet, remain to be placed within a more fully elaborated theory. These principles include the well-documented attempt by Boulez to integrate recent developments in pitch and rhythm. In addition to this, I set out the key artistic aim from this time which Boulez has, more or less, retained to this day: the realisation of a particular conception of *freedom* of the autonomous subject achieved through making every aspect of the means of expression become *necessary*.

Chapter II, 'Stocktakings' and '*Chance*', covers the important transitional period in Boulez's career between 1952 and 1957. The compulsion driving him to reconsider and rationalise his entire compositional approach is based on two aesthetic problems with the concept of 'consistency'. First, he acknowledges that in striving for complete *necessity* and consistency he reduced his *freedom* as a composer. Second, he recognises the impossibility of making every aspect within the musical work become *necessary* due to the inevitability of *chance*. In order to overcome these problems, he draws from his primary influence at this time, the writings of Stéphane Mallarmé. Mallarmé's texts are preoccupied with the idea of 'chance' which refers to that which is exterior to thought and which cannot be controlled, and consequently cannot 'express' anything.⁵⁴ Boulez's solution to this issue is the same as Mallarmé's: to introduce mobility within the work of art. As Mallarmé introduced mobile elements into all aspects of literary form, Boulez developed the idea of 'mobile form', most notably exemplified by his Third Piano Sonata. Throughout this period, Boulez grapples with working-through a dialectical approach to all aspects of music. As I shall demonstrate, it is noticeable that several of his most well known articles dating from this time are summaries of his views, an indicator of his attempts to rationalise his practice.

The third and central chapter is the kernel of this dissertation and is entitled 'Constellation'. I examine what is Boulez's mature, consciously dialectical approach to musical composition which is first coherently displayed in '*Aléa*' (1957) and

⁵⁴ I examine this idea later. See: this dissertation p. 97.

revealed most fully in Boulez's lectures at the Darmstadt Summer School in the early 1960s.

Chapter IV consists of 6 independent sections in which I examine how the dialectical position I set out in chapter III is manifested in various areas of Boulez's musical activity. Throughout these sections, I refer back to the aesthetic framework I identified in chapter III. The first section is '1. History' and considers Boulez's thoughts on establishing his own music history. The second section, '2. Analysis', investigates his views on musical analysis and makes comparisons with the ideas of Messiaen. The most remarkable feature of Boulez's discussion of analysis is that he understands analysis as the prelude to composition. For this reason, I have placed this section before '3. Technique', which constitutes the third section. Boulez's primary account of his musical technique appears in *Penser la musique aujourd'hui* (1963) and this is the major source of reference for this section. I consider his appropriation of Structural Linguistics as a means for rationalising his own musical technique and his conception of creating musical structures and musical form, both of which bear the imprint of his dialectical approach. The most obvious imprint of this dialectical approach is arguably in the fourth area of music I examine entitled '4. Listening'. In this section, I consider his advocacy of a new mode of listening that uses 'para-memory'.⁵⁵ '5. Technology' considers Boulez's persistent desire to expand the available sound world of the composer. This theme is most obvious in relation to his work in electro-acoustic music and his foundation of IRCAM. IRCAM is also considered in the final section of chapter IV, '6. Institution', but understood here as one particular attempt by Boulez to promote and institutionalise avant-garde music.

The fifth and final chapter functions as the conclusion and comments on Boulez's dialectical conception of music as a whole. I attempt to draw connections between the various manifestations of his aesthetic ideas and consider his theory overall.

⁵⁵ See: this dissertation p. 332.

I would like to note that the plan of this dissertation broadly follows Boulez's aesthetic development over the course of his life. Although many persistent themes have appeared throughout Boulez's writing career, a general course of evolution can be traced. In the post-war period, his writings display a fixation with the immediate problems of the musical language. This can be witnessed in his criticisms of the inconsistent developments between pitch and rhythm. His exploration of consistency at a local level of musical structure forced him to confront the issue of larger-scale, formal problems between 1952 and 1957. During this time, he reconsidered his aesthetic principles by attempting to place them within a coherent theory. His new conception of form ('mobile form') together with his new dialectical approach required a 'new mode of listening'. The difficulties encountered by people listening to the new music and the consequent rupture between composers and the concert-going audience again gave rise to his determined efforts to promote new music. His considerable conducting work during the late 1960s and 1970s can be considered as his attempt to solve this problem. The primary manifestation of Boulez's desire to promote new music is his development of IRCAM which opened in 1977.

Overall, there is a line of development in Boulez's preoccupations, beginning with the immediate problems of the musical language, followed by questions of form through to the issues of listening and the reception of music and musical institutions. I would argue that the primary reason for this development stems from the sudden accessibility of previously banned works, such as those by the Second Viennese School, in the immediate post-war period. Whereas composers of previous generations would have been familiar with works of their immediate predecessors and assumed the inheritance of their musical material, the post-war generation encountered many works very suddenly and consequently did not assume this natural connection. Like many of his peers, Boulez responded by beginning to rebuild his musical practice from scratch, which resulted in each stage of the compositional process being worked through in turn, beginning with the immediate problem of establishing a language.

Influences

Although I shall examine in detail Boulez's influences in chapter I, a number of key figures deserve to be highlighted here.

The most obvious influences with which to begin are Boulez's teachers Olivier Messiaen and René Leibowitz. In particular, there are striking similarities between passages in the writings of Leibowitz and Boulez which I highlight throughout this dissertation. Boulez's early championing of Webern should also be seen as springing from the teachings of Leibowitz, despite Leibowitz favouring Schoenberg. I would suggest that his two teachers are the primary reason for the general consistency of ideas throughout his writings.

To the influence of his teachers I would also add several schools of thought that significantly contributed towards Boulez's aesthetic theory. Although there are various figures who unquestionably influenced Boulez who do not fall into these categories, these exceptions tended to influence Boulez on specific ideas rather than his general aesthetic viewpoint.⁵⁶

Several Surrealist artists and writers appear to have stimulated much of Boulez's early artistic development. Whereas Surrealism was the provocation, Symbolism has given Boulez his most fundamental and enduring influence. Mallarmé, in particular, was the key model for Boulez's shift towards a consciously dialectical approach. The third influential school of thought is Expressionism, primarily through the teachings of Leibowitz and the critical essays of Schoenberg. Fourth, there are clear echoes of Existentialism in Boulez's writings, not least in his preoccupation with the idea of chance. The fifth influence is that of Phenomenology, especially the theory of Merleau-Ponty.

In addition to these primary influences, there are other schools of thought that have provided Boulez later in his career with concepts that have helped him to clarify his aesthetic position. However, these influences do not appear to have had a deep impact on Boulez's aesthetic theory. This category includes Structuralism, the *nouveau roman* and the philosophy of Schopenhauer (the latter probably through the filter of Wagner).

Almost all of these schools of thought have been largely ignored in Boulez scholarship, an exception being Breatnach's study of the Mallarméan impact on Boulez.⁵⁷ Existentialism and Phenomenology, in particular, have never been mentioned, probably due to Boulez's dismissals of their influence on him.

Partial Conclusion

There are several dangers I have endeavoured to avoid in my approach to Boulez's aesthetics. First, by attempting to consider his aesthetic as a whole, one can easily be drawn into an approach that is excessively 'reductionist', in which his ideas are 'deformed' in order to fit an overall theory. I hope I have succeeded in avoiding this trap by attempting to reflect the details of his aesthetic ideas. Second, and following on from the first, Boulez's aesthetic concepts are highly interrelated and overlap with each other. Nevertheless, I have unravelled these ideas into a linear exposition. I consider this an inevitable part of my examination and explication of his complex aesthetic theory. This interrelatedness should be borne in mind whilst reading this dissertation. The third danger with my approach is the temptation to assume Boulez's aesthetic theory is consistent and forms a unified whole throughout his life.

⁵⁶ These exceptions include Karlheinz Stockhausen and John Cage, both of whom provided specific ideas and 'moral support' during the early 1950s when their approaches overlapped with that of Boulez.

⁵⁷ Breatnach's *Boulez and Mallarmé* (1996) is useful as it examines on the one hand Boulez's aesthetic ideas, particularly those influenced by literature, and Mallarmé's aesthetic ideas, particularly with respect to his use of the metaphor of 'Music'. However, Breatnach does not provide a detailed examination of the ways in which Mallarmé's ideas have impacted on Boulez's aesthetic writings, preferring to concentrate upon Boulez's composition *Pli selon Pli* (1960-). The most remarkable

Although I argue his aesthetic position becomes a deliberately conceived aesthetic theory around 1957, there are fluctuations in his ideas since that time which I hope I have acknowledged throughout this dissertation. The fourth danger is that in seeking to situate his concepts in the context from which he drew them, the reader thinks I am claiming to provide absolute definitions of these concepts. I do not claim to define these concepts definitively and provide the 'answer' to what Boulez's music 'means', nor do I consider that this is desirable or possible. Fifth, whilst this dissertation attempts to trace the lines of developments in Boulez's writings, his writings do not, necessarily, exactly mirror his preoccupations of the time. That is to say, there is not exact synchronicity between Boulez's aesthetic development and the aesthetic ideas appearing in his writings. A particular aesthetic problem that may be his most pressing concern at a given moment may not appear in his writings until he feels confident that he has come to understand it better. To this problem, I would respond that there is no other way of analysing Boulez's aesthetic development than through his writings.

There are several reasons why this study of Boulez's aesthetic theory is pertinent and relevant today. First and most simply, a detailed historical survey of his writings has hitherto not been written. Second, there are many misunderstandings concerning his writings which need to be addressed. One misunderstanding is that his conception of musical creation is purely intellectual and excludes any type of 'expression'.⁵⁸ This error is largely due to Boulez's insistence on describing practical problems of the musical language and his reticence to define and fix the boundaries of musical expression. Third, not all the aesthetic implications of his influences have been examined fully. The most important example in this respect is the lack of understanding of the full ramifications of the influence of Mallarmé. Fourth, Boulez confronts the issues which have acutely faced composers since the Second World War, such as the problem of musical language, the relationship of today's composer to the past, and the nature of expression. Fifth, Boulez is often

aspect of Breatnach's book is that there is no mention of a fundamental common theoretical influence on both Mallarmé and Boulez: the dialectical thought deriving from the philosophy of Hegel.

⁵⁸ I examine Boulez's approach to musical 'expression' throughout this dissertation.

regarded as a key protagonist in musical 'modernism' due to his rationalist approach and emphasis upon 'modernist' notions such as unity and autonomy. Nevertheless, Boulez's conception of music often resists this categorisation, for example, he does not conceive the work as a fixed and closed entity. Ultimately, I hope to clarify his aesthetic framework to help understanding of both the recent history of music and composition today. In light of Boulez's preoccupation with the establishment of a coherent aesthetic position, research into his aesthetic theory seems to be greatly underdeveloped. This dissertation aims to remedy this situation.

CHAPTER I: ORIENTATIONS AND ÉCRITURE (1943-52)

The period between 1943, when Boulez entered the Paris Conservatoire, and 1952, the year of *Structures premier livre* (1952), was crucial in the formation of Boulez's aesthetic ideas. Before his move to Paris in 1942 with the intention of enrolling in the Conservatoire, Boulez had lived a relatively narrow cultural life. In the time up to 1952, he encountered many of the composers, writers and artists who would shape his aesthetic thought. These influences are considered in part 1 of this chapter.¹ Also during this time, whilst building a reputation as a composer, Boulez had several articles published. The embryonic aesthetic ideas revealed in these early writings are examined in part 2 of this chapter.

Part 1: Orientations

The first fundamental influence on the formation of Boulez's aesthetic outlook was provided by his harmony teacher at the Paris Conservatoire, Olivier Messiaen (1908-92).² Although Boulez was taught by other teachers at the Conservatoire, for example Andrée Vaurabourg-Honegger (1894-1980) and Georges Dandelot (1895-75), Messiaen's radical approach was undeniably the most influential. Remarkably, Boulez, who has habitually dismissed almost everyone who has had any influence on his aesthetic approach, has consistently acknowledged the important influence of Messiaen. Indeed, as early as 1957, he describes Messiaen as a 'permanent model'.³

¹ Due to the need to delimit the scope of this dissertation, my primary aim in part 1 is to highlight the key influences on Boulez and discuss their contribution towards his aesthetic development. I have, therefore, attempted to keep other information, particularly biographical details, to a minimum.

² In this respect, I agree with Deliège who argues that Messiaen was Boulez's first 'reference' ['référence']. Deliège (1981) p. 170.

³ ['permanent modèle']. Goléa (1958a) p. 17. Goléa paraphrases a conversation he had with Boulez in 1957.

Yet, despite his obviously strong impact, Messiaen's influence is difficult to pin down precisely.

Whilst Messiaen taught Boulez harmony at the Conservatoire he also taught analysis in his private classes at the home of Guy Bernard-Delapierre. He was the least 'academic' of Boulez's teachers and his teaching, like his musical compositions, was highly unorthodox and personal.⁴ Messiaen's new and broad-minded approach resulted in him becoming the first teacher at the Paris Conservatoire to introduce non-Western music to his students. Boulez's experience and interest in non-Western music probably originates from this time. Similarly, Boulez's first encounter with modernist works came through Messiaen: indeed, Messiaen's own compositional developments had a crucial impact on his student's aesthetic thought. Boulez was most influenced by Messiaen's rhythmic techniques and his composition *Mode de valeurs et d'intensités* (1949), a crucial stepping-stone towards total serialism.⁵

As well as Messiaen, I would cite Boulez's other important teacher, René Leibowitz (1913-72), as an important influence on the formation of Boulez's aesthetic theory. Leibowitz's most obvious influence was with respect to his promotion of serial compositions by the Second Viennese School, primarily works by Schoenberg. After hearing Schoenberg's *Wind Quintet* Op. 26 (1923-24), a significant work in the development of the twelve-tone technique, conducted by Leibowitz in 1945,⁶ Boulez subsequently arranged to have lessons on serialism with Leibowitz. At that time, Leibowitz was the leading authority on serialism living in post-war Paris. However, Leibowitz's knowledge of serialism was largely self-taught, despite brief studies with Schoenberg and Webern which probably remained within the realm of tonality.⁷ Although it is clear he was chiefly responsible for Boulez's initial interest in and knowledge of twelve-tone technique, Leibowitz's influence on his student

⁴ I examine later Boulez's approach to analysis which draws elements from Messiaen's approach. See: this dissertation p. 274.

⁵ See: this dissertation p. 77.

⁶ Boulez must have heard a recording of Schoenberg's *Wind Quintet*, conducted by Leibowitz, that was broadcast on French radio soon after the Liberation. See: Kapp. 4 (in English).

⁷ See: Kapp (1988) p. 4 (in English).

goes far deeper. Leibowitz has written several books on serial music, most notably *Schoenberg et son école* (1947). This book exhibits a dialectical conception of music strongly influenced by Adorno,⁸ who was one of several notable friends of Leibowitz.⁹ Boulez's dialectical approach is strikingly similar to that of Leibowitz. His influence on Boulez appears to have been vastly underestimated by many writers,¹⁰ presumably due to the derogatory comments directed towards Leibowitz littered in Boulez's early writings, followed by a complete absence of his name. However, I would argue that this attitude merely points to Leibowitz's importance in the formation of Boulez's writings. Boulez's first four published articles, dating between 1948 and 1951, all discuss Leibowitz's ideas in some manner. Indeed, both his first publication, 'Propositions' (1948),¹¹ and 'Moment de Jean-Sébastien Bach' (1951)¹² begin with scathing attacks on Leibowitz.¹³ After 1952, Boulez only alludes to Leibowitz in passing, in articles from 1954, 1956 and 1958, avoiding explicit reference by name.¹⁴ It is noticeable that Leibowitz is never mentioned in *Points de*

⁸ In *Schoenberg et son école* (1947), Leibowitz not only uses 'Adornian' terms such as 'dialectics', 'objectivity', 'unfoldment', 'sedimentation', 'fossilization', and a similar writing style but he also cites from Adorno's book *Alban Berg* (1937). See: Leibowitz (1947) p. 142 (in English).

⁹ Other friends include the anthropologist Lévi-Strauss, the writer Georges Bataille and the philosophers Jean-Paul Sartre and Merleau-Ponty. See: Kapp (1988) p. 4 (in English).

¹⁰ Two notable exceptions to this are Walsh and Kapp. Walsh recognises that Leibowitz's influence on 'Boulez's ideas on Webern, and on the historical importance of serialism' has not been fully recognised. Walsh also suggests that Boulez's quotations from Schoenberg in 'Schoenberg is Dead' (1952) and Berg in 'Moment de Jean-Sébastien Bach' (1951) may be found in Leibowitz's *Introduction à la musique de douze sons* (1949). See: Walsh (1991a) p. v – vi (in English). The closest examination of Leibowitz's impact on Boulez is Kapp's article 'Shades of the Double's Original: René Leibowitz's dispute with Boulez' (1988). Kapp suggests that several of Leibowitz's arguments were adopted by Boulez and turned back on Leibowitz.

¹¹ See: Boulez (1948a) p. 253 (in French) and p. 47 (in English).

¹² See: Boulez (1951a) p. 65 (in French) and p. 1 (in English).

¹³ There are two other articles by Boulez published between 1948 and 1951, both of which discuss Leibowitz. First, Boulez's 'Incidences actuelles de Berg' (1948), published in the same edition of *Polyphonie* as 'Propositions' (1948), contains a quotation from a recent article by Leibowitz (see: Boulez (1948b) p. 39 (in French) and p. 185 (in English)). Second, 'Trajectoires' (1949) contains a quotation from Leibowitz's *Schoenberg et son école* (1947) (see: Boulez (1949) pp. 55-56 (in French) and p. 200 (in English)) and originally began, like 'Propositions' (1948) and 'Moment de Jean-Sébastien Bach' (1951), by criticising Leibowitz (see: Walsh (1991b) p. 188 footnote 1 (in English)). Perhaps it was partly due to retrospective recognition of this overused device that this introduction was omitted in *Relevés d'apprenti* (1966).

¹⁴ Walsh identifies the allusions as 'to compare literally a Webern structure with a Beethoven one' ['comparer littéralement une structure de Webern à une structure de Beethoven'] in '...Auprès et au loin' (Boulez (1954a) p. 302 (in French) and pp. 145-146 (in English)); 'd'Indywitz' ['nos d'indouilles-witz'] in 'La Corruption dans les encensoirs' (Boulez (1956b) p. 157 (in French) and p. 22 (in English)); 'the one and only treatise so far written on dodecaphony' ['au seul traité dodécaphonique qui ait été écrit'] in 'Contrepoint' (Boulez (1958a) p. 352 (in French) and p. 234 (in

repère (1981), *Penser la musique aujourd'hui* (1963) or *Jalons* (1989). Throughout this dissertation, I shall compare Boulez's ideas with those of Leibowitz.

Whilst Leibowitz and Messiaen are the two most conspicuous influences on Boulez in this early period, he also directly encountered many artists, writers and composers living in Paris who helped to shape his aesthetic ideas. His closest circle of friends at that time consisted of the writers Armand Gatti and Pierre Joffroy and the painter Bernard Saby.¹⁵ With the exception of Boulez's brief acknowledgement of Saby's role on his understanding of Webern,¹⁶ it is difficult to know precisely what he may have drawn from his closest friends. I would suggest his evident knowledge of non-musical art-forms today, particularly literature, probably germinated at this time.

Boulez maintained friendships with several people living outside of Paris through regular correspondence. The most important of these, dating from a little later around 1950, are John Cage (1912-92) and Karlheinz Stockhausen (1928-).

Boulez and Cage first met in Paris in 1949 and did not meet again until 1952 when Boulez travelled to New York. However, after their initial encounter in Paris they regularly corresponded, the fruits of which have been published as the *Boulez-Cage Correspondance* (1991).¹⁷ Although their artistic paths would later divide,¹⁸ one can see what attracted Boulez to Cage's ideas at this time. First, as early as 1937, Cage was writing that 'new methods will be discovered, bearing a definite relation to Schoenberg's twelve-tone system.'¹⁹ There is a clear parallel with Boulez's conviction of the necessity of total serialism. Second, Cage had explored the systematic organisation of rhythm by taking Schoenberg's teachings as his point of departure (he had studied with Schoenberg in the 1930s). Again, the parallels with

English). For Walsh's comments see: Walsh (1991b) on the pages to the English translations shown above.)

¹⁵ See: Heyworth (1973) p. 7 (in English) and also: Jameux (1991) pp. 32-33 (in English).

¹⁶ In a footnote to 'Moment de Jean-Sébastien Bach' (1951), Boulez acknowledges Saby's help in appreciating the 'new mode of musical being' that Webern introduced. See Boulez (1951a) p. 8 (in the English version only).

¹⁷ See: Boulez and Cage (1993).

¹⁸ Particularly in respect to the concept of *chance*. I discuss this in detail in chapter II.

Boulez's own musical development are clear. Third, Cage was interested in the exploration of new timbres both in his invention of the 'prepared piano' and in the construction of ensembles entirely built from percussion instruments. Indeed, Boulez was impressed greatly by the Paris performance (in 1949) of Cage's *First Construction in Metal* (1939), a work written only for percussion.²⁰ The exploration of new timbres and new musical instruments would be an important feature of Boulez's approach.

Boulez and Stockhausen first met in the early 1950s and regularly corresponded with each other for the remainder of that decade. Their fascinating correspondence, which remains largely unpublished,²¹ displays several striking features. Clearly, both composers held each other in high esteem, as there are several highly detailed analytical accounts of their own musical works which demand close reading. There is also a strong bond between the two writers, as many passages use terms of reference which are impregnable to the outside reader. Finally, both composers at this time clearly felt a sense of a common aesthetic perspective, founded on modernist notions such as unity and autonomy. In addition, both shared a collective purpose. In Stockhausen's letters to Boulez, there is a recurring theme of climbing a mountain. In a letter to Boulez on 13. 11. 1959 Stockhausen writes 'we approach the same mountain by two sides, and it is no longer important who arrives at the summit first.'²² Despite this particularly 'progressive' view of music, the belief in musical progress which had inspired both of them at that time was already starting to be questioned.²³ By the early 1960s, with Stockhausen's increasingly bold explorations

¹⁹ Cage (1937) p. 5 (in English).

²⁰ Watkins (1988b) p. 561 (in English).

²¹ I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this correspondence.

²² ['Nous approchons la même montagne par deux cotés, et il n'est plus important qui arrive au sommet.'] (My English translation of Stockhausen's French. I have assumed that Stockhausen means who arrives at the summit first.) Unpublished letter from Stockhausen to Boulez dated 13. 11. 1959. This image of the mountain is used again in two other unpublished letters from Stockhausen to Boulez dated 12. 2. 1960 and 12. 11. 60. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this correspondence.

²³ For my consideration of Boulez attitude to the idea of 'progress' see: this dissertation p. 203.

of chance and Boulez's disapproval of such experiments, Boulez and Stockhausen ended their friendship.²⁴

Beyond his close circle of friends, Boulez's contacts with those older than himself helped him to meet many different composers, writers and artists as well as gain recognition himself. In this category I would include the theatre director Jean-Louis Barrault, the critic and writer Pierre Souvtchinsky, the writer Paule Thévenin, the musicologist Boris de Schloezer, and the art-promoter Suzanne Tézan. I would like to highlight briefly their role in helping to shape Boulez's aesthetic approach.

In 1946, Barrault appointed Boulez musical director of the Petit Marigny company which was renamed the following year to the Compagnie Renaud-Barrault, a post he occupied until 1956. This job enabled him to gain considerable experience of arranging music for small ensembles and to participate in the practicalities of musical performance. Unfortunately, the majority of works he arranged and performed he loathed, particularly the music of Tchaikovsky and Offenbach.²⁵ However, at least one positive encounter occurred concerning the formation of Boulez's aesthetic ideas. At some point during the 1950s, he formed a friendship with the writer Paul Claudel.²⁶ I would suggest it is likely that Boulez and Claudel first encountered each other during a Compagnie Renaud-Barrault production of Claudel's *Christophe Colomb*²⁷ (1953 production). Boulez has quoted from Claudel's writings, in particular from his work *Le soulier du satin* (1929) which was performed by the Compagnie Renaud-Barrault in 1943, albeit before Boulez became involved.²⁸

²⁴ See: Aguila (1992) pp. 228-229 (in French).

²⁵ See: Jameux (1991) p. 18 (in English).

²⁶ See: *ibid.*, p. 31.

²⁷ See: Hopkins (1986) p. 253 (in English).

²⁸ I take this date from an article by Claudel himself. See: Claudel (1980).

Interestingly, Claudel wrote an essay on Mallarmé's *Igitur* (1869), perhaps the most influential individual literary work on the formation of Boulez's aesthetic approach. I examine *Igitur* in detail later. See: this dissertation p. 222.

Souvtchinsky played an important role in Boulez's life in the immediate post-war period. He provided crucial assistance in helping Boulez become established as a writer and published one of his articles in the journal *Musique russe*,²⁹ of which he was editor. He also helped financially with the foundation of the *Domaine Musical* concerts, the performance ensemble established by Boulez to promote new music. Most importantly, with respect to this dissertation, he seems to have helped Boulez conceptualise some of his early thought, providing, in particular, the concept of 'discontinuous history'.³⁰ Souvtchinsky also encouraged Boulez's interest in the ethnological writings of André Schaeffner³¹, the writings of Antonin Artaud, whom I shall discuss shortly, and also the music of Stravinsky.³²

Although Souvtchinsky may have fostered Boulez's interest in Artaud, it was Paule Thévenin, rather than Souvtchinsky, who was responsible for initially introducing Boulez to the writings of Artaud.³³ Thévenin, who was a specialist on Artaud as well as Artaud's close friend,³⁴ also collected Boulez's articles that would eventually form *Relevés d'apprenti* (1966).

De Schloezer's importance on Boulez's career was chiefly through his support in establishing Boulez as a writer by helping him get several articles published in the *Nouvelle Revue Française*, where de Schloezer was a columnist.³⁵ Piencikowski argues de Schloezer's influence on Boulez goes further, to the 'level of ideas', and suggests de Schloezer's book, *Introduction à Jean-Sébastien Bach* (1947), may have informed Boulez's approach to musicology, particularly through introducing him to

²⁹ See: Boulez (1953a).

³⁰ See: this dissertation p. 205.

³¹ See: Aguila (1992) p. 44 (in French). Piencikowski claims that much of Boulez's knowledge of non-western musics came from Schaeffner. See: Piencikowski (1991a) p. xx (in English).

³² In a conversation between Boulez and Aguila 18. 7. 1988, Boulez acknowledges Souvtchinsky's role in encouraging his interest in Stravinsky. See: Aguila (1992) p. 47 (in French). Souvtchinsky, as is well-known, assisted Stravinsky with the writing of *Poetics of Music* (1952).

³³ See: Jameux (1991) p. 32 (in English). Shortly, I shall examine the possibility of Boulez's interest in Artaud stemming from his early interest in Surrealism.

³⁴ See: Singleton (1998) p. 18 (in English). Thévenin was a friend of Artaud and became eventual executrix of Artaud's literary estate. See: Singleton (1998) p. 18.

³⁵ See: Piencikowski (1991a) pp. xx-xxi (in English).

Gestalt Theory.³⁶ Although the latter point may be correct and there may be some similarities in attitude in a few passages and in the overall tone between de Schloezer's book and Boulez's writings,³⁷ I do not detect any significant parallels.

Likewise, Tézanis seems primarily to have played an important role in establishing Boulez in French musical life rather than influencing his aesthetic thought. She was a keen promoter of new artistic ventures and would help fund, like Souvtchinsky, the *Domaine Musical* concerts.³⁸ It was through Boulez's attendance at Tézanis' salon, an important meeting-place for leading figures in French music, literature and art, that he would meet not only the painter Saby for the first time but also several writers that made an impression on him. These included included Henri Michaux, whom I shall consider shortly, and Michel Butor.³⁹ According to Boulez, at one time he would regularly discuss ideas with Butor,⁴⁰ and one can discern several parallels between them. Both came from the same generation and entered their respective artistic disciplines after studies of a more scientific persuasion. Boulez originally studied mathematics before music, and before Butor wrote his four novels⁴¹ he had been a philosophy student and had written a dissertation on 'Mathematics and the idea of necessity'.⁴² Although Butor has written an article on Boulez entitled 'Mallarmé selon Boulez' (1961)⁴³ he is, of course, more strongly associated with another composer, Henri Pousseur, collaborating on Pousseur's *Votre Faust* (1961-67) and *Les Ephémérides d'Icare* (1970).

Before moving on to consider Boulez's other influences, I would like to consider at this point the philosopher and composer Theodor W. Adorno, whose writings manifest similarities in aesthetic approach with those of Boulez.

³⁶ See: *ibid.* Later in this chapter, I consider the influence of Gestalt Theory, an influential psychological theory in post-war Paris. See: this dissertation p. 51. In chapter III, I examine the parallels of Gestalt Theory and Boulez's aesthetic approach. See: this dissertation p. 187.

³⁷ I consider their similarities later. See: this dissertation p. 279.

³⁸ For further details of Boulez's venture with the *Domaine Musical* see: this dissertation p. 364.

³⁹ See: Aguila (1992) p. 71 (in French). I shall discuss these writers shortly.

⁴⁰ See Boulez in: Boulez and Menger (1990) p. 15 (in English).

⁴¹ All four novels were written between 1952 and 1960. See: Grant (1973) p. 7 (in English).

⁴² Butor's dissertation is dated from 1945. See: *ibid.*

⁴³ See: Butor (1961b) (in French).

Adorno's direct influence on Boulez dates from the summer of 1952, the first time Boulez attended the Darmstadt Summer School. However, it is helpful to recognise that Boulez's teacher, Leibowitz, was a friend of Adorno,⁴⁴ a fact reflected in Leibowitz's writings which are full of Adornian ideas.⁴⁵ Consequently, although he did not read Adorno directly before 1952,⁴⁶ Boulez was influenced by Adorno's ideas 'second-hand' via the intermediary of Leibowitz. Even at the 1952 Darmstadt Summer School, however, Boulez recalls that he encountered Adorno's compositions before his philosophical writings.⁴⁷ This was, in part, because Adorno's writings remained untranslated into French even by the early 1950s⁴⁸ and Boulez was not fluent in German at that time. This meant that most of Adorno's lectures at the Darmstadt Summer School in the 1950s would have only been accessible to him via intermediaries fluent in German and French, for example Stockhausen. Therefore, I would disagree with Born who suggests Adorno's lectures in the 1950s at Darmstadt account for the similarities between Boulez's and Adorno's thought.⁴⁹ This similarity is probably very likely to have been derived from Leibowitz. The first occasion on which Boulez encountered Adorno's ideas first hand was in 1956 and subsequently in 1958 when Boulez moved to Baden-Baden. At that time, Boulez's knowledge of German had sufficiently improved in order to be able to read Adorno's (as yet untranslated) books.⁵⁰

From what little he knew in the early 1950s of Adorno, Boulez respected his 'extraordinary intelligence'⁵¹ but due to Adorno's admiration for Berg, he considered him out of date.⁵² Boulez also agreed with Stockhausen, who attacked Adorno for not examining scores thoroughly enough. Boulez writes that Adorno

⁴⁴ See: Kapp (1988) p. 4 (in English).

⁴⁵ See: this dissertation p. 27.

⁴⁶ See Boulez in: Boulez and Walters (2002) p. 407 (in English).

⁴⁷ See Boulez in: Boulez and Menger (1990) p. 9 (in English).

⁴⁸ As Boulez notes. *Ibid.*

⁴⁹ See: Born (1995) p. 81 (in English).

⁵⁰ See Boulez in: Boulez and Walters (2002) p. 407 (in English). Boulez also acknowledges that he would meet up with Adorno in Baden-Baden to discuss musical matters.

⁵¹ Boulez in: Boulez and Menger (1990) p. 9 (in English).

⁵² *Ibid.*

'leans less towards the structural reality of works than on their complexity of emotion and expression'.⁵³ However, he adds that 'if Adorno has the fault of preferring intuition to analysis, he sometimes has intuitions of genius.'⁵⁴ Although Boulez notes that Adorno was shocked at the 'lack of craft exhibited by the majority of our generation'⁵⁵ this criticism did not apply to Boulez's work and it seems they shared mutual respect. Indeed, Adorno was 'favourably impressed' by *Le marteau sans maître* (1955), his Second and Third Sonatas (1950 and 1957- respectively) and the Sonatina for flute and piano (1946).⁵⁶

With regard to Boulez's writings on Adorno, one notes that he primarily refers to the philosopher in two contexts. First, on several occasions he has drawn from Adorno's writings on Wagner.⁵⁷ This is due, in part, to the fact that Boulez's writings on Wagner date from the 1970s, after he had become fluent in German and whilst he was spending considerable time at Bayreuth working on a production of Wagner's *Ring*. The second context in which he tends to refer to Adorno relates to the concept of 'professionalism',⁵⁸ a quality Boulez attributes to him. Boulez defines professionalism as 'knowing how to make reality sometimes coincide with utopia'.⁵⁹ He argues that Adorno understands the 'dangers' and the 'inadequacies' of the 'divorce between intention and perception':⁶⁰ in short, the lack of 'professionalism' Boulez argues is prevalent in music today.

Up to this point, I have only highlighted people who Boulez encountered directly, i.e. face to face. There were, of course, many other influences on him at this time who attracted Boulez through their works alone. According to Boulez, these artistic

⁵³ ['il se penche moins sur la réalité structurelle des œuvres que sur leur complexité émotionnelle et expression'.] (My translation.) Boulez in: Boulez and Grange, de la (1989) p. 84.

⁵⁴ *Ibid.*

⁵⁵ Boulez in: Boulez and Menger (1990) p. 9 (in English).

⁵⁶ Adorno (1961) p. 270 (in English).

⁵⁷ For examples see: Boulez (1970a) pp. 268-269, p. 271 (in French) and pp. 254-256, p. 258 (in English); Boulez (1976a) p. 248 (in French) and p. 270 (in English); Boulez in Boulez and Grange, de la (1989) p. 84 (in French).

⁵⁸ ['le professionnalisme'.] (My translation.) Boulez (1985a) p. 29.

⁵⁹ ['savoir faire parfois coïncider la réalité et l'utopie'.] (My translation.) *Ibid.*

⁶⁰ ['dangers', 'carences', 'le divorce entre intention et perception'.] (My translation.) *Ibid.*, p. 28.

preferences were more or less established as early as 1945 and 1946.⁶¹ These preferences can be considered as his attempt to establish his own artistic lineage. As such, they arguably illuminate his own personal aesthetic conception more than those people he actually met. It is Boulez's choice of artistic influences I would now like to consider.

Primary sources

Five key artistic-philosophical movements fundamentally shaped Boulez's aesthetic approach during this early period: Surrealism, Symbolism, Expressionism, Existentialism and Phenomenology. Nearly all of Boulez's influences at this time are derived from these key artistic and philosophical movements.⁶² The first two schools of artistic thought cited above are, of course, closely related, a feature confirmed by the numerous symbolist writers considered surrealist forefathers (e.g. Rimbaud and Mallarmé). Surrealism is considered first, as it appears to have provided the initial creative stimulation for Boulez. This initial burst seems to have been its most important legacy for Boulez, introducing him to a significant number of writers and artists that would remain important for him throughout his life. Its theoretical impact does not, however, appear to have endured. In contrast, Symbolism is by far the most important school of thought for Boulez. Expressionism is perhaps one of the more expected influences unlike Existentialism whose influence has been completely neglected by Boulez scholars (and by Boulez himself). Phenomenology, under which I allow myself the inclusion of Gestalt Theory, has influenced Boulez in particularly specific ways, notably his concept of the 'field'.

⁶¹ See Boulez in: Boulez and Deliège (1975) pp. 43-44 (in French).

⁶² The exceptions include writers such as Joyce, Kafka and Beckett.

Surrealism

It is remarkable that every commentator on Boulez's aesthetic influences has overlooked the importance of Surrealism.⁶³ The only commentator to connect Boulez's writings with Surrealism is Piencikowski who suggests that the polemical style of André Breton's Surrealist manifestos may have influenced his writing style.⁶⁴ Whilst there is an undeniably strong similarity in their writing styles, particularly in their avoidance of providing references, I would argue that the impact of Surrealism on Boulez's broad aesthetic approach at this time goes much further. Before comparing Boulez's aesthetic position and that of the Surrealists, I would like to consider the three primary indicators in his writings that point to the Surrealist influence.

The first indication of the influence of Surrealism is to be seen in the extent to which Boulez refers to the writings of Breton. Some of these references acknowledge their source, others do not. Despite an oblique allusion to Breton's 'Ode à Charles Fourier' (1947) in Boulez's 'Recherches Maintenant' (1954),⁶⁵ it is noticeable that there is no explicit mention of Breton until the early 1960s, when he is mentioned in two texts. I shall consider the reason for this delay shortly.⁶⁶ Of the two explicit references to Breton's writings, perhaps the most striking concludes the first part of Boulez's lectures presented at Harvard University in 1963⁶⁷ (and which introduces this dissertation). He cites Breton's well-known phrase the 'indestructible kernel of darkness', acknowledging Breton as the author but failing to provide a reference. The other explicit reference to Breton appears in *Penser la musique aujourd'hui*

⁶³ For example Stacey (1987), Breatnach (1996) and Miller (1978).

⁶⁴ See: Piencikowski (1991a) pp. xvii-xviii (in English).

⁶⁵ Boulez refers to a line by Breton 'to reverse the poetic steam'. [“renversions la vapeur poétique”]. See: Boulez (1954c) p. 331 (in French) and p. 15 (in English). Identified by Piencikowski. See: Piencikowski (1991b) p. 15 footnote 2 (in English). The original Breton quotation is 'ici j'ai renversé la vapeur poétique'. See: Breton (1947) p. 356. It is interesting to note that Sartre also refers to this idea of 'reverse steam', which he places in quotation marks, in *Being and Nothingness* (1943). See: Sartre (1943) p. 465 (in English).

⁶⁶ See: this dissertation p. 44.

⁶⁷ See: Boulez (1963d) and Boulez (1963e). For my use of this passage to open this dissertation see: this dissertation p. 5.

(1963) in which Boulez quotes a passage from the 'Second manifeste du Surréalisme' (1930).⁶⁸

The second indication of the impact of Surrealism on Boulez is arguably the most intriguing. Boulez has quoted from, and referred to, writers who were the subject of Breton's essays and manifestos, occasionally citing the same quotations and referring to the same passages as Breton. These writers, the 'forefathers' of surrealism, have been drawn upon by Boulez to make a point, amplify an idea or, I would suggest, strengthen the authority of his argument. This category of writers includes Baudelaire and Mallarmé, as well as Arthur Rimbaud and Alfred Jarry. As I discuss Baudelaire and Mallarmé in my consideration of Boulez's Symbolist influences, I would like to address Rimbaud and Jarry here.

Although dating from the nineteenth century, Rimbaud's writings have served as important material for the Surrealist movement. Several quotations of Rimbaud's writings appear in Boulez's texts. The only acknowledged reference to Rimbaud by Boulez concerns Rimbaud's statement that the poet becomes a 'seer' through 'a long immense deregulation of all the senses'.⁶⁹ This idea is a recurring theme in Surrealist texts (as well as in Boulez's texts⁷⁰) and is quoted by Breton in the 'Second manifeste du Surréalisme' (1930).⁷¹ Along with these references attributed to Rimbaud, there are several unacknowledged oblique references by Boulez to Rimbaud's *Une saison en enfer* (1873). Breton discusses this book in the 'Second manifeste du Surréalisme' (1930), focusing, in particular, on one section entitled

⁶⁸ Boulez quotes Breton as follows: '[t]he simplest surrealist act [...] consists of going out into the street, a revolver in each hand, and firing by chance, as much as one can, into the crowd.' ['L'acte surréaliste le plus simple [...] consiste, revolvers aux poings, à descendre dans la rue et à tirer au hasard, tant qu'on peut, dans la foule.'] (My modified translation.) Boulez (1963b) p. 19 (in French) and p. 23 (in English). For the original quotation (which is quoted by Boulez exactly) see: Breton (1930) p. 135 (in French).

⁶⁹ ['voyant' [...] 'un long, immense et raisonné dérèglement de tous les sens.'] See: Boulez (1960f) p. 377 (in French) and p. 99 (in English). Boulez alludes to this in the following: Boulez (1963d) p. 536 (in French) and p. 69 (in English).

⁷⁰ I shall examine this idea later. See: this dissertation p. 195.

⁷¹ For the original Rimbaud reference see: Rimbaud (1871b) p. 249 (in French). For the Breton reference see: Breton (1930) p. 178 (in French).

'Alchimie du verbe'.⁷² Boulez alludes to a line in 'Alchimie du verbe' in an article from 1956 when he writes 'Ah! Que vienne le temps...', a misquotation of 'Qu'il vienne, qu'il vienne, / Le temps dont on s'éprenne'.⁷³ Boulez also alludes to the beginning of *Une saison en enfer* (1873) in 'Aléa' (1957) when he writes 'Il y a quelques lustres déjà que la Beauté a été trouvée amère...', a reference to 'Un soir, j'ai assis la Beauté sur mes genoux – Et je l'ai trouvée amère – Et je l'ai injuriée.'⁷⁴ He again cites from *Une saison en enfer* (1873) in an article dating from 1956, writing 'Quel siècle à mains!', a line quoted by Breton in 'What is Surrealism?' (1934).⁷⁵

The writer, playwright, satirist and 'pata-physician', Alfred Jarry (1873-1907)⁷⁶ was considered a forefather of surrealism by Breton. Breton mentions Jarry in the 'Second manifeste du Surréalisme' (1930) and discusses him at length in the essay 'Alfred Jarry initiateur et éclaireur' (1951).⁷⁷ Jarry achieved posthumous acclaim in the immediate post-war period, helped in part by the critical support of Breton and Artaud amongst others as well as the recent productions, with Surrealist patronage, of at least two of his plays.⁷⁸ His most celebrated play is *Ubu roi* (1896), written in a highly dense style and whose main character, the title of the play, is described by

⁷² See: Breton (1930) pp. 177-179 (in French).

⁷³ This quotation from 'Chanson de la plus haute tour' in 'Alchimie du verbe' in *Une saison en enfer* (1873) is identified by Walsh. See: Walsh (1991b) p. 21 footnote 3 (in English). For the original Rimbaud reference see: Rimbaud (1873) p. 108 (in French). For Breton's discussion of *Une saison en enfer* see: Breton (1930) pp. 177-181 (in French).

⁷⁴ ['Some lustra have already passed since Beauty was first found bitter...'] This quotation is identified by Walsh. See: Walsh (1991b) p. 93 (in English). It appears in 'Aléa' (1957). See: Boulez (1957a) p. 408 (in French) and p. 27 (in English). For the original quotation see: Rimbaud (1873) p. 93 (in French).

⁷⁵ See: Boulez (1954c) p. 331 (in French) and p. 15 (in English). This is identified as a quotation of Rimbaud's *Une saison en enfer* (1873) by Walsh. See: Walsh (1991b) p. 15 (in English). The original is 'La main à plume vaut la main à charrue. Quel siècle à mains! Je n'aurai jamais ma main!' which can be found in 'Mauvais sang', a section of *Une saison en enfer*. See: Rimbaud (1873) p. 94 (in French). For the occurrence of this quotation in Breton's writings see: Breton (1934) p. 113 (in English) (translated as 'What a century of hands!').

⁷⁶ I am drawing from Shattuck and Taylor's description. See: Shattuck and Taylor (1965) p. 9 and p. 11.

⁷⁷ For the references to Jarry in these two texts see: Breton (1930) p. 140, p. 143 (in French) and Breton (1951) pp. 914-925 (in French) respectively.

⁷⁸ Rosemont writes that Jarry's *Ubu enchaîné* (1900) and *L'Objet aimé* (1953) were performed in 1937 under Surrealist auspices. See: Rosemont (1978) p. 48 (in English).

Shattuck as 'the human blunderbuss who smashed all history as he went'.⁷⁹ In addition to his plays, Jarry was lauded by Breton for his invention of 'pata-physics', 'the science of imaginary solutions'.⁸⁰ Whereas science, Jarry argues, is based on repetition from which general laws can be deduced, 'pata-physics will examine the laws governing exceptions'.⁸¹

Despite the fact Boulez's aesthetic attitude appears opposed to the satirical and whimsical tone of Jarry's writings, the frequency of references to Jarry in Boulez's writings, the first in 1952, warrants his place in this study. In three articles, Boulez alludes to a character in Jarry's play *Ubu cocu* (1943) named Achras who collects polyhedra.⁸² He refers to 'Ubu', the subject of several of Jarry's plays, in articles from 1952 and 1956⁸³ and on three other occasions he provides obscure references attributed to Jarry but without specifying the exact source.⁸⁴ The most illuminating reference to him appears in a passage on 'partial speculations'⁸⁵ in which he alludes to 'pataphysics'.⁸⁶

The third and final indicator of the importance of Surrealism for Boulez is that many of his earliest sources of artistic influence were involved, in some way, with the Surrealist movement. Some of those who influenced him were signed-up members of the Surrealist group, others were involved on an informal level. These influences include the writers René Char, Antonin Artaud and Louis Aragon, and also Paul

⁷⁹ Shattuck and Taylor (1965) p. 9 (in English).

⁸⁰ Jarry (1911) p. 193 (in English).

⁸¹ *Ibid.*, p. 192.

⁸² See: Boulez (1952b) p. 286 (in French) and p. 324 (in English); Boulez (1956b) p. 156 (in French) and p. 21 (in English); Boulez (1963d) p. 541-542 and p. 74 (in English). The 1956 reference to Jarry is identified by Walsh. See Walsh (1991b) p. 21 footnote 3.

⁸³ See: Boulez (1952b) p. 286 (in French) and p. 324 (in English); Boulez (1956b) p. 157 (in French) and p. 22 (English).

⁸⁴ 'We should need the toothpick of Jarry to pick out that miniature stable.' ['Il nous faudrait le cure-dent de Jarry pour nettoyer cette écurie-miniature.'] see: Boulez (1963b) p. 21 (in French) and p. 24 (in English); 'Form, or as Jarry would put it, 'the word'...' ['La forme: le mot, aurait pu dire Jarry...'] see: Boulez (1965) p. 398 (French) and p. 100 (English); 'Those who know least know most, and vice versa, as Jarry might have said!' ['Ceux qui savent le moins savent le plus, et réciproquement, aurait pu dire Jarry!'] See: Boulez (1979b) in French p. 457 and p. 402 (in English).

⁸⁵ For my examination of 'partial speculations' see: this dissertation p. 155.

⁸⁶ For my discussion of Jarry's 'pataphysics' in relation to Boulez's aesthetic ideas see: this dissertation p. 181.

Klee and Wassily Kandinsky who were involved informally with the surrealist movement. First, I would like to consider Boulez's most obvious Surrealist influence, René Char.

Char formally joined the Surrealist movement in 1929 and was, for most of the 1930s, a committed member of the Surrealist group. He not only signed the 'Second manifeste du Surréalisme' but also published *Le marteau sans maître* (1934),⁸⁷ under the Editions surréalistes (1934). This work would later provide the stimulation for Boulez's famous composition of the same name. However, by 1938, Char had become increasingly disillusioned with the Surrealist group and his ties with it progressively weakened.

Boulez first discovered Char's poetry at the start of 1946 when he read Char's book entitled *Seules demeurent*.⁸⁸ The title struck Boulez and, more importantly, so did Char's poetry. Boulez was particularly impressed by the 'conciseness' of Char's writing and 'a type of contained violence'.⁸⁹ The 'contained violence' that Boulez focused upon, rather than the often-highlighted feature of Char's writings – his preoccupation with nature – suggests he viewed them from a Surrealist perspective. One poem in *Seules Demeurent* called *Le Visage Nuptial* (1938), which Lawler argues reflects Char's increasing disaffection with the Surrealist movement at that time,⁹⁰ directly inspired Boulez to compose the work of the same name several months later.⁹¹ Boulez and Char first met face to face in 1947⁹² and, from that time until Boulez moved to Baden-Baden in 1958, they would regularly meet and correspond with each other.⁹³

⁸⁷ Char (1934).

⁸⁸ See Boulez in: Boulez and Gazier (1990) p. 18. Curiously, there is a marked similarity between this title, *Seules demeurent*, and the title of Boulez's extensive analysis of Stravinsky's *The Rite of Spring* (1913), 'Stravinsky demeure', which was written in 1951 and first published in 1953.

⁸⁹ ['condensation', 'une espèce de violence contenue'.] (My translation.) See Boulez in: Boulez and Deliège (1975) p. 54.

⁹⁰ See: Lawler (1978) p. pxiii (in English).

⁹¹ See: Boulez in: Boulez and Gazier (1990) p. 18 (in French).

⁹² Jameux (1991) p. 22 (in English).

⁹³ See Boulez in: Boulez and Gazier (1990) p. 18 (in French).

Another obvious Surrealist influence on Boulez is the actor, director, playwright and critic, Antonin Artaud (1896-1948).⁹⁴ Artaud's writings are characterised by disturbing imagery, a rejection of all forms of establishment and the claim that theatre, which was his main concern, must remain true to itself and forcibly establish a new powerful means of expression. Artaud joined the Surrealist movement in 1924 and his signature appears in the 'Manifeste du Surréalisme' (1924). For two years, he took an active involvement in the movement, writing Surrealist works and guest editing *La Révolution surréaliste*.⁹⁵ In 1926, Artaud was expelled from the increasingly Marxist surrealist movement due to his career as a film actor and the bourgeois sponsorship of his theatrical activities.⁹⁶ It was only when Artaud moved to Paris in 1946 that his writings, particularly *Le Théâtre et son double* (1938) (the second edition of which had only recently been published in 1944), started to become noticed.⁹⁷

In retrospect, Boulez's encounter with Artaud's ideas seems inevitable. As I have already noted, two of Boulez's acquaintances, Souvtchinsky and Thévenin were closely linked with Artaud.⁹⁸ Indeed, Thévenin probably precipitated Boulez's first direct encounter with Artaud. Thévenin was primarily responsible for many of Artaud's public readings in post-war Paris and probably encouraged Boulez to attend a performance at the Galerie Loeb in July 1947. According to Walsh, Boulez was highly impressed by Artaud, noting in particular his vocal delivery.⁹⁹ His vocal delivery is also remarked upon by Breton, another contributory factor towards Boulez's interest in Artaud's work.¹⁰⁰ Curiously, Boulez's interest in Artaud, and perhaps in Surrealism in general, may have also been encouraged by Leibowitz. In 1971, Leibowitz published a book entitled *Le Compositeur et son double* (1971), an

⁹⁴ I draw from Singleton's description of Artaud as an 'experienced stage, screen and radio actor, director, playwright and critic.' Singleton (1998) p. 11 (in English).

⁹⁵ For example, in 1925 Artaud wrote *Le Pèse-nerfs* (1925) and *L'Ombilic des limbes* (1925). Artaud was guest editor of *La Révolution surréaliste* on 15. 4. 1925. See: Singleton (1998) p. 14.

⁹⁶ Singleton (1998) p. 14 (in English).

⁹⁷ *Ibid.*, p. 18. The first edition of *Le Théâtre et son double* was published in 1938.

⁹⁸ See: this dissertation p. 31 (in English).

⁹⁹ See: Boulez (1958c) pp. 429-430 (in French) and p. 43 (in English); Walsh (1991a) p. 43 footnote 4.

¹⁰⁰ Breton notes Artaud's 'certain intonation of voice'. See: Breton (1946) p. 737 (in French).

allusion to Artaud's *Le Théâtre et son double* (1938).¹⁰¹ I would propose that Leibowitz was at least interested in and perhaps familiar with Artaud's ideas.

Although Boulez was impressed by Artaud's performance at the Galerie Loeb and was aware of his writings, I would suggest that his impact upon Boulez's aesthetic ideas has been over-emphasised.¹⁰² Throughout all of his writings, Boulez has only mentioned Artaud twice, and even on one of those occasions it was in an article written for an edition of *Cahiers Renaud-Barrault* entirely devoted to Artaud.¹⁰³ I would argue that the reason for the exaggeration of Artaud's importance is that both of Boulez's articles which mention Artaud are important in the context of his career as a writer and both conclude with highly memorable phrases drawn from Artaud's writings. In his first ever publication, 'Propositions' (1948), Boulez proposes that 'music should be collective hysteria and magic, violently modern – along the lines of Antonin Artaud'.¹⁰⁴ Stacey argues that this statement supports his claim that the character of some of Boulez's earlier works, particularly *Structures premier livre* (1952), were influenced by Artaud. However, I would argue this is an indicator of his early interest in Surrealism generally.¹⁰⁵ The other reference to Artaud appears in the last line of 'Son et verbe' (1958) in which Boulez writes 'I increasingly believe that to create effective art, we have to take delirium and, yes, organise it.'¹⁰⁶ Although he does not explicitly attribute this statement to Artaud, it is clear from the context that he is referring to Artaud.¹⁰⁷ I would add that although 'delirium' suggests the 'flavour' of Artaud's writings, I have been unable to locate any passage in which he discusses 'organising delirium'. However, a passage in Rimbaud's *Une saison en enfer* (1873), with which Boulez is certainly familiar, displays strong similarities with this idea. In the section entitled 'Délires II' [Delirium II], Rimbaud writes 'I

¹⁰¹ See: Kapp (1988) p. 2 (in English).

¹⁰² For example, see: Stacey (1987) p. 24 (in English).

¹⁰³ For full publishing details see: 'Propositions' (1948) in Appendix B. The other article that refers to Artaud is 'Son et verbe' (1958). See: Boulez (1958c).

¹⁰⁴ ['la musique doit être hystérie et envoûtement collectifs, violemment actuels – suivant la direction d'Antonin Artaud'.] Boulez (1948a) p. 262 (in French) and p. 54 (in English).

¹⁰⁵ Stacey (1987) p. 24 (in English).

¹⁰⁶ ['De plus en plus, j'imagine que pour le créer efficace, il faut considérer le délire et, oui, l'organiser.'] Boulez (1958c) p. 430 (in French) and p. 43 (in English).

¹⁰⁷ This line is the culmination of a paragraph recalling Artaud's use of language.

will invent the colour of vowels! [...] I will rule form and movement of each consonant, and, with instinctive rhythms, I will flatter myself with inventing an accessible poetic verb, one day or another, to all the senses. I was reserving the translation. [/] That was first a study. I was writing silences, nights, I was noting the inexpressible. I was fixing the chasms.¹⁰⁸

Although not a significant influence on Boulez, the writings of Aragon, a strongly committed member of the Surrealist movement, have been mentioned by Boulez. In 'La Corruption dans les encensoirs' (1956) he refers to Aragon's poem 'Personne pâle'¹⁰⁹ and in *Penser la musique aujourd'hui* (1963) he quotes from Aragon's *Traité du Style* (1928).¹¹⁰

Perhaps the most surprising additions to this list of Boulez's surrealist influences are the painters Paul Klee and Wassily Kandinsky. According to Rosemont, both participated in Surrealist exhibitions whilst not being formal members.¹¹¹ However, I would regard the aesthetic universes of Klee and Kandinsky as taking their points of departure from an essentially Symbolist approach and therefore I consider them under the next category of Symbolism.

A writer I would like to place under the category of surrealism is the writer Henri Michaux (1899-1984). Although he was not involved with the surrealist movement, his writings display strong similarities with surrealist writers. Michaux writes in a highly dense and obscure style, with striking juxtapositions of ideas and, in Boulez's words, an 'extraordinarily original poetic imagery'.¹¹² These features result in his works achieving a nightmarish and disturbing quality. This can be seen in perhaps

¹⁰⁸ ['J'inventerai la couleur des voyelles! [...] Je réglai la forme et le mouvement de chaque consonne, et, avec des rythmes instinctifs, je me flatterai d'inventer un verbe poétique accessible, un jour ou l'autre, à tous les sens. Je réservais la traduction. / Ce fut d'abord une étude. J'écrivais des silences, des nuits, je notais l'inexprimable. Je fixais des vertiges.'] (My translation.) Rimbaud (1873) p. 106.

¹⁰⁹ Walsh notes this. See: Walsh (1991b) p. 20.

¹¹⁰ See: Boulez (1963b) pp. 20-21 (in French) and pp. 23-24 (in English).

¹¹¹ Rosemont (1978) p. 47 (in English).

¹¹² ['imagerie poétique extraordinairement originale'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 122.

Michaux's most famous work, *Un certain Plume* (1938) and in his poem 'Je rame', which was the basis for Boulez's composition *Poésie pour pouvoir* (1958).

I would argue that the presence of these three indicators pointing to the strong impact of surrealism on Boulez's aesthetic conception is compelling. I consider there are two main reasons why this influence has been greatly neglected, not least by Boulez himself. First, his tendency to hide his major sources of influence is a characteristic of his writings. This is particularly true with respect to the relatively 'straightforward' influences of the critical texts of Breton and Leibowitz, both of whom write about aesthetic matters in a clear manner. One detects a preference on Boulez's part, particularly in this period, to refer to writings which resist easy comprehension.¹¹³ Second, in the immediate post-war period, Breton and the Surrealists were closely identified with Communism, a political persuasion that, according to Heyworth, interested Boulez for a brief period up to 1948.¹¹⁴ Since that time, the year of his first publication, Boulez has shown a continued desire to avoid making any overtly political statements. One senses that it was only until the 1960s, when Boulez had already established himself as an important musical figure and when Surrealism could be viewed 'dispassionately' in its historical context, that he felt able to allude to Breton without being linked to any political persuasion.

Whilst Surrealism appears to have contributed primarily to the selection of Boulez's initial artistic sources, there are, nevertheless, several Surrealist themes that appear in his writings. The most obvious shared theme is the preoccupation with chance and the absurd.¹¹⁵ Another parallel is the rejection, or at least subversion, of inherited artistic forms. The final theme I would like to highlight is the shared revulsion towards the sedimented forms of everyday life. I shall return to these themes shortly.

¹¹³ For example, the writings of Mallarmé.

¹¹⁴ Heyworth (1973) p. 32 (in English).

¹¹⁵ For example, chance is the central theme in Breton's novel *Nadja* (1949). See: Breton (1949). For my examination of Boulez's concept of *chance* in chapter II see: this dissertation p. 96.

Having briefly considered Surrealism, I would now like to discuss the Symbolist influence on Boulez.

Symbolism

The Symbolist who made the most profound impact on Boulez's aesthetic theory was the poet Stéphane Mallarmé (1842-98). Deliège writes that 'one cannot approach the work of Boulez other than in the light of a certain reading of Mallarmé'.¹¹⁶ Particularly influenced by Baudelaire in his youth,¹¹⁷ Mallarmé went on to produce some of the most intense and 'difficult'¹¹⁸ poetry written in the French language. He was preoccupied with structure and developed radically new forms for his works, most famously in his poem 'Un coup de dés' (1897). Like Boulez, this concern with structure was a consequence of his aesthetic reflections on his own art.¹¹⁹

Boulez acknowledges that his first sustained interest in Mallarmé dates from the start of the 1950s.¹²⁰ This tallies with his first written reference to the poet in a letter to John Cage in June 1950.¹²¹ Worton notes that Boulez's interest in Mallarmé was probably stimulated by his earlier passion for the poetry of René Char,¹²² whose body of works became less important to Boulez over the 1950s as Mallarmé's became greater. Boulez is not, of course, the first composer to be creatively inspired

¹¹⁶ ['on n'approchera l'œuvre de Boulez que dans la lumière d'une certaine lecture de Mallarmé']. (My translation.) Deliège (1981) p. 170.

¹¹⁷ See: Austin (1953) pp. 67-68 (in French). Also see Breatnach's comparison of Mallarmé's 'Brise Marine' and Baudelaire's 'Parfum Exotique'. See: Breatnach (1996) pp. 23-26 (in English).

¹¹⁸ I use Breatnach's description. Breatnach (1996) p. 22 (in English).

¹¹⁹ Breatnach notes the concern with structure common to both Boulez and Mallarmé. See: Breatnach (1996) p. 66 (in English).

¹²⁰ See Boulez in: Boulez and Szendy (1993) p. 145 (in French).

¹²¹ In this letter, Boulez mentions a composition that he is currently writing, but subsequently aborted, entitled 'Un coup de dés'. This letter was first published in the original French edition of *Boulez-Cage Correspondance* (1990). Breatnach notes that Boulez's first reference to Mallarmé in a text written to be published (rather than private correspondence) is in 1951 in 'Moment de Jean-Sébastien Bach' (1951). See: Boulez (1951a) p. 79 (in French) and p. 14 (in English). I have ignored Boulez's earlier mention of Mallarmé in the title of Ravel's *Trois poèmes de Stéphane Mallarmé* (1913) that appears in 'Trajectoires' (1949). See: Boulez (1949) p. 43, p. 45, p. 46 (in French) and p. 189, p. 190, p. 191 (in English).

¹²² See: Worton (1981) p. 66 (in English).

by Mallarmé's poetry. Debussy's ground-breaking *Prelude à l'après-midi d'un faune* (1892-1894), regarded by Griffiths as the first modernist musical work,¹²³ was, of course, based upon the musical depiction of Mallarmé's poem 'L'après-midi d'un faune' (1876).

The first significant reference to Mallarmé that appears in Boulez's writings concludes 'Moment de Jean-Sébastien Bach' (1951). In this article, he refers to Mallarmé's famous poem, 'Un coup de dés' (1897).¹²⁴ This poem centres on the theme of *chance* ['*le hasard*']¹²⁵ in the artwork, a fundamental issue for Mallarmé and Boulez. 'Un coup de dés' is the only completed work of three major texts by Mallarmé that confront chance. The other two are *Le Livre* (posthumous) and *Igitur* (1869). *Le Livre* is one of Mallarmé's final works and this is arguably his most obscure writing on chance. I consider this later in chapter II. *Igitur*, on the other hand, is one of the poet's earliest works and probably reveals more about his thoughts on chance than any other text. Boulez quotes from *Igitur* in 'Aléa' (1957), his first article to consider thoroughly the issue of chance.¹²⁶ Although the text of *Igitur* is difficult to comprehend and widely misunderstood, I consider Boulez understands this story not only as a discussion of chance but also as an allegory of artistic creation. I examine this idea in chapter III.¹²⁷

Mallarmé's concept of chance relates to the wider question of the artist's inherited material. I shall examine chance, together with the influence of Mallarmé on Boulez, in detail in chapter II.¹²⁸

¹²³ See: Griffiths (1978b) p. 7 (in English).

¹²⁴ Boulez quotes the last line from Mallarmé's 'Un coup de dés' (1897): 'Un coup de dés n'abolira le hasard'. Boulez (1951a) p. 79 (in French) and p. 14 (in English).

¹²⁵ *Le hasard* is etymologically the term from which the English word 'hazard' is derived and perhaps 'the hazardous' would convey more precisely the meaning to the English reader. Throughout this dissertation I have employed the italicised term *chance* to denote *le hasard*.

¹²⁶ See: Boulez (1957a) p. 419 (in French) and p. 38 (in English). For my discussion of this quotation from *Igitur* (1869) (which concludes 'Aléa') see: this dissertation p. 131.

¹²⁷ See: this dissertation p. 222.

¹²⁸ See: this dissertation p. 96.

There are several other Symbolist poets to whom Boulez refers who are not fundamental influences upon his aesthetics but are, nevertheless, familiar to him. Rimbaud, who I have considered earlier, is an obvious example. The writings of Mallarmé's friend Paul Valéry (1871-1945) are quoted by Boulez on several occasions. Although the first reference to Valéry appears in 1954, the most memorable citation appears in an article dating from 1961:¹²⁹ 'I was seeing myself seeing myself'. I discuss this phrase in chapter III.¹³⁰ The writings of Charles Baudelaire are used primarily as supporting material for Boulez's insistence upon adopting a self-critical attitude to composition. There are three main texts which enlist the support of Baudelaire: 'Probabilités critiques du compositeur' (1954) 'Alternatives' (1960) and the introduction to *Penser la musique aujourd'hui* (1963).¹³¹ Finally, another Symbolist poet from whom Boulez has drawn is Paul Verlaine.¹³²

So far, I have only considered Boulez's literary influences. As I noted earlier, there are also three painters whom Boulez acknowledges as influences: Paul Klee (1879-1940), Wassily Kandinsky (1866-1944) and Piet Mondrian (1872-1944). I include these painters under the category of Symbolism as they share an essentially Symbolist aesthetic outlook despite their not being historically 'Symbolist painters'. Stacey describes their particularly Symbolist outlook: '[Kandinsky, Klee and Mondrian were] motivated by a desire to portray a deeper spiritual reality through an abstract, autonomous, artistic language'.¹³³

According to Boulez, his first awareness of these painters came a little later than the Surrealist writers I have discussed, around 1947 when their canvasses were first

¹²⁹ For the first reference to Valéry see: Boulez (1954a) p. 299 (in French) and p. 143 (in English). For Boulez's quotation of 'I was seeing myself seeing' ['Je me voyais me voir'] see: Boulez (1961a) p. 519 (in French) and p. 54 (in English).

¹³⁰ See: this dissertation p. 192.

¹³¹ See: Boulez (1954b); Boulez (1960g) and Boulez (1963a) respectively.

¹³² For example see: 'Claude Debussy' (1958) in Boulez (1958a) p. 206, p. 209 (in French) and p. 262, p. 265 (in English).

¹³³ Stacey (1987) p. 6.

exhibited in Paris.¹³⁴ All three painters attempted to rationalise their artistic practice, particularly Klee and Kandinsky through their teaching at the Bauhaus, and all three have had their theories on the practice of art published.

Of these three painters, Klee is by far the most influential on Boulez's aesthetic ideas. The first mention of Klee in Boulez's writings appears in 1955. In this article, Boulez uses the title of Klee's painting 'À la limit du pays fertile' (1929) as the title and concluding line to an article detailing his ideas concerning new music technology.¹³⁵ Boulez must have already encountered this line by 1952, as he later claims he originally intended to use the same phrase as a subtitle to *Structure 1a* (1952).¹³⁶ His first encounter with the aesthetic ideas of Klee, rather than his pictures alone, came later, around the mid 1950s, when Stockhausen offered him a copy of Klee's book *Das bildnerische Denken* (1956).¹³⁷ Although, at that time, Boulez could not read the German text fluently, he was able to study the examples and draw ideas relevant to his own work. The main lessons he drew from Klee appear in his book *Le pays fertile: Paul Klee* (1989).¹³⁸ Boulez draws particular attention to Klee's assertion that when the artist creates an artwork, he should avoid relying upon unconscious memories and instead start from scratch.¹³⁹ Indeed, one of the first quotations Boulez cites from Klee's writings (rather than the title of a painting) makes this point: '[w]e have to be reborn, and to know nothing, absolutely nothing, of Europe.'¹⁴⁰ Another notable feature of Klee that Boulez comments upon is his strong interest in music, although Klee preferred works by Mozart and Bach rather than Schoenberg or Stravinsky.¹⁴¹ His interest in music led Klee to give several of his paintings titles with musical 'correspondances' e.g. rhythm and polyphony.¹⁴²

¹³⁴ See Boulez in: Boulez and Deliège (1975) p. 44 (in French).

¹³⁵ See: Boulez (1955a) p. 315 and p. 330 (in French) and p. 158 and p. 172 (in English).

¹³⁶ See Boulez in: Boulez and Deliège (1975) pp. 69-70 (in French).

¹³⁷ See: Boulez (1989c) p. 8 (in French). For Klee's book, see: Klee (1956).

¹³⁸ In particular, see: Boulez (1989c) p. 7 (in French).

¹³⁹ I consider this in more detail in chapter III, See: this dissertation p. 169.

¹⁴⁰ ['Il faudrait naître, et ne rien, absolument rien savoir de l'Europe'.] Boulez (1956b) p. 160 (in French) and p. 25 (in English). According to Walsh, this line is quoted in Grohmann, W. *Paul Klee* (Stuttgart, 1954) p. 41 (English version) (London, 1954) p. 41 although I have been unable to trace it in the new edition (see: Grohmann (1954)). See: Walsh: (1991b) p. 25 (in English).

¹⁴¹ See: Boulez (1989c) pp. 13-16 (in French).

¹⁴² See: *ibid.*, p. 36. For my discussion of the history of the concept of correspondances see: p. 193.

The fact that Klee drew ideas from music, I would argue, has helped Boulez to draw ideas from him that have shaped his own musical practice.¹⁴³

The first mention of both Kandinsky and Mondrian appears in a text from 1966. In this short article, Boulez draws a parallel (which he calls a 'conjunction')¹⁴⁴ between the careers of Kandinsky and Schoenberg, a device that primarily enables him to write on Schoenberg. The only point relating to Kandinsky specifically is that, of the three painters who have influenced Boulez, Kandinsky's approach succeeds in combining 'finesse and geometry'.¹⁴⁵ Boulez would later draw a similar parallel between Mondrian and Webern.

Expressionism

The influence of Expressionism, chiefly through the critical essays of Schoenberg and Leibowitz and later through the texts of Klee, Kandinsky and Adorno, provided an important source for Boulez's aesthetic formation. Developing from Symbolism and Romanticism, the Expressionist movement is primarily a literary and artistic movement which flourished in the late nineteenth century and first quarter of the twentieth century. In music, it is primarily applied to Schoenberg's freely 'atonal' works from approximately 1908-21.

Arguably the defining characteristic of Expressionism is its appropriation of Freudian psychoanalytic theory and its aspiration to express and realise the hitherto repressed inner world of the artist – the Freudian Unconscious. However, with regard to Boulez's aesthetic approach, its principal importance appears to have been the emphasis on necessity. Scattered throughout the essays of Schoenberg and Leibowitz is their advocacy of making every aspect of the musical work *necessary* and functional in order to make it completely expressive. This relates to the idea of

¹⁴³ I discuss the ideas that Boulez draws from Klee throughout this dissertation.

¹⁴⁴ For my consideration of Boulez's notion of 'conjunctions' see: this dissertation p. 257.

¹⁴⁵ ['finesse et géométrie'.] (My translation.) Boulez (1966e) p. 155 (in French) and p. 345 (in English).

making the musical work become a living organism. In this respect, the Formalist so-called 'art for art's sake' position articulated by writers such as Hanslick comes close to Boulez's views on this matter. One must reject 'stylistic concerns' and focus on the 'idea', i.e. on the necessity of every aspect. Schoenberg claims, in a passage echoed by much of Boulez's writings, that 'art can only be created for its own sake. An idea is born; it must be moulded, formulated, developed, elaborated, carried through and pursued to its very end.'¹⁴⁶

Existentialism

The extent of the influence of Existentialism on Boulez is difficult to establish precisely. Its impact remains hidden, as Boulez has rarely referred to any of the Existential theorists in his writings or interviews. On the rare occasions he has mentioned Existentialism, his attitude is largely dismissive.¹⁴⁷ At best, he acknowledges that Jean-Paul Sartre (1905-80) was the major 'personality' in the post-war period,¹⁴⁸ remarks that he was well aware of Sartre's journal *Les Temps Modernes*, and notes the presence of Simone de Beauvoir (1908-86).¹⁴⁹

Despite his outward attitude, I would argue that there are clear signs of the influence of Existentialism in Boulez's writings. The most obvious indicators are Boulez's reflections on chance and his claim that one both reveals and defines one's essence (which is constantly being superseded) through an 'initial choice'.¹⁵⁰ More profoundly, Boulez's entire conception of music as that of the composer overcoming

¹⁴⁶ Schoenberg (1946) p. 124 (in English).

¹⁴⁷ The following statement is typical: 'when the *actualités* have gone, it is a lot of noise about not very much!' Cooper cites Boulez on a radio programme on Camus, recalling Existentialism in Paris in his youth. See: Cooper (1990) p. 194 (in English).

¹⁴⁸ Boulez in: Boulez and Walters (2002) p. 405 (in English).

¹⁴⁹ *Ibid.*, p. 405 (in English). *Les Temps Modernes* was, of course co-founded by Sartre and Merleau-Ponty, whom I shall discuss shortly. Boulez adds that Leibowitz contributed to *Les Temps Modernes* with several articles on the Second Viennese School. According to Kapp, Sartre was a friend of Leibowitz. See: Kapp (1988) p. 4 (in English).

¹⁵⁰ I examine Boulez's conception of the 'initial choice' in chapter III. See: this dissertation p. 143.

the inescapably contingent inherited material, based on a notion of human *freedom*, is particularly Existentialist. I shall return to these ideas shortly.¹⁵¹

Throughout this dissertation, I refer not only to Sartre and de Beauvoir but also to Martin Heidegger (1889-1976), arguably the primary figure leading towards Existential thought. I have drawn on Heidegger's writings, because, although they have never been mentioned in Boulez's texts, they are particularly illuminating in relation to Boulez's ideas.

Phenomenology

Phenomenology can be defined as a branch of philosophy which seeks to describe things in terms of the way they are manifested before applying notions of causality and intentionality. There are several indicators in Boulez's writings which point to the influence of Phenomenology. Most of these can be attributed to Maurice Merleau-Ponty (1908-61) whose connections to the Existentialist movement (he not only co-founded *Les Temps Modernes* but also contributed numerous articles) and his friendship with Leibowitz¹⁵² make him the most probable source of Boulez's phenomenological traits. Merleau-Ponty's writings draw heavily on Hegel, Heidegger and Edmund Husserl (1859-1938), the latter's concepts of 'intuition', 'reduction' and 'parentheses' also appearing in Boulez's writings.¹⁵³

Arguably the most substantial legacy of Merleau-Ponty for Boulez is that of Gestalt Theory. Gestalt Theory was originally developed in the 1920s and 1930s in Germany with Wolfgang Köhler (1887-1967), Kurt Koffka (1884-1941) and Max Wertheimer (1880-1943). They argued against the claim that perception or thinking can be reduced to an accumulation of individual sensations or associations but rather is determined by the overall structure, or Gestalt (meaning shape). Drawing from this, Merleau-Ponty argues in his book *La phénoménologie de la perception* (1945)

¹⁵¹ See: this dissertation p. 52.

¹⁵² See: Kapp (1988) p. 4 (in English).

¹⁵³ See: this dissertation p. 127 and p. 166.

that reality appears to us as a Gestalt which constitutes the 'phenomenal field'¹⁵⁴ which is, at the same, the 'transcendental field'. The Gestalt is not, therefore an objective notion 'out there' but implicitly part of the subject perceiving it. I shall examine in detail Boulez's incorporation of Gestalt Theory into his own approach in chapter III.¹⁵⁵

Shared themes in Boulez's influences

The five artistic and philosophical movements outlined above share certain similarities in their conception of artistic creation. These similarities are primarily applicable to the first four influences with the omission of Phenomenology. I set out these shared themes here in order to help clarification when they recur later in this dissertation.

Surrealism, Symbolism and Existentialism all share a similar conception of what constitutes everyday language. Broadly, they conceive the inherited language as a problem in itself, whose existence is shaped by contingent factors. This contingent (or *chance*) aspect, a striking theme in all three influences, results from a variety of historical factors. We, ourselves, are founded on this contingency, as we are 'thrown', to employ Heidegger's terminology, into our own individual contingent situation. Language has a tendency to conceal this contingent historical aspect through a process of 'sedimentation', in which concepts appear as absolute and directly connected to the thing or idea to which they refer. This is a major issue, not least because this sedimentation impacts upon one's conception of oneself. Consequently, the individual subject is viewed as absolute and unchanging, i.e. as an object. This is regarded as restricting and denying the responsibility of one's innate *freedom*, i.e. that one is an autonomous subject. As I shall explore later, sedimented

¹⁵⁴ See the 4th section in the introduction entitled the 'Phenomenal field': Merleau-Ponty (1945) pp. 52-63 (in English).

¹⁵⁵ See: this dissertation p. 187.

everyday language and the passive response it inspires is described in dismissive terms in Surrealist, Symbolist and Existentialist literature.¹⁵⁶

Despite their shared conception of the problematic aspect of the inherited language, all three movements acknowledge its unavoidability: one cannot think outside of language. The task for the artist, therefore, is to overcome this contingent existence in some way and to realise a conception of oneself as a free, autonomous subject.

The response of the Surrealists to this problem is distinctly different from that of the Symbolists and Existentialists. The Surrealists draw heavily upon Freud's idea of 'free association' which corresponds to what Breton calls 'psychic automatism'.¹⁵⁷ Breton argues that one can reveal the unconscious mind by avoiding conscious rational thought and disrupting the communal inherited aspect of language.¹⁵⁸ This is fundamentally opposed to Boulez's insistence upon adopting a rational approach.

The Existentialists' solution, as embodied in de Beauvoir's notion of the 'metaphysical novel', is much closer to Boulez's approach than that of Surrealism. Drawing from Hegel's notion of a 'mode of cognition', de Beauvoir describes the aspiration of a novel that unveils 'being' through its own forms: its expression *is* the form, not an expression of something exterior to it. De Beauvoir writes that 'a metaphysical novel brings an unveiling of existence for which no other mode of expression can provide the equivalent'.¹⁵⁹ This is comparable to Boulez's mature views on this matter, which I consider in respect to his related concept of the 'transcription'.¹⁶⁰ However, Boulez's aesthetic position is even nearer to the Symbolist's solution.

¹⁵⁶ I shall examine these terms in detail later. See: this dissertation p. 157.

¹⁵⁷ I shall examine this in more detail later. See: this dissertation p. 104.

¹⁵⁸ See: this dissertation p. 104.

¹⁵⁹ ['un roman métaphysique apporte un dévoilement de l'existence dont aucun autre mode d'expression ne saurait fournir l'équivalent'.] (My translation.) Beauvoir, de (1946) p. 1163.

¹⁶⁰ See: this dissertation p. 155.

If I take Mallarmé to represent the Symbolist approach, Mallarmé writes of his plans to achieve the 'pure work' which overcomes the *chance* aspect of the inherited language through *necessity* and the deliberate introduction of formal mobility. Although I consider Mallarmé's concept of the 'pure work' in detail in chapter II,¹⁶¹ I shall briefly consider Boulez's attitude towards this concept.

Boulez describes Mallarmé's concept of the 'pure work' as an 'original instrument'. He writes that 'Mallarmé was obsessed by the idea of formal purity [...] He entirely rethinks French syntax in order to make it, quite literally, an 'original' instrument.'¹⁶² In an interview I conducted with Boulez, he reveals that his idea of an 'original instrument' refers to the way in which Mallarmé arrives at his own syntax and in so doing constructs a language 'totally adapted to his own thought.'¹⁶³ I would argue that Boulez is describing a conception of language that would not be unfamiliar to both the Symbolists and Existentialists. He is not claiming that one can make a language from nothing but rather that the inherited material must be modified in order to arrive at a form of expression that mirrors, in Boulez's words, 'not only *what* [the artist] is thinking, but the *way* he is thinking.'¹⁶⁴

Boulez argues that Mallarmé's 'original instrument' was achieved through 'formal purity', a view shared by Scherer in his important study of Mallarmé, *Expression littéraire dans l'œuvre de Mallarmé* (1947). Scherer writes that Mallarmé had the 'extraordinary ambition to conceive and to dominate the entire system of verbal expression.'¹⁶⁵ This statement strikes at the crucial part of Mallarmé's aspiration of an 'original instrument'. Mallarmé seeks to overcome the contingent aspect of the inherited material by making it *necessary*. This aspiration is clearly echoed throughout the writings of Schoenberg and Leibowitz.

¹⁶¹ See: this dissertation p. 115.

¹⁶² ['La syntaxe française, il la repense entièrement pour en faire un instrument original, au sens littéral de ce terme.'] Boulez (1970c) p. 486 (in French) and p. 175 (in English).

¹⁶³ Boulez in: Boulez and Walters (2002) p. 402 (in English).

¹⁶⁴ *Ibid.*, p. 403 (in English).

¹⁶⁵ ['l'ambition extraordinaire de concevoir et de dominer le système entier de l'expression verbale'] (My translation.) Scherer (1947) p. 42 (in French). The quotation originally comes from Valéry 'Je disais quelquefois à Stéphane Mallarmé...' (1932) in *La Nouvelle Revue Française* 1. 5. 1932, p. 841.

With respect to Boulez's own mature theory, I would argue that it is evidently closest to that of Mallarmé. Boulez seeks to overcome the contingent aspect of the inherited musical material, which is exterior to the composer's thought, by 'dominating contingency'¹⁶⁶ and forcing the material to become *necessary*, i.e. rationalised and interior to the composer's thought. This conception of musical composition appears in one of Boulez's most famous statements: 'creation is only possible when the unforeseeable becomes necessity.'¹⁶⁷

Although this particular conception of musical composition remained embryonic in Boulez's early years, its various elements are evident even in his earliest writings. The primary example is Boulez's fixation on establishing a consistent language which would culminate in his move towards 'total serialism' in 1952, a crucial year in his aesthetic development.¹⁶⁸ His earliest writings (up to 1952) are considered in the following part entitled 'Écriture'.

Part 2: Écriture

[I]t is impossible to live always on the same givens. [...] Thought must generate a new form of expression.¹⁶⁹

This part is entitled 'Écriture'¹⁷⁰ for two reasons. First, it is concerned with Boulez's earliest writings and the concepts they display. Second, these writings are primarily focused upon problems of the musical language, i.e. problems of musical 'écriture'.

¹⁶⁶ ['dominer la contingence'.] (My translation.) Boulez (1985a) p. 26.

¹⁶⁷ ['il n'y a de création que dans l'imprévisible devenant nécessité.'] (My translation.) Boulez (1952c) p. 288 (in French) and p. 133 (in English).

¹⁶⁸ See: this dissertation p. 64.

¹⁶⁹ ['il est impossible de vivre toujours sur les mêmes données [...] La pensée doit engendrer une forme nouvelle d'expression'] (My translation.) Boulez in: Boulez and Coutaz (1968-70) pp. 1333-1334. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished interview.

Before 1952, Boulez had only had four articles published, 'Propositions' (1948) and 'Incidences actuelles de Berg' (1948) in *Polyphonie* and 'Trajectoires: Ravel, Stravinsky, Schoenberg' (1949) and 'Moment de Jean-Sébastien Bach' (1951) in *Contrepoint*. He had also written two extensive letters to Cage in 1951 detailing the structural principles of his compositions *Polyphonie X* (1951) and *Structures* (1952) which have subsequently been published as 'Le système mis à nu'.¹⁷¹ I would add to this list of pre-1952 articles Boulez's first and only published extensive analysis (of Stravinsky's rhythmic techniques in *The Rite of Spring*) 'Stravinsky Demeure' which was written in 1951 but published in 1953.

Four key themes are evident in these early essays. Arguably the most important theme is his claim that tonality is no longer an adequate means of expression. The second theme, a consequence of the first, is the 'historical necessity' of establishing a new language, i.e. serialism. Third, 'Incidences actuelles de Berg' and 'Moment de Jean-Sébastien Bach' primarily attack the attempts to synthesise pre-twentieth century musical 'styles', such as romanticism, with contemporary music. This can be witnessed in Berg's combination of serial techniques and romanticism in the former article and neoclassicism in the latter. Fourth, Boulez is concerned with the aesthetic problems concerning rhythm. This issue occupies much of his writings at this time, most obviously in 'Propositions' although 'Trajectoires', despite its fragmentary quality, also contains a passage dealing with this issue. Before I consider these themes further, I would like to isolate the three underlying aesthetic concepts on which these themes are founded. These three concepts are the driving force of Boulez's conception of music history at this time. I shall call these aesthetic concepts 'consistency', 'dissociation', and 'renewal'.

¹⁷⁰ *Écriture* is a problematical French word to translate into English but is usually translated as the English 'writing'. Unlike the English 'writing', the concept of 'Écriture' includes the act and final product of notating one's thoughts.

¹⁷¹ See: Boulez (1951b).

Consistency, dissociation and renewal

First, 'consistency' is the most important principle in Boulez's writings, not only in this early period but also throughout his texts. This concept is not explicitly stated in any of Boulez's articles from this time but first appears in later writings (from 1952 to around 1960) under the term of 'purity' or 'rigour'.¹⁷² By the time of his 1960 Darmstadt Summer School course, he begins to use regularly the term 'cohérent'. Throughout this dissertation, I employ the term 'consistency' to denote Boulez's concept of 'cohérent'.¹⁷³

Consistency can be understood at this point in this dissertation as the 'consistent' application of a compositional principle to all aspects of music. Clearly, this principle is one manifestation of Boulez's distinctly modernist conception of musical composition. This principle underpins all of his key proposals from this time. He argues for the need for consistency between the structuring principle in pitch (i.e. serialism) and the structuring principle in rhythm (i.e. Stravinsky's and Messiaen's rhythmic developments), the most comprehensive account of this argument being 'Propositions' (1948). He also stresses the need for consistency within the musical material itself, i.e. the material should be one-and-the-same. This is the basis for his criticisms of Berg's use of romantic and serial material. It is also the foundation of his vitriolic attacks on neoclassicism.

Second, Boulez's writings are founded upon a notion of the idea of the ever-increasing 'dissociation' of the musical material. This concept does not appear explicitly in his writings until 1952 but clearly underpins several of his arguments

¹⁷² ['pureté', 'rigueur']. By 1976, Boulez writes that his generation has learnt to 'mistrust all ideas of style that are primarily concerned with 'purity'. ['nous avons appris à nous méfier des notions de style par trop purificatrices']. (My translation.) Boulez (1976a) p. 253 (in French) and p. 274 (in English). Although this statement also indicates a shift of emphasis in his aesthetic approach, it is symptomatic of Boulez's hesitancy towards this using this term in his writings since the 1960s, in contrast to its earlier liberal use.

¹⁷³ I would like to add that the French verb 'consister' only refers to the idea of 'consisting of something' or alternatively the thickness of a substance (its 'consistency'). It is not used in the manner that I use the English term 'consistency' within this study.

dating from this time.¹⁷⁴ It is not a concept unique to Boulez, as Adorno also argues that the material of art music contains a tendency towards dissociation due to the historical process of increasing rationalisation. Although I shall discuss Boulez's understanding of this concept in detail later,¹⁷⁵ broadly it refers to the historical tendency, in Western art music, towards the dissociation of the material from the theme to the individual motif, then to the individual pitch interval, to the individual sound components in total serialism and currently to the investigations in sound synthesis. This phenomenon of dissociation is the basis of notions such as the ever-increasing autonomy of the interval in nineteenth and twentieth century music and should be understood as the manifestation of the process of rationalisation. This concept accounts for Boulez's insistence on the historical necessity of serialism and also his rejection of neoclassicism.

The third and final concept I would like to highlight in Boulez's earliest writings is 'renewal'. Of the three ideas I have isolated, this is only one to be explicitly named by Boulez in this period.¹⁷⁶ It appears in two main contexts in his writings.

The first context is in his desire to challenge all inherited musical ideas and revitalise them, i.e. renew them. This attitude towards what is inherited is also particularly characteristic of surrealism. Indeed, Boulez's argument is very much in the vein of surrealist texts, as he seeks to awaken the reader to that which he passively accepts as normal and instead adopt an approach in which he is in constant 'renewal' with all ideas. This idea becomes one of the key premises on which his dialectical conception of music is built.¹⁷⁷

The second context in which Boulez's idea of renewal appears is within the musical work itself. This concept is explicitly proposed by Leibowitz who also uses the term

¹⁷⁴ Boulez writes of the 'phenomenon of dissociation'. [*'phénomène de dissociation'*.] Boulez (1952c) p. 266 (in French) and p. 114 (in English).

¹⁷⁵ I consider the idea of dissociation both in terms of Boulez's concept of music history in chapter IV. See: this dissertation p. 264.

¹⁷⁶ [*'renouvellement constant'*.] Boulez (1948a) p. 265 (in French) and p. 54 (in English).

'renewal' as well as describing it using Schoenberg's terminology of 'the law of perpetual variation'.¹⁷⁸ Boulez clearly understands these two terms in tandem, as he connects them in 'Propositions' (1948).¹⁷⁹ He insists that the composer must constantly renew, or 'perpetually vary', all aspects of the musical work. Like his conception of dissociation, Boulez understands renewal as being based on the historical tendency towards the ever-increasing rationalisation of the musical material. Consequently, it is renewal which undermined tonality in late romanticism and led to the developments in atonality at the beginning of the twentieth century, which in turn led to serialism. It is the way in which Schoenberg's serialism constantly renews all twelve semitones that, for Boulez, begins to tackle the problem of the disintegration of tonality. Again, his criticisms of neoclassicism can be understood in terms of renewal, as it does not challenge inherited ideas (indeed it accepts them intact as material) and it does not display the historically inevitable constant renewal of musical elements.

Having established these three underlying concepts of 'consistency', 'dissociation' and 'renewal', I would like to consider how they underpin the four key themes I identified earlier.

In all of Boulez's earliest articles, he argues that the expressive power of tonality is no longer adequate. This is due to two reasons. First, tonality became exhausted due to the breakdown of its formal rules and tonal functions. This collapse was precipitated by the tendency towards dissociation and renewal and manifested in late romanticism by increasing chromaticism, complex harmonies and more adventurous modulations.¹⁸⁰ Second, tonality was deemed incapable of possessing the range of

¹⁷⁷ As I shall argue in chapter III, the idea of 'renewal' is highly connected to the principle of doubt. See: this dissertation p. 167. I also consider the most probable source of this idea: Leibowitz.

¹⁷⁸ For two occurrences of this concept, see: Leibowitz (1947) p. 57, p. 269 (in English).

¹⁷⁹ Boulez writes that 'the principle of variation and constant renewal will guide us remorselessly.' [*'le principe de la variation et du renouvellement constant nous guidera impitoyablement.'*] Boulez (1948a) pp. 261-262 (in French) and p. 54 (in English).

¹⁸⁰ In later texts, Boulez would describe this problem as the 'degradation' of the tonal system due to the 'law of entropy'. For my examination of this idea see: this dissertation p. 153. Schoenberg describes a similar version of music history in which chromaticism undermined tonality. See: Schoenberg (1941) p. 216 (in English).

expression demanded by the composer in a post-holocaust Europe. These two criticisms of tonality are often not distinguished from each other, as they both point to the same conclusion: the expressive redundancy of tonality.

His response to this crisis in musical expression was the adoption of serialism as the solution towards establishing a new language. It is helpful to remember that the serial works of the Second Viennese School were relatively unknown in the immediate post-war period. This was primarily due to the Nazi prohibition of all forms of 'degenerate art' which, with respect to music, included a ban of the performance of serial works.¹⁸¹ With the sudden accessibility of serial music, the post-war generation of composers quickly consumed developments by the Second Viennese composers which had occurred over decades.¹⁸² In this climate, Boulez, in his capacity as a writer, set himself the task of clarifying current developments and establishing a new language based on Schoenberg's developments.

Specifically in 'Incidences actuelles de Berg' (1948), Boulez's broad argument is that whilst Berg is a good composer, his attempt to integrate romanticism and 'dodecaphony' is doomed – 'the materials are not of the same nature'¹⁸³ and may herald a 'quite bewildering return to Wagner!'¹⁸⁴ This is based on the principle of consistency, in this case the desire to make the materials become integrated within a consistent work.¹⁸⁵ Similarly, in 'Moment de Jean-Sébastien Bach' (1951), he attacks contemporary composers who call for a return to the style of Bach, primarily in terms of neoclassicism. Rather than merely copying Bach's style which developed

¹⁸¹ I refer to the exhibition of 'Entartete Kunst' (Degenerate Art) in Munich in 1937 organised by the Nazis. The Nazi prohibition of serial music meant that, for Boulez's generation, serialism was clearly identified with the French Resistance and the Liberation. On the other hand, the Nazis fostered and supported Boulez's *bête noire*, neoclassicism, which was highly prevalent in Paris during the Second World War and in the period shortly afterwards. Therefore, the accusation that Boulez's advocacy of serialism was a rejection of his French culture or belied sympathies with Nazism are unfounded. For my consideration of Boulez's views on neoclassicism see: this dissertation p. 236.

¹⁸² This is acknowledged by Boulez. See Boulez in: Boulez and Menger (1990) p. 10 (in English).

¹⁸³ ['les matériaux n'étant pas de même nature'.] Boulez (1948b) p. 41 (in French) and p. 187 (in English).

¹⁸⁴ ['un retour à Wagner assez ahurissant'.] *Ibid.*, p. 41 (in French) and p. 187 (in English).

from his formal concerns, Boulez implies Bach's formalist approach to music should be adopted. Immediately, one recalls Schoenberg's call for the importance of the musical 'idea' over considerations of 'style'. Boulez's criticisms of neoclassicism constitute some of his most scathing passages of writing. Perhaps this is unsurprising as, with regard to each of the three underlying concepts I have identified (consistency, dissociation and renewal), neoclassicism breaks them all. Its materials are inconsistent with each other and they do not manifest the historical tendencies of dissociation and renewal.

The remaining main theme that appears in Boulez's articles from this time is the problem of rhythm. In 'Propositions' (1948), he argues that, unlike Schoenberg, he considers it necessary to apply the serial principle to rhythm and not only pitch. Clearly, this is based on the idea of consistency applied to the different sound components. It is also based on the phenomenon of dissociation of the musical material I outlined earlier. I would like to examine Boulez's thoughts on rhythm, as they constitute one of his main preoccupations at this time. The main source of his ideas on rhythm is 'Propositions', in which he considers the approaches to rhythm by several twentieth century composers, examining in particular the idea of the rhythmic cell.

Initially Boulez considers Stravinsky's conception of rhythmic cells acknowledging Messiaen's role in bringing these rhythmic features to light. The use of rhythmic cells would be incorporated into Boulez's compositions, a feature acknowledged by Boulez himself in his composition *Polyphonie X* (1951).¹⁸⁶ One notes in the idea of independent rhythmic cells the tendency towards the idea of duration and the disruption of regular metre, both of which would become features of total serialism. However, in this earliest article, he still uses the term 'rhythm' and not yet 'duration', although very soon the latter would emerge. In 'Trajectoires' (1949), the

¹⁸⁵ In this context, one can understand 'material' as referring to the musical material in its traditional sense – unproblematically as that which the composer uses to create a work. I shall examine Boulez's conception of 'material' in detail in chapter III. See: this dissertation p. 149

¹⁸⁶ See: Boulez (1974a) p. 190 (in French) and p. 200 (in English).

following year, he argues that 'the conception of a regular basic metre [...] needs to give way [...] to that fertile idea of the lowest common multiple which is a rational generalisation from the discoveries of Stravinsky'.¹⁸⁷ This is, in effect, the idea of duration in all but name. I would suggest that Boulez's first encounter with Cage in 1949, the latter composer employing the (English) term 'duration' in an article dating from the same year, may have also helped Boulez towards this conception of rhythm.¹⁸⁸ In addition, I would suggest that the influence of Henri Bergson (1859-1941), perhaps through the intermediary of Merleau-Ponty or Proust, may have informed Boulez's thought. Bergson distinguished between 'time', which is measurable by physicists and objective, and 'duration', which involves one's memory and can only be subjectively experienced.¹⁸⁹

With regard to Boulez's attitude towards Stravinsky at this time it is notable that despite a complete rejection of his neoclassicism, he appears to have drawn considerably from his rhythmic developments.¹⁹⁰ Messiaen himself is congratulated on having introduced important devices concerning the development of rhythmic cells (e.g. rhythmic canons, rhythmic retrogrades, superimposed rhythms and the 'added value'¹⁹¹). However he is criticised because in certain passages in his

¹⁸⁷ ['La conception du mètre régulier de base [...] doit laisser la place [...] à cette notion féconde du plus petit commun multiple, généralisation rationnelle des découvertes de Stravinsky.'] Boulez (1949) p. 56 (in French) and p. 201 (in English).

¹⁸⁸ Cage writes that 'Sound has four characteristics: pitch, timbre, loudness and duration.' Cage (1949) p. 63 footnote 2 (in English). I discuss Cage's influence on Boulez's conception of duration later. See: this dissertation p. 62.

¹⁸⁹ It is interesting to note the similarity between Bergson's conception of 'duration', in which events are understood by memory and one event being superseded by another, and Boulez's consistent employment of term 'serialism' which suggests a succession of musical events. Note that Boulez's term is not employed by Leibowitz who uses the 'twelve tone technique'.

¹⁹⁰ Indeed, this interest, guided by Messiaen's analyses, is displayed in Boulez's only published analysis, his extensive study of rhythm in *The Rite of Spring* published in 1953 but written in 1951. See: Boulez (1953a).

¹⁹¹ Boulez provides a definition of Messiaen's idea of the 'added value' [valeur ajoutée]: 'half of the smallest unit of rhythm added to the rhythm, in the form of either a note or a dot.' ['moitié de la plus petite valeur d'un rythme quelconque ajoutée à un rythme, soit par une note, soit par le point'.] Boulez (1948a) p. 255 (in French) and p. 48 (in English). Even before the composition of Messiaen's *Mode de valeurs et d'intensités* (1949), one can see in this statement the basis of composing rhythm based on the smallest rhythmic unit, i.e. duration.

compositions there are too many chords merely 'filling-out' a rhythmic structure.¹⁹² In a later interview dating from 1975, Boulez would also add that he was not interested in Messiaen's appropriation of Greek and Indian rhythms.¹⁹³ Messiaen himself contradicts this, in an interview dating from the following year, by claiming that his student used formulas derived from Greek and Indian rhythms but in an undeclared manner.¹⁹⁴ He also suggests that of all his students, Boulez was the most interested in his teacher's rhythmic discoveries¹⁹⁵ and goes as far as to describe him as his 'successor' with respect to rhythm,¹⁹⁶ although the student managed to retain his own unique approach.¹⁹⁷

Returning to 'Propositions' (1948), whilst Varèse is criticised by Boulez for focusing on rhythm above all other sound components – a 'facile solution which solves nothing',¹⁹⁸ – the three composers of the Second Viennese School are attacked for their indifference to rhythm. However, he acknowledges that Webern began to dissolve the regular metre. This is his first mention of Webern and, although he would soon be championing Webern's music by 1952, he chides Webern here on 'his attachment to rhythmic tradition'.¹⁹⁹

In 'Trajectoires' (1949), whilst praising Messiaen's advancements in rhythm, albeit with some reservations, Boulez whole-heartedly rejects Leibowitz's conception of rhythm. He quotes a passage from Leibowitz's *Schoenberg et son école* (1947):

¹⁹² It is at this point that Boulez's well-known phrase that Messiaen 'does not compose – he juxtaposes' can be found. ['il ne compose pas – il juxtapose'.] *Ibid.*, p. 256 (in French) and p. 49 (in English).

¹⁹³ See Boulez in: Boulez and Deliège (1975) p. 11 (in French).

¹⁹⁴ See Messiaen in: Messiaen and Samuel (1976) p. 111 (in English).

¹⁹⁵ *Ibid.*, p. 48.

¹⁹⁶ *Ibid.*, p. 111.

¹⁹⁷ *Ibid.*, p. 48.

¹⁹⁸ ['C'est une solution de facilité qui ne résout rien.'] Boulez (1948a) p. 262 (in French) and p. 54 (in English).

¹⁹⁹ ['son attachement à la tradition d'écriture rythmique'.] *Ibid.*, p. 255 (in French) and p. 49 (in English).

Rhythm is merely an element which is produced spontaneously by horizontal and vertical sound-forms because it articulates the unfoldment of these forms in such a way that musical speech would be impossible without it.²⁰⁰

Leibowitz is arguing that the rationalisation of rhythm for its own sake, for example in Stravinsky's music, is mistaken.

Already before 1952, one detects in Boulez's writings the attempt to reconcile the pitch developments of serialism that he had discovered through Leibowitz with the rhythmic developments Messiaen had analysed in Stravinsky's music, non-Western musics and in Messiaen's own works. In order to appreciate fully this preoccupation in Boulez's thought, I would like to examine the key writings and events that occurred in the most momentous year of his musical life: 1952.

1952

1952 was a pivotal year in Boulez's life. In this year, the aesthetic principles he had been exploring hit a major obstacle manifested in his work *Structures premier livre*.²⁰¹ During this year, he attended the Darmstadt Summer School for the first time and encountered the ideas of Adorno. He also had four articles published, three of which are highly significant in his writing career for different reasons, which constitute the culmination of his thought in this early period. The three most important articles are 'Schoenberg is Dead' (1952), published in February 1952 in response to the death of Schoenberg (on 13. 7. 1951), 'Incipit' (1952), written to promote a concert featuring Webern's music and 'Éventuellement', which constitutes a summary of post-war developments in music.²⁰² The fourth 'Chien flasque' (1952) is a short tongue-in-cheek text summarising the achievements of Erik Satie (1866-1925) and most notable for being Boulez's first article to be written

²⁰⁰ Leibowitz (1947) p.274 (in English). For Boulez's quotation of this passage see: Boulez (1949) pp. 55-56 (in French) and p. 200 (in English).

²⁰¹ I shall discuss the aesthetic ideas that this important composition displays shortly. See: this dissertation p. 77.

²⁰² Boulez (1952a), Boulez (1952d) and Boulez (1952c) respectively.

in self-consciously poetic style.²⁰³ As I consider 'Éventuellement' (1952) to constitute the first article of Boulez's transitional period between 1952 and 1957, I shall examine it in chapter II. Before then, I would like to consider 'Schoenberg is Dead' and 'Incipit' and reflect on their importance and relevance in terms of my study of Boulez's aesthetics.

'Schoenberg is Dead'

'Schoenberg is Dead' (1952) is probably Boulez's most famous article and perhaps the most misunderstood. Indeed, Whittall describes his opinions on Schoenberg as 'among the most fascinating examples of articulate prejudice available to the musician.'²⁰⁴ Boulez's broad argument is that whilst Schoenberg's creation of the twelve-tone technique is historically necessary, composers should reject his reliance upon tonal formal schemas and follow instead the example of Webern. I would like to examine this argument by beginning with Boulez's criticisms of Schoenberg's use of tonal formal schemas.

Boulez argues that Schoenberg's use of serial material is inconsistent with his retention of tonal formal schemas.²⁰⁵ Decroupet notes this, claiming that even in these early texts 'the emphasis is placed on the material-form relation'.²⁰⁶ In an interview dating from 1982, Boulez remembers that around the time that he was writing 'Schoenberg is Dead', he attempted to make the 'microstructure' and macrostructure' in his own compositions correspond, in other words be consistent with each other.²⁰⁷ His efforts in his compositions clearly impacted on his writings on aesthetics.

The specific claim that material and form should be consistent can be found in the writings of Leibowitz. Kapp notes that one of the themes in Leibowitz's writings is

²⁰³ Boulez (1952b).

²⁰⁴ See: Whittall (1967) p. 136 (in English).

²⁰⁵ See: Boulez (1952a) p. 148 (in French) and p. 212 (in English).

²⁰⁶ ['l'accent est mis sur cette relation matériau-forme.'] (My translation.) Decroupet (1994) p. 21.

his discussion of athematicism and its 'inevitable consequences relating to form'.²⁰⁸ This is despite the fact that Schoenberg, whom Leibowitz deemed the greatest of the Second Viennese composers, persists in using tonal forms in his serial compositions. In his book, *Schoenberg et son école* (1947), Leibowitz expands on this idea. He suggests that because the musical language is living and in a constant state of flux,²⁰⁹ one can detect 'the survival, in many works which already outline the elements of a new order, of certain elements belonging to an old order.'²¹⁰ It is an easy step for Boulez to complete the process Leibowitz describes by attacking the 'elements belonging to an old order' in the music of Schoenberg, i.e. tonal formal schemas.

Boulez's recognition that Schoenberg relied on tonal schemas as much as Stravinsky (in the latter's neoclassical works) did not pass unnoticed. Despite Adorno's portrayal of Schoenberg and Stravinsky as opposing poles in the musical spectrum in *Philosophy of Modern Music* (1949), by 1961 Adorno writes that 'looking back on it we can see that Schoenberg comes quite close to Stravinsky.'²¹¹ Boulez, commenting in a later interview clearly having read Adorno's study, agrees that the opposition of Schoenberg and Stravinsky has lost its validity.²¹²

Another important point to note in 'Schoenberg is Dead' (1952) is Boulez's explicit argument for the historical *necessity* of serialism. He writes that:

We do not pretend to a hilarious demonism but simply to the most banal good sense in declaring that, after the discovery of the Viennese School, every composer working outside of serialism is *useless*.²¹³

²⁰⁷ ['microstructure' 'macrostructure'.] (My translation.) Boulez in: Boulez and Nattiez (1982) p. 196.

²⁰⁸ Kapp (1988) p. 5 (in English).

²⁰⁹ Particularly in the post-war era which he describes as a 'period of transition'. Leibowitz (1947) p. 268 (in English).

²¹⁰ *Ibid.*, p. 267.

²¹¹ Adorno (1961) p. 274 (in English). Adorno is commenting specifically on Schoenberg's *Pierrot lunaire* (1912).

²¹² See: Boulez (1985a) p. 28 (in French). Boulez does add, however, that he highly values Adorno's work. In an earlier interview, Boulez pairs Schoenberg and Stravinsky in their use of 'dead forms, implicitly (all though not explicitly) referring to Adorno's book. ['formes mortes'.] (My translation.) Boulez in: Boulez and Deliège (1975) p. 37.

²¹³ ['Nous prétendons ne pas faire preuve d'un démonisme hilare, mais bien manifester le bon sens le plus banal en déclarant que, après la découverte des Viennois, tout compositeur est *inutile* en dehors

A similar statement appears in 'Éventuellement' (1952), which dates from the same year. As these two statements often appear to be one-and-the-same, I quote here the statement found in 'Éventuellement':

any musician who has not experienced – I do not say understood, but truly experienced – the necessity of twelve-tone language is USELESS.²¹⁴

This is perhaps Boulez's most famous statement and one, I would argue, that has led to a skewed understanding of his entire aesthetic theory. This argument can be traced to Leibowitz in his book *Schoenberg et son école* (1947) which dates from only five years earlier when he writes that:

the profound and detailed knowledge of [the composer's] craft will inevitably lead [the composer] where he must go – probably, that is, to the twelve-tone technique. In other words, the perfect assimilation of the would-be master to this syntax of today – the only one in which his mastery may be expressed.²¹⁵

Leibowitz, whose argument is primarily drawn from Schoenberg's essays,²¹⁶ continues by arguing that only the most 'lucid' and 'advanced' composers today will recognise the necessity of the serial language. This means 'nearly all those who are now composing in the new technique are on a higher level than other contemporary composers'.²¹⁷ Whilst Boulez avoids echoing the rather ludicrous tone of Leibowitz's latter point,²¹⁸ his overall claim is the same. As Breatnach correctly observes, the primary argument Boulez attempts to make is that any composer who

des recherches sérielles.'] (My modified translation.) Boulez (1952a) p. 150 (in French) and p. 214 (in English).

²¹⁴ ['tout musicien qui n'a pas ressenti – nous ne disons pas compris, mais bien ressenti – la nécessité du langage dodécaphonique est INUTILE.'] Boulez (1952c) p. 265 (in French) and p. 113 (in English).

²¹⁵ Leibowitz (1947) p. 265 (in English).

²¹⁶ Schoenberg's claim that '[t]he method of composing with twelve tones grew out of a necessity' is a typical example. Schoenberg (1941) p. 216 (in English).

²¹⁷ Leibowitz (1947) p. 265 (in English).

²¹⁸ Taken at face value, Leibowitz's statement arguing that serial composers are 'on a higher level' seems at best a little naïve. I would suggest that it is rooted in his dialectical conception of music history and that he is depicting the process of sublation.

does not appreciate the need for a new means of expression after the exhaustion of tonality is 'useless'.²¹⁹ However, it is not this point that has occupied the attention of many readers but his insistence on serialism as the basis of the new language. Unquestionably, at the time of writing, Boulez's belief in serialism as the basis of the new language was at its peak. Whilst this belief in the historical necessity of serialism has subsequently diminished in intensity over the years,²²⁰ his belief in historical necessity *per se* remains as strong as ever. In an interview dating from 1989, he confirms this is what he intended to mean by the statement above and that he still thinks this today. He claims 'I am sure that as long as you haven't absorbed²²¹ the history which comes before you, you certainly cannot go very far.'²²²

Returning to 'Schoenberg is Dead' (1952), Boulez supports his argument for the historical necessity for serialism on three principles he distinguishes in Schoenberg's atonal works which would eventually become rationalised as serialism. These are perpetual variation, the emphasis on so-called 'anarchic' intervals (and the corresponding avoidance of 'consonant' intervals such as the octave) and an emphasis upon counterpoint.²²³ One can see that these three principles are based on the concepts of renewal and dissociation I identified earlier.²²⁴ I would argue that, yet again, this approach can be tracked back to Leibowitz and, if pursued further, beyond Leibowitz to Schoenberg and Adorno. Adorno, for example, makes the following claim concerning the historical necessity of serialism. He argues that:

To be sure, among the rules of twelve-tone technique there is not one which does not proceed necessarily out of compositional experience - out of the progressive illumination of the natural material of music.²²⁵

²¹⁹ Breatnach (1996) p. 75 (in English).

²²⁰ For example, see: this dissertation p. 91.

²²¹ Boulez's use of the term 'absorbed' is derived from Mallarmé's writings. For more details see: this dissertation p. 108.

²²² Boulez in: Boulez and McCallum (1989) p. 10 (in English).

²²³ See: Boulez (1952a) p. 146 (in French) and p. 210 (in English).

²²⁴ See: this dissertation p. 57.

²²⁵ Adorno (1949) p. 68 (in English).

One can see that Boulez's argument for the historical necessity of serialism is founded on the claim that the expressive power of tonality is exhausted and an understanding of the aesthetic ideas shaping music history, such as dissociation and renewal, which led to Schoenberg's development of the twelve-tone technique. This is a crucial element in Boulez's argument in 'Schoenberg is Dead' which is frequently overlooked. Born, for example, asserts incorrectly that Boulez's belief in the necessity of serialism is founded upon his criticisms of Schoenberg's inconsistency rather than his understanding of music history. This mistake leads Born to describe Boulez's claim for the historical necessity of serialism as 'ideological gloss'.²²⁶

I have established that in 'Schoenberg is Dead', Boulez argues contemporary composers must appreciate the historical necessity for a new language based on Schoenberg's twelve-tone technique but avoid his reversion to tonal forms. The conclusion Boulez draws is that composers should reject Schoenberg's approach and instead favour Webern. I would like now to examine this proposal.

Towards the end of 'Schoenberg is Dead' and after he has attacked Schoenberg's reliance upon tonal schemas, Boulez cites Webern as a composer who recognised the need to create new forms suited to the new material.²²⁷ By citing Webern, Boulez clearly intends to champion his approach in place of that of Schoenberg. Indeed, several writers have suggested that the title 'Schoenberg is Dead' implies the corollary phrase of 'Long live the King',²²⁸ which, for Boulez at this time, was Webern who most consistently applied Schoenberg's twelve-tone technique more than Schoenberg himself. Watkins also argues that this article is the rejection of Schoenberg for Webern:

²²⁶ Born (1995) p. 55 (in English). Born does not expand upon what 'ideology' she believes Boulez is championing.

²²⁷ See: Boulez (1952a) p. 151 (in French) and p. 214 (in English).

²²⁸ For example, see: Kapp (1988) p. 12 (in English) and Watkins (1988) p. 510 (in English).

['Schoenberg is Dead'] aimed not only at the demolition of the Schoenberg cult led by Leibowitz but in effect announced the formation of a Webern cult with Boulez as the leader.²²⁹

The point made by Watkins that this article is not only a rejection of Schoenberg but also of Boulez's source of Schoenberg's ideas - Leibowitz - is particularly important. This is the first text by Boulez not to mention Leibowitz and from this point onwards, despite a few oblique allusions, he never mentions Leibowitz by name again in his writings. This article heralds the beginning of Boulez's attempts to establish his own aesthetic position and in doing so he rejects completely the influence of his former teacher. However, in the same way that 'Schoenberg is dead... long live the king!' implies that, despite the death of Schoenberg today's composer must take the essence of his twelve-tone technique and apply it even more consistently than Schoenberg himself, so I would argue that, ironically, despite his rejection of Leibowitz, Boulez largely takes the essence of Leibowitz's ideas and applies them more consistently than Leibowitz. This claim is also suggested by Kapp who writes that:

Boulez was led on beyond the actual information obtained from Leibowitz into a way of thinking which left its traces even when Leibowitz provoked his disagreement.²³⁰

Although 'Schoenberg is Dead' displays the first instance of Boulez's 'dethronement' of Schoenberg for Webern, this is much more comprehensively articulated in another text dating from later in 1952 which might better have been called 'Long live the King!': 'Incipit' (1952).

Incipit

'Incipit' (1952) is the first article by Boulez to be published in a non-musical journal, the *New York Times*, and publicises a forthcoming concert of Webern's

²²⁹ Watkins (1988a) p. 509 (in English).

²³⁰ Kapp (1988) p. 6 (in English).

music. As such, this article constitutes a different type of writing aimed at a larger and non-specialised audience. Its title, 'Incipit', is a Latin term literally meaning 'beginning' but is used here in its modern sense to introduce the title of a work. Despite the fact that 'Incipit' was first published after 'Éventuellement' (1952), an article considered in the following chapter, I have included it here, as I would argue it contains ideas which appear not as thoroughly developed as those appearing in 'Éventuellement'.²³¹

The main argument in 'Incipit' is that Webern's approach to composition is '*the threshold*',²³² i.e. the example for contemporary composers to follow. Before 'Incipit', Webern's name appears fleetingly in several articles such as 'Trajectoires: Ravel, Stravinsky, Schoenberg' (1949) and 'Moment de Jean-Sébastien Bach' (1951) and usually in favourable tones. 'Incipit' is the first article entirely dedicated to Webern and presents the ideas Boulez set out in 'Schoenberg is Dead' (1952) but, I would argue, now described in a way that belies a clearer conception of his own aesthetic principles. I would now like to examine these ideas and his account of them.

One of the two major obstacles to the acceptance of Webern's music that Boulez identifies is its 'technical perfection',²³³ or 'formal purity',²³⁴ as he describes it later in the same article. This has enabled an expressive intensity comparable to that achieved by Mallarmé. Clearly, Boulez is describing for the first time in an explicit and conscious way the concept of 'consistency' I highlighted earlier. I would argue that this is highly significant, as it indicates his initial attempts to establish his own coherent aesthetic position. It is also notable for the connection he makes between Webern and Mallarmé in consideration of Mallarmé's importance on Boulez's aesthetics between 1952 and 1957 that I examine later in chapter II. The term 'purity' that Boulez uses to describe Webern's music is also employed by Leibowitz:

²³¹ For my examination of 'Éventuellement' (1952) see: this dissertation p. 84.

²³² ['LE seuil'.] Boulez (1952d) p. 153 (in French) and p. 215 (in English).

²³³ ['perfection technique'.] *Ibid.*, p. 153 (in French) and p. 215 (in English).

²³⁴ ['pureté formelle'.] *Ibid.*, p. 154 (in French) and p. 216 (in English).

Webern thinks his music organically by excluding every useless detail, in founding it on the purity of thematic and polyphonic work...²³⁵

This statement is firmly grounded upon the modernist utopia of complete *necessity* in order to achieve the 'pure work' I highlighted earlier.

Boulez highlights Webern's attempt to achieve consistency not only between the material and the form but also between the nature of the serial material and the style in which it is employed. Whereas Schoenberg and Berg continued to use romantic musical gestures in their serial works, which Boulez describes as 'luxuriantly flamboyant',²³⁶ Webern attempted to remove all aspects of tonality from his serial works. Boulez argues that, in this respect, Webern's approach is similar to that of Debussy, as he 'reacts violently to all inherited rhetoric'.²³⁷ This notion of rejecting all inherited ideas would later become an integral part of Boulez's dialectical conception of music.²³⁸

The second of the two major obstacles to the acceptance of Webern's music is the 'novelty of the message'.²³⁹ Boulez counters the accusation that Webern's music has no feeling by arguing it is the newness of the message that makes it seem unfeeling at first listening. It is notable that Boulez's first text to celebrate explicitly the works of Webern emphasises that his desire to achieve a new form of expression primarily constitutes his importance.

The two major obstacles Boulez identifies to the acceptance of Webern's music are based firmly in the concepts I have claimed underpin his aesthetic thought at this

²³⁵ Leibowitz, 1938 after a Paris performance of Webern's *Variationen für Klavier* op. 27 (1935-36). Quoted in: Kapp (1988) p. 2.

²³⁶ ['luxueusement flamboyant'.] Boulez (1952d) p. 153 (in French) and p. 215 (in English).

²³⁷ ['réagit violemment contre toute rhétorique d'héritage'.] *Ibid.*, pp. 153-154 (in French) and p. 215 (in English).

²³⁸ For my consideration of this see: this dissertation p. 161.

²³⁹ ['la nouveauté du message transmissible'.] Boulez (1952d) p. 153 (in French) and p. 215 (in English).

time, in particular the principle of 'consistency'. However, he makes a point in 'Incipit' that seems rather unconnected with his core ideas at this time. He writes that:

music is not simply "the art of sounds", but is better defined as a counterpoint between sound and silence.²⁴⁰

He continues by arguing that Webern's only contribution to rhythm, but an important addition nevertheless, is his deliberate use of silences in his music.²⁴¹ The reason why the idea of music as 'sound and silence' is not suggested by Boulez's aesthetic preoccupations leading up to 1952 is that it probably comes directly from Cage. Cage describes music as 'sound and silence' in an article dating from 1949, only three years before 'Incipit' (1952). The American composer claims that '[t]he material of music is sound and silence. Integrating these is composing.'²⁴² Between 1949, the time of Cage's article, and 1952, the time of 'Incipit', Boulez and Cage regularly corresponded and it seems certain that this idea is drawn from Cage. What is particularly noticeable is the way in which Boulez presents this idea as his own and the fact that there appears to be little attempt on his part to integrate it with his own aesthetic principles of the time.

Boulez's overall claim in 'Incipit' that Webern should be considered the role model for contemporary composers is unsurprising in consideration of Leibowitz's teachings. Although Leibowitz considers Schoenberg as the most important composer, he argues that Webern is the most advanced.²⁴³ This can be seen in the subtitles of the chapters on Schoenberg and Webern in *Schoenberg et son école* (1947). Whereas the chapter on Schoenberg is subtitled 'The birth and the fundamentals of contemporary music' the chapter on Webern is subtitled 'The

²⁴⁰ ['la musique n'est point seulement 'l'art des sons', mais qu'elle se définit bien plutôt en un contrepoint du son et du silence.'] *Ibid.*, p. 154 (in French) and p. 216 (in English).

²⁴¹ See: *ibid.*, p. 154 (in French) and p. 216 (in English).

²⁴² Cage (1949) p. 62 (in English).

²⁴³ Leibowitz (1947) p. 251 (in English).

conscience of the future in contemporary music'.²⁴⁴ Understood in this light, the adoption of Webern as 'the threshold' for the ambitious young Boulez is entirely compatible with Leibowitz's teachings. Leibowitz argues that Webern is the most advanced composer because his approach is the most consistent. As Kapp notes, Leibowitz considers Webern's later works to have resolved some of the inconsistencies that survived from tonality.²⁴⁵ This idea underpins Leibowitz's claim that Webern is 'the only composer of our time who has returned to the source itself of music, who has taken it upon himself to question each of our common musical phrases'.²⁴⁶

In later years, Boulez's attitude towards Webern would become less reverential, arguing that 'Webern is indispensable [today (in 1992)] in a less urgent but more profound way'.²⁴⁷ In the immediate post-war era, Boulez maintains that his celebration of Webern was undertaken primarily as a means of avoiding the aspects of neoclassicism and post-romanticism that appear in the music of Schoenberg and Berg.²⁴⁸ Webern's music is also relatively easy to analyse and therefore yielded much that could be developed for the post-war generation of composers.²⁴⁹ However, even at that time he considered Webern's asceticism to have its limitations²⁵⁰ and later has arguably come to prefer the complexity of Berg's music.²⁵¹

²⁴⁴ See: Leibowitz (1947). The chapter on Berg is subtitled 'The conscience of the past in contemporary music'.

²⁴⁵ Kapp (1988) p. 5 (in English).

²⁴⁶ Leibowitz, 1938 after a Paris performance of Webern's *Variationen für Klavier* op.27 (1935-36). Quoted in Kapp (1988) p. 2 (in English).

²⁴⁷ ['Webern est indispensable d'une façon moins urgente et plus en profondeur.'] (My translation.) Boulez in: Boulez and Szaersnovicz (1992) p. 43.

²⁴⁸ *Ibid.*

²⁴⁹ *Ibid.*, p. 44.

²⁵⁰ Boulez in: Boulez and Souster (1969) p. 476 (in English).

²⁵¹ See Boulez in: Boulez and Szaersnovicz (1992) p. 44 (in French).

Several writers have proposed that Boulez's thought at this time was concerned with achieving a resolution of the teachings of Leibowitz and Messiaen which would eventually culminate in the so-called 'total serialism' of *Structure 1a* (1952). Kapp writes that '[t]he train of thought was the parallel placing [of Leibowitz and Messiaen] – this already embodies almost the entire serial principle – of the organisation of pitch and duration.'²⁵² Similarly, Decroupet suggests that '[t]he contact with Olivier Messiaen and René Leibowitz determine the two sides of the musical research that Boulez will attempt to reconcile.'²⁵³ More precisely, Leibowitz can be seen as representative of Schoenberg's pitch serialisation and Messiaen can be viewed as representative of both Stravinsky's and his own developments in rhythm.

This version of Boulez's development at this time is undeniably correct, although a little simplistic, not least because it neglects the numerous composers, writers and artists I have already outlined who were influential in this earliest period. This argument is based primarily upon considering his most pressing concern at this time, which was the integration of recent developments in the musical language. It does not consider the underlying forces shaping Boulez's theory. If one considers the three aesthetic concepts of consistency, dissociation and renewal, one notes that all three underpin Leibowitz's conception of music and it is, therefore, reasonable to suggest that Boulez's primary source of these ideas is Leibowitz. In addition, several of Boulez's key themes from this time can be traced in Leibowitz's writings, most notably the idea of needing to re-evaluate the musical language in order to achieve expression. Similarly, both Boulez and Leibowitz argue that this new language is historically *necessary*. However, Boulez appears to attribute this last point to Messiaen in an interview from 1992 in which he argues that one of two major lessons he drew from Messiaen was 'the historical perspective indispensable to

²⁵² Kapp (1988) p. 9 (in English).

²⁵³ ['Le contact avec Olivier Messiaen et René Leibowitz détermine les deux versants de la recherche musicale que Boulez tentera de réconcilier.'] (My translation.) Decroupet (1994) p. 20.

situate the musical language.²⁵⁴ This probably refers to Messiaen's approach to analysis which would begin by discussing the cultural environment in which a work was conceived before considering the details of the musical work.²⁵⁵ The other major lesson he attributes to Messiaen is 'the temporary, provisional, validity of every stage in the evolution of that language.'²⁵⁶ I would suggest this probably alludes to Messiaen's openness to non-Western musics and his consequent lack of a monolithic, progressive, uniquely European conception of high-art music that Leibowitz possessed: in short, Messiaen's cultural relativism. Certainly, Boulez's later mature aesthetic position would display this relativism and a theoretical mobility absent in Leibowitz's approach. However, whilst accepting that Messiaen probably contributed to this aspect of Boulez's aesthetic theory, I would argue that his major impact was predominantly in terms of Boulez's actual compositional practice.

I have established that Boulez's ideas up to this time in 1952 manifest a strong desire to resolve the teaching of pitch serialisation from Leibowitz and the investigation into rhythm from Messiaen in order to create a new, more consistent means of expression. This desire is based upon the aesthetic concepts of consistency, dissociation and renewal. It is based on consistency due to Boulez's attempt to apply the same logic to pitch as rhythm and to arrive at overall forms and styles consistent with the serial material. It is based on dissociation because the serial principle is understood as the inevitable consequence of the tendency towards the breakdown of the musical material into its ever-smaller constituent parts in an effort to rationalise technique. It is based on renewal due to a view of music history as the ever-increasing variation of the musical material, a tendency that led to Schoenberg's constant circulation of all twelve semitones in serialism. The culmination of all these ideas can be seen in Boulez's seminal work *Structures* for two pianos (first book) (1952).

²⁵⁴ ['la perspective historique indispensable pour situer le langage musical'] (My translation.) Boulez (1992) p. 4.

²⁵⁵ I discuss this later in terms of Boulez's approach to analysis. See: this dissertation p. 289.

At the limit of fertile land: *Structures première livre*

Structures (1952) not only marks a pivotal moment in Boulez's musical life but it also can be interpreted as a declaration of aesthetic intent. Shortly, I shall consider the main aesthetic issues represented by *Structures* and in the conclusion I shall return in more detail to this work in consideration of his mature aesthetic theory. Before then, I would like to discuss briefly some of the historical context leading to the composition of this work.

Although perhaps the most famous, Boulez's *Structures* was not the first 'total serialist' work to be composed.²⁵⁷ Several other works had, to varying degrees of consistency, serialist or 'proto-serialist' features. The most obvious work, and the composition containing the seed which would ultimately grow into the first book of *Structures*, is Messiaen's *Mode de valeurs et d'intensités* (1949).²⁵⁸ The most striking innovation in *Mode de valeurs et d'intensités* is the numerical organisation of not only pitch but also duration, dynamics and articulation. Notably, Messiaen uses the idea of duration not rhythm with a range from a demisemiquaver to a dotted crotchet.²⁵⁹ All these features would later become exactly reproduced in *Structures*. However, unlike *Structures*, *Mode de valeurs et d'intensités* cannot be strictly considered serial as it uses a mode of 36 pitches, 24 durations, 12 methods of articulation and 7 dynamics.²⁶⁰

²⁵⁶ ['la validité temporaire, provisoire, de toute étape dans l'évolution de ce langage.'] (My translation.) Boulez (1992) p. 4.

²⁵⁷ Philippot is therefore wrong in his assertion that Boulez was the first to apply the series to sound components other than pitch. One might argue that it was Messiaen, unwittingly or, perhaps more convincingly, Goeyvaerts. See: Philippot (1966) p. 157.

²⁵⁸ For the purposes of this dissertation, I consider only the developments towards total serialism that either influenced Boulez directly or are an indication of the cultural climate in which he moved. Therefore, I have ignored the earlier development of total serialism by Milton Babbitt whose essay 'The function of set structure in the twelve-tone system' was published in 1946 and was soon followed by *Three compositions* for piano (1947) and *Compositions for four instruments* (1948), both total serialist works. I would argue that Babbitt's essentially empirical approach is significantly different from Boulez's approach which is grounded in a French artistic tradition.

²⁵⁹ See: Toop (1974) p. 147 (in English).

²⁶⁰ See: Koblyakov (1990) p. 110 (in English).

Between Messiaen's work in 1949 and Boulez's work in 1952 several other 'proto-serialist' works were composed. Arguably the first European total serialist work was *Nr. 1, Sonata for 2 Pianos* (1950-51) written in the winter of 1950-51 by Karel Goeyvaerts (1923-93). The impetus for the composition of this work had been Goeyvaerts' attendance of Messiaen's Analysis class in 1947, only two years after Boulez had left.²⁶¹ Both Goeyvaerts and Boulez responded to Messiaen's teachings with remarkably similar approaches. In *Nr. 1, Sonata for 2 Pianos*, Goeyvaerts applied abstract numbers to the various sound components and, according to Toop, reflected the 'crossing' structures of the serial permutations in the musical form. In other words, Goeyvaerts, like Boulez, was striving to achieve consistency between material and form. However, the overall form remained an inherited formal schema of four-movement sonata form. Nevertheless, Stockhausen was very impressed with Goeyvaerts' composition and performed it with Goeyvaerts at the Darmstadt Summer School in 1951. On the occasion of the performance, Stockhausen also explained the principles to an audience which did not include Boulez (who did not visit the Darmstadt Summer School until 1952) but did include Adorno.²⁶² Later that autumn, Stockhausen wrote *Kreuzspiel* (1951) which is based on a 'crossing' form similar to Goeyvaerts' work.²⁶³ At around the same time, Boulez's composition *Polyphonie X* (1951) was premiered at Donaueschingen on 6. 10. 1951 which was the first work to extend serialism to instrumentation. This work was subsequently withdrawn. Boulez next began work on *Structures*, which, like Goeyvaerts' work, uses two pianos, and was premiered at Boulez's first attendance of the Darmstadt Summer School in 1952.²⁶⁴

Structures, in particular the first piece *Structure 1a*, constitutes the culmination of Boulez's obsession with consistency and *necessity* at this time. Boulez acknowledges this when he writes that 'I wrote in those years of "purification" my

²⁶¹ See: Delaere (1996) p. 2 (in English).

²⁶² See: *ibid.*

²⁶³ This is noted by Toop who adds that Stockhausen's work is arguably more similar to Messiaen's *Mode de valeurs et d'intensités* (1949). See: Toop (1974) pp. 159-164 (in English).

²⁶⁴ The premiere only included *Structures 1a* (1952) and was on 4. 5. 1952.

first book of *Structures*.²⁶⁵ He attempts to make every aspect of the work become *necessary* by 'purifying', or 'annihilating', as far as possible every personal choice. This is an attempt to annihilate the *chance* aspect of the inherited material. He argues that *Structure 1a* was:

an attempt [...] to question everything, to wipe the slate clean of one's heritage and begin from zero in order to see how one can reconstitute writing to begin from a phenomenon that has annihilated the individual invention.²⁶⁶

The 'annihilation of the individual invention', or as Boulez describes elsewhere as the annihilation of the 'purely "personal", the accidental',²⁶⁷ begins even with his choice of musical material. He deliberately takes the modal theme from Messiaen's *Mode de valeurs et d'intensités* in order to use, as Boulez describes, 'a material that I had not invented'.²⁶⁸ This theme becomes the 12 note series from which each note is given its ordinal number. He then uses all 12 transpositions of the series to create the original matrix and by inverting the series, the inversion matrix. By reading either matrix from right to left one arrives at the retrograde series. In total, there are 48 serial permutations which he subsequently applies to duration by multiplying the basic rhythmic unit of the demisemiquaver by the number in the series. This arbitrary transplantation of the 12 numbers derived from the 12 semitones of pitch applied to duration and the impossibility of hearing rhythmic 'transpositions' in a similar manner to pitch emphasises the overtly rational approach that Boulez adopts. Dynamics are then assigned twelve different values from *pppp* (1) to *ffff* (12). Again, the vague relative field of dynamics in which distinct values cannot be articulated, unlike pitch, suggests Boulez's 'annihilation of the individual invention'. As if to emphasise this point, he assigns a number to 12 different types of articulation which is not only patently arbitrary but also virtually impossible to realise on a piano.

²⁶⁵ ['J'écrivis dans ces années d'"épuration" mon premier livre de *Structures*.'] (My translation.) Boulez (1963e) p. 563.

²⁶⁶ ['un essai [...] remettre tout en cause, faire table rase de son héritage et recommencer à partir de zéro pour voir comment on peut reconstituer l'écriture à partir d'un phénomène qui a annihilé l'invention individuelle.'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 70.

²⁶⁷ ['purement "personnelle", accidentelle'.] Boulez (1963e) p. 563.

One can see that Boulez's attempt to 'annihilate' as far as possible the 'purely "personal"' is based on automatism. This automatism refers to the automatic generation of musical structures as found in the use of grids of series in *Structures*.²⁶⁹

Boulez drew two primary conclusions from his exploration of total serialism, or more accurately 'total consistency'.

The first major conclusion is that, in striving for total aesthetic consistency in which every aspect becomes necessary, one eliminates the element of surprise, an element Boulez highly values. The loss of surprise is the loss of the possibility of arriving at a work which contains something new and unforeseen. This loss occurs because, in seeking to be completely consistent, the composer must have a complete plan of the work to be composed before the task of composition begins. This situation is particularly apparent in *Structure 1a* in which he more or less follows his pre-planned serial scheme. I would argue that one piece of evidence pointing to the fact that Boulez understands this work in this way is the subtitle he considered giving to *Structures*, which I would now like to consider.

According to Boulez, as he was coming to the end of writing *Structures* he noticed that his rigorous approach to the material was echoed in Klee's painting entitled 'À la limite du pays fertile' ['At the Limit of Fertile Land'].²⁷⁰ He considered using Klee's title as the subtitle for his own work but subsequently decided not to use it. Boulez's writings on Klee's painting can, therefore, be understood as providing an insight into his own attitude towards his own *Structures*. Boulez argues that if one cannot avoid the 'pitfall that is obedience to a desire for structuration without poetic [...] one certainly finds oneself *at the limit of fertile land*. [...] However, if the

²⁶⁸ ['Je disposais donc d'un matériau que je n'avais pas inventé'.] (My translation.) Boulez in: Boulez and Deliège (1975) p.70.

²⁶⁹ I shall examine this notion in detail in chapter II. See: this dissertation p. 102.

²⁷⁰ See: Boulez (1989c) pp. 169-175 (in French).

structure forces the imagination to enter a new poetic, one is, in effect, *in fertile land*.²⁷¹ This is the claim that the composer must take a rational and consistent approach to music in order to arrive at a 'new poetic' which is 'in fertile land' but, at the same time, this rational approach should not eliminate the possibility of something new emerging. The need to use 'fertile' ideas, which can generate new unforeseen ideas, is an important aspect in Boulez's mature aesthetic theory and one I shall examine later.²⁷²

One can see that through his exploration of the principle of consistency Boulez formed the conclusion that the unforeseeable result of the compositional process was something he wished to retain. This unforeseeability comes both from rationalisation, i.e. through *necessity*, and also through the composer responding to the particular qualities of the musical material at his disposal during the process of composition. The notion of the composer taking a rational and consistent approach in order to arrive at new unforeseen ideas whilst still being able to respond to the demands of the material is the seed of what would become his consciously dialectical theory to be examined in chapter III.

The second major conclusion Boulez drew from *Structures* is that the rigorous application of the principle of consistency inevitably leads to inconsistency. He writes that this conclusion was 'one of the fundamental experiences in my life as a composer.'²⁷³ I would argue *Structure 1a* represents the pinnacle of his fixation with the principle of consistency. However, it quickly became obvious that in the midst of this rationality, irrationality slipped through. He writes in a passage that I shall analyse in more detail later:

²⁷¹ ['l'écueil qu'est l'obéissance à un désir de structuration sans poétique [...] on se situe [...] *à la limite du pays fertile*. [...] Au contraire, si la structure force l'imagination à entrer dans une nouvelle poétique, alors, on est, en effet, *en pays fertile*.'] (My translation.) *Ibid.*, p. 175.

²⁷² See: this dissertation p. 211. As I examine later, the term 'fertile' is associated in Boulez's writings with fertile 'proliferations', itself an idea connected with automatism (the automatic proliferation of musical structures). It is interesting to note that the idea of being 'at the limit of fertile land' probably refers to the limit of the fertile proliferation of musical automatism.

²⁷³ ['une des expériences fondamentales dans ma vie de compositeur.'] (My translation.) Boulez in: Boulez and Deliège (1975) pp. 71-72. Boulez is explicitly referring to his recognition that automatism leads towards *chance*.

Desperately, one tries to dominate one's material by an arduous, sustained and vigilant effort, and desperately chance persists, sneaking in through a thousand unfillable cracks.²⁷⁴

Perhaps the main example of this is the seemingly random sonic results of much of *Structures*. He also lost considerable control over the musical material which led to 'total absurdity'.²⁷⁵ It was clear to Boulez that total consistency was impossible. He makes this point in the following statement in which it appears he cannot bring himself to use the term 'total serialism' and instead favours the term 'Gesamtkunstwerk' (total artwork). He writes that 'this is, perhaps, the definitive lesson of the Gesamtkunstwerk – that the total work of art exists only in the fiction of an absolute that is slipping away'.²⁷⁶ Therefore, Boulez was forced into re-evaluating what had been to this point his primary aesthetic principle: consistency. His response was to find a way of overcoming this inconsistent and unrationalised element by adopting a dialectical approach. His dialectical approach, the focus of chapter III, would crystallise in 1957. In his transition towards this new approach, he would draw heavily on the experiments of Cage, but more profoundly on the writings of Mallarmé. Mallarmé's writings display a preoccupation with the concept of the unrationalised, which he called *chance*.

²⁷⁴ ['Désespérément, on cherche à dominer un matériau par un effort ardu, soutenu, vigilant, et désespérément le hasard subsiste, s'introduit par mille issues impossibles à calfeutrer...'] (My slight alteration to the translation.) Boulez (1957a) p. 411 (in French) and p. 30 (in English).

²⁷⁵ ['l'absurdité totale'.] Boulez (1963b) p. 22 (in French) and p. 25 (in English). Boulez, speaking of his own experience, acknowledges that 'when I began to work with total serialism and all the parameters, it was no longer possible to control anything.' Boulez in: Boulez and Gable (1985-86) p. 111 (in English).

²⁷⁶ ['C'est peut-être, en définitive, la leçon du *Gesamtkunstwerk*: l'œuvre d'art totale n'existe que dans la fiction d'un absolu qui se dérobe.'] (My modified translation.) Boulez (1970a) p. 273 (in French) and p. 259 (in English).

CHAPTER II: STOCKTAKINGS AND CHANCE (1952-57)

At the end of the previous chapter, I established that by 1952 Boulez had reached 'the limit of fertile land' with his approach to musical composition. He recognised that in attempting to be completely consistent and make every musical feature *necessary* he lost the *freedom* to respond to unforeseen developments during composition. Second, he discovered that his notion of consistency inevitably led to inconsistency, i.e. *chance*. This latter recognition was a turning point in Boulez's thought. Consequently, his aesthetic conception of music required a change of direction in order to surmount these two problems. Between the years 1952 and 1957, Boulez's approach becomes consciously dialectical, a transition that can be traced in his writings dating from this time. Whilst I shall investigate the source of this dialectic in chapter V,¹ the emergence of this transitional process in his writings is the subject of this chapter.

In part 1, 'Stocktakings', I consider ten of the eleven articles from this period. My primary concern in this part is to examine the emergence of Boulez's shift towards a consciously dialectical approach. I also consider several key themes in these articles such as his desire to synthesise the various sound components sympathetically and the continued development of aesthetic ideas that appeared in writings before 1952.

Part 2 is entitled '*Chance*' and draws primarily from one article, 'Aléa' (1957), the first text displaying Boulez's mature dialectical theory. Although, unlike the ten texts I considered in part 1, 'Aléa' is not transitional in nature, it does work through Boulez's train of thought leading up to his current conception of chance. I shall examine, therefore, 'Aléa' in detail during the course of this chapter.

Part 1: Stocktakings

Five of the ten articles dating from 1952 to 1957 constitute some of Boulez's most famous writings. These are 'Éventuellement' (1952), 'Tendances de la musique récente' (1953), 'Auprès et au loin' (1954), 'Recherches maintenant' (1954) and 'À la limite du pays fertile' (1955). What is noticeable about these five articles is that they attempt to provide a broad summary, or 'synthesis',² of current developments in music and their possibilities for the future. I would argue that this common feature is indicative of Boulez's attempts to rationalise his own aesthetic approach at this time and move towards a consciously dialectical conception of music. In a comparable manner, all five articles also confront the task of 'synthesising' the different sound components (i.e. pitch, duration, timbre etc.) in a way that takes into account their different characteristics. I would like to consider these five 'synthesising' articles first before I consider the other five texts.

'Éventuellement' (1952) is one of Boulez's most important articles, as it is his first text to attempt to provide an overall view of the developments in music up to that time. It was written just after *Polyphonie X* (1951) and *Structures* (1952)³ and focuses upon many of the technical concerns of these works in addition to the forthcoming composition *Le marteau sans maître* (1952). The title of this essay is a particular source of intrigue. Breatnach appears to translate it incorrectly as 'Eventually', as she claims it suggests the ideas discussed in the article will 'ultimately prove irrefutable'.⁴ The best English translation for 'Éventuellement' is 'Possibly', which, I would argue, refers to the possibilities available to the composer

¹ See: this dissertation p. 383.

² I use the term synthesis as it is a key feature in Boulez's mature dialectical theory. For my examination of Boulez's concept of synthesis see: this dissertation p. 199.

³ According to Deliège, 'Éventuellement' (1952) was written shortly after the completion of *Structures* (1952). See Deliège in: Boulez and Deliège (1975) p. 69. If this is accurate, Boulez must have written this considerable text at a fair pace in the Spring of 1952. This is because he completed *Structures* in the early part of 1952 and 'Éventuellement' was published in May of the same year. For musical examples from *Polyphonie X* (1951) see: Boulez (1952c) pp. 274-277 (in French) and pp. 121-124 (in English); For musical examples from *Structures* (1952) see: Boulez (1952c) pp. 268-273 (in French) and pp. 116-120 (in English); For musical examples from *Le marteau sans maître* (1955) see: Boulez (1952c) pp. 282-284 (in French) and pp. 128-129 (in English).

that Boulez maps out. In the term 'Éventuellement' there is also the connection between the concept of chance, that is, of possibilities which may or may not occur.⁵ This is perhaps not as obvious with the English word 'Possibly'. Although I examine his thoughts on chance in part 2, it is important to be aware that, even in 1952, Boulez was preoccupied with this concept, both in the writings of Mallarmé and also through his correspondence with Cage.⁶

Several themes in 'Éventuellement' appear in earlier articles. The most conspicuous is Boulez's reiteration of the statement he made in 'Schoenberg is Dead' that 'any musician who has not experienced – I do not say understood, but truly experienced – the necessity of twelve-tone language is USELESS.'⁷

However, the subject occupying most space in 'Éventuellement' is rhythm. Boulez provides several musical examples from his own compositions and shows different means of developing rhythmic ideas.⁸ He attributes many developments in rhythm to Cage and Messiaen. In particular, Messiaen is the acknowledged source of the ideas of 'modes of duration' and 'durational dialectic'.⁹ The former idea seems to refer to the way in which rhythm gains a functional value (i.e. is made *necessary*) by the creation of rhythmic 'modes', in other words rhythmic series. The latter refers to Messiaen's establishment of hierarchies of note-values in order to develop music. Whilst noting the term 'dialectic', to which I shall return shortly, this is the first occasion on which Boulez uses the specific term 'duration' [durée].¹⁰

⁴ Breatnach (1996) p. 4 (in English).

⁵ This meaning is clear in the related German word 'Eventualität' which approximately corresponds to the English 'Contingent'.

⁶ Indeed, it is in 1952 that one of the most infamous experiments into chance was premiered: Cage's 4'33".

⁷ ['tout musicien qui n'a pas ressenti – nous ne disons pas compris, mais bien ressenti – la nécessité du langage dodécaphonique est INUTILE.'] Boulez (1952c) p. 265 (in French) and p. 113 (in English). For my discussion of this statement in chapter I see: this dissertation p. 66.

⁸ See above for page references for the musical examples.

⁹ ['modes de durées', 'une dialectique de la durée'.] *Ibid.*, p. 289 (in French) and p. 134 (in English).

¹⁰ For the several occasions on which this term appears see: *ibid.*, pp. 280-281 (in French) and pp. 126-127 (in English). Earlier, I suggested this term may have come from Cage. See: this dissertation p. 62.

'Éventuellement' contains the first explicit description of the 'phenomenon of dissociation'.¹¹ He argues that this phenomenon can be seen in Stravinsky's rhythmic developments which weakened metre and the Second Viennese School developments into atonality and serialism which weakened tonality. He states this clearly when he writes, referring to these two developments, that 'this phenomenon of dissociation has been a powerful force in the evolution of both structural methods.'¹² Although he does not state it explicitly, Boulez is clearly linking the phenomenon of dissociation with the historical *necessity* of serialism.

As in 'Incipit' (1952), Boulez refers to the idea of 'sound and silence'. He now defines silence as 'the absence of sound'¹³ which refers to the absence of features such as a particular register or timbre in a work by means of which, through the presence and absence of this feature,¹⁴ the composer articulates form. As I noted earlier, the integration of this idea into his aesthetic argument appears greater in this article than in 'Incipit', which is contrary to what one would expect, as 'Incipit' was published after 'Éventuellement'. There are three possible reasons for this. First and most obviously, 'Éventuellement' is much more extensive than 'Incipit' and consequently he has greater scope for developing his ideas more convincingly. Second, 'Incipit' may have been written before 'Éventuellement' despite being published afterwards. Establishing the chronology of when Boulez wrote his articles is very difficult, as on many occasions texts have been published months or years after they were originally written. Third, it is also possible that he was asked to write 'Incipit' at short notice in order to publicise a concert of Webern's music in New York, and therefore it was written rather hurriedly.

As well as there being several themes traceable to earlier articles, 'Éventuellement' is highly important, as it introduces several new themes. Indeed, I would argue that these new themes mark a significant change in Boulez's aesthetic outlook, and

¹¹ ['phénomène de dissociation'.] Boulez (1952c) p. 266 (in French) and p. 114 (in English).

¹² ['phénomène de dissociation a servi puissamment l'évolution de l'un de l'autre élément structurel.'] *Ibid.*, p. 267 (in French) and p. 114 (in English).

¹³ ['absence de son'.] (My translation.) *Ibid.*, p. 278 (in French) and p. 125 (in English).

constitute the initial step towards a dialectical conception of music in response to the lessons of *Structure 1a* (1952).¹⁵

The most conspicuous of these is Boulez's concern with integrating the different sound components in a way sympathetic to their different characteristics.¹⁶ This is substantively different from his desire before 1952 to attempt to reduce all the sound components to the same serial principle. This new concern appears in all of the five 'synthesising' articles from this time.

Another interest emerges in the short penultimate section: new music technology. This constitutes Boulez's first published discussion of the idea of using new technology for musical composition.¹⁷

Several terms also make their first appearance in this article which would be used extensively in Boulez's most complete explication of his musical technique, *Penser la musique aujourd'hui* (1963). First, he uses the term 'sound-complex' in preference to the term 'chord',¹⁸ as the former avoids the tonal connotations of the latter. Later, he acknowledges that this term is from Cage.¹⁹ Second, Boulez discusses the idea of 'multiplication' (superimposing musical structures to derive other structures).²⁰ Third, the notion of the 'field of variations'²¹ refers to the 'field' in which sound 'objects' can occur. The idea of defining a 'field' in which sound objects are subsequently placed is important, and I examine it in detail in chapter IV.²² Fourth, he uses the terms morphology and syntax, together with rhetoric.²³

¹⁴ For my discussion of Boulez's concept of presence and absence see: this dissertation p. 313.

¹⁵ I would therefore disagree with Piencikowski who argues that 'Éventuellement' is the 'crystallisation' of Boulez's earliest stage of aesthetic development. See: Piencikowski (1991a) p. xviii.

¹⁶ See: Boulez (1952c) p. 268 (in French) and p. 115 (in English).

¹⁷ See: *ibid.*, pp. 290-293 (in French) and pp. 135-138 (in English). For my examination of Boulez's conception of the role of music technology see: this dissertation p. 345.

¹⁸ ['complexes de son'.] *ibid.*, p. 282 (in French) and p. 128 (in English). In preference to 'accord'.

¹⁹ See: *ibid.*, p. 290 (in French) and p. 135 (in English).

²⁰ ['multiplions'.] *Ibid.*, p. 283 (in French) and p.128 (in English). For my consideration of this idea see: this dissertation p. 314.

²¹ ['champ des variations'.] *Ibid.*, p. 284 (in French) and p. 130 (in English).

²² See: this dissertation p. 304.

Of all the ideas that appear in 'Éventuellement', the most important and most profound in terms of the formation of Boulez's aesthetic approach is the first published airing of the principle of the dialectic.²⁴ Instantly, one's attention is drawn to this term when he writes of 'a dialectic between sound and silence'.²⁵ However, another passage describes the dialectical process more fully but omits the specific term 'dialectic'. At the conclusion of this article, he writes that:

A consciously organising logic is not something independent of the work, it contributes to its creation, it is related to it in a two-way circuit; for it is the need to pin down what one wants to express that causes the evolution of technique; this technique reinforces the imagination, which then projects itself towards the previously unperceived; and, in this way, in an endless play of mirrors, creativity pursues its course; a living and lived organisation, allowing every possible acquisition, enriched at every new experience, self-completing, self-modifying, changing even its emphasis.²⁶

Although this is a description of the dialectical process, like the abrupt appearance of Cage's notion of 'sound and silence', its arrival seems rather unprepared in relation to Boulez's earlier texts. It would be several years before Boulez would come to re-evaluate fully his compositional approach towards one that is consciously dialectical. This first step towards a dialectical conception of music can be understood as his response to the loss of *freedom* and the unforeseen experienced during his attempts to achieve consistency in *Structure 1a* (1952). His solution is to

²³ For example, Boulez refers to 'the search for a dialectic between morphology, syntax and rhetoric'. ['Rechercher une dialectique entre la morphologie, la syntaxe, et la rhétorique'.] See: Boulez (1952c) p. 272 (in French) and p. 119 (in English). For my discussion of these terms see: this dissertation p. 298.

²⁴ It should be noted that an earlier appearance of the term 'dialectic' unpublished until 1991 appears in a letter from Boulez to Cage in 1951. See: Boulez (1951b) p. 139 (in French) and p. 141 (in English).

²⁵ ['une dialectique du son et du silence'.] Boulez (1952c) p. 278 (in French) and p. 125 (in English).

²⁶ ['Une logique consciemment organisatrice n'est pas indépendante de l'œuvre, elle contribue à la créer, elle est liée à elle dans un circuit réversible; car c'est le besoin de préciser ce que l'on voudrait arriver à exprimer qui amène l'évolution de la technique; cette technique renforce l'imagination qui se projette alors vers l'aperçu; et, ainsi, dans un jeu de miroirs perpétuel, se poursuit la création; organisation vivante et vécue, laissant possibles toutes les acquisitions, s'enrichissant à chaque nouvelle expérience, se complétant, se modifiant, changeant même d'accentuation.'] (My modifications.) *Ibid.*, p. 295 (in French) and pp. 139-140 (in English).

reintroduce the composer's ability to respond to the particular characteristics of the musical material during composition. That is to say, the composer's conception of the material is shaped by the material, which itself is shaped by the composer's conception of it. This results in a musical work hitherto unforeseen before the process of composition.²⁷ The unforeseen aspect is a feature which is not only desired by Boulez but is highlighted in 'Éventuellement' as the defining criterion of what constitutes a work. In a phrase I have quoted elsewhere, he writes that 'creation exists only in the unforeseeable becoming necessity'.²⁸ This statement summarises Boulez's attitude towards the unforeseen and his conception of the dialectic. On the one hand, the composer must rationalise his material, in other words the composer and the material must engage in a dialectical relationship, in order to arrive at the unforeseen. On the other hand, the composer must not adopt a rational approach that eliminates the unforeseen (and the unforeseeable). I would argue this is a fundamental shift in his aesthetic framework. Rather than desiring total *necessity*, which involves the complete prescription of the musical work before composition, Boulez seeks to reintroduce his own choice by means of a dialectical conception of music. Although the fruits of this transition can first be seen in 'Aléa' (1957), it is most comprehensively described in the lectures he presented at the Darmstadt Summer School in 1960. These lectures constitute the main source of my examination of Boulez's mature aesthetic theory in chapter III.²⁹

After 'Éventuellement', the next article to summarise and synthesise the situation of music in the early 1950s is 'Tendances de la musique récente' (1953). Unlike the former text, 'Tendances de la musique récente' is much shorter and contains no musical examples. The primary concern, as in 'Éventuellement', is with establishing a relationship between the various sound components. Again, as in 'Éventuellement', he relates Stravinsky's rhythmic developments and serial pitch

²⁷ I discuss the concept of unforeseen in chapter III. See: this dissertation p. 207.

²⁸ ['il n'y a de création que dans l'imprévisible devenant nécessité.'] (My translation.) Boulez (1952c) p. 288 (in French) and p. 133 (in English).

²⁹ See: this dissertation p. 137.

developments to the concept of dissociation.³⁰ He explains that specifically concerning rhythm, the phenomenon of dissociation manifests itself in Stravinsky's desire to utilise material that is more malleable.³¹

Another theme that Boulez considers in 'Tendances de la musique récente' is the possibility of using tunings based on a system other than equal temperament. He asks himself:

Why indeed should one regard as inviolate a decision which has rendered immense service but has no *raison d'être*, since the tonal organisation which required such standardisation is now practically destroyed?³²

This criticism is based on the principle of consistency between equal temperament and tonality, as the former enabled the possibility of modulations in the latter. Boulez does not appear to recognise that the twelve-tone technique is inherently founded upon equal temperament and therefore, I would suggest, the abandonment of equal temperament undermines the justification for serialism. He continues by citing the examples of Varèse and Cage as two composers that attempted to break free of the inherited tuning system.³³ Whilst Varèse and Cage turned to percussion instruments in order to avoid equal temperament, Boulez is enthusiastic about the possibilities made available since the advent of electronic musical equipment.³⁴

Towards the end of 'Tendances de la musique récente', Boulez returns to the task of establishing a satisfactory relationship between the various sound components. He refers to the often-cited criticism of serial works: the omnipotence of the number

³⁰ See: Boulez (1953b) p. 165 (in French) and p 173 (in English).

³¹ See: *ibid.*, p. 166 (in French) and p 174 (in English).

³² ['Pourquoi, en effet, considérer comme tabou cette décision qui a rendu d'immenses services, mais a perdu désormais sa raison d'être, l'organisation tonale qui avait commandé cette normalisation étant pratiquement détruite?'] Boulez (1953b) p. 168 (in French) and p. 176 (in English).

³³ See: *ibid.*, pp. 166-167 (in French) and pp. 174-175 (in English).

³⁴ I discuss the use of percussion and new technology as a means of avoiding sedimented musical ideas elsewhere. See: this dissertation p. 347.

twelve.³⁵ This peculiarity, of course, is due to beginning with the twelve semitones as the material for all the other sound components. He argues that if the composer can arrive at a more subtle conception of integrating the different sound components which takes into account their various characteristics, 'serial thinking can at last escape the number twelve'.³⁶ I would argue that this is the beginning of Boulez's climb-down from a strictly serial conception of music, a process that would last many years. Clearly, he still passionately insists (to this day) upon the *necessity* of uniting the various components of sound and the various technical acquisitions of the musical language generally. However, whether or not this remains within what one might expect the definition of 'serialism' to encompass is unclear. For example, if the composer works with pitches that are not part of equal temperament or are not precisely delimited, as he suggests earlier in the same article, can one persist in the idea of the series? Boulez provides what, I would suggest, constitutes his own redefinition of serialism:

in the end it is not the twelve notes that are paramount, so much as the serial idea itself, the idea, that is, of a sound universe, specific to each work, derived from a phenomenon that is undifferentiated until the moment the series is chosen, at which point it becomes unique and essential.³⁷

In this statement Boulez seems to be advocating a characteristic of the serial technique, the avoidance of any *a priori* sound universe, rather than the idea of the series itself, i.e. a series of notes or values that are permuted.

Like the two previous articles I have considered, 'Auprès et au loin' (1953) is primarily concerned with the problem of establishing relations between the sound

³⁵ Cage refers to this problem in the following: 'Do you agree with Boulez when he says what he says?/ Are you getting hungry?/ Twelve. Why should you (you know more or less what you're going to get)?/ Will Boulez be there or did he go away when I wasn't looking?/ Why do you suppose the number 12 was given up but the idea of the series wasn't?'. Cage (1958a) p. 46 (in English).

³⁶ ['cette pensée sérielle peut enfin sortir du chiffre douze']. Boulez (1953b) p. 170 (in French) and p. 177 (in English).

³⁷ ['En définitive, ce ne sont pas les douze sons qui ont la plus grande importance; bien plutôt, la conception sérielle; soit la notion d'un univers sonore – propre à chaque œuvre – se fondant sur un

components that are sympathetic to their individual characteristics. In addition to this concern, he is clearly considering the issue of *chance* in the musical composition. He proposes that '[w]e might [...] regard a piece of music as a succession of rejections among many probabilities.'³⁸ Heyworth, commenting on this phrase in particular, suggests that Boulez's argument merely displays the 'fine sense of the obvious'.³⁹ What Heyworth fails to appreciate is that Boulez's statement should be regarded within his views on chance generally and not decontextualised. This statement addresses the problem of 'automatism', the automatic generation of musical structures by the consistent application of a musical logic (à la *Structure 1a*) from which a work can result. Whilst Boulez argues it is vital to attempt to be consistent and rational, the composer cannot merely present the completion of this logic as a musical work itself. He must plot his pathway through these possibilities by accepting or rejecting them. I discuss in detail these ideas in part 2 of this chapter.⁴⁰

'Recherches maintenant' (1954) is a short text written in Boulez's more polemical and consciously 'literary' style in comparison to many of his other texts dating from this period. This is probably because it was written for the non-specialist audience of *La nouvelle revue française*. It shares many of the themes that appear in the three texts I have already discussed, in particular the concern with establishing sympathetic relationships between the sound components. This article is most notable for the first mention of the idea of the 'formant' as the model of sound which avoids the inherited model of the musical theme.⁴¹ Also in this text is the first appearance of the idea of 'parentheses' that I shall discuss later.⁴²

phénomène indifférencié jusqu'au moment où l'on choisit sa série': il devient alors unique et essentiel.] *Ibid.*, p. 170 (in French) and pp. 177-178 (in English).

³⁸ ['Voyons [...] l'œuvre comme une suite de refus au milieu de tant de probabilités'.] (My slight modification.) Boulez (1954a) p. 314 (in French) and p. 157 (in English).

³⁹ Heyworth (1973) p. 15 (in English).

⁴⁰ See: this dissertation p. 102.

⁴¹ See: Boulez (1954c) p. 334 (in French) and pp. 17-18 (in English). For my discussion of this idea see: this dissertation p. 185.

⁴² See: *ibid.*, p. 335 (in French) and p. 19 (in English). For my discussion of this idea see: this dissertation p. 127.

'À la limite du pays fertile' (1955) is also concerned with synthesising recent developments in music, but within the field of electronics. I consider the arguments put forward within this article in chapter IV.⁴³

So far, I have considered five of the ten articles which date from this transitional period. All these five texts attempt to summarise and clarify the situation in music at that time. In addition, they all share common themes, in particular the desire to organise the different sound components in a way that takes into account their individual characteristics. I would now like to consider briefly the other five articles published in this period, the most important of which being 'Probabilités critiques du compositeur' (1954).

'Probabilités critiques du compositeur' is, with 'Éventuellement' (1952), the most important article dating from this period from the perspective of Boulez's aesthetic development. This is because Boulez uses for the first time several concepts that would ultimately form his consciously dialectical theory. His overall argument in this article is that the composer must possess a self-critical attitude towards his own music. In order to support this claim, he draws considerably from the writings of Baudelaire. This is the first of three main texts in which Boulez would cite from Baudelaire's writings in order to support his notion of the self-critical composer.⁴⁴ He continues by describing several features of the process of composition that I would call proto-dialectical. Initially he argues that 'the first and most immediate form of criticism is reflection'.⁴⁵ This is the initial moment of self-criticism, or, more accurately, self-reflection. Once this first stage is reached, he then claims that one must be 'impassioned'.⁴⁶ This means that the composer should proceed from his own particular reasoned point of view. Later, he also argues one must adopt a

⁴³ See: this dissertation p. 351.

⁴⁴ The other two texts being 'Alternatives' (1960) and the introduction to *Penser la musique aujourd'hui* (1963). See: Boulez (1960g) and Boulez (1963a) respectively.

⁴⁵ ['Première forme de critique, la plus immédiate: une réflexion.'] Boulez (1954b) p. 29 (in French) and p. 108 (in English).

⁴⁶ ['passionnée'.] *Ibid.*, p. 30 (in French) and p. 109 (in English).

position of 'fundamental "irrespect" (a *doute*)'.⁴⁷ This is the first mention of the concept of doubt, an important aesthetic concept I examine in detail in chapter III.⁴⁸ Finally, he argues that the composer must have a 'double' nature, i.e. a self-critical attitude.⁴⁹ The idea of the artist having his own 'double' obsessed Artaud, and led to the title of Artaud's most famous book, *Le Théâtre et son double* (1938).⁵⁰

'Probabilités critiques du compositeur' reveals Boulez's shift towards an as yet unfinished dialectical conception of music. The four remaining texts from this time are of less importance to this study. 'Expérience, autruches et musique' (1955) is a short text which, like 'Recherches maintenant' (1954), is written in a consciously 'literary' style for the general reader of *La nouvelle revue française*. He stresses the need for experiment and invention as well as the need to avoid timidity (like the ostrich burying its head in the sand).⁵¹ This call for experimentation is based on his desire to retain the unforeseen and unforeseeable within the process of composition. The title of his next article 'Première et seconde audition' (1955) broadly describes the content. He argues that one must not merely judge new works upon first listening but come to understand them better through repeated listenings. Consequently, it is important not only to premiere new compositions but also to perform them several times in order to promote them.⁵² His very short tribute to Honegger, simply entitled 'Honegger' (1956) (the composer had died the previous year), was probably written primarily due to his debt to Honegger's role in finding him work with the Compagnie Renaud-Barrault⁵³ rather than through any significant aesthetic influence. The final text from this transitional period is 'Corruption dans les encensoirs' (1956). The central argument is that the influences of Mallarmé and music from the far east on Debussy 'corrupted' the closed circuit of Western art

⁴⁷ ['un "irrespect" fondamental (un *doute*)']. *Ibid.*, p. 31 (in French) and p. 109 (in English).

⁴⁸ See: this dissertation p. 161.

⁴⁹ To support this he quotes from Baudelaire again. See: *ibid.*, p. 33 (in French) and p. 110 (in English).

⁵⁰ Also note that Boulez wrote a composition entitled 'Doubles' (1958) which was written soon after Boulez's adoption of a consciously dialectical approach. I shall return to the idea of the 'double' in chapter III. See: this dissertation p. 172.

⁵¹ See: Boulez (1955b) pp. 466-468 (in French) and pp. 430-431 (in English).

⁵² See: Boulez (1955c) pp. 461-463 (in French) and pp. 427-429 (in English).

⁵³ See: Boulez (1956a).

music for the better. This 'corruption' enabled a much wider and more open view of Western art music than before.⁵⁴

Having briefly considered all ten of Boulez's articles dating from his transitional period from 1952 to 1957, one can clearly observe his aesthetic preoccupations at this time and sense a re-evaluation of his principles prior to this period. Whilst the most conspicuous concern in these articles is with integrating the different sound components sympathetically, I would argue this is the continuation and refinement of the principle of consistency in practice. Consequently, this concern does not mark a significant shift in Boulez's aesthetic framework. However, the less noticeable move towards a dialectical approach, i.e. towards a conception of music that is both rational and unforeseen, is fundamental. The development of a dialectical conception of music, crystallising in 1957, resolves one of the two obstacles he encountered after *Structure Ia* (1952): the problem of making every musical aspect *necessary* without eliminating one's *freedom*, signalled by the appearance of the unforeseen. The other obstacle was the recognition that any attempt to be completely consistent and *necessary* results in *chance*. This is the focus of part 2 of this chapter.

⁵⁴ This refers to Boulez's advocacy of 'globalising' the composer's 'field' of view by not eliminating non-western musics. For my discussion of Boulez's attitude towards non-western musics see: this dissertation p. 247. This also touches upon Boulez's condemnation of the tendency, in the west, to create closed musical categories which he calls 'ghettos'. See: this dissertation p. 370.

Part 2: *Chance*

Boulez's theoretical reflections on the notion of *chance* primarily date from 1952 to 1957 and were influenced by several factors.

The single most fundamental influence on his conception of chance is the writer and poet Mallarmé. The preoccupation with chance occurs in numerous Surrealist and Symbolist texts. These influences are explored throughout this chapter and in chapter III.⁵⁵ Another factor was the contemporaneous research into 'complete' control which reached its culmination in total serialism. The most obvious examples are Boulez's own compositions, *Polyphonie X* (1951) and the first book of *Structures* (1952). The apparently opposite explorations into complete chance, particularly exemplified by Cage's 'work' 4'33" (1952) and his theoretical writings in general, also contributed towards Boulez's reflections upon chance, as Jameux correctly notes.⁵⁶ However, I would argue that Cage's role in this respect was chiefly in provoking Boulez to confront the problem of chance in music rather than in helping him conceptualise chance itself.⁵⁷

This section investigates Boulez's conception of chance and its sources. I begin with a consideration of Boulez's acknowledgement that chance inevitably exists within musical composition and his subsequent attempts to overcome this problem. Throughout, I shall examine the specific terminology he employs. Although I consider the aesthetic issue of chance in composition and performance in this

⁵⁵ The Surrealist interest in *chance* appears most strikingly in the advocacy of 'automatic writing' and the thematic content of works such as Breton's novel *Nadja*. See: Breton's *Nadja*: Breton (1949). I consider this Surrealist factor later. See: this dissertation p. 104.

⁵⁶ See: Jameux (1991) pp. 89-90 (in English).

⁵⁷ I would disagree, therefore, with the claim that Boulez's exploration of *chance* drew heavily from Cage but was disguised under the name of Mallarmé. This suggestion is implied by Cage himself, who is quoted by Peyser as saying: 'With me the principle [of chance] had to be rejected outright; with Mallarmé it suddenly became acceptable to him. Now Boulez was promoting chance, only it had to be *his* kind of chance.' Cage quoted in Peyser (1976) p. 129 (in English).

section, I consider the problem of chance arising in the listener's understanding of the musical work in 'Listening' in chapter IV.⁵⁸

The concept of 'chance'

Of all the terms he uses, none is more important to understand in context than one of the three primary concepts I highlighted in Boulez's writings at the beginning of this study: the term *chance* [*le hasard*] itself. It is a main source of misunderstanding of Boulez's aesthetic ideas and one of several concepts connected with chance derived from Mallarmé's writings whose theoretical roots, I would argue, draw from Hegelian philosophy.⁵⁹ It is important to have some grasp of this history in order to comprehend fully how Boulez uses this term and how he understands its implications.

First, I would like to stress that Boulez's use of the term chance does not merely correspond to the English word 'chance'. It is not only a synonym for the fortuitous meeting of different elements or an event that cannot be predicted with certainty before it occurs, i.e. the unforeseen. These connotations are, nevertheless, part of the meaning of this term but do not constitute its complete definition. At the end of the last section, I established that it refers to something that is not consistent with the rationalised musical technique of the particular composer. I would therefore propose that one begins to approach the concept of chance by understanding it as something exterior to the composer's own thought. If an element of a given artwork is not under the artist's control, i.e. it is not *necessary* and functional, that element does not have a meaning (i.e. it is meaningless). This undermines the notion of art as the expression of the *free* autonomous subject. Boulez himself seems to understand chance in this way when he describes it in 'Aléa' (1957) as that which 'does not 'compose''.⁶⁰ For a more accurate description of chance, it is helpful to consider the

⁵⁸ See: this dissertation p. 340.

⁵⁹ I consider the Hegelian influence on Mallarmé in the conclusion. See: this dissertation p. 383.

⁶⁰ Boulez refers to '*chance* which does not 'compose''. [*'ce hasard qui ne "compose" pas*']. (My translation.) Boulez (1957a) p. 419 (in French) and p. 37 (in English).

source from which Mallarmé drew the term, at least via other writers – the writings of Hegel. Hegel provides a definition of what is usually translated in English as the ‘Contingent’ and is the same concept as chance:

[T]he Contingent is something that is not self-possessed and is alien.⁶¹

The ‘Contingent’ is that which is alien - i.e. exterior - to the subject and does not belong to, or has not been ‘consumed’ by, the subject. It is because chance is not ‘self-possessed’ that results in it being an unnecessary and inconsistent element in the musical work. Boulez’s aversion to the passive acceptance of inherited musical material is based on this idea. The inherited idea is not ‘possessed’ by the composer, as it is drawn from the works of previous composers. As I shall argue later,⁶² his movement towards a dialectical approach can be understood as a means of ‘consuming’ the exterior contingent inherited material so that it becomes necessary to the composer’s thought. When the composer possesses his own material, i.e. he has complete mastery of the technical means at his disposal, he arrives at the utopia of the ‘pure work’ I discussed earlier. However, as I shall consider, Boulez arrives at the recognition that chance is contained not only in the non-self-possessed inherited material but also in the composer himself. In an article from 1963, he expands upon this by arguing chance arises through ‘the chronology of the various encounters in your life and even the chronology of that chronology’.⁶³ This affects the musical work through a composer’s distinctive musical taste and compositional mannerisms.⁶⁴ This is the same recognition at which Mallarmé arrives in his work entitled *Igitur* (1869).⁶⁵ The claim that chance is something not self-possessed and

⁶¹ [‘das Zufällige ist das Unbesonnene und Fremde’.] Hegel (1807) p. 498 (in German) and p. 431 (in English). In the remaining part of this sentence that includes this definition, Hegel provides an example of the contingent: ‘a throw of the dice’ [‘wie durch ein Würfeln’]. This is particularly interesting in consideration of Mallarmé’s famous poem ‘Un Coup de dés’ (1897).

⁶² See: this dissertation p. 159.

⁶³ [‘la chronologie de vos rencontres, et la chronologie même de votre chronologie.’] Boulez (1963d) p. 536 (in French) and p. 69 (in English).

⁶⁴ In the 1980s, Boulez calls this *chance* within the composer as the composer’s ‘gesture’. See: this dissertation p. 217.

⁶⁵ For my examination of *Igitur*, see: this dissertation p. 222.

not consistent is suggested by McCalla in the following statement, written on literature rather than music:

The elimination of *le hasard* is the exclusion of the arbitrary, and the exploration of language as its own agent, rather than as that of an ultra-linguistic reality.⁶⁶

In other words, the attempt to eliminate chance is part of the attempt to eliminate that which is exterior to the medium of expression itself, in Boulez's case the musical language. This has important consequences for his thoughts on establishing a musical technique that I examine later.⁶⁷

Having begun to consider the way in which Boulez conceives chance, I would like to analyse the primary account of his thoughts on this subject which appears in 'Aléa' (1957).

Chance: by inadvertence or automatism

The term 'aléa', presented both as the title of Boulez's article and within the text itself, was employed by Boulez to refer to chance elements within music, and this constitutes its first usage in a musical context. Etymologically, it is derived from the Latin word 'alea' meaning 'throw of the dice'. This clearly signals his debt to Mallarmé's poem 'Un coup de dés' (1897) in the conception and formulation of this term and in his thoughts on chance in general. The meaning of the term 'aléa' is arguably much more instantly accessible to the French reader than the English reader, as it forms the root of relatively common French words such as 'aléas' ('hazards') and 'aléatoire' ('uncertain'). His use of this idea in music, however, should be understood within the definition he provides in a later text from 1968: that of 'a directed chance, a controlled chance'.⁶⁸

⁶⁶ McCalla (1976) p. 57.

⁶⁷ I refer to Boulez's insistence on the use of musical models that are based only on the material of sound. See: this dissertation p. 181.

⁶⁸ ['un hasard dirigé, un hasard contrôlé'.] (My modified translation.) Boulez (1968b) p. 505 (in French) and p. 461 (in English). I would, therefore, disagree with Metzger's claim, echoed by

In the article 'Aléa', he identifies the two different ways in which chance is introduced into musical composition. The first is identified as 'chance by inadvertence', the second as 'chance by automatism'.⁶⁹ He presents these two different types of chance as if they are the two extremes of chance and total control respectively. This can be confusing, as it becomes clearer later in the same article that they are really two different means of confronting chance. His approach in 'Aléa' is to test each of these two means of confronting chance to see if they stand up to their own logic, in other words, if they are consistent with themselves.

First, Boulez is highly critical of experiments he rather misleadingly calls 'chance by inadvertence'.⁷⁰ This refers to the deliberate use of chance techniques to create music, such as throwing dice or the employment of vague notation. Most of his criticisms centre on the lack of involvement of the composer's invention. He describes the results as an 'artificial paradise [...]: a narcotic which protects against the needle prick of invention.'⁷¹ His most damning criticism is that, despite its attempt to avoid the composer's subjectivity, it always returns in the decisions involving the way chance is introduced, e.g. decisions concerning performance such as the time frame or the venue.⁷² That is to say, the composer always tends to reintroduce traditional notions of the musical work. Boulez suggests that, if one wants to arrive at 'chance by inadvertence' in every respect, 'my preference goes,

Charles, that Boulez uses the term 'aleatoric' incorrectly. Both argue that whilst Boulez calls his Third Piano Sonata 'aleatoric', a work in which the individual details are fixed but the overall form can be rearranged, the correct definition of 'aleatoric' is the opposite: a work in which the formal course is fixed but the individual details depend on chance. However, as the term 'aleatoric' was first used and defined by Boulez and is not derived from another discipline such as mathematics from which an exact definition can be drawn, it is difficult to argue that Boulez's own definition of his own term is incorrect. See: Metzger (1961) p. 26 (in English). See: Charles (1965) p. 147 (in English). Boulez notion of a 'directed chance' refers to his conception of 'mobile form'. See: this dissertation p. 107.

⁶⁹ ['le hasard par inadvertance', 'un hasard par automatisme'.] See: Boulez (1957a) p. 410 (in French) and p. 29 (in English).

⁷⁰ One could argue that 'automatism' more readily fits the description of 'accidental chance' as this chance is accidentally created.

⁷¹ ['paradis artificiel [...]: ce genre de narcotique protège, en effet, de l'aiguillon que vous inflige toute invention'.] *Ibid.*, p. 408 (in French) and p. 26 (in English).

⁷² See: *ibid.*, p. 408 (in French) and p. 27 (in English).

without question, to natural chance, which needs no *instruments* to reveal itself.⁷³ This type of chance is only consistent if one is never involved in the process of making sounds at any stage. This is clearly impossible, as even if one follows Boulez's suggestion above, the listener inevitably implants his own conceptions of music into the listening experience. Implicitly, he attacks chance techniques because, whilst they purport to eliminate the composer's subjectivity, they exist because of a subjective desire to eliminate that subjectivity. Even vague notation does not avoid this, rather the performer makes the choices instead of the composer.⁷⁴

One reference in 'Aléa', in particular, reveals to whom the main target of this criticism is directed. He argues that these experiments into 'chance by inadvertence' draw from 'a quasi-oriental philosophy in order to conceal a fundamental weakness in compositional technique'.⁷⁵ This reference to 'oriental philosophy' is also a feature of Boulez's entry for the *Encyclopedie Fasquelle* on Cage in the following year (1958).⁷⁶ As Nattiez notes, these criticisms are primarily targeted at Cage's experiments into chance procedures.⁷⁷ The attack on Cage's approach which appears in 'Aléa' was not the first criticism to appear in Boulez's writings. In a letter to Cage dating from December 1951, a time when Boulez was composing his first book of *Structures*, he already expresses his reservations about the American composer's chance procedures in his work *Music of Changes* (1951):

The only thing, forgive me, which I am not happy with, is the method of absolute chance (*by tossing the coins*). On the contrary, I believe that chance must be extremely controlled.⁷⁸

⁷³ ['Alors nos préférences vont, sans conteste, à l'inadvertance naturelle qui n'a pas besoin d'*instruments* pour se manifester.'] (My slight modification.) *Ibid.*, p. 408 (in French) and p. 27 (in English).

⁷⁴ See: *ibid.*, p. 409 (in French) and p. 28 (in English).

⁷⁵ ['l'adoption d'une philosophie teintée d'orientalisme qui masquerait une faiblesse fondamentale dans la technique de la composition'.] *Ibid.*, p. 407 (in French) and p. 26 (in English). Also in: Boulez and Cage (1993) pp. 18-19.

⁷⁶ Boulez notes that the American composer is influenced by 'oriental ideas in the thinking and form of his early works'. Boulez (1958f) p. 152 (in English).

⁷⁷ Nattiez (1993) pp. 18-19 (in English).



Throughout the 1950s, the writings of Boulez and Cage become more hostile toward each other. This hostility culminated with Boulez's 'Aléa' (1957) and Cage's sarcastic response in his lectures at the Darmstadt Summer School in 1958.⁷⁹ I shall compare the differing conceptions of chance of Boulez and Cage at the end of this section.⁸⁰

The second way in which chance is introduced into musical composition is identified by Boulez as 'chance by automatism'. This refers to the manipulation of sound components through the use of serial grids and numbers in total serialism. Like his attitude towards 'chance by inadvertence', he is highly critical of this approach that he describes as 'mechanistic, automatic, fetishistic'.⁸¹ However, he does not reject out of hand number grids, or the automatic generation of musical structures generally, indeed he claims they are necessary to help organise the sound world of the work. On this point, his argument can be tracked back as early as 1951 to the following passage, also notable for the first mention of the term 'automatism' in his writings:

We may therefore conceive of musical structure from a dual viewpoint – on the one hand the activities of serial combination where the structures are generated by automatism of the numerical relations. On the other, directed and interchangeable combinations where the arbitrary plays a much larger role.⁸²

⁷⁸ Boulez (1951c) p. 112 (in English).

⁷⁹ In addition to the passage I cited earlier mocking the serial fixation with the number 12 (see: this dissertation p. 91). Cage mentions Boulez in another text from Cage's 1958 Darmstadt Summer School course: 'Who's interested in Satie nowadays anyway? Not Pierre Boulez: he has the twelve tones, governs Le Domaine Musical'. Cage (1958b) p. 65 (in English).

After Boulez's mention of Cage in 'Aléa' in 1957, Boulez very rarely mentions him again in his writings. For example, Boulez only refers once to Cage in *Jalons* (1989) in order to provide an example of a composer who refused to distinguish between different types of musical material. See: Boulez (1989a) p. 408 (in French). An earlier reference to Cage, in 1967, appears to be Boulez's final word on their disagreement and merely reads: 'Take John Cage, who is a particularly interesting case. Before he became infatuated with Zen and employed a technique of rhythmic sequences borrowed from the raga, he wrote interesting works.' Boulez (1967) p. 422 (in English).

⁸⁰ See: this dissertation p. 133.

⁸¹ ['mécaniste, automatique, fétichiste'] Boulez (1957a) p. 409 (in French) and p. 28 (in English).

⁸² ['On peut donc concevoir la structure musicale sous un double point de vue: d'un côté les activités de combinaison sérielle, avec engendrement des structures par automatisme des relations numériques; d'autre part, les combinaisons dirigées et interchangeables, où l'arbitraire joue un rôle beaucoup plus considérable.'] Boulez (1951b) p. 139 (in French) and p. 141 (in English).

In this passage, Boulez adopts a favourable attitude towards the generation of numerical relations by automatism. It is only when this automatism is used exhaustively and reduces the imagination of the composer to a minimum that it becomes problematical.⁸³ By 1954, he begins to state this worry with greater concern: 'technique is becoming a screen, a much-needed shelter from more awkward questions.'⁸⁴ In another article dating from the same year he expands upon this idea: '[c]ertainly a coherent system is a necessary prelude to composition; but that does not mean that the system has to be pursued to its ultimate conclusion from that moment on.'⁸⁵

Returning to 'Aléa' in 1957, Boulez writes:

Composition aspires to the most perfect, polished, irreproachable objectivity. [...] Schematisation simply takes the place of invention; imagination, a mere servant, limits itself to giving birth to a complex mechanism, which in turn takes in the task of generating microscopic and macroscopic structures until the exhaustion of all possible combinations marks the end of the work.⁸⁶

This criticism of the aspiration towards aesthetic 'objectivity' would continue into the 1960s in his Darmstadt lectures and *Penser la musique aujourd'hui* (1963). In his Darmstadt lecture entitled 'Forme' (1960), Boulez argues that musical compositions displaying a 'fetishistic' preoccupation with numbers and the principle

⁸³ See: Boulez (1963e) p. 573 (in French).

⁸⁴ ['la "technique" devient paravent, abri souhaité pour se protéger de questions plus délicates à envisager'.] Boulez (1954c) p. 331 (in French) and p. 15 (in English). The reference to the 'commentary' concerns the analyses provided by composers to describe their own works.

⁸⁵ ['Un système cohérent est, de fait, préalable à toute composition; nous ne voulons pas dire que ce système doive être développé dans ses dernières conséquences dès ce moment'.] Boulez (1954a) p. 313 (in French) and p. 156 (in English).

⁸⁶ ['La composition veut tendre à la plus parfaite, à la plus lisse, à la plus intouchable objectivité. [...] La schématisation, simplement, prend la place de l'invention; l'imagination – ancillaire – se borne à donner naissance à un mécanisme complexe qui, lui, se charge d'engendrer les structures microscopiques et macroscopiques jusqu'à ce que l'épuisement des combinaisons possibles ait signalé la fin de l'œuvre.'] (My modified translation.) Boulez (1957a) p. 408 (in French) and p. 27 (in English).

of permutation do not achieve 'form' but a 'mere sampling of local structures'.⁸⁷ In other words, when the composer simply generates musical structures through automatism, the result is merely the sound of musical patterns in time. Again, he reiterates this in another lecture at Darmstadt in 1961 when he argues that 'no form is justified by the mere logic of its unfolding'.⁸⁸ When the composer loses mastery over his material by succumbing completely to a type of musical logic, i.e. a type of consistency, the resulting work is meaningless and consequently loses its *raison d'être* of expression.⁸⁹ This is, of course, the problem I identified at the end of the last chapter, that through extreme consistency the composer arrives at absurdity.⁹⁰

All of these criticisms concerning 'chance by automatism' can very easily be directed at Boulez's *Structure 1a*. (1952) Boulez acknowledges this in a letter to Henri Pousseur dating from shortly after *Aléa* was first presented at Darmstadt in which he reveals that the criticisms in '*Aléa*' are primarily targeted at himself.⁹¹

The term 'automatism' itself is of particular interest, as it is a key term in Breton's definition of Surrealism:

SURREALISM, n.m. – Pure psychic automatism by which one intends to express verbally, by writing or by any other way, the real function of thought. Dictation of thought, in the

⁸⁷ ['un simple échantillonnage de structures locales'.] Boulez (1960d) p. 364 (in French) and p. 95 (in English). In *Penser la musique aujourd'hui* (1963), Boulez refers to this problem as the 'permutations of samples'. ['permutations d'échantillons'.] See: Boulez (1963b) p. 43 (in French) and p. 42 (in English). The earliest mention of this idea appears at the end of '*Auprès et au loin*' (1954). He argues that 'A work is thus limited to being one fragment of probability among many'. ['l'œuvre se borne donc à une espèce de lambeau probable parmi tant d'autres lambeaux'.] Boulez (1954a) p. 314 (in French) and p. 157 (in English).

⁸⁸ ['aucune forme n'est justifiée par une simple logique de déroulement'.] Boulez (1961a) p. 523 (in French) and p. 58 (in English).

⁸⁹ Writing in 1989, Boulez describes the problem of automatism in precise terms: 'what is most striking is the absence of delimitation, I would say the absence of necessity. The most curious result of this schematic intervention is precisely the absence of direction, the absence of intention.' ['ce qui frappe le plus, c'est l'absence de délimitation, je dirais même l'absence de nécessité. Le résultat le plus curieux de ce dirigisme schématique est précisément l'absence de direction, l'absence d'intention.'] (My translation.) Boulez (1989a) p. 80.

⁹⁰ See: this dissertation p. 81.

⁹¹ See: Decroupet (1994) p. 155. I draw from Decroupet's extract of a letter from Boulez to Pousseur written late July 1957, shortly after Boulez's '*Aléa*' had been presented (in German) by Heinz-Klaus Metzger at Darmstadt 1957.

absence of all control exercised by reason, and outside all aesthetic or moral preoccupations.⁹²

Through 'automatism', Breton argues, the artist can escape the sedimented⁹³ ideas of the rational mind and consequently achieve a new form of expression. This notion of automatism led to the surrealist experiments in 'automatic writing' which, influenced by Freud's ideas on 'free association', avoided rationalisation by dictating the poet's 'stream of consciousness'. Stacey draws a parallel between this idea of automatism, specifically concerning Artaud's automatic writing, and Boulez's exploration of automatism in *Structures*.⁹⁴ There is unquestionably a strong connection between the automatism of surrealism and Boulez; indeed, it is probable that Boulez deliberately uses this term with surrealism in mind. Both approaches aim to achieve a new concept of expression unlimited by sedimented ideas through the annihilation of chance. However, whereas surrealism attempted to achieve this through an abandonment of rationality, Boulez opted for the Mallarméan solution of complete rationality (i.e. complete *necessity*). Similarly, whereas surrealism avoided inherited grammatical rules in the belief that one could arrive at this new form of expression immediately (i.e. 'automatically'), Boulez avoids inherited grammatical rules but then replaces them with his own. One can see that the surrealist's abandonment of rationality in 'automatic writing' is much closer to Boulez's category of 'chance by inadvertence' than 'chance by automatism'. In an interview in 1993, he makes it clear that he understands the surrealist experiments in 'automatic writing' in this way. He describes Cage's method of '*coin tossing*'⁹⁵ as the equivalent of automatic writing in literature, not his own method of generating musical structures by automatism. He continues by arguing that the problem with automatic writing in both literature and music is that it 'does not engender any grammar, and a vocabulary does not exist without grammar': consequently, it does

⁹² ['SURREALISME, n. m. Automatisme psychique pur par lequel on se propose d'exprimer, soit verbalement, soit par écrit, soit de tout autre manière, le fonctionnement réel de la pensée. Dictée de la pensée, en l'absence de tout contrôle exercé par la raison, en dehors de toute préoccupation esthétique ou morale.'] (My translation.) Breton (1924) p. 35.

⁹³ For my consideration of Boulez's conception of 'sedimentation' see: this dissertation p. 230.

⁹⁴ Stacey (1987) p. 22 (in English).

⁹⁵ (In English.) Boulez in: Boulez and Szendy (1993) p. 139 (article in French).

not express anything.⁹⁶ One notes that it is the necessity of achieving an adequate means of expression which serves to provide music with its justification.

In summary, both chance by inadvertence and chance by automatism are criticised by Boulez. The former is rejected completely whilst the latter is rejected in its extreme cases. Both approaches are different means of removing the composer from making choices and both inevitably lead towards chance in some way. However, even if the composer actively intervenes in the process of composition, chance is introduced into the work from the chance encounters of the composer's life and musical taste. Boulez summarises this inevitability of chance:

the less one chooses, the more the single possibility depends on the pure chance encounter of the [sound] objects; the more one chooses, the more what happens depends on the coefficient of chance implied by the subjectivity of the composer.⁹⁷

Having established that Boulez recognises chance is inevitable, it is also clear, for reasons concerning his desire for a new form of expression, that his attitude towards it is hostile. This hostility is based on three aesthetic concepts I have identified earlier: 'renewal', 'self-possession' and 'consistency'.

First, he criticises chance on the grounds that it cannot 'renew' itself. Writing specifically on 'chance by inadvertence' (although this argument can be applied to chance in general) he writes that '[i]nadvertence is fun to begin with, but one soon wearies of it, all the more quickly for its being condemned never to renew itself.'⁹⁸ This refers to the acknowledgement that chance always remains itself, as it cannot change. Chance in one musical situation constitutes the same as chance in another

⁹⁶ ['elle n'engendre aucune grammaire, et un vocabulaire n'existe pas sans grammaire.'] (My translation.) *Ibid.*, p. 139.

⁹⁷ ['moins on choisit, plus la chance unique dépend du pur hasard de la rencontre des objets; plus on choisit, plus l'événement dépend du coefficient de hasard impliqué par la subjectivité du compositeur.'] (My slight modification.) Boulez (1957a) p. 414 (in French) and p. 33 (in English). Note the similarity between what Boulez calls the 'coefficient of *hasard*' to Sartre's 'coefficient of adversity'. An example of this in Sartre's writings appears in *L'Être et le néant* (1943). See: Sartre (1943) p. 481 (in English).

situation. He makes this point succinctly in the following: '[i]n its All-Objectivity, the work represents a fragment of chance which [...] is as justifiable (or unjustifiable) as any other fragment.'⁹⁹

The second criticism, which follows on from the first, is that chance is not self-possessed and therefore it cannot be controlled by the composer. This is a point I have already noted throughout this section. Once the work cannot express anything, Boulez argues, it loses its self-justification. I would argue that this is his most fundamental criticism of chance. However, as I have already established, he discovered with *Structure 1a* that chance is always present in the musical work and it is impossible to annihilate it completely.

The third criticism, which follows on from the second, is that chance is an inconsistent and *unnecessary* element which impedes the aesthetic consistency of the musical work. As I discussed earlier in chapter I,¹⁰⁰ the principle of consistency is arguably the cornerstone of Boulez's aesthetic theory. Chance is inconsistent because it rebels against the consistency imposed by the composer.

Having established that Boulez recognised the inevitability of chance in the musical work, I would now like to examine his solution to this problem.

Boulez's solution to the problem of chance

Earlier in this dissertation, I quoted the following passage in which Boulez describes his 'desperate' struggle with chance:

⁹⁸ ['L'inadvertance est drôle, pour commencer, mais on s'en lasse très vite, d'autant plus vite qu'elle est condamnée à ne jamais se renouveler.'] Boulez (1957a) p. 408 (in French) and p. 27 (in English).

⁹⁹ ['Dans sa Toute-Objectivité, l'œuvre représente [...] un fragment de hasard justifiable autant (ou aussi peu) que n'importe quel fragment.'] *Ibid.*, p. 408 (in French) and p. 27 (in English).

¹⁰⁰ See: this dissertation p. 57.

Desperately, one tries to dominate one's material by an arduous, sustained and vigilant effort, and desperately chance persists, sneaking in through a thousand unfillable cracks.¹⁰¹

This quotation is a good starting point to examine his response to this problem. It is very similar to a sentence buried in Bonniot's preface to Mallarmé's *Igitur* (1869) which describes Mallarmé's development from *Igitur* to 'Un coup de dés' (1897):

After having completely exhausted himself in an effort to dominate himself increasingly completely and arduously, [Mallarmé] arrives at this conclusion, desperately, that Chance persists[.]¹⁰²

Several identical words appear in both statements by Boulez and Bonniot, such as 'dominate', 'arduous' and 'chance persists'. The two quotations are so strikingly alike that Boulez would appear to be drawing on Bonniot's description. The following sentence in Bonniot's preface reveals Mallarmé's solution to this problem:

this existence of Chance is tempered by the creation of a Constellation¹⁰³

The creation of a 'Constellation' was Mallarmé's attempt to 'absorb' (i.e. integrate) chance into the work of art.¹⁰⁴ This idea can most readily be seen in his poem 'Un coup de dés',¹⁰⁵ which utilises the typographical disposition of the words on the page to enable the eye to follow different routes through the text. Indeed, the concept of the 'Constellation' and the aesthetic development that led Mallarmé towards this

¹⁰¹ ['Désespérément, on cherche à dominer un matériau par un effort ardu, soutenu, vigilant, et désespérément le hasard subsiste, s'introduit par mille issues impossibles à calfater...'] (My slight alteration to the translation.) Boulez (1957a) p. 411 (in French) and p. 30 (in English).

¹⁰² ['Après avoir usé toute une vie dans un effort de domination de soi-même de plus en plus complet et ardu, il arrive à cette conclusion, désespérément, que le Hasard subsiste'.] (My translation.) Bonniot (1900) p. 430. I shall refer to the capitalisation of the term *le Hasard* in the conclusion. See: this dissertation p. 389.

¹⁰³ ['cette existence du Hasard est tempérée par la création d'une Constellation'.] (My translation) Bonniot (1900) p. 430.

¹⁰⁴ This is noted by Breatnach, McCalla and Stacey. See: Breatnach (1996) p. 65; McCalla (1976) p. 46; Stacey (1987) p. 81 respectively. I refer to Mallarmé's concept of 'hasard absorbé'.

¹⁰⁵ Although this poem is referred to in most literature and throughout this dissertation in its most usual form of 'Un coup de dés', strictly speaking its full title is 'Un coup de dés jamais n'abolira le hasard'. Boulez often refers to it incorrectly as 'Le coup de dés' or merely 'Coup de dés'.

idea is literally threaded throughout this poem. Distinguished from the rest of the text by large capitalised letters, two main lines run throughout Mallarmé's work:

A THROW OF THE DICE WILL NEVER ABOLISH CHANCE
NOTHING WILL HAVE TAKEN PLACE BUT THE PLACE EXCEPT PERHAPS A
CONSTELLATION¹⁰⁶

The first line articulates the problem of the inevitability of chance within the work of art. The last line, which is not as straightforward as the first, signals Mallarmé's solution of the 'Constellation'.

The capitalisation of the term 'Constellation' that appears in the preface by Bonniot, who was a close student of Mallarmé, suggests it may originally have been drawn from German literature, possibly the writings of Hegel. However, this term, or its equivalent in German, does not appear in Hegel's writings. It occurs, however, more than half a century after Mallarmé in the writings of Adorno. Paddison writes that in his espousal of his ideas, Adorno favoured:

the idea of the 'constellation' of fragments, each equidistant from an unstated centre, marking the place of the object of enquiry, whose presence is conjured up and at the same time negated by a text which constantly denies identity with its object.¹⁰⁷

This is the essence of Mallarmé's conception of the 'Constellation'. It is the introduction of elements of 'mobility'¹⁰⁸ into the form of the work which prevent any singular conception of meaning to dominate. For Mallarmé, this involved placing the words on the page in a way that enables them to be read in more than one order. This introduction of mobility is a means of acknowledging and 'absorbing', to use Mallarmé's term, chance. Paddison's description of Adorno's approach is very similar to Rosen's description of Mallarmé's 'Un coup de dés':

¹⁰⁶ ['UN COUP DE DÉS JAMAIS N'ABOLIRA LE HASARD / RIEN N'AURA EU LIEU QUE LE LIEU EXCEPTÉ PEUT-ÊTRE UNE CONSTELLATION'.] Mallarmé (1897a) pp. 457-477 (in French) and Mallarmé (1897b) pp. 124-145 (in English).

¹⁰⁷ Paddison (1993) p. 19 (in English).

Mallarmé's poem [Un Coup de Dés] concerns the play of chance which remains implicit in any creative ordering, the freedom of meaning essential to a form both defined and closed. He affirms as a delusion the classical idea of the work of art that attempts to ignore chance and contains at its centre a definitive nucleus of meaning. *Un coup de dés* neither abolishes chance nor yields to the probabilities, but contains them by an essay in transcendence.¹⁰⁹

Boulez's Third Piano Sonata

For Boulez, Mallarmé's image of the 'constellation' was the solution to the parallel problem in music. This can be seen most clearly in Boulez's Third Piano Sonata (1957-). He describes the form of the five movements, or 'formants',¹¹⁰ of his Sonata as a 'constellation'. As if to reiterate this point the pivotal third formant is entitled *Constellation-Miroir*. The five formants, of which only three have been published, can be played in one of eight orders, to be chosen by the performer. Writing on this formal mobility, Boulez notes that 'the idea of the form is circular: each autonomous development may serve as beginning or end'.¹¹¹ There are also multiple pathways within each formant that a performer can choose. For example, the first formant *Antiphonie* is written on separate sheets which can be arranged in four different orders.

The Third Piano Sonata is Boulez's first work to incorporate 'mobility' of form in order to grant the performer elements of choice. This introduction of mobility, i.e. a 'controlled chance' would become known as 'mobile form', a term I shall examine shortly.¹¹² However, the Third Piano Sonata was not his first work to conceive actively and consciously the element of choice within the musical work. In an interview from 1975, Boulez claims he had considered having detachable

¹⁰⁸ I shall examine the concept of 'mobility' shortly. See: this dissertation p. 111.

¹⁰⁹ Rosen (1986) p. 95 (in English).

¹¹⁰ For my consideration of Boulez's notion of the formant in relation to his account of musical technique, see: this dissertation p. 304.

¹¹¹ ['la forme est conçue circulairement: chaque développement autonome peut servir de commencement ou de fin'.] Boulez (1960a) p. 439 (in French) and p. 150 (in English).

¹¹² See: this dissertation p. 111.

movements in *Livre pour quatuor* (1948-49), influenced in some way by his reading of *Igitur* (1869) and 'Un coup de dés' in that same period,¹¹³ but finally decided upon three fixed movements.¹¹⁴ I would also argue that, after the pinnacle of total serialism of *Structure 1a* (1952) in which his compositional choices were limited as far as possible (i.e. automatism), he set about permitting himself elements of choice on a local level. This can be seen in his next major work, *Le marteau sans maître* (1955). In this intermediate work between *Structure 1a* and the Third Piano Sonata, the composer's choice is not entirely subjugated to the automatism of serial relations. His Third Piano Sonata can be understood, therefore, as the continuation of this idea of introducing mobility into the work, from the local structural level to the larger-scale form. Boulez himself acknowledges this in an interview dating from 1990, arguing that his primary preoccupation from 1952 onwards was the following problem:

Since I have allowed for choices on the local level, why not extend such choices to the form itself?¹¹⁵

In other words, Boulez seeks to be consistent in his introduction of 'mobility'. Before continuing, I would like to clarify the terms of 'mobility' and 'mobile form'.

Mobile form and mobility

The concepts of 'mobility' and 'mobile form' (or 'the mobile') in Boulez's writings are difficult to define. This difficulty is compounded by his failure to distinguish between these two concepts, which are closely related but with significantly different meanings. 'Mobility' appears in Boulez's writings twelve years before the

¹¹³ See Boulez in: Boulez and Deliège (1975) pp. 63-64 (in French).

¹¹⁴ *Ibid.*, pp. 50-51.

¹¹⁵ Boulez in: Boulez and Menger (1990) p. 11 (in English). He makes the same point in an article dating from 1960, claiming that the urgent task is to restore 'the parity between the formal powers of music and its morphology and syntax. Fluidity of form must be integrated with fluidity of vocabulary.' ['mettre les pouvoirs formels de la musique en parité avec la morphologie et la syntaxe; la fluidité de la forme doit intégrer la fluidité du vocabulaire.'] Boulez (1960a) p. 433 (in French) and p. 144 (in English).

term 'mobile form', and whereas the idea of mobile form was widespread in the 1950s and early 1960s, Boulez's specific principle of 'mobility' was not. Having acknowledged that these two concepts have their own separate 'histories', I would like to stress that he conceives them as being essentially the same: 'mobility' is the aesthetic principle and 'mobile form' is the introduction of 'mobility' into the form itself. I would first like to consider the notion of 'mobility'.

Primarily, one should understand 'mobility' as the possibilities at any given moment of musical creation (i.e. in performance or composition) within a particular field of choice. My reasons for this definition will become clearer during my examination of this term. This concept appears in Boulez's first ever publication 'Propositions' (1948) in which he defines mobility as '[e]ach time a note occurs it will be in a different register'. He opposes this idea to 'fixity', defined as when 'each of the twelve notes has a fixed location'.¹¹⁶ Due to this definition, Nattiez claims that:

[Boulez's concept of mobility] has nothing to do with the introduction of chance into the compositional process; it is concerned with the freedom that the composer gives himself regarding the registral disposition of each note in the series.¹¹⁷

Besides the fact that Boulez's definition describes a rather crude musical idea to be understood as part of his embryonic musical theory, Nattiez's argument is rather simplistic. First, I would suggest Boulez's narrow definition presents a concrete example (indeed, a particularly narrow example) of the general principle of mobility (and fixity). Second, even taken at face value, this definition does not necessarily exclude other possible meanings for this term. In light of later developments, it would be inconceivable that Boulez had retained this very narrow definition throughout his writing career. I would suggest this early definition provides an insight into his early attempts to rationalise his own musical technique. However, a much more informative view into this term is provided by Cage.

¹¹⁶ ['chaque fois qu'une note se présentera, ce sera à des registres divers' [...] 'les douze sons auront chacun leur place bien déterminée'.] Boulez (1948a) p. 256 (in French) and p. 50 (in English).

¹¹⁷ Nattiez (1993) p. 16 (in English).

According to an article by Henry Cowell dating from January 1952, Cage reveals that 'Boulez influenced me with his concept of mobility'.¹¹⁸ Consequently, when, in an article published later in the same year, Cage provides his own definition of 'mobility', one can consider its implications for understanding Boulez's conception of this term. Cage distinguishes between the two opposing poles of 'mobile' and 'immobile'. Writing with number charts in mind, he states that 'mobile means an element passes into history once used giving place to a new one; immobile means an element, though used, remains to be used again'.¹¹⁹ This definition of 'mobile' is very similar to Boulez's concept of 'renewal' I examined earlier.¹²⁰ In chapter I, I established that the concept of renewal manifests itself both in the aesthetic position that constantly revitalises, or 'renews', all inherited concepts, and also in the compositional approach itself which aspires to vary constantly all aspects of the musical work. The concept of mobility must, therefore, be understood as being closely linked to the principle of renewal, as it aesthetically revitalises one's conception of the work and compositionally enables greater variation and 'mobility'. This is stated clearly in 'Aléa' at the point which Boulez first introduces the idea of mobile form into his essay. He argues that the development of mobile form is based, in part, on 'the desire to create a self-renewing kind of mobile complexity'.¹²¹ He continues:

[I]n a musical world where all notion of symmetry is tending to disappear, and a concept of variable density is assuming a more and more basic role on every level of composition – from the material up to the structure – it is logical to look for a form which is not fixed, an evolving form which rebels against its own repetition; in short, a relative formal virtuality.¹²²

¹¹⁸ Cage in: Boulez and Cage (1993) p. 98 footnote 1. This quotation originally appeared in Cowell's account of New York musical life that was published in the *Musical Quarterly* 38 1 (January 1952) pp. 123-136.

¹¹⁹ Cage in: Boulez; Cage; Feldman; Wolff (1952) p. 171 (in English).

¹²⁰ See: this dissertation p. 58.

¹²¹ ['le désir de créer une complexité mouvante, renouvelée'.] Boulez (1957a) p. 410 (in French) and p. 29 (in English).

¹²² ['dans un univers musical d'où toute notion de symétrie tend à disparaître, où une idée de densité variable prend une place de plus en plus primordiale à tous les échelons de la construction – depuis le matériau jusqu'à la structure –, il est logique de rechercher une forme qui ne se fixe pas, une forme

One can easily see in this quotation the concepts of renewal and variation underpinning Boulez's thoughts on mobile form. The final line which describes 'a relative formal virtuality' is a reference to Mallarmé's concept of 'virtuality'. The concept of virtuality constitutes Mallarmé's depiction of the idea of the multiple possibilities that the work opens: in Mallarmé's case the virtuality of words.

As mobility is associated with renewal, it clearly constitutes something different from chance which, as I showed earlier, Boulez describes as being 'condemned never to renew itself'.¹²³ Therefore, when I defined mobility (above) as 'the possibilities at any given moment of musical creation [...] within a particular field of choice' it is essential to avoid confusing these possibilities with the multiple possibilities of non-self-possessed chance.¹²⁴ However, these two concepts of mobility and chance are, nevertheless, associated, as they both are concerned with possibilities, some of which will become 'fixed' or 'realised'. Nevertheless, whereas chance involves events which remain exterior to one's thought, mobility is concerned with choice, i.e. the *freedom* of the autonomous subject.

The idea of 'mobile form', prevalent in the 1950s and early 1960s in various art-forms, has its precedents in the 'mobile' of the visual arts, particularly the mobiles of Alexander Calder (1898-1976). The 'mobile' or 'mobile form' consequently has its own history which is different to that of Boulez's concept of mobility which dates from the 1940s. However, the idea of mobile form is certainly part of his conception of the general principle of mobility. The term 'mobile form' first appears in his writings in the article 'Form' (1960). He provides an alternative name - '*material form*'¹²⁵ suggesting that the score, which he describes as a 'possible score',¹²⁶ can

évoluante qui se refusera, rebelle, à sa propre répétition; en bref, une virtualité.'] *Ibid.*, p. 410 (in French) and p. 29 (in English).

¹²³ ['elle est condamnée à ne jamais se renouveler'.] *Ibid.*, p. 408 (in French) and p. 27 (in English). For my earlier citation of this passage see: this dissertation p. 106.

¹²⁴ Understood in this sense, Nattiez's statement that '[Boulez's concept of mobility] has nothing to do with the introduction of chance into the compositional process' is correct. Nattiez (1993) p. 16 (in English).

¹²⁵ ['forme matérielle'.] Boulez (1960d) p. 365 (in French) and p. 95 (in English).

serve as a basis, i.e. 'material', for 'one or more 'fixed' scores chosen from the multiple 'possibilities'.¹²⁷ This last point is highly illuminating. It reveals the link between Boulez's concepts of 'mobility' and 'fixity' dating back to 1948 and the idea of mobile form. This statement confirms he conceives 'mobility' as the possibilities available to the composer which, with respect to mobile form, are either chosen (i.e. 'fixed') or remain unrealised possibilities.

So far, I have established that Boulez's introduction of mobility into musical form in his Third Piano Sonata was provoked primarily by the impasse of *Structure 1a*. I would now like to consider two key literary ideas influential on Boulez before I return to the details of his proposal of musical mobile form. Although it must be recognised that there were musical factors that precipitated Boulez's development towards mobile form,¹²⁸ I would argue that the substance of Boulez's aesthetic conception is particularly influenced by literature. The first literary idea I shall examine is Mallarmé's concept of the 'pure work'. The second idea is that of the 'labyrinth'.

Mallarmé and the 'pure work'

Boulez has acknowledged that he was 'very attracted' to Mallarmé around 1950.¹²⁹ At that time, he read two of three key works by Mallarmé that confront chance and which point towards the 'pure work'. In the chronological order in which they were written these are *Igitur* (1869), 'Un coup de dés' (1897) and *Le Livre* (posthumous), all of which should be kept in mind when considering the Third Piano Sonata.

¹²⁶ ['une partition possible'.] *Ibid.*, p. 365 (in French) and p. 95 (in English).

¹²⁷ ['on tirera une ou des partitions fixes, parmi les multiples qu'elle permet.'] (My slight modification.) *Ibid.*, p. 365 (in French) and pp. 95-96 (in English).

¹²⁸ Breatnach correctly notes that before Boulez's Third Piano Sonata, Stockhausen and Pousseur had already written works focusing on similar experiments in form. See: Breatnach (1996) p. 81 (in English). Jameux also observes that Stockhausen's *Klavierstück XI* (1956), which features 19 structures that can be played in any order with any number of structures omitted, was premiered two months before Boulez's Third Piano Sonata. See: Jameux (1991) pp. 87-88 (in English).

¹²⁹ In an interview with Deliège, Boulez claims that his first encounter with Mallarmé was around 1948-49. See Boulez in: Boulez and Deliège (1975) pp. 63-64 (in French). In an interview with

Of these three works, I would argue that the earliest, *Igitur*, is by far the most influential on Boulez's aesthetic theory, not only with respect to the concept of chance but also in consideration of Mallarmé's aesthetic position generally. Therefore, I examine *Igitur* in detail in chapter III in my examination of Boulez's mature dialectical aesthetic theory.¹³⁰ At this point, it suffices to note that *Igitur* is a short allegory which depicts the confrontation between the artist and chance until finally the artist arrives at 'absorbed chance'.¹³¹

Boulez notes that around 1950 he read 'Un coup de dés'.¹³² This is probably correct, as he mentions in a letter to Cage dated June 1950 that he is working on a composition entitled 'Un coup de dés'.¹³³ Although this work was subsequently aborted, Boulez would later return to Mallarmé's poem as the basis of his Third Piano Sonata. The first reference to Mallarmé in his published articles appears the following year in 'Moment de Jean-Sébastien Bach' (1951) in which he quotes the last line of 'Un coup de dés': 'Toute pensée émet un coup de dés'.¹³⁴ 'Un coup de dés' would provide Boulez with his inspiration for his Third Piano Sonata¹³⁵ and, as I shall consider shortly, led to his introduction of mobility into musical form. However, his Third Piano Sonata is distinctively different from Mallarmé's poem because the former allows mobility in the order of the musical sections whereas the overall form of the latter is fixed and only permits different pathways through the text. In this respect, Boulez's aesthetic conception in this work anticipated one of Mallarmé's final works called, quite simply, *Le Livre*.

Szendy, he argues that it was around 1950-51. See Boulez in: Boulez and Szendy (1993) p. 145 (in French).

¹³⁰ See: this dissertation p. 222.

¹³¹ ['hasard absorbé'.] Mallarmé (1869) p. 443. This is the note written by Mallarmé beside the final paragraph of *Igitur* (1869). I shall discuss this idea later. See: this dissertation p. 108.

¹³² See Boulez in: Boulez and Szendy (1993) p. 145 (in French).

¹³³ Boulez in: Boulez and Cage (1993) p. 62 footnote 1 (in English).

¹³⁴ Boulez (1951a) p. 79 (in French) and p. 14 (in English).

¹³⁵ In an interview dating from 1993, Boulez recalls that he 'began [his] Third Sonata inspired by the *Coup de dés* [sic]'. ['j'ai commencé ma *Troisième Sonate* en m'inspirant du *Coup de dés*']. (My translation.) Boulez in: Boulez and Szendy (1993) p. 145.

Le Livre (posthumous) is an unfinished book consisting of loose pages which can be read in different orders or isolated from the rest of the book. Edited and introduced by Jacques Scherer, it was first published, in its incomplete form, on 13 March 1957 at a time when Boulez had already established the mobility of form in his Third Piano Sonata. Boulez read it shortly after it had been published, later in 1957. In an interview from 1990, he maintains he found in *Le Livre*:

a kind of confirmation: in fact, when I had thought of open form, I had in mind the typographical arrangement of “coup de dés” that allowed the reading of phrases diagonally, in such a way that, depending on whether one chose one bifurcation or another, several meanings were mingled.¹³⁶

For Mallarmé, the formal mobility of *Le Livre* was a means of ‘absorbing’ chance to enable a new form of expression. His sought to annihilate chance contained within the writer, i.e. the contingent aspects of his writing such as his individual mannerisms. By enabling more than one pathway through *Le Livre*, that is to say by avoiding *the* pathway of the author, Mallarmé hoped he would arrive at what he called the ‘pure work’.¹³⁷ The ‘pure work’, in which language becomes in Boulez’s words an ‘original instrument’,¹³⁸ is a work in which the chance of the particular writer’s voice is absorbed by the structure and mobility of the work and consequently disappears. Mallarmé describes this aspiration in his important critical essay ‘Crise de vers’:

The pure work implies the disappearance of the poet’s delivery, which concedes the initiative to the words, by the collision of their mobilised inequality; they are lit up by reciprocal reflections as a virtual trail of fire on gems, replacing the perceptible breathing in the ancient lyrical breath or the enthusiastic personal direction of the phrase.¹³⁹

¹³⁶ Boulez in: Boulez and Menger (1990) p. 11 (in English).

¹³⁷ [‘œuvre pure’.] (My translation.) Mallarmé (1897c) p. 366.

¹³⁸ For my earlier discussion of the ‘original instrument’, see: this dissertation p. 54.

¹³⁹ [‘L’œuvre pure implique la disparition élocutoire de poète, qui cède l’initiative aux mots, par le heurt de leur inégalité mobilisés; ils s’allument de reflets réciproques comme une virtuelle traînée de feux sue des pierreries, remplaçant la respiration perceptible en l’ancien souffle lyrique ou la direction personnelle enthousiaste de la phrase.’] (My translation.) Mallarmé (1897c) p. 366.

The notion of the writer’s ‘breath’ is also mentioned in *Igitur* (1869). See: this dissertation p. 224.

Scherer articulates this aspiration in his study of Mallarmé's *Livre*:

Ordinary books are personal: *Le Livre* will be objective. Ordinary books are circumstantial: *Le Livre* will not attach itself to any particular object and will treat the totality of existing things. Ordinary books are only albums: *Le Livre* will be ordered according to a structure.¹⁴⁰

Several references to Mallarmé's *Livre* appear in Boulez's writings dating from around the early 1960s. One of the first references is a mention of Mallarmé's idea of 'l'opérateur' that Scherer highlights in his essay on *Le Livre*.¹⁴¹ Boulez uses this term to refer to the 'network of proposed possibilities' which are the 'material for l'opérateur'.¹⁴² Mallarmé envisaged public recitals of parts of *Le Livre* which would be read by the 'opérateur', after which discussions could be held. Regarded in this light, the role of the 'opérateur' would be similar to that of the priest, as he would select passages to be read and contemplated. Boulez clearly understands this process of selection as comparable to the composer's selection from the multiple possibilities generated by automatism at the outset of composition. The idea of the *opérateur* is particularly interesting as in Bonniot's preface to *Igitur* (1869),¹⁴³ Bonniot helps to clarify this term. Whilst writing on Mallarmé's projections for *Le Livre*, Bonniot claims that at the end of this process:

¹⁴⁰ ['Les livres ordinaires sont personnels: le Livre sera objectif. Les livres ordinaires sont circonstanciels: le Livre ne s'attachera à aucun objet particulier et traitera de la totalité des choses existantes. Les livres ordinaires ne sont que des albums: le Livre sera ordonné selon une structure.'] (My translation). Scherer (1957) pp. 21-22 (in French).

¹⁴¹ See: *ibid.*, pp. 68-74.

¹⁴² ['des réseaux de possibles proposées' 'au travail de "l'opérateur"']. (My slight alteration of the original.) Boulez (1960d) p. 359 (in French) and p. 90 (in English). Boulez also mentions this idea in *Sonate que*. Boulez (1960a) p. 436 (in French) and p. 148 (in English). Immediately before this latter reference to Mallarmé's idea of 'l'opérateur', Boulez quotes from *Le Livre*, without providing a specific page reference: 'a book neither begins nor ends: at the very most it pretends to do so'. ['Un livre ne commence ni ne finit: tout au plus fait-il semblant']. Boulez (1960a) p. 436 (in French) and p. 148 (in English). For the original see: Scherer (1957) leaf 181 (in French) (it is the only text on this page). In his essay preceding *Le Livre*, Scherer draws attention to this phrase by quoting it at the end of his first chapter. See: Scherer (1957) p. 24 (in French).

¹⁴³ I have already established that Boulez has probably read this preface. See: this dissertation p. 108.

[Mallarmé] becomes surgeon and removes [the Idea] completely from existence by that which he calls "the operation" – a book full of probable treats and that would absolutely not be lacking in signification for everyone.¹⁴⁴

Mallarmé's idea of the '*opérateur*' is connected with the notion of performing an operation that removes the Idea from existence – i.e. from the contingency of existence. For Boulez, the performer would, more or less, adopt the role of l'*opérateur* with regard to the Third Piano Sonata.

The labyrinth

Boulez frequently employs the image of the 'labyrinth', sometimes described as the 'maze' or 'town map',¹⁴⁵ to depict the mobile form of his Third Piano Sonata. These images articulate his new conception of musical form as consisting of particular landmarks to be visited via several pathways. Whereas in 'Aléa' (1957) he uses the term 'constellation',¹⁴⁶ by the time of 'Sonate, que me veux-tu?' in 1960 he appears to favour the image of the labyrinth. I would propose that this is due to two reasons. First, as I shall consider shortly, the metaphor of the 'labyrinth' was prevalent in French literature at the end of the 1950s and early 1960s, particularly in the authors of the *nouveau roman*. Indeed, a novel by Alain Robbe-Grillet (1922-), arguably the leading figure of the *nouveau roman*, entitled *Dans le labyrinthe* (1959),¹⁴⁷ was published at around the time of Boulez's switch from the idea of the 'constellation' to that of the 'labyrinth'. The second reason for Boulez's switch might be due to the

¹⁴⁴ ['devient chirurgien et lui [l'Idée] supprime tout à coup l'existence par ce qu'il appelle "l'opération" - livre plein de régals probables et qu'il voudrait non dénué absolument du signification pour tout le monde.'] (My translation.) Bonniot (1900) p. 427.

¹⁴⁵ See: Boulez (1960a) p. 441 (in French) and p. 151 (in English). In a 1984 discussion with Jameux, Boulez acknowledges that 'the image of the town has always seduced me' and admits that it aided his conception of *Répons* (1981-): 'The town is [...] the more or less conscious model of the geography of *Répons*.' ['L'image d'une ville m'a toujours séduit' [...] 'La ville est [...] le modèle plus ou moins conscient de la géographie de *Répons*.'] (My translation.) Boulez in: Boulez and Jameux (1984) pp. 16-17.

¹⁴⁶ Note also that Boulez uses the term 'Constellation' as the title of the central movement of the Third Piano Sonata.

¹⁴⁷ *Dans le labyrinthe* (1959) is written impersonally except for the first and last word – 'I' and 'me' respectively. It is the story of a soldier ordered to deliver a package whose contents he does not know in an unfamiliar city which he comes to know gradually. See: Robbe-Grillet (1959) (in English).

connotations of the term 'labyrinth', which suggests movement in time and the choice of pathways, which is closer to the experience of musical mobile form than the more static image of the 'constellation'. This is suggested by Boulez's first discussion of the idea of the 'labyrinth' that appears in 'Sonate, que me veux-tu?' (1960):

the work must keep a certain number of pathways open by means of precise dispositions in which chance represents the 'points', which can be switched at the last moment.¹⁴⁸

In this essay, ostensibly an account of the aesthetic ideas that informed his Third Piano Sonata, Boulez provides two examples of labyrinth structures that appear in literature.

First, he cites Kafka's short story 'The Burrow' (1923) in which the artist creates his own maze, constantly moving his supplies and changing the network of passages for the sake of secrecy from the outsider.¹⁴⁹ In an interview in 1985, Boulez expands upon his view of Kafka's novels in general. He reveals that the way in which the reader perpetually travels in unforeseen directions is comparable to his experience of composing. As I shall examine in chapter III,¹⁵⁰ the notion of the unforeseen is an important element in his dialectical conception of composition. He argues that 'it is important not to go in a straight line: all sorts of divagations are necessary to succeed at the result.'¹⁵¹

The second labyrinth structure that Boulez cites is the town map in *L'Emploi du temps* (1956) by an important exponent of the *nouveau roman*, Michel Butor.¹⁵² This parallel seems to have remained with Boulez for many years, as he repeats this point

¹⁴⁸ ['l'œuvre doit assurer un certain nombre de parcours possibles, grâce à des dispositifs très précis, le hasard y jouant un rôle d'aiguillage qui se déclenche au dernier moment.'] (My slight modification.) Boulez (1960a) p. 434 (in French) and p. 146 (in English).

¹⁴⁹ See: *ibid.*, p. 434 (in French) and pp. 145-146 (in English).

¹⁵⁰ See: this dissertation 207.

¹⁵¹ ['l'important n'est pas d'aller en ligne droite: toutes sortes de divagations sont nécessaires pour aboutir au résultat.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 149.

¹⁵² See: Boulez (1960a) p. 441 (in French) and p. 151 (in English).

in an interview dating from 1975.¹⁵³ As I stated in the introduction,¹⁵⁴ Butor was a good friend of Boulez during the 1950s and it is helpful to consider briefly Butor's novel in order to illuminate Boulez's conception of the 'labyrinth'.

The narrator and main character of *L'Emploi du temps* is a young Frenchman called Revel. During his time living in a fictional north of England city called Bleston, Revel accidentally becomes involved in what may or may have not been a murder: this situation is never clarified. In order to help understand what happened, Revel keeps a diary of his thoughts in which he attempts to recall events. This diary is the entire material of Butor's book. Although one can read *L'Emploi du temps* as a detective novel, its chief preoccupation is with the perception of time.¹⁵⁵ This preoccupation is stressed by the dates given at the top of each of Revel's diary entries. The month in which the entry was written is followed by the month (or months) that the events being discussed happened. Through the act of keeping a diary, together with the new events that happen as he writes, Revel's understanding and memory of events changes. For example, there are discrepancies between different diary entries (e.g., Revel incorrectly remembers particular dates) emphasising that Revel's perception of events is subjective. This subjectivity is especially noticeable in Revel's map of Bleston which he draws from memory to help him recall events. Brunel notes that some of the roads on the map are not complete but interrupted in a manner that echoes Revel's attempts to understand events. Brunel writes that 'like the map of the labyrinth, the textual labyrinth [of the novel] has its ruptures and its dead-ends'.¹⁵⁶ By moving through the various pathways of the labyrinth, Revel arrives at a richer and more complex understanding of events. Similarly, the journey the reader or listener takes through a work,

¹⁵³ Boulez makes the comparison of his Third Piano Sonata and the map of a town, although he does not cite Butor's novel on this occasion. See Boulez in: Boulez and Deliège (1975) pp. 106-107 (in French).

¹⁵⁴ See: this dissertation p. 32.

¹⁵⁵ This preoccupation is, of course, suggested by the title of the book.

¹⁵⁶ ['Comme le plan du labyrinthe, le texte labyrinthique a ses ruptures et ses chausse-trapes.'] (My translation.) Brunel (1995) p. 166.

considering it from various angles, enables him to arrive at a richer and more complex understanding of the work.¹⁵⁷

One can see clear parallels between the constant re-evaluation of events in Butor's 'textual labyrinth' and Boulez's approach in his Third Piano Sonata. Both provide, by labyrinth structures, a means of replacing the fixed point of view of the author with a relative and multi-layered artwork which, as Boulez writes, allows 'different levels of reading'.¹⁵⁸ This was a key aspiration of the *nouveau roman* writers in general, whose impersonal description of objects and events and rejection of the narrative speaker shares a marked similarity to Boulez's approach at this time. Most importantly for Boulez, the introduction of pathways into the musical work enables the chance of the composer's voice to become 'absorbed' into the form. Boulez refers to this absorption of the author's voice when he claims that 'the work must be like a labyrinth, one must be able to lose oneself in it.'¹⁵⁹

The notion of being 'able to lose oneself' in the work is typically described by Boulez as the search for 'anonymity'. Writing in 1960 he reveals that '[i]f I had to find an underlying motive [for the Third Piano Sonata], it would be the research of such 'anonymity'.¹⁶⁰ This term, I would argue, has contributed enormously to the misconception that Boulez rejects any form of musical expression. It refers to the desire to concentrate upon the demands of the work-in-hand in order to arrive at the ideal of the 'pure work'. Through 'annihilating' the contingency of the existing

¹⁵⁷ According to Grant, Butor not only considers the act of reading the labyrinth a means of arriving at a fuller and richer understanding of the work but also the act of writing itself. Grant writes, 'in many ways 'writing a novel' is for Butor synonymous with 'gaining insight''. Grant (1973) p. 12 (in English).

¹⁵⁸ ['polyvalence des niveaux de lecture.']. (My translation.) Boulez in: Boulez and Deliège (1975) p. 28.

¹⁵⁹ ['l'œuvre doit être comme un labyrinthe, on doit pouvoir s'y perdre.']. (My translation.) *Ibid.*, p. 27.

¹⁶⁰ (My translation.) ['S'il fallait trouver un mobile profond à l'œuvre que j'ai tâché de décrire, ce serait la recherche d'un tel "anonymat".'] Boulez (1960a) p. 443 (in French) and p. 154 (in English). Boulez continues to use the term of 'anonymity' today. Speaking of *Structures* (1952), he states that 'the important thing was to achieve anonymity'. Boulez in: Boulez and Walters (2002) p. 409 (in English).

material in every aspect the work becomes *necessary*.¹⁶¹ Nevertheless, this anonymity does not mean that the resulting work is not 'expressive' in some way - it merely describes the rejection of all inherited forms of expression. Similarly, this anonymity does not imply that the composer expresses an objective (i.e. anonymous) account of history. Anonymity enables the possibility of a form of expression in which every aspect becomes a *necessary* and expressive part of the resulting work: the musical means and the composer's thought become identical.¹⁶² Indeed, Boulez regularly celebrates the uniqueness of the resulting work, claiming that 'composition is such an individualistic act!'¹⁶³

Returning once more to 'Aléa', the latter half of this article considers the practical problems of integrating chance into the musical composition. Although it is perhaps not clear, he divides this discussion into the introduction of chance on the local level of composition, i.e. from moment to moment, and the introduction of chance on the global level, i.e. form. I would briefly like to consider some of the examples and issues discussed: first, on a local level.

The introduction of chance on a local level: Improvisation

As an example of the introduction of chance into the most 'elementary level',¹⁶⁴ i.e. on a local level,¹⁶⁵ Boulez cites the introduction of 'rubato' by the performer into the work. By the term rubato he refers not merely to small deviations in tempo but to a more general principle of 'mobility' in other sound components such as dynamics

¹⁶¹ In this respect, one recalls Boulez's statement that 'there is only creation in the unforeseeable becoming necessity.' ['il n'y a de création que dans l'imprévisible devenant nécessité.'] (My translation.) Boulez (1952c) p. 288 (in French) and p. 133 (in English).

¹⁶² One recalls Boulez's claim that the composer arrives at an 'original instrument' when the language 'is totally adapted to [one's] own thought.' Boulez in: Boulez and Walters (2002) p. 402 (in English).

¹⁶³ ['la composition est un acte tellement individuel!'] (My translation.) Boulez in: Boulez and Grange, de la (1990) p. 46.

¹⁶⁴ ['Niveau le plus élémentaire.'] Boulez (1957a) p. 412 (in French) and p. 30 (in English).

¹⁶⁵ Although Boulez uses the term 'elementary level' in 'Aléa', I use the much more accurate term of 'local level' or 'local form' which Boulez employs in his later writings dating from the 1960s. Both terms refer to the moment by moment unfolding of music.

and register which he calls 'articulative suppleness'.¹⁶⁶ He insists, however, that this introduction of chance should be written into the score and not left to the performer's taste. He writes:

If the player can modify the text at will, such modification must be implied by the text, and not merely supplementary to it. The score must contain this interpretative 'chance' like a watermark. [...] In this way I introduce via the score the necessity for chance in the performance: a directed chance.¹⁶⁷

His avoidance of leaving these elements of choice to the performer is due to his distrust of merely reproducing inherited musical ideas unconsciously. As I have mentioned before, this distrust of everyday spontaneity is a particular feature of Boulez's symbolist influences. The distrust was reinforced by the surrealist experiments in 'automatism' that I considered earlier.¹⁶⁸ With specific reference to this aspect of performer choice or spontaneity he writes that this freedom needs to be guided and projected, as 'instant' imagination is more susceptible to weaknesses than illuminations'.¹⁶⁹ He repeats this point in 1968 when he writes that performers usually respond to vague notations with 'contemporary clichés'.¹⁷⁰

An example he provides of introducing chance into the musical work is that of a section utilising varying aggregates of two to eleven notes with varying leaps of register.¹⁷¹ If the player is asked to adapt his tempo to the difficulty of execution, a regular pulse will not result, as the rhythm will be physically linked to the mechanics of playing. Another possibility he cites is that of the performer being allowed to

¹⁶⁶ ['la souplesse d'articulation'.] *Ibid.*, p. 412 (in French) and p. 31 (in English).

¹⁶⁷ ['Si l'interprète peut modifier à sa guise le texte, il faut que cette modification soit impliquée par ce dernier et non qu'elle soit seulement en surcharge. Le texte musical doit porter en filigrane cette "chance" de l'interprète. [...] J'introduis ainsi par le texte une nécessité de hasard dans l'interprétation: un hasard dirigé'.] (My slight alteration of the translation.) *Ibid.*, p. 412 (in French) and p. 31 (in English).

¹⁶⁸ See: this dissertation p. 104.

¹⁶⁹ ['l'imagination "instantanée" est plus susceptible de défaillances que d'illuminations'.] (My translation.) *Ibid.*, p. 413 (in French) and p. 32 (in English).

¹⁷⁰ ['clichés' 'contemporains'.] Boulez (1968b) p. 505 (in French) and p. 461 (in English).

¹⁷¹ See: Boulez (1957a) p. 412 (in French) and p. 31 (in English).

'oscillate around a given tempo'.¹⁷² Although he again stresses that he uses terms such as 'rubato' in a more general sense, it is difficult to understand the significant aesthetic distinction between this last example and rubato in its traditional sense.

After outlining some of the possibilities of introducing chance on a local level into the work, Boulez continues by considering the practical problems of writing for more than one instrument at a time. Works written for two performers should not create too many difficulties, as it is possible to add extra signals and reference points. For example, one performer can play in a fixed tempo whilst the other plays *accelerando* if there are clear departure and arrival points that both can follow.¹⁷³ For more than two players, a conductor can provide a central tempo from which the players can diverge, or in the case of a group of players having to adopt a variable tempo, an assistant conductor can be added.

It is important to mention Boulez's concept of 'improvisation' during this discussion of chance on a local level. Whilst his attitude to 'improvisation' understood in its usual sense (i.e. performer 'spontaneously' playing without a score) is typically hostile,¹⁷⁴ the particular usage here refers to a specific aesthetic idea. It makes its first appearance in Boulez's writings in 'Aléa',¹⁷⁵ and should be understood, therefore, as deriving from his consideration of the integration of chance within the musical work. He expands upon this idea in the article 'Construire une improvisation' (1961) in which he defines improvisation as the 'forcible insertion (*Einbruch*) into the music of a free dimension.'¹⁷⁶ One can see that his definition of

¹⁷² ['d'osciller autour d'un *tempo* donné']. (My translation.) *Ibid.*, p. 412 (in French) and p. 31 (in English).

¹⁷³ See: *Ibid.*, p. 418 (in French) and pp. 36-37 (in English).

¹⁷⁴ One is reminded of the statement I cited on the previous page that "'instant' imagination is more susceptible to weaknesses than illuminations'. For an example in Boulez's writings concerning 'improvisation' specifically, he describes the usual type of 'improvisation' as 'psychodramas [...] [having] only a primary interest for their authors'. ['psychodrames' 'Ils n'ont prioritairement d'intérêt que pour leurs auteurs']. (My translation.) Boulez in: Boulez and Billaz (1983) p. 115 (in French). In the context of this discussion of Boulez's conception of introducing *chance* into the musical work I have avoided becoming involved in distinguishing between different types of improvisation.

¹⁷⁵ ['improvisation']. Boulez (1957a) p. 411 and p. 415 (in French) and p. 30 and p. 33.

¹⁷⁶ ['irruption (*Einbruch*) dans la musique d'une dimension libre.']. Boulez (1961b) p. 445 (in French) and p. 155 (in English). Despite this short definition of 'improvisation' that appears at the beginning

the term is used in a much more narrow sense than its common usages elsewhere e.g. cadenzas, jazz improvisation etc. However, it is very similar to the definition provided by Stockhausen in a letter to Boulez at the end of 1953.¹⁷⁷ Judging from his response, Boulez was unfamiliar with the term used in this narrow sense, as he queries its meaning.¹⁷⁸ Stockhausen replies that it refers to the selection of a particular duration, frequency or intensity within a defined 'space'.¹⁷⁹ This is, in essence, the way in which Boulez conceives the concept of improvisation. It not only refers to the performer's moment by moment selection of musical components within a defined 'space', but also that of the composer during composition. It is important to appreciate this usage of the term 'improvisation', as by 1993, he argues that 'improvisation is a kind of writing, even though immaterial'.¹⁸⁰ Elsewhere, he makes the same point that improvisation operates within existing 'formal frames' transmitted 'orally' which remain unwritten.¹⁸¹ Therefore, Boulez's idea of 'improvisation' is, quite specifically, the 'forcible insertion into the music of a free dimension', whether this is unwritten and 'orally' transmitted, as in jazz improvisation for example, or written, as in the avant-garde explorations in the late 1950s and early 1960s into performer choice.

at this essay, the term 'improvisation' in the title of this text ('Construire une improvisation' (1961)) primarily refers to Boulez's description of his recent composition *Deuxième improvisation sur Mallarmé* (1958).

¹⁷⁷ Stockhausen writes 'I find myself increasingly in statistical composition: serial 'improvisation' between limits of serial spaces of time, pitch and intensity.' ['Je me trouve il plus en plus dans la composition statistique: "improvisation" sérielle entre limites des espaces sérielles du temps, d'hauteur, de l'intensité.'] (My translation.) Stockhausen (1953a) (no page numbers). This letter from Stockhausen to Boulez is dated November 1953 and must have been written before both Boulez's reply (which is undated) and Stockhausen's subsequent response dated 20 November 1953. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished correspondence.

¹⁷⁸ Boulez asks 'What do you mean by 'improvisation' between different limits?'. ['Qu'est-ce que vous entendez [...] pour "improvisation" entre les différentes limites?'] (My translation.) Boulez (1953c) (no page numbers). This letter from Boulez to Stockhausen was written before 20. 11. 53 (see preceding footnote).

¹⁷⁹ Stockhausen essentially reiterates his first definition of 'improvisation' as 'respecting the limits of durations, frequency bands and *superior* intensities'. ['en respectant les limites des durées, bandes des fréquences et intensités *supérieures*.'] (My translation.) Stockhausen (1953b) (no page numbers). I examine the term 'space' ['espaces'], together with the idea of 'field' ['champs'], in chapter IV. See: this dissertation p. 304.

¹⁸⁰ ['L'improvisation est une écriture, bien qu'immatérielle.'] (My translation.) Boulez in: Boulez and Szendy (1993) p. 139.

The introduction of chance on a global level: Parentheses

Up to this point in 'Aléa', Boulez has considered the introduction of chance into what he calls the 'elementary level', in other words on a local, moment to moment, level. He continues by considering the introduction of chance into the form of the musical work itself. He describes this, rather obscurely, as the integration of chance within an 'orientated whole',¹⁸² i.e. within the global musical form. This description seeks to distinguish the introduction of chance into the global musical form from the moment-to-moment 'non-orientated' chance at the 'elementary level'. The following is Boulez's aesthetic summary of his new conception of musical form which, in effect, is a description of his Third Piano Sonata (1957-):

In a form of this kind, therefore, one could imagine junction points, or platforms of bifurcation, mobile elements capable of adapting (with certain modifications which would possibly be written in) to fixed structures which could themselves be selected arbitrarily but with the restriction that, in the 'course' of the development, a given event could only happen once.¹⁸³

This describes the various pathways through a musical work available to the performer. By granting the choice of the order of the musical sections (each of which cannot be repeated) within certain limits, one arrives at 'a new concept of development which is discontinuous in a way that is foreseeable and foreseen.'¹⁸⁴ This description presents an idea that can be traced back to an article published three years earlier in which he employs for the means of explication the notion of

¹⁸¹ ['des cadres formels' "oralement"] (My translation.) Boulez in: Boulez and Billaz (1983) p. 115.

¹⁸² ['ensemble orienté'] (My translation.) Boulez (1957a) p. 414 (in French) and p. 33 (in English).

¹⁸³ ['On concevrait donc, dans une telle forme, des points de jonction, des plates-formes de bifurcation, sortes d'éléments mobiles susceptibles de s'adapter (avec certaines modifications qui y seraient inscrites dans l'éventuel) à des structures fixes éligibles de façon arbitraire, avec cette restriction que, sur le "parcours" du développement, un événement donné ne saurait arriver qu'une seule fois.'] (My slight modification.) *Ibid.*, p. 415 (in French) and pp. 33-34 (in English).

¹⁸⁴ ['une nouvelle notion du développement qui serait essentiellement discontinu, mais d'une discontinuité prévisible et prévue'] *Ibid.*, p. 415 (in French) and p. 33 (in English).

'parentheses'. The term 'parentheses' in his texts has attracted the attention of several commentators.¹⁸⁵ Writing in 1954, Boulez declares:

Let us claim for music the right to parentheses and italics...; a concept of discontinuous time made up of structures which interlock instead of remaining in airtight compartments; and finally a sort of development where the closed circuit is not the only possible solution.¹⁸⁶

Although I shall investigate the ideas of 'discontinuity' and 'circuits' in detail in chapter III,¹⁸⁷ one can understand these concepts at this point and in this context as referring to the moveable sections in mobile form. I shall return to the idea of 'interlocking structures' shortly.¹⁸⁸

Deliège suggests a possible link between Boulez's term 'parentheses' and Mallarmé's device of inserting clauses into the main sentence, which 'disguise the main clause'.¹⁸⁹ As Scherer observes in his 1947 study of Mallarmé's writings, Mallarmé frequently uses parentheses, the content of which is typically just as equal in importance as the main clause. Scherer also notes that Mallarmé's parentheses can introduce a new register of speech, often more subjective, into the text.¹⁹⁰

Boulez, himself, expands upon what he means by the term 'parentheses' in an article published in 1958, only one year after 'Aléa' (1957). He appears to conceive parentheses in its traditional sense: a clause which comments upon the main clause that may be omitted without destroying the overall form and meaning. Understood in this way, parentheses can be considered as one particular aspect of mobile form. Boulez writes that:

¹⁸⁵ For example Decoupet and Deliège (see the following page).

¹⁸⁶ ['Réclamons pour la musique le droit à la parenthèse et à l'italique...; une notion de temps discontinu grâce à des structures qui s'enchevêtrent au lieu de rester cloisonnées et étanches; enfin une sorte de développement où le circuit fermé ne soit pas la seule solution à envisager.'] (My slight alteration of the English translation.) Boulez (1954c) p. 335 (in French) and p. 19 (in English).

¹⁸⁷ See: this dissertation p. 210.

¹⁸⁸ See: this dissertation p. 130.

¹⁸⁹ Deliège (1986) pp. 102-103 (in English).

¹⁹⁰ See: Scherer (1947) pp. 58-60 (in French).

A work thought of as a circuit, neither closed nor resolved, needs a corresponding non-homogeneous time that can expand or condense

He continues:

This intrusion of 'chance' into the form of a work may manifest itself in circuits using multiple nodal points with different probabilities of triggering, or by means of commented structures – effervescences – from which one can subtract these commentaries without altering their general physiognomy – the necessity of parenthesis.¹⁹¹

Boulez employs the term 'parentheses' to refer to musical sections that can be reordered or removed completely. This is a metaphor to depict his conception of form and constitutes, therefore, something completely different from the idea of musical quotation which concerns the deliberate reference to past works and an aesthetic 'rupture' with the work being composed. Consequently, the apparent contradiction Decroupet notes between, on the one hand, Boulez's championing of parentheses and, on the other hand, his rejection of quotation is fictitious.¹⁹²

In addition to this 'literary' understanding of the concept of 'parentheses' - as removable musical sections – I would argue that one could also cite Husserl's notion of 'epoche' as a contributory factor. In an article by de Beauvoir that appeared in *Les Temps Modernes*, a journal with which Boulez was familiar,¹⁹³ she refers to 'epoche' as 'putting between parentheses'. As I shall demonstrate in chapter III,¹⁹⁴ Boulez's conception of music is founded upon the principle of Cartesian 'doubt', which is similar to Husserl's 'epoche'.¹⁹⁵

¹⁹¹ ['Cette intrusion du "hasard" dans la forme peut se manifester soit dans des circuits à multiples plaques tournantes, à déclenchement probable, soit à l'aide de structures commentées – effervescentes – d'où l'on peut soustraire ces commentaires sans altérer leur physionomie générale – nécessité de parenthèse.'] (My modified translation.) Boulez (1958e) p. 166 (in French) and p. 179 (in English).

¹⁹² See: Decroupet (1994) pp. 131-132 (in French).

¹⁹³ See Boulez in: Boulez and Walters (2002) p. 405 (in English).

¹⁹⁴ See: this dissertation p. 167.

¹⁹⁵ I refer to the line by de Beauvoir: 'man 'puts between parentheses' his will of being'. ['l'homme "mettre entre parenthèses" sa volonté d'être'.] (My translation.) Beauvoir, de (1947b) p. 20.

Although Boulez appears to advocate ‘parentheses’ as the introduction of mobility into musical form, he is wary of the crude compositional method that is content with merely ‘juxtaposing self-contained sections’.¹⁹⁶ This is an issue because the different sections become static blocks of musical material that do not impact on each other. He seems particularly sensitive to this problem, perhaps due to his reservations concerning Messiaen’s (and Stravinsky’s) use of juxtaposition.¹⁹⁷ Boulez first discusses this issue in 1954, in the passage I quoted on the previous page concerning ‘interlocking structures’. In a much later text he presented at the Collège de France in 1989, he rather complicates this issue concerning parentheses. He criticises the aesthetic approach that places ‘history in parentheses’, particularly postmodernism.¹⁹⁸ This is a rejection of the compartmentalisation¹⁹⁹ of the musical material into historical styles that is characteristic of postmodernism and similar to the juxtapositional techniques of Messiaen and Stravinsky.

Despite the fact that the idea of ‘parentheses’ is a particularly complicated and not very well articulated term to describe his conception of formal mobility, it should be recognised that it helped to shape his conception of mobile form.²⁰⁰ Indeed, this idea

¹⁹⁶ [‘la juxtaposition de “sections” centrées sur elles-mêmes?’] Boulez (1957a) p. 415 (in French) and p. 33 (in English).

¹⁹⁷ One is reminded of Boulez’s criticism of Messiaen that he ‘does not compose – he juxtaposes’. [‘il ne compose pas – il juxtapose’.] Boulez (1948a) p. 256 (in French) and p. 49 (in English). I would like to add that this sensitivity to this problem is not unique to Boulez. For example, Adorno makes this criticism of Stravinsky’s *Symphony in Three Movements* (1945) which uses ‘the static juxtaposition of “blocks”’. Adorno (1949) p. 211 (in English)

¹⁹⁸ [‘l’histoire entre parenthèses’.] (My translation) Boulez (1989b) p. 3. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

¹⁹⁹ In a recent interview, Boulez states this avoidance of compartmentalisation clearly: He states that ‘I want to get rid of the idea of compartments in a work’. Boulez in: Boulez and Di Pietro (2001) p. 70 (in English).

²⁰⁰ It is important to note that the idea of parentheses helped to stimulate Boulez’s musical practice not only on a global level of form but also on a more local level. An example that Boulez himself provides is in his later composition *Cummings ist der Dichter* (1970) in which he attempted to find an equivalence for the parentheses in the text by assigning a group of specific instruments which disappear in a manner similar to the parentheses. See Boulez in: Boulez; Loselle; Caws; Perloff (1992) p. 10 (in English). Deliège, writing on *Le marteau sans maître* (1955) although his point could be applied generally, claims that the idea of parentheses finds its best reflection in Boulez’s compositional practice. (See: Deliège (1981) p. 170 (in French).) I would disagree and suggest that whilst it has helped to stimulate directly Boulez’s music through equivalences its main importance is that it has shaped his conception of mobile form.

is a clear indicator of the importance of Mallarmé's influence on Boulez's concepts of chance and mobility.

Conclusion

In the conclusion to 'Aléa' (1957), Boulez quotes from two works by Mallarmé: 'Un coup de dés' (1897) and *Igitur* (1869). First, from 'Un coup de dés', he quotes the line '[t]owards this supreme conjunction with probability'.²⁰¹ The idea of the conjunction, in particular the 'supreme conjunction', is significant in Boulez's aesthetic approach and is examined in chapter IV.²⁰² Second, he quotes the following passage from *Igitur*:

In short where chance is involved in an action, it is always chance that fulfils its own Idea in affirming or negating itself. In the face of its existence, negation and affirmation both fail. It contains the Absurd – implies it, but in a latent state and preventing it from existence: which permits the Infinite to be.²⁰³

The first line in this typically highly dense passage by Mallarmé establishes that chance constitutes something different from one's own Idea: i.e. it always 'fulfils its own Idea' rather than the Idea of the artist. I considered this problem at the beginning of this section in light of Hegel's definition of the Contingent as 'something that is not self-possessed and is alien'.²⁰⁴ The second line points to the impossibility of avoiding chance by embracing it wholeheartedly (as in Cage's approach) or ignoring it altogether. The final line is the most cryptic and refers to the 'multiple possibilities', to borrow Boulez's terminology, 'latently' suggested but of

²⁰¹ ["Vers cette conjonction suprême avec la probabilité".] Boulez (1957a) p. 419 (in French) and p. 37 (in English).

²⁰² See: this dissertation p. 257.

²⁰³ ['Bref dans un acte où le hasard est en jeu, c'est toujours le hasard qui accomplit sa propre Idée en s'affirmant ou se niant. Devant son existence la négation et l'affirmation viennent échouer. Il contient l'Absurde – l'implique, mais à l'état latent et l'empêche d'exister: ce qui permet à l'Infini d'être'.] (My modified translation.) Boulez (1957a) p. 419 (in French) and p. 38 (in English). This is identified by Walsh. See: Walsh (1991b) p. 37 footnote 6 (in English). For the original quotation from Mallarmé's *Igitur* (1869) see: Mallarmé (1869) p. 441 (in French).

²⁰⁴ ['das Zufällige ist das Unbesonnene und Fremde'.] Hegel (1807) p. 498 (in German) and p. 431 (in English).

which only a limited number can be chosen. The sheer vastness of the multiple possibilities is what constitutes the 'Absurd'.

After quoting this passage, Boulez continues by claiming that his solution to the problem of chance, the deliberate introduction of mobility into the musical form, is perhaps the 'only means of *fixing the Infinite*?'²⁰⁵ This is a reference to the same part of *Igitur* from which the passage above is drawn. Mallarmé writes that a consequence of throwing the dice is that 'the Infinite is finally *fixed*.'²⁰⁶ This means that one of the multiple possibilities has been realised and 'fixed', an idea that foreshadows much of Existential thought. The usage of the term 'fixed' in this passage is particularly interesting, as it recalls Boulez's distinction of 'mobility' and 'fixity' that appears in 1948. Although there is no reason to question his claim that he first encountered Mallarmé's writing a little later than this (around 1950), perhaps Mallarmé's terminology of 'fixity' confirmed and helped Boulez to formulate this idea further.

In the final line of 'Aléa', Boulez presents the following polemical question: would the new conception he proposes be 'the one way of killing the Artist?'²⁰⁷ This provocative statement, which refers to the desire for anonymity I considered earlier,²⁰⁸ constitutes the fundamental point of contact between Boulez and Cage. It echoes a statement made by Cage around the time he regularly corresponded with Boulez in which he discusses the possibility of artistic creation free from individual taste, memory (psychology), literature and artistic traditions.²⁰⁹ Considerable material has been written on the differing conceptions of chance displayed by Boulez and Cage. A clear understanding of the aesthetic differences between the two composers in this area is particularly helpful with respect to this study and therefore I would like to conclude this section by briefly comparing their approaches.

²⁰⁵ ['le seul moyen pour essayer de *fixer l'Infini*?'] Boulez (1957a) p. 419 (in French) and p. 38 (in English).

²⁰⁶ ['l'Infini est enfin *fixé*']. (My translation (and identification).) Mallarmé (1869) p. 442.

²⁰⁷ ['ne serait-ce pas le seul moyen de tuer l'*Artiste*?'] Boulez (1957a) p. 420 (in French) and p. 38 (in English).

²⁰⁸ See: this dissertation p. 122.

Boulez and Cage: A comparison

Boulez's attitude to chance is firmly grounded not only in several aesthetic concepts that underpin his own earliest writings but also in a tradition of French artistic thought, most notably Symbolism. This tradition assumes that the role of art is to reveal the world in some way. However, chance, the contingency of existence which is not self-possessed and subject to control, impedes this goal. The artist is forced to find a way of overcoming chance in order to retain control of his work. Consequently, the artist attempts to eliminate, as far as possible, all alien elements such as his own unconscious use of inherited ideas (to 'kill' the Artist).

Opposed to this conception of art is Cage's attempt to obliterate the artist's expression entirely. The first premise in Boulez's approach – the need for expression – is completely rejected by Cage. This rejection permeates much of Cage's writings throughout his career but particularly in the late 1950s, around the time of Boulez's 'Aléa' (1957). For example, Cage writes 'when silence [...] is not in evidence, the will of the composer is. Inherent silence is equivalent to denial of the will.'²¹⁰ He continues by citing Boulez as a prime example of a composer with few silences in his music, and, by implication, a composer who imposes his will. Unlike Cage, Boulez does not seek to destroy his own will and, by association, his own expression: indeed his rejection of the chance of inherited ideas is undertaken to enable expression. Elsewhere Cage writes that '[t]hose involved with the composition of experimental music find ways and means to remove themselves from the activities of the sounds they make. Some employ chance operations'.²¹¹ Cage understands the removal of 'themselves' as the complete obliteration of every aspect involving human will, whereas Boulez seeks the elimination of the non-self-possessed elements.

²⁰⁹ Cage in: Boulez; Cage; Feldman; Wolff (1952) p. 172 (in English).

²¹⁰ Cage (1958a) p. 53 (in English).

²¹¹ Cage (1957) p. 10 (in English).

In short, although both Boulez and Cage appear to reject the 'composer', they view this task from different traditions and with different conceptions of what exactly they wish to reject. The inability to appreciate these differences has led to several fundamental misunderstandings in this area. Charles, in a highly damning article on Boulez, is a major example of this failure to understand the frame of references in which Boulez conceives chance in music. Charles writes that:

The more a work is unified, under the very guise of a labyrinth, the more it will be capable of reflecting the demands and, above all, the hand, the personal touch, of its creator [...]. Elegance, for the artist, will certainly consist in hiding behind a veil of anonymity [...]. But this perfect impersonality bears an implicit signature.²¹²

These criticisms of Boulez's conception of music not only miss the target but also reveal a complete lack of understanding of his aesthetic approach. Charles' main reproach seems to be that, despite Boulez's attempts to achieve artistic anonymity, he continues to express himself. In this criticism, one detects an aesthetic perspective founded in the music of the post-war American Experimental composers such as Cage. This perspective is manifested in Charles' assumption that the expression of the composer is undesirable and the fact that Boulez's compositions betray their creator's hand diminishes their value. As I have already stated, Boulez regards the contingency of the inherited material as a problem to be overcome. His solution is to focus on making every musical feature *necessary*, which implies a negation of himself *not* a negation of expression itself.

Another article that shows a misunderstanding of the different conception of chance between Boulez and Cage is Lee's 'Mimesis and Beyond: Mallarmé, Boulez, and Cage (1986-87)'. In a rather confused essay, Lee correctly recognises that Boulez's ideas on chance are shaped in some way by Mallarmé's writings. Unfortunately, Lee continues by arguing that the difference between the approaches to chance by Boulez and Cage lies in their different readings of Mallarmé: whereas Boulez

²¹² Charles (1965) p. 148 (in English).

focused on system, Cage focused on chance.²¹³ This is despite the fact that Lee himself notes that Mallarmé did not have much influence on the formation of Cage's ideas.²¹⁴ In the pursuit of understanding both Boulez's and Cage's conception of chance, Lee permits himself this conceit. However, many of the points he subsequently makes are also based on equally dubious grounds.

I would argue that the best and most accurate account of this difference between the conceptions of chance articulated by Boulez and Cage is provided by Aguila in the following passage:

[Cage] hoped by these means to efface all trace of the *ego* of the composer (or, more exactly, he carried out a displacement of interest from musical listening, by making the listener listen to the sounds for themselves and not to focus his attention on the expressive or constructive will of the composer).

Pierre Boulez, on the contrary, reached a limit: this period of wiping the slate clean was only undertaken in order to rid oneself of the automatisms of inherited writing.²¹⁵

Having examined Boulez's views to introducing *chance* into the musical form, I would like to suggest that his new conception of form, particularly with respect to his employment of images such as the constellation and the labyrinth, points to something more than a new musical form. Like many of his ideas concerning musical technique, it reflects a fundamental shift towards a new conception of musical practice on a wide-reaching theoretical level. The deliberate introduction of

²¹³ *Ibid.*, p. 181.

²¹⁴ Lee (1986-87) p. 181 (in English).

²¹⁵ ['[Cage] espérait par ce moyen effacer toute trace de l'*ego* du compositeur (ou, plus exactement, il opérerait un déplacement de l'intérêt de l'écoute musicale, en incitant l'auditeur à écouter les sons pour eux-mêmes et non à focaliser son attention sur la volonté expressive ou constructive du compositeur). / Pierre Boulez, au contraire, atteignit un point limite: cette période de table rase n'était destinée qu'à se défaire des automatismes d'écriture hérités.'] (My translation.) Aguila (1992) p. 230.

mobility into the musical form and the conscious attempt to integrate the concept of the unforeseen, a vital element of composition I considered earlier, are mirrored in Boulez's theoretical approach. This can be seen in his mature dialectical conception of music to be examined in the following chapter.

CHAPTER III: CONSTELLATION (1957-)

In chapters I and II, I examined Boulez's aesthetic development manifested in his writings up to 1957. I argued that before 1952, his approach had been orientated towards dominating the musical material by bringing it within a completely consistent and necessary whole. However, this fixation with consistency led to two major aesthetic obstacles which arose in *Structure 1a* (1952). First, he recognised that in attempting to achieve total consistency he lost the *freedom* to respond to the unforeseen ['l'imprévu'], the unexpected developments during composition. Second, he discovered that his notion of consistency inevitably led to inconsistency, i.e. *chance*. In order to surmount these two problems, his aesthetic approach required a change of direction. This transition can be traced in Boulez's writings between 1952 and 1957.

In 1957, this transitional period culminated in the emergence of Boulez's mature, consciously dialectical, conception of music. The first essay to display this is 'Aléa' (1957) which broadly describes Boulez's preoccupations in his transitional period and how he arrived at his new conception of music. Due to its retrospective quality, I have already considered 'Aléa' in the previous chapter.¹

The predominant sources of material for chapter III are the lectures Boulez presented at the Darmstadt Summer School in 1959, 1960 and 1961, at Harvard University in 1963, and at the College de France in the 1980s. The Darmstadt lectures, almost all of which have been published as part of *Penser la musique aujourd'hui* (1963)² or as individual essays in *Points de repère* (1981), constitute Boulez's first attempt to

¹ See: this dissertation p. 99.

confront aesthetic issues in an extended form. The Harvard lectures, subsequently published in two parts as 'Nécessité d'une orientation esthétique' (1963)³ are extremely important to this study, as they contain several of the most revealing passages by Boulez on his 'aesthetic orientation'.⁴ The courses Boulez presented at the College de France in the 1980s have been published as *Jalons (pour une décennie)* (1989).⁵ In addition to Boulez's lectures, I draw from numerous other post-1957 sources which help my examination of his dialectical theory.

In this chapter, I examine Boulez's mature, post-1957, explicitly dialectical⁶ conception of music from a theoretical perspective: how his aesthetic ideas fit together and upon what underlying principles they are founded. In short, this is an overview of his theory of music.

I have decided to describe his dialectical conception of music with reference to musical composition rather than in the abstract, as his aesthetic theory is deeply rooted in composition. It is very difficult to investigate the factors that contributed to his formulation of a dialectical approach without considering the practical musical aesthetic problems which gave rise to it. Indeed, the practical problems encountered in his compositional activity have led to his, sometimes rather idiosyncratic, dialectical conception of music. I would like to stress, therefore, that Boulez does not merely select a philosophical method which is subsequently applied to music. This will become clear in my explication of his theory, as some parts are obviously written based on his experiences concerning total serialism. I shall examine the

² For details concerning the development of this book see: this dissertation p. 292.

³ Published with the titles 'Nécessité d'une orientation esthétique' (1963) and 'Nécessité d'une orientation esthétique II' (1963). See: Boulez (1963d) and Boulez (1963e).

⁴ The fact that the primary sources for this chapter are Boulez's teaching materials from the late 1950s and early 1960s is not insignificant. At that time, his professional life became characterised by his first teaching posts at Darmstadt and Harvard, which were occasional teaching positions, as well as his regular lecturing post at Basel University. I would suggest that his teaching work proved an outlet for his thoughts at this time and helped him, or perhaps forced him, to clarify his approach. For more details on Boulez's teaching work see: this dissertation p. 361.

⁵ See: Boulez (1989a).

⁶ Boulez openly acknowledges that his conception of music is 'fundamentally dialectical'. I refer to the question put to Boulez: 'you envisage music as fundamentally dialectic?' to which Boulez replies

manifestation of his dialectical conception in areas other than musical composition in chapter IV. Finally, after considering the various ways in which this aesthetic principle becomes exhibited in the different aspects of Boulez's career, I shall return to Boulez's overall dialectical theory in the conclusion.⁷

Throughout this chapter, I shall compare Boulez's ideas with those of his influences. In addition, I also refer to several writers such as Hegel, Heidegger, Merleau-Ponty, Sartre and de Beauvoir whose influence Boulez has not explicitly acknowledged but who illuminate his ideas.

I would like to begin my examination of Boulez's dialectical approach by considering its *raison d'être*: the need for expression and the related concept of the *free* autonomous subject.

The importance of expression

Although Boulez has shown reluctance to discuss expression directly, he frequently emphasises that expression is the *raison d'être* of music. He argues that 'if you write it is to communicate'⁸ and that 'the profound problem of music is [...] knowing if it permits you to express yourself and how.'⁹ He stresses that music exists due to the need for expression, and that this expression could not be offered by any other means:

Music exists because there are musicians: not for itself, but because people can only express themselves in that domain [...] I believe that music is a means of irrepressible expression.¹⁰

'It is entirely that.' ['vous envisagez la musique est fondamentalement dialectique?' 'Elle l'est entièrement.'](My translation.) Boulez and Cott (1985) p. 142.

⁷ See: this dissertation p. 375.

⁸ ['si vous écrivez c'est pour communiquer'.] (My translation). Boulez in: Boulez and Jameux (1984) p. 16.

⁹ ['le problème profond de la musique [...] [est] de savoir si elle vous permet de vous exprimer, et comment.'](My translation.) Boulez in: Boulez and Cott (1985) p. 141.

¹⁰ ['La musique existe parce qu'il y a des musiciens: pas pour elle-même, mais parce que des gens ne peuvent s'exprimer que dans ce domaine [...] Je crois que la musique est un moyen d'expression irrépressible.'](My translation.) Boulez in: Boulez and Laurent (1983) (page numbers unknown).

The importance Boulez ascribes to music flatly contradicts the common misconception of him as a 'mathematical' composer who concentrates on numerical schemes rather than 'expression'. Whilst this criticism is based on a highly simplistic attitude towards composition – that the composer's 'expression' comes spontaneously and without calculation¹¹ – Boulez reinforces this perception of himself by avoiding, in a direct manner, this issue in his writings. Nevertheless, there are revealing statements scattered throughout his career that shed light on his conception of expression. I shall consider these statements during the course of this chapter.

At this juncture, I consider it important to eliminate several connotations the highly loaded term expression can easily convey in music. First, Boulez is not primarily concerned with communicating an emotional state or extra-musical idea from the composer to the listener. Indeed, it is certainly not the transmission of a pre-existing idea communicated by the composer through the music to the listener who then decodes the message. Nor is it associated with the notion of conveying bodily gestures, an association that Boulez explicitly rejects.

For the moment, I would like to propose two distinctive features that characterise Boulez's conception of expression. First, it is intrinsically musical – music can express nothing other than itself. I shall return to this later. Second, it is concerned with realising a particular notion of *freedom* based on the idea of the autonomous subject. Before examining Boulez's dialectical approach, I would like to highlight this concept of freedom to which he refers as the 'imagination' or the 'imaginary'.

¹¹ To draw from Boulez's dialectical approach that I shall examine shortly, I would suggest that this mistake is based on the illusory 'naturalness' of the 'expressive' work. Due to its apparently 'immediate' expressive quality, the work conceals the rationalisation involved on the part of the composer in order to achieve this quality of expression.

The imagination (or the 'imaginary')

The concept of the 'imaginary' (or 'imagination') has attracted the attention of several commentators on Boulez's writings. Charles, for example, writes that 'in Boulez's writings one could find a whole mythology of the imagination'.¹²

In psychology, the 'imagination' is the mental activity that makes mental images, the 'imaginary' being the realm of that activity. Imagination is clearly different to perception in that it refers to absent objects: indeed, the more clearly one perceives an object the less one imagines. In its concern with absent objects, imagination is closer to memory than perception. However, the power of the imagination implies something more than memory and suggests the creation of new images. The categories of imagination and conceptual thought are distinct in that the former is concerned with particular images whereas the latter deals with the general abstract concepts of language. Neither imagination nor conceptual thought always comes first: one can imagine a particular image which is subsequently conceptualised, e.g. an object, or one can conceptualise a concept which is subsequently imagined, e.g. a mathematical equation which is later presented as a model.

Boulez claims that the artist's 'imagination' is his 'principle virtue'¹³ and that it is 'absolutely incommunicable'.¹⁴ Understood in this sense, it is different to 'consciousness' that I shall consider shortly. He describes it as the 'queen of faculties'.¹⁵ This latter phrase alludes to Baudelaire's notion of the imagination. Baudelaire argues that the poetic 'imagination' is a 'quasi-divine faculty which

¹² Charles (1965) p. 148. Piencikowski also notes what he describes as Boulez's 'predilection for a ritualised imagination'. [*'prédilection pour un imaginaire ritualisé'*.] (My translation.) Piencikowski (1995) p. 15. I would take issue with this description of a 'ritualised imagination' as Boulez's concepts of the imagination and imaginary reject any ritualistic or sedimented elements.

¹³ [*'la principale vertu: l'imagination'*.] Boulez (1963d) p. 551 (in French) and p. 82 (in English).

¹⁴ [*'ce qui est absolument incommunicable, c'est l'imagination'*.] Boulez (1961c) p. 389 (in French) and p. 127 (in English).

¹⁵ [*'L'imagination, cette "reine des facultés"'*.] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

perceives above all, outside philosophical methods, the intimate and secret relations of things, the correspondances and the analogies'.¹⁶

Boulez also writes that 'the unconscious plays an incalculable role'¹⁷ in the decisions taken by the imagination. This is clearly a reference to Freud's conception of the imagination as the satisfaction of frustrated drives, i.e. through sublimation. Freud argues that the work of art is the result of this sublimation of unconscious desires. Boulez's acknowledgement of the role of the Unconscious in composition may initially appear at odds with his anti-expressive reputation, but this does not necessarily mean that the unconscious desires are 'expressed' in the musical work. It only establishes that the Unconscious helps to direct the development of composition and that it becomes transformed (sublimated) into musical form.¹⁸ Understood in this sense, Boulez's approach differs from that of musical Expressionism which sought direct expression of unconscious desires.

For Sartre, the imagination is a manner of being, the power of negating the inherited material (through absent objects) which permits one to 'doubt', a concept I shall examine later.¹⁹ The imagination, therefore, gives an indication of one's *freedom* to overcome the limitations of the inherited material. I would argue that it is in this sense that Boulez understands the role of the imagination – implicitly connected to a particular notion of the *free* autonomous subject whose roots can arguably be tracked back to the eighteenth century and the Enlightenment. As Boulez's conception of the imagination and the imaginary is comparable to the notion of freedom found in

¹⁶ ['une faculté quasi divine qui perçoit tout d'abord, en dehors des méthodes philosophiques, les rapports intimes et secrets des choses, les correspondances et les analogies'.] (My translation.) Baudelaire, Charles in a study from 1857 on Poe (Pl. II, p. 334) quoted in footnote 1 to his poem 'Correspondances' by: Dupont (1991) pp. 263-264.

I shall return to this description, particularly the idea of 'correspondances', later in this chapter. See: this dissertation p. 193.

¹⁷ ['l'inconscient y joue rôle incalculable.'] Boulez (1961c) p. 389 (in French) and p. 127 (in English).

¹⁸ As I shall argue shortly, Boulez draws from Schopenhauer's concept of 'will' to depict this sublimation.

¹⁹ For my discussion of doubt see: this dissertation p. 161. Sartre's concept of the 'imaginary', distinguished from the 'imagination', refers to the experience of the art-work. I discuss the idea of the imaginary used in this way in chapter IV. See: this dissertation p. 339.

Existentialist writings, I consider it helpful to set out briefly what an Existentialist concept of freedom involves.

The imagination as freedom

Freedom, for the Existentialists, does not necessarily refer to the notion of political or social freedom. Nor does it refer to gratuitous acts, i.e. to perform any act according to one's whim.

I would argue that the best way of approaching the notion of Existentialist freedom is through Sartre's concept of the 'initial choice' which, as I shall argue later, is an important element in Boulez's aesthetic theory. Cooper explains that the 'initial choice', which occurs every time one chooses, is based on the acknowledgement that for any choice to be free (for it to be a real choice and not an illusion as in complete determinism²⁰) it must be preceded by a further free choice of the motives behind the first one. However, this would mean that freedom to choose never begins, as there could never be a first free choice. Sartre asserts that there is an 'initial choice' that occurs which presupposes no other.²¹ Through the 'initial choice' one defines oneself. However, it should be noted that this conception of freedom is not an individual freedom. To perform an act is implicitly to endorse it universally for everyone. De Beauvoir emphasises that one's acts must not negate the freedom of others and that to do so is based on one's alienation from oneself.²² One typically avoids this responsibility through what Sartre famously terms 'bad faith'.

'Bad faith' is perhaps one of Sartre's most pervasive ideas but arguably one of the most misunderstood. It refers to any attempt to avoid recognising that one is free and therefore responsible for one's action. This avoidance occurs through viewing oneself as a being-in-itself (i.e. as a fixed object) and through the passive acceptance

²⁰ One can see that Sartre's 'initial choice' contradicts Freud's concept of the 'unconscious' (in which all behaviour and thought is founded upon causal relations). Cooper notes that, for Sartre, a belief in the Unconscious is bad faith. See: Cooper (1990) pp. 96-97 (in English).

²¹ See: *ibid.* pp. 158-159.

of the historical givens. As I shall consider shortly, I would claim that the idea of 'bad faith' is an important, but unacknowledged, idea in Boulez's aesthetic conception of music.

I would now like to examine Boulez's three-part dialectical approach beginning with the first stage: 'immediate memory'.

First stage of the dialectic: *Chance*

The first stage of Boulez's dialectical conception of music is based on the claim that all 'concepts' are inherited: that one cannot invent a concept from nothing. Concepts are historical and consequently one's expression is always historical. It is not possible to create an innate ahistorical concept.²³ As all concepts are inherited, Boulez argues, the world can only be understood through comparisons and through attempts to rationalise its structures. To support this claim, he quotes from the philosopher Louis Rougier:

What we can know of the world is its structure, not its essence. We think of it in terms of relationships and functions, not of substances and accidents.²⁴

One understands the world through the relationships between things rather than by knowing individual substances or accidents. In other words, one can only know the world through concepts and not 'immediately'.

This claim upon which Boulez's entire aesthetic theory is founded is, I would argue, a particularly Existentialist conception of being. For the Existentialists,

²² See: Beauvoir, de (1947a) pp. 648-649 (in French).

²³ Nevertheless, one can 'synthesise' new concepts from those that already exist, by translating concepts from one field and applying them to new areas. This is often achieved unconsciously: a very simple example is that of a child who learns to count with stones but then, unassisted, applies the counting rule to apples. I shall examine the idea of synthesis later.

²⁴ Boulez quotes Rougier: ['Ce que nous pouvons connaître du monde, c'est sa structure, non son essence. Nous le pensons en termes de relations, de fonctions, non de substances et d'accidents.'] Boulez (1963b) p. 31 (in French) and p. 32 (in English).

consciousness is always 'consciousness of' something – i.e. consciousness does not exist in itself but acts on intentional objects inherited through language. As Merleau-Ponty describes it 'language is not the clothing of my thought but its body. Thought is no internal thing and does not exist independently of the world and of words'.²⁵ One cannot conceptualise the world outside of the inherited language. The recognition that one constructs one's own world, leads to a conception of oneself as a 'tubula rasa', a blank slate upon which one accumulates a being. Boulez's writings endorse this conception through terms such as the 'void', the 'abyss' and 'nothingness', the latter term inevitably suggesting Sartre. These terms contradict the notion that one has a fixed, pre-existing essence which is found and realised, as de Beauvoir describes very succinctly:

the 'me' is not: I exist as authentic subject, in a constantly renewing burst which is opposed to the frozen reality of things. I am thrown without help, without a guide, in a world where I am not settled in advance to wait. I am free: my projects are not defined by pre-existing interests, they present their ends for themselves.²⁶

This anti-Freudian position means that one is always surpassing what one *is*. Merleau-Ponty argues that this idea can be found in Hegel's writings, claiming that '[t]here is an Existentialism of Hegel in the sense that for him, man is not immediately a consciousness which possesses its own thoughts clearly, but a life given to itself which seeks to understand itself'.²⁷ Similarly, Merleau-Ponty quotes Hegel making another proto-Existentialist statement which summarises this conception of the self: '[c]onsciousness... is immediately the act of surpassing the limit, and, when limited to belonging to him, the act of surpassing himself'.²⁸

²⁵ Merleau-Ponty (1945) pp. 182-183 (in English).

²⁶ ['Dans l'existentialisme [...] le moi n'est pas; j'existe comme sujet authentique, dans un jaillissement sans cesse renouvelé qui s'oppose à la réalité figée des choses; je me jette sans secours, sans guide, dans un monde où je ne suis pas d'avance installé à m'attendre: je suis libre; mes projets ne sont pas définis par des intérêts préexistants; ils posent eux-mêmes leurs fins.'] (My translation.) Beauvoir, de (1945) p. 398.

²⁷ ['il y a un existentialisme de Hegel en ce sens que pour lui, l'homme n'est pas d'emblée une conscience qui possède dans la clarté ses propres pensées, mais une vie donnée à elle-même qui cherche à se comprendre elle-même.'] (My translation.) Merleau-Ponty (1946) p. 1314.

²⁸ ['La conscience... est donc immédiatement l'acte d'outrepasser la limite, et, quand sa limite lui appartient, l'acte de s'outrepasser soi-même.'] (My translation.) *Ibid.*, p. 1314.

Certainly, there is a development of thought that stretches back to Hegel which is founded on the aspiration of achieving a radical freedom of thought. As I have already noted, this is articulated in Boulez's writings as the 'imaginary'. One's thought is only limited by its concepts, i.e. thought is only limited by itself.

Thus far, I have established that Boulez's conception of being is particularly Existentialist in that he insists that consciousness only exists through intentional objects, i.e. concepts. This results in the notion of the subject as an empty void, to which Boulez alludes in the following passage:

Are you not afraid of finding, quite literally, *nothing* at the heart of this 'mystery', or at least nothing that has not already been formulated by more illustrious thinkers?²⁹

Boulez continues by arguing that the fear of finding 'nothing' at the heart of rationality is compounded by the 'fear of not being able to recompose the 'mystery''³⁰ once it has been unveiled. In response to this problem, he insists upon adopting a rational approach which will make one's 'imagination' stronger. This advocacy of rationality is unsurprising in itself. However, he continues in a way that flatly contradicts Existential thought. He argues (in a passage that introduced this dissertation) that:

I am convinced that in every great composer [...] there is an "indestructible kernel of darkness"! He can never destroy this even if he should want to: it is the deep and inexhaustible source of that radiation which will unfailingly resist every purely rational approach. He can degrade it only by either plundering, forgetting (which implies hating), or deriding it. These intentions are not yet mine... I put my faith in the "kernel of darkness", which will still persist after every momentary flash of illumination.³¹

²⁹ ['Ne craignez-vous pas de, littéralement, ne *rien* trouver à la naissance de ce "mystère", du moins rien que ce que des esprits plus illustres se sont déjà ingéniés à formuler?'] (My modified translation.) Boulez (1963d) p. 550 (in French) and p. 82 (in English). The last sentence is a clear reference to Sartre.

³⁰ ['la peur de ne pouvoir recomposer le mystère'.] (My modified translation.) *Ibid.*, p. 552 (in French) and p. 83 (in English).

³¹ ['Je suis sûr qu'il existe dans tout grand compositeur [...] un "noyau infracassable de nuit"! Quand il le voudrait, il ne pourrait arriver à détruire en lui cette source profonde et inépuisable de radiation (le don, quoi qu'il arrive, résistera à toute approche purement rationnelle) – il ne pourra le dégrader

The idea of the 'kernel of darkness' depicts that which is irrational and which is unknowable through rational analysis. I would argue that this is the autonomous subject at the heart of being I considered earlier. It is that which provides the most profound 'why' to one's actions and what makes a thing what it *is*. In this sense, the 'kernel of darkness' can be understood as the 'origin' of oneself, as in Boulez's concept of the 'original instrument'. Indeed, this notion of an irrational origin to one's subjective freedom is described in Boulez's writings with reference to the concept of 'will'.

The concept of 'will' can be traced back to Schopenhauer's writings and refers to the interior and profound origin of a thing (or oneself) that remains unknowable. The 'will' is inherently free and constantly 'becoming' what it is, i.e. becoming realised in the world. Schopenhauer claims:

we often cannot give account of the origins of our deepest thoughts: they are the product of our mysterious interior. Judgements, sudden ideas, decisions rise unexpectedly from those depths, to our own surprise.³²

Opposed to the will is 'representation', the conscious, rational surface side to the world which we can know. This representational side is the intentional concepts I have been discussing in terms of Existentialist thought.

The first appearance of the 'will'³³ in Boulez's writings dates from 1979 in which he speaks of the 'unique will'.³⁴ Similarly, he later states that '[e]ach important work

qu'en saccageant, ou en l'oubliant, par haine, ou par dérision. Ces intentions ne sont pas encore miennes... J'ai confiance en ce « noyau de nuit », qui subsistera après l'éclat d'un moment dispersé.'] Boulez (1963d) p. 552 (in French) and p. 83 (in English).

³² Schopenhauer (1819) Part II p. 849 (in English).

³³ Excluding the title of his conversation with Deliège, *Par hasard et par volonté* (1975). See: Boulez and Deliège (1975).

³⁴ ['volonté unique'.] (My translation.) Boulez in: Boulez and Clavé (1990) p. 2. It should be noted that Boulez is specifically responding to a question concerning whether the transmission of music allows the composer to make a coherent approach and avoid dispersion. Boulez makes exactly the same argument in his acceptance speech on receiving the Siemens prize in 1979. See: Boulez (1979a) p. 561 (in French) and pp. 525-526 (in English). The date of the first appearance of this term in

[...] is a new aggregate where a unique will has succeeded in a synthesis unknown up to then.'³⁵ In terms of Schopenhauer's philosophy, it is incorrect to write of a 'unique will' as the will is undifferentiated and free and therefore cannot be distinguished from another will.

I would argue that the 'will' or 'kernel of darkness' is also encapsulated in Boulez's appropriation of Michaux's phrase 'centre and absence'.³⁶ The centre is the autonomous subject which guides one's actions but this centre is not rational or knowable: it remains absent in one's consciousness. One can only begin to come close to this unknowable irrational non-conceptual centre through rationality and concepts.

In summary, Boulez appears to adopt two concepts of being. The first I would identify as drawing from an Hegelian viewpoint (I include in this category the Existentialist concept of being) based on a notion of radical freedom in which consciousness acts through intentional objects. The second concept of being takes as its point of departure Schopenhauer's concept of 'will' in which one attempts to realise one's 'becoming'. Both conceptions of 'being', nevertheless, agree that consciousness (Schopenhauer's world as representation) only acts on intentional objects without which it is empty.

As consciousness requires intentional objects in order to conceptualise the world, in an analogous manner Boulez argues that musical composition can only be created through the inherited forms, in particular the inherited musical *métier*. This musical inheritance can be considered as comparable to concepts only insofar as it is the rationalised, conceptual aspects of music (clearly, in a strict sense music is non-conceptual). This emphasis on the inability to avoid the rationalised means of music

Boulez's writings is not insignificant. He had spent considerable time conducting Wagner's *Ring* cycle, a composer who drew considerably from the ideas of Schopenhauer.

³⁵ ['Chaque œuvre importante [...] est une agrégation nouvelle où une volonté unique a abouti à une synthèse inconnue jusqu'alors'.] (My translation.) Boulez (1989a) p. 39.

³⁶ As I shall discuss later, the idea of centre and absence informs Boulez's understanding of the relationship between words and music.

results in the conclusion that the composer cannot avoid history by inventing music from nothing. Boulez states this clearly when he writes that 'the composer depends on the age which conditions him'³⁷ and that:

Our first awareness of music as such can take the form only of an awareness of music already in existence, i.e. the music of the past. Even more importantly, any awareness of the *métier* of music can only be an awareness of the *métier* of our predecessors. There can be no musical gift, however dazzling, of which this is not true. No *métier* can be invented *ex nihilo*.³⁸

Without this inherited *métier*, the composer cannot conceive his music. Boulez writes, employing the term 'means of transmission' to stand for *métier*, that 'invention only exists, in a tangible way, thanks to the means of transmission without which thought remains at the state of intention.'³⁹ The 'means of transmission' or *métier* to which Boulez refers above can be subsumed under the category of the musical 'material'.

One can establish from several of Boulez's texts that the composer's 'material' refers not only to the traditional conception of thematic material but also to everything which could be involved in composition. This includes 'the givens of a particular historical period and of the means of expression in general.'⁴⁰ The 'givens of a particular historical period' touches upon the claim that material is historical in some way. I shall return to this later. The 'means of expression' refers to all the

³⁷ ['le compositeur dépend de l'époque qui le conditionne'.] (My translation.) Boulez (1963d) p. 547 (in French) and p. 78 (in English). One of the earliest appearances of this idea is in 1961 when Boulez writes that the composer 'cannot be independent from the age in which he lives'. ['il ne saurait être indépendant de son époque'.] (My translation.) Boulez (1961d) p. 501 (in French) and p. 40 (in English).

³⁸ ['La première prise de conscience que l'on puisse avoir de la musique – j'entends, de la musique en tant que phénomène général, que catégorie – s'effectuera par la prise de conscience des œuvres du passé. Qui plus est: la prise de conscience de ce qu'est le métier musical ne pourra venir que d'une prise de conscience du métier des prédécesseurs. Il n'y a pas de don, aussi brillant soit-il, qui pourrait s'en passer. Le métier ne saurait se créer *ex nihilo*.'] Boulez (1961c) p. 382 (in French) and p. 121 (in English).

³⁹ ['l'invention n'existe, de façon tangible, que grâce à cet ensemble de moyens de transmission sans lesquels la pensée reste à l'état d'intention.'] (My translation.) Boulez (1989a) p. 70.

⁴⁰ ['des données d'une époque de l'histoire, et des moyens d'expression en général.'] (My translation.) Boulez (1961d) p. 495 (in French) and p. 35 (in English).

aspects involved in composition consisting of 'obstacles of all sorts from the production itself of sound up to the capacity of execution.'⁴¹ Essentially, everything involved in the process of composition and performance (including technology and performance spaces) can be considered as material. Most importantly, and most obviously, the material encompasses the inherited musical acquisitions that appear in the form of the inherited musical language.

It is vital to recognise that the material is not distinct from oneself, i.e. objective' but incorporates one's intentional relationship to 'it'. It includes, therefore, not only the possibilities as a set of objective possibilities but also one's capacity for the *ways* of working with the material. This is important as one can believe that it is possible to take the material and work with it in a removed manner – i.e. see the material in its objectivity. This belief is based on the failure to recognise that material includes the *way* one conceives the relationships between material and their possibilities. The composer cannot take material and then work with it his own way – the way one works with the material is material itself.

Musical expression is dependent upon the inherited rationalised musical material

The claim that the only possible means of achieving expression is through the intermediary of the material – the inherited musical language – is a particularly distinctive feature of Boulez's mature aesthetic essays. Although it is a manifestation of his dialectical approach, it constitutes a smooth continuation of his earlier fixation with consistency. It is, of course, founded on the claim that compositional thought can only be based on the musical equivalent of concepts – i.e. the rationalised inheritance on the musical material.

⁴¹ ['obstacles de toute sorte depuis la production elle-même du son jusqu'à la capacité d'exécution.'](My translation.) Boulez (1980b) p. 22.

From this, one can argue that not only musical thought is solely possible through the rationalised inherited musical material but also that this material is the only means of *expression*. One can present this idea in its inverted form: although sound can exist without relying exclusively on this inheritance, *expression* can only be achieved through the rationalised forms of the inherited musical material. This is because expression relies on the rationalised, 'conceptualised' elements of the inherited musical material. These concepts are inherently intentional, not purely objective, and are therefore historical.

The first clear articulation of Boulez's emphasis upon the unavoidability of confronting the inherited material (particularly in the form of the musical language) appears in 'Éventuellement' (1952). As I discussed in chapter II,⁴² despite that at the time of writing 'Éventuellement' his aesthetic approach was not yet dialectical, this essay displays the first indications of a move towards a dialectical conception. Whilst arguing that the importance granted to the musical language is due to expressive needs, Boulez rebuffs the accusation that thoroughness in technique is merely an intellectual endeavour:

Do not forget that, in music, expression is intrinsically linked with language, even with the technique of language. Music is perhaps the least dissociable of all the means of expression, in the sense that it is its morphology which, before all else, reveals the evolution of the artist's sensibility. One can see, therefore, how the reproaches of intellectualism are ill-founded, since the formal means are the only possible communication.⁴³

⁴² See: this dissertation p. 84.

⁴³ ['N'oublions pas qu'en musique, l'expression est liée très intrinsèquement au langage, à la technique même du langage. La musique est peut-être le phénomène le moins dissociable de tous les moyens d'expression, en ce sens que c'est sa propre morphologie qui rend compte, avant tout, de l'évolution sensible du créateur. On voit alors comment ces reproches d'intellectualisme sont mal venus puisque les moyens formels sont la seule possible communication.'] (My modified translation.) Boulez (1952c) p. 294 (in French) and pp.138-139 (in English). As Boulez's use of the term morphology in this statement dates from 1952 it probably refers to the musical structure generally (i.e. not separate from syntax). For my discussion of his later use of the term 'morphology', see: this dissertation p. 298. It should be noted that in the English version, the conclusion of the penultimate sentence is misleadingly translated as 'expresses the emotional development of the artist'.

Note the last line that stresses that the formal means, i.e. the inherited rationalised material, is the only means of communication, i.e. expression. This argument is the basis of his claim, dating from the early 1960s, that form and content are inextricably linked. To support this, Boulez quotes a phrase from Lévi-Strauss, a structural linguist⁴⁴ and good friend of Leibowitz:

Form and content are of the same nature and amenable to the same analysis. The content draws its reality from its structure, and what we call form is the *structural disposition* of local structures, in other words of the content.⁴⁵

Charles describes Boulez's choice of the quotation above as 'naïve', as it is drawn from anthropology and ambiguous when applied to music.⁴⁶ I would suggest that, in this respect, Charles touches upon a useful point that should be made.⁴⁷ However, Charles makes the mistake of concluding that 'the "content" [...] does not matter very much'.⁴⁸ This ignores all of Boulez's statements stressing that the musical language is the only means of communication.

In his insistence that one can only communicate through inherited rationalised musical forms, Boulez's argument recalls that of his Symbolist and Expressionist influences. Valéry, for example, discussing this idea in terms of literature, argues

⁴⁴ I consider the structuralist influence on Boulez's writings dating from around the early 1960s in chapter IV. See: this dissertation p. 295.

⁴⁵ ['Forme et contenu sont de même nature, justiciables de la même analyse. Le contenu tire sa réalité de sa structure et ce qu'on appelle forme est la "mise en structure" de structures locales, en quoi consiste le contenu.'] Boulez (1963b) p. 31 (in French) and p. 32 (in English). Boulez also cites this line at the beginning of 'Forme' (1960) which was originally the basis of a third chapter for *Penser la musique aujourd'hui* (1963). Although in the original French in these passages is identical, the English version of 'Forme' which appears in *Orientations* (1986) is translated differently from above as: 'Form and content are of the same nature and amenable to the same analysis. Content derives its reality from its structure, and what is called *form* is the "structuring" of local structures, which are the content.' Boulez (1960d) p. 359 (in French) and p. 90 (in English). Deliège provides the original reference: Lévi-Strauss (1960) 'La structure et la forme, réflexion sur un ouvrage de Vladimir Propp' *Cahiers de science économique appliquée* no. 99 Series M No. 7, 5-36. Paris pp. 21-22. See: Deliège (1989) p. 104 (in French).

⁴⁶ Charles (1965) p. 150 (in English).

⁴⁷ There is a tendency on Boulez's part, particularly in *Penser la musique aujourd'hui* (1963), to draw concepts from non-musical disciplines without fully explaining how he precisely understands them or what they mean in a musical context. This issue and the problem of new terminology in general is examined in the section entitled 'Technique' in chapter IV. See: this dissertation p. 292.

⁴⁸ Charles (1965) p. 150 (in English).

that '[e]very idea which comes to us is a composition of ideas which have already been served. Every expression is an arrangement of pre-existing words.'⁴⁹ He continues by claiming that 'Our vocabulary is, in effect, only of history reduced to elements which are assimilatable, usable and living.'⁵⁰

Sedimentation

Boulez argues that all inherited concepts - and accordingly the musical language - have a tendency to appear natural through 'sedimentation'.⁵¹ This idea, traceable to Merleau-Ponty's notion of the 'sedimentation of language',⁵² is the process by which concepts appear to become natural through repetition and their inherent historical aspect becomes fixed, akin to the sedimentation of historical artefacts into archaeological layers. Boulez writes that:

[I]t seems that one finds natural what has become habit, perhaps by education, perhaps by personal experience, both when one has ceased active investigation; is it a paradox to say that one considers as natural only that which one has ceased discovering, *inventing*?⁵³

To encapsulate the process of sedimentation, Boulez typically evokes the 'law of entropy'. He uses this precisely in the same way as it is used in its original sphere of physics. In physics, the 'law of entropy' refers to the tendency towards ever-decreasing useful energy within a particular system.⁵⁴ Boulez similarly writes of diminishing energy within a particular 'system', the 'system' usually being in his case a musical system (e.g. tonality). He writes that:

⁴⁹ ['toute idée qui nous vient est une composition d'idées qui ont déjà servi. Toute expression est un arrangement de mots préexistants.'] (My translation). Valéry (1944a) p. 42.

⁵⁰ ['Notre vocabulaire en effet n'est que de l'histoire réduite en éléments assimilables, utilisables et vivants.'] (My translation). *Ibid.*, p. 43.

⁵¹ Throughout this dissertation, I use the term of 'sedimentation' to refer to this idea. Boulez uses this specific term in an interview from 1990. See: Boulez in: Boulez and Clavé (1990) p. 2.

⁵² Cooper attributes the concept of the 'sedimentation of language' to Merleau-Ponty. See: Cooper (1990) p. 168 (in English).

⁵³ ['il semble que l'on trouve naturel ce dont on a pris l'habitude, soit par éducation, soit par l'expérience personnel, une fois que l'une et l'autre ont cessé toute investigation active; est-ce un paradoxe de dire que l'on considère comme naturel seulement ce que l'on a cessé de découvrir, *d'inventer*?'] (My translation.) Boulez (1963e) p. 558.

there are periods of mutation in the history of music: these periods question the existence of principles that, having being imposed and generally adopted without discussion, become progressively degraded by reiteration. The evolution of the language obeys the general law by which energy diminishes; there is an entropy in the successive systems that have been established during the course of centuries.⁵⁵

This is Boulez's identification of the problem of sedimentation: that through 'reiteration' concepts inevitably become 'degraded', i.e. they lose their expressive power and become naturalised. In another essay, he makes the same point that '[w]hen a logical and coherent system becomes gradually degraded, there is an extremely active search for new materials'.⁵⁶

When concepts become sedimented they appear 'natural' and this leads to two common mistakes. First, concepts can seem so 'natural' that they appear to spring from nowhere but oneself, as though one has invented a concept from nothing. The most obvious example of this in music is the widespread belief that compositional ideas come spontaneously without the help of one's memory of past music and other concepts 'transcribed' into music. Second, concepts can take on the appearance of being distinct from human interference. Yet, Boulez argues, one cannot know the 'essence' of a thing. Inherited concepts only appear 'immediate', as they tend to hide their mediated aspect: quite literally, they are 'handed-down' from others.

Rather than being natural, all concepts are historical (i.e. inherited). This means that claims made about the 'objective' world are based on *chance*: they are contingent

⁵⁴ I am grateful to Andrew Walters for his help on this matter.

⁵⁵ ['l'histoire musicale traverse des périodes de mutation: elles remettent en cause l'existence de principes qui, s'étant imposés à l'adoption générale non sans discussion, se sont progressivement dégradés par un emploi réitéré; l'évolution du langage obéit à la loi générale de dégradation de l'énergie; il y a entropie des systèmes successifs établis au cours des siècles.'] (My modified translation.) Boulez (1961d) pp. 496-497 (in French) and p. 36. (in English).

⁵⁶ ['Un ensemble logique et cohérent s'étant peu à peu dégradé, il se produit une recherche extrêmement active de nouveaux matériaux.'] (My modified translation.) Boulez (1963d) p. 547 (in French) and p. 78 (in English). It should be noted that although he is proposing this idea as a general principle, these statements are targeted at today's passive employment of tonal material and serve to support his argument for the *necessity* of serialism.

rather than being *necessary*. Every claim about the world is shaped by contingent forces and could exist alternatively (i.e. existence is not bound by concepts and essences). Boulez claims that this contingency is in everyone and arises through 'the chronology of the various encounters in your life and even the chronology of that chronology'.⁵⁷

For music, the sedimented language is founded upon historical conceptions of the nature of its medium: sound. Alternatively stated, music is founded on a historically-defined relationship between material and one's conception of the nature of the material. Tonality, for example, is grounded in the principles of acoustics dating from the eighteenth century. Boulez calls this aspect embodying one's conception of the material a 'speculation'.

The concept of the 'speculation' is important in Boulez's writings. Despite its perhaps misleading connotations, the speculation is not a conception of the material that the composer 'plucks from the air'. Like all concepts, the speculation is inherited and appears in the form of the material acquisitions available to the composer. Although I shall examine Boulez's approach towards making a speculation later in this chapter, I would like to consider here the speculations inherited within the sedimented language. I have isolated three categories of inherited speculations that appear in Boulez's writings: 'partial speculations', 'transcriptions' and a cross between these two categories, the 'phantasmagoria'.

Types of sedimentation: The 'partial speculation', the 'transcription' and the 'phantasmagoria'

A 'partial speculation' is a conception of sound which displays inconsistencies with other existing speculations on sound. It can be considered an archaism which has not been integrated to other technical acquisitions.

⁵⁷ ['la chronologie de vos rencontres, et la chronologie même de votre chronologie.'] *Ibid.*, p. 536 (in French) and p. 69 (in English).

The most obvious example of a partial speculation is Schoenberg's application of the serial principle to pitch only. By excluding other musical components such as rhythm and form from his serial conception of music (i.e. by failing to generalise the serial principle) Schoenberg's language retained archaisms. Boulez, himself, provides several different examples of partial speculations in music. One example involves focusing upon the musical vocabulary over form or vice versa.⁵⁸ Another case might be that the rhythmic or instrumental⁵⁹ aspects are particularly innovative as compared to the overall vocabulary.⁶⁰ An interesting example cited by Boulez is that of his own post-war generation which displayed a 'distorted relationship between technique and poetics'.⁶¹

A 'transcription' is a concept drawn from a non-musical context which is applied (i.e. 'transcribed') to music. There are two types of transcription that I would identify in Boulez's writings: the 'commentary' and the 'correspondance'. The commentary is any text that is attached to a musical work or works which comments upon it. The most obvious example of a commentary is the analysis. Therefore, I examine the commentary in the section entitled Analysis in chapter IV. The 'correspondance' is a non-musical concept that is 'transcribed' to music in order to stimulate composition or enrich one's listening experience.⁶² The problem that Boulez identifies with the transcription generally is that it:

represents the elementary stage of common perception which no longer envisages the means [...] of a profound contact. It is the initial shock which can, moreover, lead to nothing if at

⁵⁸ See: Boulez (1963d) p. 538 (in French) and p. 71 (in English).

⁵⁹ For example, in *Eclats* (1965), Boulez explored only resonant instruments employed with either struck attack followed by decay or a maintained sound. See Boulez in: Boulez and Szendy (1993) pp. 139-140 (in French).

⁶⁰ See: Boulez (1963d) p. 538 (in French) and p. 71 (in English).

⁶¹ ['la distorsion entre la technique de l'œuvre et sa poétique'.] Boulez (1963d) p. 538 (in French) and p. 70 (in English).

⁶² I shall discuss the idea of the correspondance later in this chapter. See: this dissertation p. 193.

any moment there arise problems of *realisation* that cannot be overcome and threaten communication.⁶³

In other words, the transcription remains a non-musical concept that has not been dialectically confronted.

A concept in Boulez's writings that constitutes both a partial speculation and a transcription is the 'phantasmagoria'. The 'phantasmagoria' of the composer is an initial speculation (or 'vision') which is explicitly partial which helps drive the process of composition.⁶⁴ This concept makes its first substantive appearance in Boulez's writings in 1985 and can be tracked back to the writings of Adorno and Benjamin.⁶⁵ In their writings, it denotes something which appears 'second nature' because it hides its 'modes of production' (it conceals its mediated aspect).⁶⁶ In other words, the phantasmagoria can be considered as a form of sedimentation.

The problem of sedimentation

Numerous writers have highlighted the problem of the sedimentation of the existing inherited language. Mallarmé defines what he calls either 'reportage' or 'speaking',⁶⁷ which 'only treats the reality of things commercially'.⁶⁸ This refers to the everyday

⁶³ ['elle représente le stade élémentaire de la perception commune, qui n'envisage pas encore les moyens [...] d'un contact approfondi. Elle est le choc initial, qui peut, d'ailleurs, ne pas aboutir, des obstacles de *réalisation* se révélant, à un moment donné, infranchissables, réfractaires à la communication.'] Boulez (1962) pp. 481-482 (in French) and p. 196 (in English). It should be noted that Boulez is writing specifically on the idea of 'correspondances'.

⁶⁴ A phantasmagoria can be considered a particular formal idea perhaps unrelated (in a direct manner) to the music itself e.g., the structural ideas of blocks and points in Boulez's Third Piano Sonata (1957-). See Boulez in: Boulez and Szendy (1993) p. 140 (in French). Another example is Boulez's favoured image of the town that served him for his Third Piano Sonata (1957-) and *Répons* (1981-). For my earlier discussion of the image of the town (or town map) see: this dissertation p. 119.

⁶⁵ According to Paddison, Adorno drew this concept from Walter Benjamin. See: Paddison (1993) p. 124 (in English).

⁶⁶ Originally phantasmagoria shows projected pictures of ghost-like images onto a wall or screen. The projector, i.e. the means of production, was usually concealed.

⁶⁷ ['Parler'.] (My translation.) Mallarmé (1897c) p. 366.

⁶⁸ ['Parler n'a trait à la réalité des choses que commercialement'.] (My translation.) *Ibid.*, p. 366. This reference to commerce appears later in the same text, specifically in relation to 'reportage': 'To narrate, to teach, even describe, each suffices perhaps to change human thought, of taking or putting in the hand of others a piece of money, the elementary usage of after dinner chat the universal

sedimented usage of language in which one assumes a direct relationship between language and reality for the purposes of communication. Similarly, Heidegger describes everyday language as 'Idle Talk' ['Gerede']⁶⁹ which is primarily concerned with talking rather than with expressing the 'being' (the essence) of a thing. Consequently, he argues, it exhibits 'groundlessness' ['Bodenlosigkeit'] because whilst it makes claims about the world, these claims are merely contingent: these claims are lost in the 'They', a communal language which is exterior to oneself.⁷⁰ In addition, Hegel's 'the Familiar' - that which is 'uncritically taken for granted'⁷¹ - and Sartre's 'bad faith' and 'the look' of the 'other'⁷² point to this problem of sedimentation.

Like Boulez, all these writers stress the restricting aspect of the sedimented inherited language. Similarly, all these writers understand this inherited material as unavoidable and one's only means of thought. Boulez discusses this with a continuation of the physics theme of the 'law of entropy' that I identified earlier. He now proposes the image of the 'jet engine' which 'consumes' the sedimented material:

In order to free his personality, [the composer] must effect a real work of force, in the course of which he consumes, like a "jet engine", the potential energy of the material he finds at his disposition.⁷³

reportage which, literature excepted, participates in all genres of contemporary writing.' ['Narrer, enseigner, même décrire, cela va et encore qu'à chacun suffirait peut-être pour échanger la pensée humaine, de prendre ou de mettre dans la main d'autrui en silence une pièce de monnaie, l'emploi élémentaire du discours dessert l'universel *reportage* dont, la littérature exceptée, participe tout entre les genres décrits contemporains.'] (My translation.) *Ibid.*, p. 368.

⁶⁹ Heidegger (1927) pp. 211-214 (in English).

⁷⁰ For example, this idea can be clearly observed in the following: 'Idle talk is the possibility of understanding everything without previously making the thing one's own.' *Ibid.*, p. 213 (in English).

⁷¹ ['Bekannte' 'werden unbesehen als bekannt'.] Hegel (1807) p. 29 (in German) and p. 18 (in English).

⁷² Sartre's concept of 'the look' ['*le regard*'] of the 'other' refers to the objectification of one person by another which turns the person being looked at into a fixed object and therefore reduces his/her freedom.

⁷³ ['Pour dégager sa personnalité, il doit effectuer un réel travail de force, au cours duquel il consomme, comme un "réacteur", l'énergie éventuelle du matériel qu'il trouve à sa disposition.'] (My translation.) Boulez (1963e) p. 554.

Leibowitz uses a very similar idea to describe the same situation of the composer's relationship to history at the start of a new composition. In place of Boulez's description of the composer as one who 'consumes [...] like a jet engine', one could quite easily use Leibowitz's 'propulsive force'.⁷⁴ Both descriptions by Boulez and Leibowitz belie the same attitude towards the inherited material. The composer needs the historical material to begin composition but he must somehow transform this material and make it *necessary* to his own thought. To accept this material blindly is to relinquish one's innate *freedom* and to limit one's thought. Note in the passage above that Boulez wants to 'free his personality'. This freedom is restricted by the contingent aspect of the inherited material. Boulez articulates this problem quite categorically:

The limitations inherent in a social form of transmission have scarcely any *raison d'être* or any logic; we are fully aware of their artificial character, which restricts the imaginary and does not allow it to find expression in an immaterial, fluid dimension.⁷⁵

Elsewhere in Boulez's writings, this 'immaterial, fluid dimension' is also specifically identified as the 'imaginary'.⁷⁶ As I noted at the beginning of this chapter, the 'imaginary' is a key concept in Sartre's writings and constitutes the

⁷⁴ Leibowitz (1947) p. xiv (in English). Elsewhere, Boulez employs Leibowitz's term of 'propulsion' exactly: 'We might perhaps symbolize the relationship between a creative artist and tradition by a kind of propulsion from within, and by means of, a certain milieu.' ['En quelque sorte, les rapports d'un créateur et de la tradition pourraient se symboliser par la propulsion dans et par un milieu donné.'] Boulez (1961d) p. 501 (in French) and pp. 39-40 (in English). This metaphor appears elsewhere in Boulez's writings for example he claims that history drives our acts and describes the past as the 'essential motor of action'. See: ['Le passé, moteur essentiel de l'action.']. (My translation.) Boulez (1989b) p. 1. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

⁷⁵ ['Les limites inhérentes à une forme sociale de transmission n'ont guère de raison d'être, ni de logique; on ressent à plein leur caractère artificiel qui brime l'imaginaire sans lui donner la possibilité de s'exprimer dans une dimension fluide, immatérielle.']. (My slightly modified translation.) Boulez (1969) p. 228 (in French) and p. 213 (in English).

⁷⁶ For example, Boulez describes Mahler's symphonies as 'meeting-places *par excellence* of the imaginary theatre, imaginary novel and imaginary poem; musical expression asserts its claim to what it has been denied, it decides to assume complete responsibility for all possibilities of being, it actually becomes philosophy, by escaping the contingencies of purely verbal transmission. ['Au carrefour d'un théâtre, d'un roman, d'un poème imaginaires, la symphonie devient lieu de rencontre par excellence; l'expression musicale revendique tout ce qu'on lui dénie, elle décide de tout assumer des possibilités de l'être, elle devient véritablement philosophie – en échappant aux contingences de la transmission purement verbale.']. (My modified translation.) Boulez (1976b) p. 280 (in French) and p. 300 (in English).

realm of the artwork and a particular conception of freedom. This Existentialist concept is described in clear terms by de Beauvoir. She argues that when one writes a novel 'one hopes [...] to supersede on the imaginary plane the too strictly defined limits of received experience.'⁷⁷ This concords with Boulez's conception of described above.

The inherited musical material in the form of the musical language becomes, therefore, the primary concern for the composer. He cannot realise his freedom through it in its existing form but he cannot compose without it.

In summary, stage one of Boulez's dialectical theory is based upon the claim that all understanding of the world is founded on inherited concepts. This inherited sedimented material is mediated and is characterised by chance, as one cannot avoid the arbitrary concepts that one inherits – this is the 'body' of one's thought. This material impedes the notion of freedom, the distinctive characteristic of the free autonomous subject. Therefore, the composer's task is to overcome the inherited material and free himself of this unavoidability of history. He sums up this problem as follows: '[the composer] could not exist without [his predecessors]; he cannot exist joined to them.'⁷⁸

2: Second stage of the dialectic: *Necessity*

In order to overcome the inherited material, Boulez proposes that the composer must challenge all concepts. This questioning appears in his writings in several ways. The first and most important term I would like to consider and that I shall use henceforth to denote this idea of questioning is 'doubt'.

⁷⁷ ['on espère [...] dépasser sur le plan imaginaire les limites toujours trop étroites de l'expérience réellement vécue.'] (My translation.) Beauvoir, de (1946) p. 1156.

⁷⁸ ['double', 'Il ne pourrait exister sans eux; il ne peut exister conjointement à eux.'] (My translation.) Boulez (1963e) p. 553.

Doubt

Although 'doubt' ['le doute'] first appears in Boulez's writings in 1954,⁷⁹ it is most extensively described in his important lectures presented at Harvard University in 1963.⁸⁰ In these texts, he proposes that the composer should begin by starting from the point of 'rational doubt'.⁸¹ He expands upon what he means by this:

Doubt [...] which, challenging the existence of the musical project, will ensure our point of departure and free our thought of a number of accumulated handicaps. Wiping the slate clean of a certain number of inherited concepts, we reconstruct our thought on fundamentally new givens, permitting us to open a hitherto unexplored field of aesthetic choice.⁸²

Boulez's usage of the term 'doubt', in particular 'rational doubt', is a reference to Descartes' concept of 'rational doubt'.⁸³ This 'doubt' entails a distancing between oneself and the inherited concept in order to reveal the illusion of its 'natural' aspect

⁷⁹ In 'Probabilités critiques du compositeur' (1954) Boulez argues that one must adopt a position of 'fundamental 'irrespect' (a *doubt*)'. ['un "irrespect" fondamental (un *doute*)']. Boulez (1954b) p. 31 (in French) and p. 109 (in English).

⁸⁰ 'Nécessité d'une orientation esthétique' (1963) and 'Nécessité d'une orientation esthétique II' (1963). See: Boulez (1963d) and Boulez (1963e) respectively. The latter remains unpublished in English.

⁸¹ ['doute rationnel']. (My translation.) Boulez (1963e) p. 552.

⁸² ['le doute [...] qui, remettant en cause l'existence du projet musical, permettra d'assurer notre départ et de délivrer notre pensée d'un certain nombre de handicaps accumulés. Faisant table rase de toutes les conceptions héritées, nous reconstruirons notre pensée sur des données foncièrement neuves, et lui permettrons d'ouvrir ainsi un champ inexploré du choix esthétique.'] (My translation.) Boulez (1963d) p. 548 (in French) and p. 79 (in English).

⁸³ This reference, although assumed by Boulez to be common knowledge, is perhaps not immediately obvious to the English reader. Boulez signals to the reader that he has drawn the concept of 'doubt' from elsewhere when he writes of the 'famous philosophical 'doubt''. ['le doute (déjà fameux...)']. *Ibid.*, p. 548 (in French) and p. 79 (in English). In a slightly earlier article dating from 1961, Boulez alludes to the origin of this term, without stating it clearly. He writes 'un doute fondamental et une insatisfaction permanente. (Rapprochons allégrement Descartes de Trotsky.)' The English reader encountering the English translation unfortunately reads the first part of this statement as 'radical questioning and permanent dissatisfaction' which does not use the specific Cartesian concept of 'doubt'. (See: Boulez (1961c) p. 389 (in French) and p. 128 (in English)). It is only in a later interview dating from 1975 that Boulez confirms explicitly that he is thinking of Descartes. He states: 'that which one calls doubt, the Cartesian doubt'. ['ce qu'on appelle le doute, le doute cartésien']. (My translation.) Boulez in: Boulez and Deliège (1975) p. 70. The reference to the Cartesian concept of 'doubt' would have been regarded as common knowledge in the musical and literary circles in which Boulez moved. For example, Schaeffer also refers to this idea in *Traité des objets musicaux* (1966). See: Schaeffer (1966) p. 15 (in French).

and therefore bring out its historically mediated aspect. Boulez, writing from the perspective of a composer analysing another composer's work, states:

Doubt, as I conceive it, is, above all, a dissolution as complete as possible of the automatism in the relations with "others"; an approach which, in distancing you from another thought, unmasks from it the "natural".⁸⁴

In this passage, Boulez stresses the historically mediated aspect of the inherited material by emphasising that one is involved in a relationship with the thought of 'others'. As I established earlier in this chapter, the 'others' are sedimented into the concepts of the inherited language. Boulez's statement describes, in effect, the second stage of Hegel's dialectical process. Hegel writes:

Thoughts become fluid when pure thinking, this inner *immediacy*, recognises itself as a moment, or when the pure certainty of self abstracts from itself – not by leaving itself out, or setting itself aside, but by giving up the *fixity* of its self-positing.⁸⁵

Hegel continues:

Spirit becomes object because it is just this movement of becoming an *other to itself*, i.e. becoming an *object to itself*, and of suspending otherness.⁸⁶

This distancing from oneself is the distinctive feature of doubt and constitutes a 'negation' of the inherited material. Note that this is a negation of the contingent existing inherited material, the means of expression, *not* a negation of expression itself. As inherited concepts are unavoidable and yet the only means of expression,

⁸⁴ ['Le doute, tel que je le conçois, est, avant toute, une dissolution aussi complète que possible de l'automatisme dans les relations avec "autrui"; démarche qui, en vous distanciant d'une pensée autre, en démasquant le "naturel"']. (My translation). Boulez (1963e) p. 557.

⁸⁵ ['Die Gedanken werden flüssig, indem das reine Denken, diese innere *Unmittelbarkeit*, sich als Moment erkennt, oder indem die reine Gewissheit seiner selbst von sich anstrahlt; - nicht such weglässt, auf die Seite setzt, sondern das *Fixe* ihres Sichselbstsetzens aufgibt']. Hegel (1807) p. 31 (in German) and p. 20 (in English).

⁸⁶ ['Der Geist wird [...] Gegenstand, denn er ist diese Bewegung, *sich ein anderes*, d. h. *Gegenstand seines Selbsts* zu werden, und dieses Anders-sein aufzuheben.']. *Ibid.*, p. 32 (in German) and p. 21 (in English).

all one can decide is whether to choose or negate the material. Boulez states this very clearly:

We all think we are individuals and created our own world, but that's absolutely not true; it's impossible. Composers can follow the cultural patterns they have been given as models, or they can rebel against what they have been taught.⁸⁷

This view of one's capacity to either choose or rebel against what is inherited is a marked feature of Existentialist essays, particularly Merleau-Ponty's famous 'power of refusal'.

There are several different ways in which the principle of doubt appears in Boulez's writings which I would now like to examine.

Doubt as 'forgetting', 'parentheses' and 'renewal'

Boulez often presents the principle of doubt as 'forgetting'. One example appears in his fondness for quoting a passage from Claudel's *Le soulier de satin* (1929):

I hate the past! I hate remembering! The voice that I believe I heard just then at the base of me, behind me,
It is not backward, but forward that it calls me; if it were backward, it would not have such bitterness and such sweetness!⁸⁸

Boulez cites this passage to expand upon an idea by the conductor Roger Désormière, who had recently died, that had struck Boulez. Désormière had declared that the conductor's aim should be 'the gradual ridding of everything useless'.⁸⁹ This

⁸⁷ Boulez in: Boulez and Di Pietro (2001) p. 88 (in English).

⁸⁸ ['J'ai l'horreur du passé! j'ai l'horreur du souvenir! Cette voix que je croyais entendre tout à l'heure au fond de moi, derrière moi, / Elle n'est pas en arrière, c'est en avant qu'elle m'appelle; si elle était en arrière elle n'aurait pas une telle amertume et une telle douceur!'] (My translation.) Boulez (1966b) p. 402 (in French) and p. 512 (quotation in French and English). These are the words of Rodrige, the Vice-King to Panama, when he thinks of Prouhèze. For the original passage, see the troisième journée (vol. II) scene IX: Claudel (1929) p. 83.

⁸⁹ Boulez quotes from one of Désormière's notes. ['se défaire peu à peu de tout l'inutile'.] (My translation.) Boulez (1966b) p. 388 (in French) and p. 500 (in English).

shares with the passage from Claudel the emphasis upon doubting all inherited material in order to arrive at the modernist utopia of pure expression.⁹⁰

Another example of the concept of 'doubt' presented in Boulez's writings as 'forgetting' forms both the subtitle and the concluding line to the article 'Style or Idea?: In Praise of Amnesia' (1971). Boulez attacks Stravinsky's neoclassical works for their reliance, or 'remembrance', of musical styles which, in effect, do not 'doubt' the inherited forms of the material. Boulez, when reminded in a later interview of his statement 'In praise of amnesia' replies:

There is nothing more horrible than direct influences. It is necessary to forget all references, to forget them *voluntarily*, or even to bury them, making the seed from them and to plunge them in their own ground.⁹¹

Boulez's proposals to 'forget' history are, of course, polemical ways of encapturing the claim that concepts must be doubted. Unfortunately, these depictions have led to several fundamental misunderstandings, not least that Boulez completely rejects all of music history, particularly pre-Schoenbergian music. Whilst, this is clearly not true – the considerable time he devoted during the 1970s towards a production of Wagner's *Ring* is an example testifying to the contrary – this misconception persists.

The intensity with which Boulez desires to 'forget' the past is due to his desire to overcome the limitations it places on the 'imaginary', i.e. on one's freedom. In this sense, I would argue that forgetting the past can be interpreted as a rejection of 'bad faith'. Sartre condemns the reliance upon inherited forms and styles as it merely

⁹⁰ It should be noted that the association of the passage from Claudel with Boulez's concept of 'doubt' is not obvious from this article. This link is articulated much more clearly at the beginning of a course Boulez presented at the Collège de France in 1989 entitled 'Mémoire et création I' (1989) in which he explains that 'I hate remembering' encapsulates his desire to forget (doubt) all inherited concepts. See: Boulez (1989b) p. 1 and p. 22 (in French).

⁹¹ ['Il n'y a rien de plus horrible que les influences directes. Il faut oublier toutes les références, les oublier *volontairement*, or encore les enfouir, en faire de la semence et les plonger dans sa propre terre.'] (My translation.) Boulez in: Boulez and Szendy (1993) p. 144. Note the italicised word 'volontairement' whose relation to the concept of 'volonté', the 'will', is much clearer in the French than in the English.

obscures one's freedom, a freedom that he ascribes to consciousness. He writes that 'consciousness continually experiences itself as the nihilation of its past being'.⁹²

The need to doubt all concepts is present in Boulez's earliest articles and constitutes a recurring theme in Leibowitz writings. Indeed, Leibowitz's conception of this idea very closely resembles that of Boulez. In the following, Leibowitz urges today's composer to approach inherited ideas with 'radical scepticism', a concept which broadly corresponds to that of 'doubt':

should not every serious work [...] begin by approaching all the problems which have arisen up to this point with the most radical scepticism? It is not until we have put all our "knowledge" in quotation marks that our conscious judgement can attain that unhackneyed freshness, allied with propulsive force, which will permit us to present clearly and lucidly the problems which we are about to attack.⁹³

Compare this with Boulez's statement:

It is necessary to disseminate knowledge and information in order to remove the fear from the music of our time: fear which is revealed as the primary source of rejections and a priori judgements that one often confronts. After learning how to trace the paths that today's composers have followed [...] one will be capable of discovering with interest that which is current, and develop a critical judgement based on value and not on prejudice.⁹⁴

Both statements by Leibowitz and Boulez take as their point of departure the need to doubt every inherited idea. In both, Leibowitz and Boulez stress that this is not merely an attempt to attain originality and avoid reproducing inherited ideas: It is an

⁹² Sartre (1943) p. 64 (in English).

⁹³ Leibowitz (1947) p. xiv (in English). Note that Leibowitz views composition from a characteristically western art music perspective as that of problem-solving. This stems from an approach which seeks to 'synthesise' the inherited material into a 'consistent' language. I shall return to the point in detail later. See: this dissertation p. 184.

⁹⁴ ['il nous faut [...] disséminer connaissance et information pour que tombe l'appréhension devant la musique de notre temps: appréhension qui se révèle la source principale des rejets et des jugements a priori que l'on est si souvent amené à déplorer. Ayant appris à repérer les chemins qu'ont suivi les compositeurs d'aujourd'hui [...] on sera en mesure de découvrir avec intérêt ce qui est actuel, et de développer un jugement critique fondé sur la valeur et non sur le préjugé.'] (My translation.) Boulez (1979d) (no page numbers). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

integral element in a much larger vision of musical activity. This questioning of one's inheritance in order to revitalise what Leibowitz calls one's 'conscious judgement' and what Boulez calls one's 'critical judgement' is not unique to either writer. Schoenberg's essays, for example, also stress the need 'to free oneself of all the presuppositions based on one's training and experience, in order to arrive at a new, intuitive realization.'⁹⁵

Note in the passage by Leibowitz above the reference to 'quotation marks'. This recalls Boulez's idea of 'parentheses' I considered in chapter II.⁹⁶ Boulez's declaration to 'claim for music the right to parentheses and italics...'⁹⁷ refers, as he explains in a later article, to the ability to reorder and remove musical sections in 'mobile form', comparable to the literary usage of parentheses. However, in another text he describes *Structure 1a* (1952) as 'a sort of "parenthesising" of the musical language, in its means as in its ends, in its grammar as in its expressive usage'.⁹⁸ This comes very close to Leibowitz's conception of 'quotation marks' as comparable to 'doubt'. I would suggest that Leibowitz, and perhaps Boulez, is drawing upon the French translation of Husserl's concept of 'epoche'. In an article by de Beauvoir that appeared in *Les Temps Moderne*, a journal with which Boulez was familiar and to which Leibowitz contributed,⁹⁹ she translates 'epoche' as 'putting between parentheses'.¹⁰⁰ This refers to the attempt to 'put in parentheses' objects from one's own consciousness in order to examine pure mental content.¹⁰¹ Clearly there is a marked similarity between this and the 'distancing' of 'doubt' I considered earlier.

⁹⁵ Schoenberg (1909) p. 191 (in English).

⁹⁶ See: this dissertation p. 127.

⁹⁷ ['Réclamons pour la musique le droit à la parenthèse et à l'italique...'] (My slight alteration of the English translation.) Boulez (1954c) p. 335 (in French) and p. 19 (in English).

⁹⁸ ['La première pièce [...] [Structure 1a] se présente plus comme une sorte de "mise entre parenthèses" de la langue musicale, dans ses moyens comme dans ses fins, dans sa grammaire comme dans son usage expressif'.] (My translation.) Boulez (1963e) p. 565.

⁹⁹ See Boulez in: Boulez and Walters (2002) p. 405 (in English).

¹⁰⁰ De Beauvoir writes that 'The Existential conversion must be closer instead to the Husserlian reduction: that man 'puts between parentheses' his will of being and is brought back to the consciousness of his true condition.' ['La conversion existentialiste doit être rapprochée plutôt de la réduction husserlienne: que l'homme "mettre entre parenthèses" sa volonté d'être, et le voilà ramené à la conscience de sa vraie condition.'] Beauvoir, de (1947b) pp. 20-21.

Specifically concerning musical composition, Boulez refers to the principle of doubt as 'renewal'.¹⁰² 'Renewal' in this sense means that the musical language is always in a state of flux and permanently being questioned and 'renewed'. Elsewhere, he states this clearly by writing that 'the unification of the language implies a total renewal of "semantic" values; the questioning of the vocabulary at every stage'.¹⁰³ As I established in chapter I,¹⁰⁴ the term 'renewal' denotes both an abstract principle, as in the example above which refers to the renewal of the musical technique, and also the more practical idea of constantly varying the musical material, most notably in the renewal of sound components in serialism. Although Boulez attributes the concept of 'renewal' to Souvchinsky,¹⁰⁵ it can easily be found in Leibowitz's writings, to the extent that, I would argue, the latter appears the most probable source. As I shall show in chapter IV, the concept of renewal is a cornerstone of Leibowitz's approach to history.

Thus far, I have looked at the various guises under which the principle of 'doubt' appears in Boulez's writings. This principle, whether explicitly identified using the term of 'doubt' or by other means, characterises the thought of several influences on Boulez.

¹⁰¹ I draw from Scruton's description of 'epoche'. See: Scruton (1994) p. 39 (in English).

¹⁰² ['*renovation radicale*'.] Boulez (1979e) p. 283 (in French) and p. 303 (in English).

¹⁰³ ['L'unification du langage impliquait un renouvellement total des valeurs "sémantiques"; la mise en question du vocabulaire à tous les stades'.] (My translation.) Boulez (1963e) p. 564. Boulez is referring to the first book of *Structures* (1952).

The necessity of renewing musical form in each musical work, i.e. of constantly making it new, is a feature that Boulez highlights in serialism. For example, he writes that '[t]he universe of serial thought being essentially a *relative* universe, there can be no question of fixed, non-relative forms.' ['Dans l'univers *relatif* où se meut la pensée sérielle, l'on ne saurait donc songer à des formes fixes, non relatives.'] Boulez (1960d) p. 359 (in French) and p. 90 (in English).

¹⁰⁴ See: this dissertation p. 58.

¹⁰⁵ See: Boulez (1963e) p. 573 (in French). Due to the lack of available material written by Souvchinsky, it is difficult to confirm or refute this claim. However, I would note that despite all the

Influences on Boulez that also advocate 'doubt'

As I have already noted, de Beauvoir advocates the application of 'epoche', similar to 'doubt', to all sedimented ideas. She also explicitly uses the term 'doubt' to describe the reader's engagement with the novel. She argues that 'The reader questions himself, he doubts, he takes part and this hesitant elaboration of his thought is an enrichment that any doctrinal teaching cannot replace.'¹⁰⁶ I would suggest that this idea of 'doubting' inherited ideas, if not always this specific term, is an important Existentialist concept. Heidegger's notion of 'Angst' which 'forces inauthentic Dasein [being] to confront the true structure of its existence',¹⁰⁷ i.e. Angst which forces one to problematise the issue of being, is also comparable to 'doubt'. Interestingly, Heidegger claims that this Angst is provoked by the 'voice of conscience'¹⁰⁸ ['Stimme des Gewissens'] which 'summons Dasein's [being's] Self from its lostness in the "They"'¹⁰⁹ (the 'They' understood as the inherited material at one's disposal). This 'voice of conscience' recalls Claudel's 'voice' that calls one forward which comes from one's 'base'. This is particularly illuminating as both passages share the idea of rejecting what is given in favour of a 'voice' which calls them towards the unknown.

An important feature of the Surrealist movement is its rejection of passively accepting all sedimented ideas. One can understand the surrealist emphasis on dreams and their advocacy of 'automatic writing' as attempts to avoid repeating inherited ideas in order to reveal the repressed aspects of the unconscious.¹¹⁰ Artaud,

clear similarities between the writings of Boulez and Leibowitz, Boulez has never acknowledged his teacher's influence.

¹⁰⁶ ['Le lecteur s'interroge, il doute, il prend parti et cette élaboration hésitante de sa pensée lui est un enrichissement qu'aucun enseignement doctrinal ne pourrait remplacer.'] (My translation.) Beauvoir, *de* (1946) p. 1155.

¹⁰⁷ Mulhall (1996) p. 109 (in English).

¹⁰⁸ Heidegger (1927) p. 319 (in English).

¹⁰⁹ *Ibid.*

¹¹⁰ A passage by Breton confirms that he identifies this attitude as distinctively surrealist. He defines several writers, including Rimbaud and Carroll, who were surrealist in most respects but one: it is possible to 'disentangle in each of them a number of preconceived notions to which – very naively! – they clung'. ['je démêle chez chacun d'eux un certain nombre d'idées préconçues auxquelles – très

in particular, vehemently rejected all forms of received ideas, especially artistic 'institutions' which fix thought. The surrealist-influenced artist exhibiting the most striking similarities with Boulez's desire to forget is Klee.

A recurring problem in Klee's theoretical texts is that whilst the artist should seek to avoid unconscious memories of inherited ideas in order to create a new form of expression, he cannot begin with anything other than his inherited material. This aesthetic dilemma in Klee's texts seems to have been important for Boulez, as he typically cites Klee on this issue in particular. On the first occasion he quotes from Klee's writings in 1956, Boulez selects a phrase encapsulating Klee's (and his own) attitude towards history: 'we have to be reborn, and to know nothing, absolutely nothing, of Europe.'¹¹¹ This is a polemical declaration of the attempt to 'forget', i.e. 'doubt' the inherited material. In 1971, however, Boulez concludes 'Stravinsky: Style or Idea?' (1971) with a reference to the flip-side of this argument: Klee's fear that one cannot escape from the knowledge of one's own culture.¹¹² This tension in Klee's writings not only characterises Boulez's selection of quotations from Klee's texts but also is a feature he explicitly identifies in Klee's thought.¹¹³ Due to this, I would suggest that, for Boulez, Klee largely represents this aesthetic conundrum.¹¹⁴

naïvement! – ils tenaient.'] (My translation.) Breton (1924) p. 37. By implication, to be considered surrealist is to reject all preconceived notions.

¹¹¹ ['Il faudrait renaître, et ne rien, absolument rien savoir de l'Europe.'] Boulez (1956b) p. 160 (in French) and p. 25 (in English). According to Walsh, this line is quoted in Grohmann, W. *Paul Klee* (Stuttgart, 1954) p. 41 (English version (London, 1954) p. 41. See: Walsh: (1991b) p. 25 (in English).

¹¹² See: Boulez (1971b) p. 323 (in French) and p. 359 (in English).

¹¹³ See: Boulez (1989c) p. 147 (in French).

¹¹⁴ One should, therefore, understand Boulez's intended appropriation of Klee's title 'À la limite du pays fertile' as the subtitle to the first book of *Structures* (1952) as being indicative of two compositional ambitions. First, it unquestionably reflects the absurd results of the limits of rationality (in the form of automatic generation of musical structures). Second, it also signals that *Structures* should be viewed as the presentation of the aesthetic problem of the unavoidability of one's inheritance which one, nevertheless, must 'forget'. If one only accepts the first (and most obvious) significance of this phrase – that of absurdity – then Boulez's subsequent use of it as the title of his article 'À la limite du pays fertile (Paul Klee)' (1955) becomes problematical. In this essay, it is very difficult to establish the absurd element in a discussion of the possibilities opened to the composer by the advent of electronic technology. Yet, the second meaning of this phrase remains applicable as it discusses the foundation of a new means of expression based on new technology and an avoidance of continuing to write in the inherited language of tonality.

Another influence on Boulez's conception of music that shares his desire to 'doubt' all inherited ideas is Mallarmé. Scherer claims that in Mallarmé's approach to writing 'there is an active attitude, and not passive, there is a linguistic creation and literary creation at the same time'.¹¹⁵ In other words, Mallarmé adopts a questioning attitude to the inherited material of the language itself. Austin also makes this point, writing that 'the theoretical attitude of Mallarmé towards the real' (the 'real linguistic material') 'is to empty the bag of received ideas'.¹¹⁶ Mallarmé distinguishes between this active attitude to the medium itself, which he calls 'literature',¹¹⁷ and the concept of 'reportage' I considered earlier.¹¹⁸ 'Literature' does not claim to have a direct relationship with reality but operates by 'allusion' and 'suggestion'.¹¹⁹ These features are, of course, arguably the most well-known defining characteristics of Symbolist art in general. This distinction between 'literature' and 'reportage' emphasises the artistic need to 'doubt'.¹²⁰

I would now like to examine further what the principle of doubt involves in Boulez's aesthetic theory.

Doubt: Rationality and affectivity

Arguably the most noticeable feature of doubt is its dependence upon adopting a rational approach to the world. The need for rationalisation in artistic creation is expressed succinctly by an excerpt Boulez selects from the writings of Baudelaire:¹²¹

¹¹⁵ ['il y a attitude active, et non passive, il y a création linguistique en même temps que littéraire.'] (My translation.) Scherer (1947) p. 10 (in French).

¹¹⁶ Austin (1995) p. 214.

¹¹⁷ ['littérature'.] (My translation.) Mallarmé (1897c) p. 366.

¹¹⁸ See: this dissertation p. 157.

¹¹⁹ ['allusion', 'suggestion'.] (My translation.) Mallarmé (1897c) p. 366.

¹²⁰ At this juncture, I would like to clarify a misunderstanding concerning Mallarmé's distinction of 'reportage' and 'literature'. Breatnach argues that 'literature' strives towards ambiguity of meaning in contrast to the precision of everyday 'reportage'. I would turn this description on its head and argue that 'reportage' purports to be precise but actually overlooks the imprecision of meaning in language. 'Literature', conversely, acknowledges and reveals this ambiguous and multivalent nature of language and, in this sense, is *more* precise than reportage. See: Breatnach (1996) p. 27 (in English).

I pity the poets who are guided by instinct alone; I believe them to be incomplete...
Somewhere in every poet there must be a critic.¹²²

For Boulez, the rational approach to music involves a self-critical form of reflection upon the inherited, mediated, musical material – the composer's only means of communication. In practice, this involves gaining an understanding of the history of the musical language, not merely appreciating it as a succession of musical styles but attempting to discern the underlying causes. Rather than focus upon the stylistic qualities of the music or, at the other extreme, focus on extra-musical ideas such as sociological factors it is important to consider music history as a history of musical concepts. He asks himself 'how is it possible to study the history of music except, primarily and essentially, through the evolution of its forms, its morphology, and its syntax?'¹²³ In other words, an understanding of the factors involved in the evolution of the musical language are only accessible via the intermediary of the rationalised musical material.

The need to look beyond the surface of what is inherited, i.e. what is 'immediate' in order to discern underlying principles is proposed by Hegel:

Abstract and immediate being is in fact first... but it is rather mediated, and one can grasp its truth only in so far as one rises back to its principle.¹²⁴

Boulez's insistence on the composer adopting a rational approach to music permeates much of his writings. However, it is only in his mature aesthetic texts – those written after 1957 and after his introduction of formal mobility into both his compositional practice and aesthetic theory – that he begins to argue that rationalisation and 'affectivity' (i.e. the emotions) are inextricably linked. It should

¹²¹ As I mentioned in chapter I, Baudelaire is called upon by Boulez in several essays to support his argument for the necessity of rationalisation in artistic practice. See: this dissertation p. 47.

¹²² ['Je plains les poètes que guide le seul instinct; je les crois incomplets... Il est impossible qu'un poète ne contienne pas un critique'.] Boulez (1963b) p. 5 (in French) and pp. 11-12 (in English).

¹²³ ['Comment étudie-t-on l'histoire de la musique sinon d'abord, et essentiellement, par l'évolution de sa morphologie, de sa syntaxe et des formes ainsi engendrées?'] Boulez (1961d) p. 494 (in French) and p. 33 (in English).

be noted, however, that this is not merely the claim that expression is only possible through rationalisation of the musical language. More fundamentally, Boulez acknowledges that there is always a subjective element in even the most 'objective' of approaches. Indeed, he associates the principle of 'doubt' with one's own subjectivity, which is involved in every form of rationality.

Doubt occurs [...] not as a cold operation of control and revision [...] but as a type of frenetic act in which the exorcism seems to play a more important role than the questioning alone. Is there not an excessive, indeed suspect, passion in wanting, therefore, to revise 'everything' and descend into the abyss? Finally, how do you reconcile that cold lucidity with its brutal necessity? Can one not find there, once again, traces of schizophrenia?¹²⁵

This portrayal of the act of artistic creation in terms of freneticism and passion very much evokes the spirit of surrealism, especially the writings of Artaud. The reference to exorcism in particular recalls Artaud's writings and Boulez's rallying-cry that 'music should be collective hysteria and magic, violently modern – along the lines of Antonin Artaud'.¹²⁶ Indeed, Boulez obliquely echoes Artaud's idea of the 'double'¹²⁷ when he continues by arguing that it is impossible to separate the 'double aspect of myself',¹²⁸ that is, the 'head' and 'heart'. This double aspect is described as 'the desire for rationality' and the 'rationality of desire',¹²⁹ two poles around which the 'personality' 'oscillates'.¹³⁰ He understands this 'oscillation', i.e.

¹²⁴ Hegel *Logique II* (Véra) p. 178, cited in Langan (1986) p. 202.

¹²⁵ ['le doute est mené [...] non pas comme une froide opération de contrôle et de révision [...] mais comme une sorte d'acte frénétique où l'exorcisme semble jouer un rôle plus important que la seule mise en question. N'y a-t-il pas une passion excessive, sinon suspecte, à vouloir ainsi "tout" réviser, et descendre à l'abîme? Et, finalement, comment conciliez-vous cette lucidité froide avec ce besoin brutal? Ne peut-on trouver, là encore, trace de schizophrénie?'] Boulez (1963e) (My translation.) p. 576.

¹²⁶ ['la musique doit être hystérie et envoûtement collectifs, violemment actuels – suivant la direction d'Antonin Artaud'.] Boulez (1948a) p. 262 (in French) and p. 54 (in English).

¹²⁷ I refer to Artaud's *Le Théâtre et son double* (1938). As Singleton observes, the 'double' is the relationship between art and the artist's reflections upon his art. See: Singleton (1998) p. 12 (in English).

¹²⁸ ['double aspect de moi-même'.] (My translation.) Boulez (1963e) p. 576. The earliest reference to the artist's double nature appears in 1954 in which he writes of 'this double phenomenon of realisation and reflection'. ['ce phénomène double de réalisation et de réflexion'.] (My slightly modified translation.) Boulez (1954b) pp. 27-28 (in French) and p. 106 (in English).

¹²⁹ ['le désir de la rationalité' 'la rationalité du désir'.] (My translation.) Boulez (1963e) p. 576.

¹³⁰ I am referring to Boulez's question 'Does the personality not oscillate around these two poles?' ['La personnalité n'oscille-t-elle pas autour de ces deux pôles?'] (My translation.) *Ibid.* p. 576.

the intervention of the principle of 'doubt' by the personality, as the introduction of the vital mobility and *freedom* into the dialectical process. This mobility is in opposition to the aesthetic position that merely takes a static point of view uninfluenced by the particularities of the musical material or the composer's rationality. Boulez writes that:

The interaction of rationality and affectivity is founded, in my opinion, on an incessant movement, and not on a separation of mental categories in a static or frozen hierarchy, where the precedence and the pre-eminence have a primordial importance. There is a supple dialectic of thought and doubt[.]¹³¹

Boulez condemns all aesthetic positions which compartmentalise rationality and affectivity,¹³² again evoking the spirit of Artaud through the latter's favoured metaphor of disease:

I believe that every other form of mental structure implies, in some way, an illness, because the organism has a tendency, in escaping to this regulation, to destroy itself by fire or by water, I want to say by an unreasoned and unproductive combustion of the mass of energy that he has at his disposal or by an intrusion of dormant water in which his most elementary reflexes sink.¹³³

This is a poetic description of the problem of not doubting inherited ideas. If the 'organism', i.e. the individual, does not challenge the inherited mental structures in

¹³¹ ['L'interaction de rationalité et d'affectivité de fonde, à mes yeux, sur un mouvement incessant, et non sur une séparation des catégories mentales dans une hiérarchie statique et figée, où les préséances et les prééminences auraient une importance primordiale. Il y a donc une souple dialectique de la pensée, et du doute'.] (My translation.) *Ibid.* p. 578.

¹³² Boulez's manner of condemnation of various approaches is particularly reminiscent of Artaud's poem 'Je rame' that he used as material for *Poésie pour pouvoir* (1958) written only five years previously. Examples from this list include 'masks', 'gesticulation', 'calculated naivety' and 'anti-convention' ['masques', 'gesticulation', 'naïveté calculée', 'anticonvention'.] (My translation.) See: *ibid.*, pp. 578-579. The idea of compartmentalising rationality and affectivity recalls Freudian Theory and the understanding of some mental disorders as excessive conflict between the id, ego and superego.

¹³³ ['Je crois que toute autre forme de structure mentale implique, en quelque sorte, une maladie, car l'organisme a tendance, en échappant à cette régulation, à se détruire par le feu ou par l'eau, je veux dire par une combustion irraisonnée et improductive de la masse d'énergie qu'il a à sa disposition ou par un envahissement d'eau dormant où sombrent ses réflexes les plus élémentaires.'] (My translation.) *Ibid.*, p. 578.

order to make them his own then he will arrive at two possible outcomes. He can be destroyed by fire in that the material imposes itself on him and, to use Boulez's metaphor, will combust too quickly. Alternatively, he can be destroyed by water in which the material does not 'combust' at all but rather is empty and 'sinks'.

This idea concerning the 'interaction of rationality and affectivity', common to several of Boulez's influences, appears in the writings of Valéry. Valéry distinguishes two sides to artistic creation which he calls the 'theoretical' and the 'affective' which 'are commonly considered independent and even incompatible'.¹³⁴ Like Boulez, he argues that these two sides not only 'accord' with the practice of art but also are 'indispensable'.¹³⁵ He highlights what he describes as Klee's greatest lesson: 'not to fear sometimes reducing the phenomena of the imagination to elementary problems, which are 'geometricised' in some way.'¹³⁶ Boulez continues by claiming that 'the reflection on the problem, on the function, brings the poetic to acquire riches that it would not have suspected if one had only given free rein to the imagination.'¹³⁷ Again, this stresses the importance of rationalisation in the work of art, which enables one to overcome the limitations of the inherited material.

Doubt: Dissociation and éclats

Doubt not only involves an 'interaction of rationality and affectivity' but also a 'breaking-up' of inherited ideas. This is the process of dismantling a complex idea into its simple elements. Specifically concerning the musical material, Boulez typically employs the term 'dissociation' to refer to this breaking-up.¹³⁸ As a general aesthetic principle, however, Boulez uses the term *éclater* (to explode into

¹³⁴ ['théorique' 'affectifs' 'communément considérés comme indépendants, et même incompatibles'.] (My translation.) Valéry (1928) p. 289.

¹³⁵ ['s'accorder' 'indispensable'.] (My translation.) *Ibid.*

¹³⁶ ['ne pas craindre de réduire parfois les phénomènes de l'imagination à des problèmes élémentaires, "géométrisés" en quelque sorte'.] (My translation.) Boulez (1989c) pp. 146-47.

¹³⁷ ['La réflexion sur le problème, sur la fonction, amène la poétique à acquérir des richesses qu'elle n'aurait pas même soupçonnées si l'on n'avait fait que laisser libre cours à l'imagination.'] (My translation.) *Ibid.*, p. 147.

¹³⁸ As I have already examined in chapter I. See: this dissertation p. 57.

fragments).¹³⁹ In the following quotation, he clearly links the idea of 'éclater' with the principle of 'doubt'. He writes:

The deliberate aim of relearning, re-finding, rediscovering, resurrecting [...] goes beyond the maximum point of doubt which breaks up [éclater] inherited knowledge; it is the descent of *Igitur*...¹⁴⁰

The reference to Mallarmé's *Igitur* (1869)¹⁴¹ points towards the origin of the term 'éclater'. Mallarmé's reflections on literature contain numerous references to the concept of 'éclater' and I would suggest that Boulez's usage of the same term is drawn from Mallarmé. However, the origin of this term possibly goes back further than Mallarmé to the first French translations of Hegel's theoretical works. Although the issue of whether or not Mallarmé ever read any of Hegel's writings remains unresolved,¹⁴² the time of the first French translations of Hegel's works by Véra coincided with a fundamental change in Mallarmé's attitude towards literature. Several key concepts found in the French translations of Hegel's writings began to appear in Mallarmé's critical writings, one of them being 'éclater'. Therefore, to facilitate understanding of this concept in the writings of Mallarmé and, ultimately, Boulez it is helpful to consider Hegel's usage of this term.

Doubting all inherited ideas by dismantling them into their individual components is described by Hegel as the 'analysis of an idea'¹⁴³ in which one begins by taking an idea and:

ridding it of the form in which it had become familiar. To break an idea up into its original elements. [...] The activity of dissolution is the power and work of the *Understanding*.¹⁴⁴

¹³⁹ Although the verb 'éclater' is not examined by Boulez in his writings it is mentioned many times in passing and is certainly a highly significant concept in his aesthetic theory. It is, of course, highlighted in the title of two compositions, *Éclat* (1965) and *Éclat-multiples* (1966-).

¹⁴⁰ ['Le propos délibéré de réapprendre, retrouver, redécouvrir, renaître, enfin, passe par ce point maximum du doute qui fait éclater le savoir hérité; c'est la descente d'*Igitur*']. (My translation.) Boulez (1963e) p. 560.

¹⁴¹ I shall examine Mallarmé's *Igitur* (1869) later in this chapter. See: this dissertation p. 222.

¹⁴² I examine this later. See: this dissertation: p. 383.

¹⁴³ ['Das Analysieren einer Vorstellung']. Hegel (1807) p. 29 (in German) and p. 18 (in English).

As Hegel explains, this process of analysis – the opposite process of ‘synthesis’ that I shall examine later – is the means by which one *understands* the inherited material. One takes the contingent existing material and attempts to make it rational and *necessary*:

Rational *thinking* frees the divine Being from its contingent shape [...] With the vanishing of the contingent character and superficial individuality which imagination lent to the divine Beings, all that is left to them as regards their *natural* aspect is the bareness of their immediate existence.¹⁴⁵

I have established that doubt distances oneself from the material, that it consists of rational and affective elements and that it involves the dissociation, i.e. the ‘analysis’, of an inherited concept into its simple parts. All of these factors are facets of the dialectical relationship between oneself and the material.

Ways in which the dialectic appears in Boulez’s writings

The principle of the dialectic appears in Boulez’s writings in several ways. As I mentioned in chapter II,¹⁴⁶ it first appears in 1952, a time when he had not yet fully reconsidered his entire aesthetic approach within a dialectical framework. He writes:

for it is the need to pin down what one wants to express that causes the evolution of technique; this technique reinforces the imagination, which then projects itself towards the previously unperceived; and, in this way, in an endless play of mirrors, creativity pursues its course¹⁴⁷

¹⁴⁴ [‘das Aufheben der Form ihres Bekanntseins. Eine Vorstellung in ihre ursprünglichen Elemente auseinanderlegen [...] Die Tätigkeit des Schneidens ist die Kraft und Arbeit des *Verstandes*.’] *Ibid.*, p. 29 (in German) and p. 18 (in English).

¹⁴⁵ [‘Das vernünftige *Denken* enthebt das göttliche Wesen seiner zufälligen Gestalt [...] Indem die zufällige Bestimmung und oberflächliche Individualität, welche die Vorstellung den göttlichen Wesenheiten lieh, verschwindet, haben sie nach ihrer *natürlichen* Seite nur noch die Nacktheit ihres unmittelbaren Daseins.’] *Ibid.*, p. 519 (in German) and p. 451 (in English).

¹⁴⁶ See: this dissertation p. 88. I also cited the following passage earlier.

¹⁴⁷ [‘car c’est le besoin de préciser ce que l’on voudrait arriver à exprimer qui amène l’évolution de la technique; cette technique renforce l’imagination qui se projette alors vers l’aperçu; et, ainsi, dans un

This is a description of the dialectical principle as ‘technique’ and ‘imagination’, two terms that Boulez employs during the 1950s and early 1960s. He also introduces the idea of ‘mirrors’ which depicts the constant reflection between technique and imagination. All the essential elements of this quotation can be seen in one of Boulez’s concluding statements at the end of *Penser la musique aujourd’hui* (1963) in which he maintains that technique is not ‘a dead weight to be dragged around as a guarantee of immortality. It is a mirror which the imagination forges for itself, and in which its discoveries are reflected’.¹⁴⁸

During the late 1960s and into the 1970s, Boulez begins to use the terms of the ‘real’ and the ‘imaginary’ to depict this dialectical relationship. These terms are arguably the most distinctive formulation of the dialectical process. They first appear in his discussions of the orchestration of Berlioz and Wagner: the former composer representing for Boulez a concentration upon the ‘imaginary’ and the latter a focus upon the ‘real’.

In the 1970s and 1980s, he introduces the dialectic under the terms of ‘material’ and ‘invention’.¹⁴⁹ In an unpublished text dating from 1980 entitled ‘Matériau et invention’ (1980), he discusses this particular conception of the dialectic. He considers in turn the two theoretical extremes of ‘material’ and ‘invention’ which, in practice, operate together during composition. At one extreme, the composer can choose particularly interesting material and explore its specific qualities: In this case, the material is primary. At the other extreme, the composer can select ‘neutral’,

jeu de miroirs perpétuel, se poursuit la création’.] (My modifications.) Boulez (1952c) p. 294 (in French) and pp. 139-140 (in English).

¹⁴⁸ [‘ce poids mort que l’on doit traîner après soi si l’on veut prendre une caution sur la pérennité. Elle est ce miroir exaltant que l’imagination se forge, qui lui renvoie ses propres découvertes’.] Boulez (1963b) p. 167 (in French) and p. 143 (in English).

¹⁴⁹ The first appearance of this dialectic is in 1970. Boulez writes that ‘In the future: Invention creates both language and material’. Boulez: (1970d) p. 210 (in English). This statement broadly describes the notion that the composer of the future will create not only his own musical language but also his own material, presumably with the help of new technology. One should remember that in the year of writing (1970), Boulez was invited to begin his designs for what would eventually become IRCAM. Indeed, several of Boulez’s statements dating from throughout the 1970s are permeated with his reflections and work connected with IRCAM and should be considered as such.

'ductile'¹⁵⁰ material and apply abstract systems to the material: In this case, the invention is primary.¹⁵¹ When the focus is on the material the composer brings out its accidental unique features, (chance contained within the material). However, Boulez argues, '[i]nvention is not based on the accident but on a delimited choice; it uses that choice to develop musical structures which correspond to it.'¹⁵² This last point is particularly revealing, as it suggests that 'invention', and one can assume the 'imagination' and the 'imaginary' similarly, does not include the inevitable chance he acknowledges exists within the composer and is expressed, in part, through his choices. Clearly, this concept is not identical to the composer's expression, but the ideal concept of *freedom* of the autonomous subject. Chance is not part of the imagination (of freedom) because one cannot change it.¹⁵³

The distinction Boulez makes between the accidental nature of the material and the self-possessed 'invention' is brought to the fore in the final depiction of the dialectical process I would like to consider. Dating from 1985, he makes this distinction clearer with the terms 'rational' (which refers to the 'idea') and the 'accident' (of the material). He writes that:

The categories of the idea are opposed to the more capricious categories of the material; the riches coming from that struggle between the rational and the accident, on all planes. The rationale of the project confronts the accident of the everyday without interruption in the composition; the rationale of the plan collides with the accident of the momentary discovery, instantaneously.¹⁵⁴

¹⁵⁰ I consider Boulez's concepts of 'neutral' and 'ductile' in chapter IV. See: this dissertation p. 347 and p. 264 respectively.

¹⁵¹ See: Boulez (1980e). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

¹⁵² ['L'invention se base non sur l'accident, mais sur un choix circonscrit; elle utilise ce choix pour développer les structures musicales qui lui correspondent.'] (My translation.) Boulez (1980e). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

¹⁵³ See: this dissertation p. 106.

¹⁵⁴ ['Les catégories de l'idée s'opposent aux catégories beaucoup plus capricieuses du matériau; la richesse provient de cette lutte à armes égales entre le rationnel et l'accident, sur tous les plans. Le rationnel du projet se confronte à l'accident du quotidien sans cesse interrompu de la composition; le

One can see that throughout Boulez's writing career, he uses several different terms which broadly describe the same dialectical interaction between the inherited material and the composer's conception. The following passage, despite the absence of any specific dialectical terms I have examined above (or perhaps because of their absence), constitutes one of the clearest presentations of Boulez's dialectical conception. He writes that:

One experimentally elaborates with concrete events, and this series of elaborations brings you closer to a certain number of laws which you then arrange into a coherent system. Strengthened by this system, you return towards the experience which allows you to find perhaps a better system - which takes into account in a better way - or perhaps a stronger system that subsumes the preceding one. And it is necessary to continue to return to this task.¹⁵⁵

Boulez's is describing what is, in short, a 'speculative' conception of musical material. The 'speculation' is an extremely important idea in Boulez's approach and one that I would like to examine now.

The speculation

As I established earlier, the notion that the material contains a historical conception of one's relationship to sound itself is identified in Boulez's writings as a 'speculation'. This speculation is, therefore, a reflection upon the inherited technique itself. Note that Boulez often employs the convention of writing about 'the speculation' or 'speculations', rather than merely 'speculation', as the English reader would expect. This device serves to problematise the concept of 'speculation' by

rationnel du plan se heurte à l'accident de la découverte, momentanée.] (My translation.) (1985a) p. 27.

¹⁵⁵ ['on élabore expérimentalement des objets concrets; cette série d'élaborations vous fait approcher d'un certain nombre de lois que vous arrangez dans un système cohérent; fort de ce système, vous repartez vers l'expérience qui vous permettra de trouver soit un système meilleur - qui rendra mieux compte des événements musicaux que vous voulez créer - soit un système plus fort, qui englobe le précédent. Et il vous faut encore repartir...'] Boulez (1960f) p. 377 (in French) and p. 99 (in English).

enabling Boulez to distinguish between the different speculations of different composers.

Boulez argues that speculation is a vital part of composition and makes a comparison between his own aesthetic approach and that of James Joyce:

[t]he novel observes itself *qua* novel, as it were, reflects on itself and is aware that it is a novel - hence the logic and coherence of the writer's prodigious technique, perpetually on the alert and generating universes that themselves expand. In the same way music, as I see it, is not exclusively concerned with "expression", but must also be aware of itself and become the object of its own reflection.¹⁵⁶

This is a rejection of the popular myth that the composer takes an abstract 'Idea', independent of the musical material, and gives it musical 'form'. If this was the case, the composer would arrive at an idea that already exists and consequently it would not be an expression of his *freedom* of the autonomous subject. Boulez asks himself '[h]ow [...] can a composer conceive his [creative message] abstractly, without an adequate morphology by which one communicates?'¹⁵⁷ The composer must concentrate upon the material of sound. Boulez argues, in a statement that echoes the writings of Schoenberg, that '[t]he musician only arrives at the *idea* of music by music itself, which is his own means of communication'.¹⁵⁸

In an article from 1963, he elaborates upon what he means by speculation upon the material of sound. He claims that 'all reflection on musical technique must be based

¹⁵⁶ ['le roman, si l'on peut ainsi s'exprimer, se regarde en tant que tel, se réfléchit lui-même, prend conscience qu'il est un roman: d'où la logique et la cohésion de cette prodigieuse technique sans cesse en éveil, suscitant des univers en expansion. C'est ainsi que la musique, à mes yeux, n'est pas uniquement destinée à "exprimer", elle doit prendre conscience d'elle-même, devenir le propre objet de sa réflexion.'] Boulez (1960a) p. 432 (in French) and pp. 143-144 (in English).

¹⁵⁷ ['comment [...] concevrait-on [le message créateur] abstraitement, sans la morphologie adéquate par laquelle s'exécute la transmission!'] (My translation.) Boulez (1961d) p. 495 (in French) and p. 34 (in English).

¹⁵⁸ ['Le musicien n'arrive à l'*idée* de musique que par la musique elle-même, moyen de communication qui lui appartient en propre']. (My modified translation.) Boulez (1963d) p. 549 (in French) and p. 81 (in English).

on sound and duration, the material with which the composer works'.¹⁵⁹ This forces the composer to conceptualise his own material and not merely accept it in its contingency. His task is to make the material become *necessary* (i.e. each element must acquire a function) to his own thought and within his own technique. In short, the composer must take the *chance* material from his predecessors and make it his own (i.e. self-possessed). Boulez argues that the composer must begin by:

founding musical systems upon exclusively musical criteria, rather than proceeding from numerical, graphic or psychological symbols to a musical codification (a kind of transcription) that has not the slightest concept in common with them.¹⁶⁰

If the composer employs concepts which that have nothing in common with sound, such as the numerical or graphic symbols that Boulez cites in the passage above, the resulting musical work loses its essential *raison d'être*.¹⁶¹ One must attempt to base one's rationalised technique on one's own thought, not on the inherited thought of others embedded in the received material. Discussing his own approach to rationalising musical technique, he claims that:

The strength of this global organisation is that in order to generate a large form, or a form of any kind, I do not need an *accident* exterior to it for which it was not, remotely, responsible. I find the *accident* at the conclusion of a logical and coherent deduction; I do not begin with the accident in order to organise it according to syllogisms that are apparently correct but have no fundamental relation to it, except factitious numerical relations (a fictitiousness rooted in the ambiguity of the properties of numbers).¹⁶²

¹⁵⁹ ['toute réflexion sur la technique musicale doit prendre source dans le son, la durée, le matériel sur lequel le compositeur travaille'.] (My translation) *Ibid.*, p. 541 (in French) and p. 73 (in English).

¹⁶⁰ ['fonder des systèmes musicaux sur des critères exclusivement musicaux – et non passer, par exemple, de symboles numériques, graphiques ou psycho-physiologiques à une codification musicale (sorte de transcription) sans qu'il y ait de l'une aux autres la moindre *notion* commune.'] (My slight alteration to the translation.) Boulez (1963b) p. 29 (in French) and p. 30 (in English).

¹⁶¹ In *Penser la musique aujourd'hui* (1963), Boulez argues that, at best, speculations not based on sound depend on the 'pata-logical'. ['*pata-logique*'.] *Ibid.*, p. 27 (in French) and pp. 28-29 (in English). This is a reference to Jarry's notion of 'pataphysics' which seeks to identify the exceptions of the physical world rather than laws which can predict events. This reference to Jarry's pataphysics is identified by Bradshaw and Bennett. See: Bradshaw and Bennett (1963) p. 29 footnote 1 (in English).

¹⁶² ['L'effort de cette organisation globale porte essentiellement sur ce point, que pour engendrer une grande forme – quelle qu'elle soit – je n'ai besoin d'aucun *accident* extérieur à elle, dont elle ne serait

With the flourish of his favoured literary device of inversion,¹⁶³ Boulez makes two important points, albeit in a manner that perhaps can confuse the casual reader. First, he quite specifically emphasises that by focusing on the material of sound alone (i.e. in making every aspect *necessary*) one does not introduce an 'accident' exterior to the musical work. Second, he writes that the 'accident' occurs at the end of the process. This refers to the notion of the 'unforeseen', the hallmark of the appearance of the *free* autonomous subject, which is an important concept in his aesthetic theory that I shall consider later in this chapter.¹⁶⁴

Although Boulez argues one must begin by speculation upon sound, he stresses that this does not mean the musical system is 'natural'. He argues that the 'era of Rameau' and 'natural principles' is over.¹⁶⁵ The composer merely takes the inherently contingent historical material and makes it necessary to his own thought, i.e. makes it a consistent part of his own means of expression. Every speculation, or 'model', 'is only [...] the best provisional solution, which allows you to find another even better provisional solution or at least more inclusive provisional solution.'¹⁶⁶ These solutions 'for the moment, provide the best possible description of 'Nature''.¹⁶⁷ He cites from the physicist Léon Brillouin who writes that '[n]ature is

pas, même lointainement, responsable. Je trouve l'*accident* au bout d'une déduction logique et cohérente; je ne pars pas de l'accident pour l'organiser suivant des syllogismes apparemment justes, mais fondamentalement sans rapport avec lui – sinon des rapports chiffrés factices (facticité qui s'instaure à la suite de l'ambiguïté des propriétés des nombres).'] (My translation.) Boulez (1960d) p. 364 (in French) and pp. 94-95 (in English).

¹⁶³ For my discussion of Boulez's use of this device see: this dissertation p. 389.

¹⁶⁴ See: this dissertation p. 207.

¹⁶⁵ See: Boulez (1963b) p. 30 (in French) and p. 31 (in English). Despite this criticism of Rameau, I would suggest Boulez would at least commend him on basing a musical technique on his own (eighteenth century) understanding of the material of sound. I make this point as Boulez praises the observations on nature made by Klee and Webern, regardless of the latter's well-known claim to natural laws in his statement that 'the diatonic scale wasn't invented, it was discovered.' (Webern (1960) p. 15 (in English).) Clearly, Boulez is praising the approach to artistic creation which begins by reflecting upon the material itself and not whether the composer believes his speculations are 'natural' or not.

¹⁶⁶ ['ce n'est [...] que la meilleure solution provisoire, qui vous permettra de trouver une autre solution provisoire encore meilleure ou, du moins, plus large.'] Boulez (1960f) p. 377 (in French) and p. 98 (in English).

¹⁶⁷ ['un moyen de nous accorder au plus près avec les modèles qui décrivent temporairement, et le mieux possible ladite Nature.'] Boulez (1961a) p. 511 (in French) and p. 47 (in English).

far too complete for our minds to be able to embrace it'¹⁶⁸ and that the 'laws of nature' do not exist independently of humans.¹⁶⁹ On the latter point, he also draws from Louis Rougier to support his argument who argues that models of nature are our 'anthropomorphic language'.¹⁷⁰

As all speculations upon the musical material of sound cannot claim to be 'natural', it is possible to speculate upon the musical material in various ways and, consequently, there is no single correct approach.¹⁷¹ As Boulez notes, 'no musical system [...] has ever found its absolute justification in the laws of nature'.¹⁷² He stresses that this first speculation, or 'gesture',¹⁷³ is merely a preliminary stage and does not constitute the value of the speculation or the work itself:

Since I exist only in relationship to that which precedes me, the choice, the bet, is a fundamental gesture which establishes myself in a historical succession, without presuming, for all that, the value of what I represent. Self-definition is no longer self-realisation, far from it!¹⁷⁴

¹⁶⁸ Boulez quotes Brillouin: ['La nature est bien trop complète pour que notre esprit puisse l'embrasser.'] (My translation.) See: Boulez (1963b) p. 30 (in French) and p. 31 (in English). I have replaced the English translation found in *Boulez On Music Today* (1971) with my own as it does not make the crucial point that nature is complete. It reads: 'Nature is much too abundant for our minds to be able to embrace it.'

¹⁶⁹ ['lois de la nature'.] Boulez (1963b) p. 30 (in French) and p. 31 (in English). Koblyakov argues that 'to a great extent Boulez was close to the general philosophical ideas of Louis Rougier (as well as the physicist Léon Brillouin)'. See: Koblyakov (1990) p. 123 (in English). This is presumably because Boulez cites these two writers to make an important aesthetic point in *Penser la musique aujourd'hui* (1963). However, this is the only occasion throughout Boulez's writings in which he refers to Rougier. Brillouin is only cited once elsewhere in an article written around the same time as *Penser la musique aujourd'hui* (1963). See: (Boulez (1961d) p. 503 (in French) and p. 41 (in English). In this article, Boulez uses the same quotation to make the same point. This suggests to me that Boulez has primarily chosen these two writers to support his argument and that they have not profoundly influenced him.

¹⁷⁰ ['un langage purement anthropomorphique'.] Boulez (1963b) p. 30 (in French) and p. 31 (in English).

¹⁷¹ I consider Boulez's frequent recourse to 'organic' and 'natural' metaphors in the conclusion. See: this dissertation p. 392.

¹⁷² ['aucun système musical [...] ne s'est trouvé absolument justifié par des lois naturelles.'] Boulez (1954a) p. 299 (in French) and p. 142 (in English).

¹⁷³ Note the use of the term 'gesture' in the following quotation which implies something other than rational. See: this dissertation p. 217.

¹⁷⁴ ['Puisque je n'existe que par rapport à ce qui me précède, le choix, le pari est un geste fondamental, qui m'établit dans la succession, sans présumer, au demeurant, de la valeur de ce que je puis représenter; se définir n'est pas encore se réaliser, il s'en faut!'] (My translation.) Boulez (1963d) p. 537 (in French) and p. 70 (in English).

Boulez claims that the composer's task is to make the material and the speculation upon the material become *necessary* by bringing all the inherited acquisitions into a consistent whole. Every element of the work must become conceptualised in order to make every element meaningful and necessary.

Boulez's first attempt to make all elements of the work necessary and belong to a 'systematic whole' was, of course, *Structure 1a*. However, he subsequently rejected the 'automatism' upon which his embryonic conception of necessity was based. Indeed, it is important to stress that necessity is not achieved by automatism or through any forms of musical pattern-making – each element generated automatically is not functional and consequently has no meaning. Nor is necessity achieved through the employment of secret codes or through the manipulation of serial derivations (or musical material generally). Making each element necessary is the result of attempting to conceptualise every element within a conceptual and rationalised whole and not through overtly arbitrary concepts. Boulez makes this clear when he writes that '[t]o retain their validity, speculations must be integrated into a *systematic whole*'.¹⁷⁵

In Boulez's writings, he often refers to this idea of the 'systematic whole' in terms of 'globalising' musical thought. Before I examine this idea further, I would like to consider an example of what I shall call a 'global speculation' that appears in Boulez's writings.

Example of Boulez's 'global' speculation

In his early writings, Boulez's primary concern is to bring the recent musical technical acquisitions within a necessary and consistent framework.¹⁷⁶ For example, in broad terms, one can see Messiaen's teachings in the realm of rhythm and

¹⁷⁵ ['Les spéculations, pour garder leur validité, doivent s'intégrer dans un *ensemble systématisé*']. Boulez (1963b) p. 27 (in French) and p. 29 (in English).

Leibowitz's teachings in the sphere of pitch as two developments that Boulez attempted to 'synthesise' into what would become 'total serialism'. Although the aesthetic problems arising from the pinnacle of total serialism, *Structure 1a* (1952), forced him to reconsider his entire aesthetic approach, he nevertheless continued to look for ways to retain the principle of consistency. This readjustment of this principle can be seen in various ways in his writings but with regard to speculation upon the sound material, he writes in 1954 that:

It would seem that the great preoccupation has been [...] to co-ordinate all the components of language, that is all the components of sound [...] into a single system of reference, allowing for their perceptual differences.¹⁷⁷

This preoccupation with making a 'global' speculation upon the sound material receives its most expansive account in two texts: a short but highly dense text entitled 'Forme' (1960)¹⁷⁸ and *Penser la musique aujourd'hui* (1963). Both writings articulate broadly the same conception of the musical material. In both, he takes the model of the acoustic phenomenon of the single sound object and deduces means of organising form.

In the earlier text, 'Forme', Boulez proposes the notion of basing form on the model of the 'formant'.¹⁷⁹ He argues that in acoustics, formants are selected frequencies that give a fundamental its character by means of related harmonies. Similarly, one can conceive of selected structures which give a particular musical work its character. He writes that '[t]he ensemble of these criteria of selection may be called the *formants* of an overall structure.'¹⁸⁰ Boulez provides several reasons for using

¹⁷⁶ For my earlier discussion of the principle of consistency see: this dissertation p. 57.

¹⁷⁷ ['Il semble que la grande préoccupation ait été [...] de coordonner toutes les composantes du langage, soit toutes les composantes du son [...] dans un système unique de références, compte tenu de la disparité de leur perception.'] Boulez (1954a) pp. 297-298 (in French) and p. 141 (in English).

¹⁷⁸ 'Forme' (1960) was intended to become the basis of an additional chapter of *Penser la musique aujourd'hui* (1963).

¹⁷⁹ For further details on this idea in terms of Boulez's account of musical technique see: this dissertation p. 304.

¹⁸⁰ ['C'est cet ensemble de critères sélectifs que j'appellerai les *formants* d'une grande structure.'] Boulez (1960d) p. 362 (in French) and pp. 92-93 (in English).

the concept of formants. First, 'it is the extension of an organic principle'¹⁸¹ in which the formants of a work are linked to, although not dependent on, the overall organisation. Second, it provides a vocabulary for discussing the articulation of form which avoids tonal terminology.¹⁸² Third, Boulez claims, it does not pose any restrictions, as it maps out the entire field between total determination to total freedom.

In *Penser la musique aujourd'hui*, Boulez continues to discuss music in essentially the same manner as in 'Forme' but without explicit recourse to the idea of the 'formant'. He begins by making a connection between the notion of the series and the material of sound itself. He writes that '[t]he series is [...] the germ of a hierarchy based on certain psycho-physiological acoustical properties'.¹⁸³ In the rather densely written passage that follows, he goes into greater detail than before in describing the way in which he envisages the material of sound. He proposes that because frequency (pitch) is a 'function of time',¹⁸⁴ as it is determined by the number of cycles per second, the 'complete sound-entity' (e.g. an individual note) is based on 'the interaction of vibration, time and amplitude'.¹⁸⁵ Therefore, the different sound components (pitch, duration, dynamics and timbre) are not independent in their existence and do not 'function by means of arithmetical addition'. Instead, they form a concept of sound which Boulez describes as a 'vectorial compound'.¹⁸⁶ Implicit in this 'vectorial' conception of the individual sound material is the criticism of the tendency displayed by many total serial works (including *Structure 1a*) to assign serial values to the different components of sound which then operate independently of each other.

¹⁸¹ ['elle est l'extension d'un principe organique'.] Boulez (1960d) p. 365 (in French) and p. 95 (in English).

¹⁸² The problem of terminology used to describe music is considered in chapter IV. See: this dissertation p. 294.

¹⁸³ ['La série est [...] le germe d'une hiérarchisation fondée sur certaines propriétés psycho-physiologiques acoustiques'.] (My slight modification.) Boulez (1963b) p. 35 (in French) and p. 35 (in English).

¹⁸⁴ ['une fonction du temps'.] *Ibid.*, p. 36 (in English) and p. 36 (in French).

¹⁸⁵ ['vibration, temps, amplitude s'interagissent pour aboutir au fait sonore total'.] Boulez (1963b) p. 36 (in French) and p. 36 (in English).

¹⁸⁶ ['composition vectorielle'.] *Ibid.*, p. 36 (in French) and p. 36 (in English).

Intuition

Although Boulez argues that the composer must attempt to bring all speculations into a global whole, he acknowledges that this is impossible. One cannot claim to possess a complete conception of the 'totality of a situation'.¹⁸⁷ Boulez claims that this gap in the composer's knowledge is filled by 'intuition':

We cannot therefore claim an absolute knowledge of all aspects of the present even when we embrace in its totality; yet, our intuition supplements this lack of information and corrects any remaining partial inaccuracies.¹⁸⁸

In an interview dating from 1975, Boulez explains more clearly what he intends to convey by the term 'intuition'. It does not rely exclusively on *chance* and constitutes something entirely different to intuition reliant upon memory (i.e. so-called 'spontaneity'). The intuition Boulez describes only becomes involved 'when all the possible conclusions to be drawn from a situation have been made – the ground of prepared intuition.'¹⁸⁹

The manner of this description and the quotation above, albeit with altered terminology, is very similar to the principle of 'isomorphism' expounded by the Gestalt psychologist, Koffka.¹⁹⁰ According to this innate principle,¹⁹¹ our perception of events occurs within what Koffka calls a 'physiological field' in response to the 'external environmental field'.¹⁹² One is struck by this concept of intuition being involved in the perception of a 'field' and the notion of the 'field of choice' I

¹⁸⁷ I discuss this idea in greater detail in chapter IV. See: this dissertation p. 261.

¹⁸⁸ ['Nous ne pouvons donc prétendre à la connaissance absolue de tous les aspects du présent, au moment où nous l'avons embrassé dans sa totalité; cependant, notre intuition supplée à ce manque d'information, et corrige ce qui demeure des inexactitudes partielles.'] (My translation.) Boulez (1963d) p. 539 (in French) and p. 71 (in English).

¹⁸⁹ ['une fois ce terrain de l'intuition préparé, quand toutes les conclusions possibles ont été tirées d'une situation de fait'.] (My translation.) Boulez in: Boulez and Deliège (1975) p. 78.

¹⁹⁰ Boulez has openly acknowledged his influence of Gestalt Theory. Indeed, he describes his own approach to musical analysis as drawing from a Gestalt approach (see: this dissertation p. 281). He has also used the term 'isomorphism' to describe serial structures. See: this dissertation p. 315.

¹⁹¹ Note that Gestalt Theory describes innate ways of perceiving the world and is therefore opposed to Behaviourist theories.

highlighted above. A typical Gestalt Theory demonstration of the principle of isomorphism can be seen when the brain 'fills-in' a pattern of dots on paper by understanding those dots as a particular shape (a Gestalt). The 'field' in which one perceives the individual dots, in other words the overall pattern or the 'totality', is crucial to understanding the dots as a pattern as one can only understand them in relation to this field.¹⁹³ The factor that enables one to fill-in the dots is the Gestalt concept of 'insight' (comparable to the concept of 'intuition' I considered earlier¹⁹⁴). The two Gestalt concepts of 'field' (providing the overall frame or totality enabling the individual events to be understood) and 'insight' (making the connections between these events) are very similar to Boulez's idea of the 'ground of prepared intuition'. Boulez continues to describe his understanding of 'intuition' by claiming that 'when someone discovers, in general he discovers by discontinuity; he discovers very rarely by continuity.'¹⁹⁵ Again, one cannot fail to notice an echo of the Gestalt Theory of isomorphism. However, the idea of understanding by discontinuity is drawn from Boulez's friend, Souvtchinsky.¹⁹⁶

The concept of intuition is also a key concept in the writings of Husserl, and drawing on Husserl, Merleau-Ponty.¹⁹⁷ After placing existing inherited ideas in 'parentheses' (epoche), Husserl argues that it becomes possible to intuit their essence.¹⁹⁸ Similarly, Leibowitz uses the term 'intuition' to describe how his compositional 'activity transformed the first *intuition* into *knowledge*'.¹⁹⁹

As a result of his acknowledgement that there is always a gap in one's knowledge, Boulez accepts that some 'partial speculations' upon the material of sound can be

¹⁹² I am drawing from Greene's description. See: Greene (1975) p. 35 (in English).

¹⁹³ See: The entry for 'gestalt psychology' in Outhwaite and Bottomore (1993) pp. 247-248 (in English).

¹⁹⁴ *Ibid.*

¹⁹⁵ ['Quand quelqu'un découvre, en général il découvre par discontinuité; il découvre très rarement par continuité.'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 78.

¹⁹⁶ For my examination of the concept of discontinuity, see: this dissertation p. 210.

¹⁹⁷ In addition, one should also recall that Merleau-Ponty's work drew considerably from Gestalt Theory.

¹⁹⁸ See: Cooper (199) p. 41 (in English).

¹⁹⁹ Leibowitz (1947) p. x-xi (in English).

useful. Indeed, he acknowledges that some partial speculations of the post-war period²⁰⁰ were helpful as 'without them none of the different levels of the sound organism could have been developed.'²⁰¹ However, they must subsequently be 'overcome in order to put contemporary musical thought on a completely and infallibly valid basis'.²⁰² Otherwise, their inherent persistent and invalidating contradictions can lead to absurdity.

On numerous occasions, Boulez describes this introduction of intuition in terms of 'seeing' [voyant]. This term has a long and illustrious history in French literature and is used by several writers that have influenced Boulez's aesthetic formation. I would like to investigate this history in order to clarify this term.

The composer as 'seer'

It is ironic that Boulez's definition of 'seer' implies that one must look beyond the frame of music and perceive the 'lines of force', as the term itself derives from his interest not in music but in literature.²⁰³ It is particularly associated with Rimbaud and it is to this poet that Boulez openly attributes the term. Rimbaud's writings display a preoccupation with this idea, for example his work *Une Saison en enfer* (1873)²⁰⁴ is littered with this term. However, Boulez's first citation²⁰⁵ of this term in its original context draws from Rimbaud's correspondence, specifically one letter to George Izambard and another to Paul Demeny. The importance of this idea in

²⁰⁰ For example, the application of the serial principle to duration and timbre.

²⁰¹ ['sans elles, aucun des différents plans de l'organisme sonore n'aurait pu évoluer'.] Boulez (1963b) p. 26 (in French) and p. 28 (in English). Boulez does not refer to specific composers in this context but he has written in other essays about technical advances made by composers. These would include Stravinsky's rhythm, Webern's expressive concentration, Schoenberg's serialism of pitch, Messiaen's initial investigations into organising sound components, Debussy's suppleness of phrase, Varèse's notion of blocks of sound and other compositional advances.

²⁰² ['On doit les surmonter pour valider totalement, sans faille, la réflexion musicale contemporaine.'] Boulez (1963b) p. 27 (in French) and p. 29 (in English).

²⁰³ Breatnach argues that this quotation means that the composer should attempt to 'recognize those features of his work which lend themselves to development and can be transported into another language or even to another medium.' Breatnach (1996) pp. 17-18 (in English).

²⁰⁴ I have demonstrated that Boulez has read Rimbaud's *Une saison en enfer* (1873) as he has alluded to it and quoted from it. See: this dissertation p. 37.

²⁰⁵ This first citation has been modified in several ways that I discuss shortly.

Boulez's aesthetics is highlighted by the fact that he uses it to conclude the final class of his Darmstadt Summer School course in 1960. He cites one line from each letter as follows:

"Our task is to arrive at the unknown by the REGULATION of *all the senses*."

"The musician' becomes a *seer* by a long, immense and reasoned REGULATION of all the senses."²⁰⁶

Well-read French readers would instantly recognise Boulez's ironic inversion of Rimbaud's original famous statements. In both sentences, Boulez has inverted the original 'deregulation' into 'regulation',²⁰⁷ drawing attention to this change by capitalisation.²⁰⁸ This ironic inversion does not, however, negate the original and should be understood as a polemical literary device. Similarly, Rimbaud's original statement should not be considered as a proclamation for art without control (i.e. a deregulation of art). Although it is relatively easy to overlook due to the eye-catching italicised phrase '*deregulation of all the senses*', Rimbaud argues that one achieves this deregulation only by a 'long, immense and reasoned' approach. Indeed, on second reading, one is struck by the contradictory phrase of 'reasoned *deregulation*'. In the second letter (to Demeny), Rimbaud elaborates on what this means. It is only through this 'ineffable torture'²⁰⁹ of reasoning that the poet 'sees' the hidden structures of all things and experiences all feelings, for example 'love',

²⁰⁶ ["Il s'agit d'arriver à l'inconnu par le RÈGLEMENT de *tous les sens*." / "'Le Musicien" se fait *voyant* par un long, immense et raisonné RÈGLEMENT de *tous les sens*."] (My translation, Boulez adds the capitalisations to the original which already contains the italics.) Boulez (1960f) p. 377 (in French) and p. 99 (in English).

The English version incorrectly and misleadingly omits the quotation marks that Boulez places on the first quotation.

These two quotations originally appear in Rimbaud's correspondence as 'Il s'agit d'arriver à l'inconnu par le dérèglement de *tous les sens*' in a letter to Georges Izambard 13. 5. 1871 (see: Rimbaud (1871a) p. 249) and 'Le Poète se fait *voyant* par un long, immense et raisonné *dérèglement de tous les sens*' in a letter to Paul Demeny 15. 5. 1871 (see: Rimbaud (1871b) p. 251).

One also notes that Boulez has substituted 'Le Poète' with 'Le Musicien'.

²⁰⁷ ['dérèglement' 'règlement'.]

²⁰⁸ This is not as clear in the English translation as all the words that Boulez italicises and capitalises in the French merely appear in italics in the English.

²⁰⁹ ['ineffable torture'.] (My translation.) See: Rimbaud (1871b) p. 251.

'suffering' and 'folly'.²¹⁰ At this moment of 'seeing', the poet is in a hallucinatory delirious state, introducing a quasi-spiritual aspect to artistic creation. Described in this way, the artist appears selfless in the sense that he undertakes this 'long, immense' process for the sake of the rest of humanity rather than himself. The final aim of this process is 'to arrive at the unknown'. The concept of the unknown, or unforeseen, is an important idea in Boulez's writings that I shall consider later.²¹¹

The idea of 'seeing' appears in the writings of several other writers that have impacted upon Boulez's aesthetic outlook. It is helpful to examine these instances of 'seeing' to clarify his conception of the term.

Breton considers the idea of 'seeing' in several texts, most notably in the 'Second manifeste du Surréalisme' (1930) in which he quotes the second phrase of Rimbaud that Boulez cites above.²¹² As I noted in the introduction, Boulez has definitely read the 'Second manifeste du Surréalisme' as he quotes from it in 1963.²¹³ It is, therefore, possible that he initially became aware of Rimbaud's idea of the 'seer' through Breton's writings. Breton also discusses this idea in connection with Artaud, writing that 'I know that Antonin Artaud has *seen*, in the sense where Rimbaud [...] [has] spoken of *seeing*'.²¹⁴

Valéry, a close acquaintance of Mallarmé, is another writer who has used this concept of 'seeing' in his writing. Boulez refers to Valéry's use of this term to make a point on Berg's romanticism. Boulez argues that Berg's romanticism is removed to

²¹⁰ ['amour', 'souffrance' and 'folie'.] (My translation.) See: *ibid.*

²¹¹ See: this dissertation p. 207.

²¹² ["long, immense, raisonné dérèglement de tous les sens.""] (My translation.) Breton quotes Rimbaud's phrase without Boulez's inversion but italicises all the words. This quotation appears in a passage in the *Second Manifeste du Surréalisme* (1930) which discusses Rimbaud's *Une saison en enfer* (1873), the subject of several allusions in Boulez's writings that I consider elsewhere (see: this dissertation p. 37). For Breton's quotation of Rimbaud see: Breton (1930) p. 178 (in French). Breton also refers to this idea in the Breton (1934) p. 137 (in English).

²¹³ See: this dissertation p. 36.

²¹⁴ ['Je sais qu'Antonin Artaud a vu, au sens où Rimbaud [...] [a] parlé de voir.'] (My translation.) Breton (1946) p. 739.

the second degree as in Valéry's 'I was seeing myself seeing'.²¹⁵ This is a reference to the final line of Valéry's *Une soirée avec M. Teste* (1895) which is 'I am being, and seeing myself; seeing myself seeing myself, and so on...'.²¹⁶ This statement suggests a self-revelatory and self-reflective aspect to artistic creation which is not apparent in Rimbaud's usage.

Michaux's usage of the term 'seeing' also implies this self-reflective aspect. To illustrate his conception of the relationship between music and literature, Boulez draws from a text by Michaux entitled 'Entre centre et absence' (1938).²¹⁷ Whilst Boulez only quotes the phrase 'centre and absence', the last few lines are concerned with seeing. Michaux writes:

It was during the thickening of the Great Screen. I was SEEING! "Can it, I was saying to myself, can it truly be so that one skims through oneself?" / It arrived, between centre and absence, at the Eureka, in the nest of bubbles...²¹⁸

Despite the obscure nature of this passage, one can establish that the idea of 'centre and absence' is associated with a moment of enlightenment, indeed self-revelation ('one skims through oneself'), a 'Eureka' moment at which one is 'SEEING'.

The idea of 'seeing', although not the term, is also threaded throughout the writings of Mallarmé. It is the duty of the writer, Mallarmé argues, to become aware of 'the ensemble of relations existing between everything'.²¹⁹ He calls this 'ensemble of relations' 'Music'.²²⁰ The metaphor of 'Music'²²¹ was chosen to express the idea of

²¹⁵ ['Je me voyais me voir'.] (My translation.) Boulez (1961a) p. 519 (in French) and p. 54 (in English). The English version provides the phrase in the original French but this is incorrectly written as 'Je me voyais voir', not 'Je me voyais me voir'. This line is also cited in: Boulez (1963d) p. 542 (in French) and p. 74 (in English).

²¹⁶ ['Je suis étant, et me voyant; me voyant me voir, et ainsi de suite...'] (My translation.) See above.

²¹⁷ I consider Boulez's use of 'centre and absence' with regard to his views on the integration of music and words later. See: this dissertation p. 252.

²¹⁸ ['C'était pendant l'épaississement du Grand Écran. Je VOYAIS! "Se peut-il, me disais-je, se peut-il vraiment ainsi qu'on se survole?" / C'était à l'arrivé, entre centre et absence, à l'Euréka, dans le nid de bulles...'] (My translation.) Michaux (1938a) p. 37.

²¹⁹ ['l'ensemble des rapports existant dans tout'.] (My translation.) Mallarmé (1897c) p. 368.

²²⁰ ['la Musique'.] (My translation.) *Ibid.*, p. 368.

understanding the underlying structures of everything in a way that is not obscured by false claims of representing reality directly.²²² In order to produce great poetry, 'Literature', the poet must avoid 'reportage' and aspire to the quality of 'Music'.²²³ Hence, he writes 'Poetry, near the idea, is Music'.²²⁴

Leibowitz also describes what appears to be the moment of 'seeing' in his book, *Schoenberg et son école* (1947), although, like Mallarmé, he does not use the term 'seeing'. Leibowitz argues that before this moment, the composer merely draws from the language of the past and explores different styles. Then there is a 'sudden consciousness', in Leibowitz's terms, when the composer discovers what seems to him the language of his epoch.²²⁵

I would argue that all these uses of the idea of 'seeing' can be traced back to the aesthetic position of Baudelaire. Indeed, Rimbaud argues that 'Baudelaire is the first seer'.²²⁶ However, Baudelaire does not use this term but instead uses the idea of 'correspondances', a term which is derived from the writings of the theorist and mystic Emanuel Swedenborg (1688-1772). Swedenborg's 'doctrine of correspondances' conceives the universe as a system of symbols to be perceived through the interrelation of all the senses. The last point referring to 'all the senses' is striking, as it appears in Rimbaud's notion of the poet as 'seer'. Swedenborg continues by proposing that every exterior object has a corresponding interior

²²¹ Note that Mallarmé distinguishes this term by capitalising it in a manner comparable to Germanic philosophical texts, e.g. Hegel.

²²² The latter is Mallarmé's concept of 'reportage' I noted earlier. See: this dissertation p. 157.

²²³ I would argue that Breatnach misunderstands Mallarmé's distinction of 'reportage' and 'Literature'. Breatnach claims that 'Literature' strives towards ambiguity of meaning rather than the precision of everyday word usage. See: Breatnach (1996) p. 27 (in French). I would argue to the contrary. Everyday word usage (reportage) purports to be immediate and determinate in meaning but this is illusory. 'Literature' reveals this indeterminacy and develops the multivalent nature of language.

²²⁴ ['La Poésie, proche l'idée, est Musique'.] (My translation.) Mallarmé (1897c) p. 381. Boulez has cited from a passage in Mallarmé's writing which contains the term 'Music', although he appears to understand it literally as sounds rather than 'the ensemble of relations existing between everything'. See: Boulez (1962) p. 467 (in French) and p. 183 (in English). I examine Boulez's thoughts on this subject later. See: this dissertation p. 252.

²²⁵ Leibowitz (1947) p. x (in English).

²²⁶ ['Baudelaire est le premier voyant'.] (My translation.) Rimbaud (1871b) p. 253.

spiritual cause,²²⁷ an idea that, I would argue, underpins many Symbolist works. Baudelaire takes this idea of 'correspondances'²²⁸ and uses it to explain what distinguishes the poetic imagination from normal everyday thought. He describes the imagination of the poet as:

A quasi-divine faculty which perceives above all, outside philosophical methods, the intimate and secret relations of things, the correspondances and the analogies.²²⁹

This notion of understanding the 'intimate and secret relations' between all things in the universe strongly characterises Symbolist thought in general and is typically manifested in Baudelaire's poetry by synaesthetic correspondances between the senses. The ability of the 'quasi-divine faculty' to comprehend the underlying structure of the universe brings the poetic imagination, in Baudelaire's view, closer towards science. Baudelaire writes that:

the *imagination* is the most *scientific* of faculties because it comprehends the *universal analogy*, or that which a mystical religion calls the *correspondance*.²³⁰

I would argue that Boulez's conception of seeing (or 'intuition') is very much tied to this essentially Symbolist view of art. However, Boulez avoids the spiritual allusions of the symbolists preferring to concentrate on seeing the 'secret relationships' within his own means of expression (the musical language).

²²⁷ Miller (1978) p. 34 (footnote 11) (in English).

²²⁸ Baudelaire's adoption of the term 'correspondances', particularly in his poem of the same name, has led to Baudelaire's name being more readily associated to this idea than Swedenborg's. Miller notes that the origin of the term 'Symbolism' is often traced to the third line of this poem: 'L'homme y passe à travers des forêts de symboles'. See: Miller (1978) p. 34 (in English). To see this line in the original context of Baudelaire's poem 'Correspondances' see: Baudelaire (1857a) p. 62 (in French).

²²⁹ ['une faculté quasi divine qui perçoit tout d'abord, en dehors des méthodes philosophiques, les rapports intimes et secrets des choses, les correspondances et les analogies'.] (My translation.) Baudelaire, Charles in a study from 1857 on Poe (Pl. II, p. 334) quoted in footnote 1 to his poem 'Correspondances' by: Dupont (1991) pp. 263-264.

²³⁰ Dupont, the editor of this edition of *Les Fleurs du Mal* (1857), quotes from a letter from Baudelaire to Toussenel 21. 1. 1856 ['l'imagination est la plus scientifique des facultés, parce qu'elle comprend l'analogie universelle, ou ce qu'une religion mystique appelle la correspondance'.] (My translation.) *Ibid.*, p. 264.

The ability to 'see' the global view of a situation distinguishes, according to Boulez, is the role of the artist in society.²³¹ In short, this 'gift' of 'seeing', of revealing what had hitherto been hidden, justifies the artist's work:

The gift of clarifying what appears to be a confused situation, the gift of perceiving the lines of force in an epoch, the gift of 'seeing' globally, of grasping the situation in its totality, of possessing by a sharp intuition the present state, of holding, of apprehending its cosmography: that is the 'seeing' required of the candidate.²³²

Other terms he uses to describe this 'gift' of 'seeing' are 'redeemer' and 'genius', the latter being a romantic term which, perhaps surprisingly, is freely used in his texts.²³³ The need for the composer to 'reveal' the world underpins much of Boulez's thought. For example, it can be seen in his defence of 'excessive individualism' which, he argues, is much more preferable to mediocrity, as the latter has never 'truly characterised or revealed anything'.²³⁴ Boulez traces this revelatory function of composers, and of creative artists generally, back to the French Revolution.²³⁵ In a version of history that echoes Adorno, Boulez claims that before then, philosophers undertook this revelatory role with composers being servants to either religion or to a patron. The French Revolution created a split between the rationalism of philosophy and the redemptive function of composers, the latter choosing to reject rationalism as well as the financial support of the church and patrons. The archetypal figure of this change was, of course, Beethoven. As the redemptive role of artists proved to be illusory, the artist turned inward,

²³¹ ['voyais'.] Boulez first uses this term in 1960. See: Boulez (1960f) p. 377 (in French) and p. 99 (in English).

²³² ['Don de clarifier une situation en apparence confuse, don d'apercevoir les lignes de force d'une époque, don de "voir" globalement, de saisir la situation dans sa totalité, de posséder par une intuition aiguë l'état présent, de tenir, d'appréhender sa cosmographie: telle est la "voyance" requise de l'impétrant.'] (My translation.) Boulez (1963d) p. 536 (in French) and pp. 68-69 (in English).

²³³ It should be noted that Boulez's understanding of the 'seer' or 'genius' differs fundamentally from that of the romantics as he insists that this initial moment of 'seeing' is not sufficient in itself and must become involved in a dialectical relationship with the material. Therefore, Boulez does not claim that the composer can, or should, be able to foresee the entire work in a divine flash of inspiration. For my examination of Boulez's notion of the 'unforeseen' see: this dissertation p. 207.

²³⁴ ['n'a-t-elle jamais caractérisé ou révélé quoi que ce soit.'] Boulez (1961d) p. 500 (in French) and p. 39 (in English).

²³⁵ The following is my summary of Boulez's argument found in Boulez (1975a).

concentrating only on art itself. Today, Boulez argues, this inconsistency remains: the composer 'has only a privileged role, one that has been granted him, as though on sufferance, in a society that he cannot shape.'²³⁶

So far, I have established that speculation involves the attempt to globalise one's thought and make every element of the work become *necessary*. The gaps in one's understanding are bridged by intuition in a moment of seeing. I would now like to consider Boulez's claim that this moment of intuition involves *chance* and constitutes an Existential realisation of the *freedom* of the autonomous subject.

'Un coup de dés' and the 'initial choice'

For Boulez, speculation is a 'bet' which places the composer within history. It is the introduction of the composer's 'personality' (i.e. the composer's *chance*) into history. Boulez stresses, once again, that this choice must remain mobile:

There is no "fixed" tradition but a worldwide historical flux in which one inserts oneself pragmatically, or according to theoretically precise coordinates. It is at this point of insertion that the personality intervenes, that the force and the decision enter into the choice; more precisely doubt, rationally established, prepares the insertion and establishes its determining factors.²³⁷

The inevitable entrance of the 'personality' in the 'rationally established' insertion into the 'historical flux' is a reference to the chance involved in the intuition of one's choices. This fundamental moment should be highlighted within the context of Boulez's aesthetics. Describing this initial speculation, Boulez writes:

²³⁶ ['il n'a plus qu'un rôle privilégié, celui qu'on veut bien lui accorder, à l'intérieur d'une société qu'il ne peut déterminer.'] (My translation.) Boulez (1975a) pp. 200-201 (in French) and p. 224 (in English).

²³⁷ ['il n'y a pas de tradition au sens proprement *fixé* que l'on accorde généralement à ce terme; mais il existe un flux historique mondial dans lequel on s'insère pragmatiquement, ou selon des coordonnées théoriquement précisées. C'est à ce point de l'insertion que joue la personnalité,

Once this initial choice has been made, whether by talent or/and by hard work, you have already accomplished a task closely related to aesthetic choice, to poetic decision. [...] Your very affinities, the very action of choosing, constitute a revelation of yourself to yourself, a proof of your own existence, an experience of your own personality.²³⁸

This passage in particular reveals the Existentialist influence on this part of Boulez's dialectical approach. It includes several terms drawn from Sartre's writings. The notion of making a choice that defines oneself and reveals one's own 'existence' to oneself is at the core of Sartre's thought. Boulez also alludes to this idea in the quotation on the previous page which mentions the idea of 'self-definition': defining one's essence through choice. This idea is predicated on Sartre's concept of 'initial choice', which Boulez cites verbatim in the passage above. As I explained earlier in this chapter,²³⁹ the 'initial choice' refers to an act which is not based on a previous choice. Nor is it based on means-to-an-end rationality, as this would be an avoidance of one's freedom. De Beauvoir explains that:

The drama of the original choice is that it operates instant by instant for the entirety of life, it operates without reason, before all reason, liberty only presents it under the figure of contingency.²⁴⁰

This 'initial choice' is the moment at which the composer 'throws the dice' and realises his freedom as an autonomous subject, overcoming the contingency of the limitations of the inherited material. It is an Existential proof of one's existence and a revelation of oneself to oneself.

qu'interviennent la force et la décision dans le choix; plus précisément, le doute, rationnellement établi, prépare l'insertion et en détermine les facteurs.'] (My translation.) Boulez (1963e) p. 555.

²³⁸ ['Admettant ce choix initial, par don ou – et – par travail, vous avez certainement accompli déjà une tâche relevant éminemment du choix esthétique, de la décision poétique. [...] Par vos affinités, par votre élection, vous vous êtes déjà révélé à vous-même, avez prouvé votre existence, éprouvé votre personnalité.'] (My slight alteration of the translation.) Boulez (1963d) p. 537 (in French) and p. 71 (in English).

²³⁹ See: this dissertation p. 143.

²⁴⁰ ['Le drame du choix originel, c'est qu'il s'opère instant par instant pour la vie tout entière, c'est qu'il s'opère sans raison, avant toute raison, c'est que la liberté n'y est présente que sous la figure de la contingence'.] Beauvoir, de (1947b) p. 59.

To summarise the second stage of the dialectic, one can see that Boulez argues it is necessary to doubt the inherited material. This is achieved through distancing the inherited concept and 'analysing' it into its constituent parts. The composer then proceeds to speculate upon the material of sound, making his speculation as consistent and as necessary as possible. This involves attempting to take a 'global' view and bring together all the acquisitions within his medium into a consistent whole. Nevertheless, this cannot have a completely consistent approach: the composer fills in the gaps with his 'intuition' in a moment of 'seeing'. This 'intuition' constitutes the Existential 'initial choice' which places the composer in history. This is a realisation and revelation of the freedom of the autonomous subject.

I would now like to consider the third stage of the dialectic which is the goal of speculation: the 'synthesis'

3: Third stage of the dialectic: *Freedom*

In the second stage of the dialectic, I established that Boulez emphasises the need to attempt to bring the acquisitions into a global whole. This can be regarded as a 'reduction' of the inherited material to its underlying principles. Boulez appears to understand this stage in this way, as he writes that the 'real goal of *the* speculation' is to 'point the way to general principles'.²⁴¹ This statement has clear resonances with Hegel, who writes that:

Culture and its laborious emergence from the immediacy of substantial life must always begin by getting acquainted with *general* principles and points of view, so as at first to work up to a *general conception* of the real issue, as well as learning to support and refute the general conception with reasons[.]²⁴²

²⁴¹ ['[elles] tendront d'elles-mêmes à la *généralité*, but essentiel de *la* spéculation.'] (My slight modification.) Boulez (1963b) p. 27 (in French) and p. 29 (in English).

²⁴² ['Der Anfang der Bildung und des Herausarbeitens aus der Unmittelbarkeit des substantiellen Lebens wird immer damit gemacht werden müssen, Kenntnisse *allgemeiner* Grundsätze und Gesichtspunkte zu erwerben, sich nur erst zu dem *Gedanken* der Sache *überhaupt* heraufzuarbeiten,

The first part of this quotation which depicts the 'laborious emergence from the immediacy of substantial life' can be understood as the first stage of the dialectic I described earlier. After this stage, the task is to work towards general principles which can lead to a 'general conception' of the material: This is the primary aim of the speculative stage of the dialectic.

Although this is the 'reduction' of the inherited material to general principles, it is not 'reductionist' in the usual sense of the term, as it does not seek to alter one's conception of the material. As I shall consider later, Boulez does not understand this reduction as sufficient in itself but must subsequently enable the 'unforeseen' and 'unforeseeable' 'proliferation' of ideas.²⁴³ This aspect of 'reduction' to 'general principles', the goal of all speculation, is the point at which one arrives at the 'synthesis'.

Synthesis

The concept of 'synthesis' deserves much consideration in this study of Boulez's dialectical theory. It is the outcome of the dialectical process, which, in turn, becomes inherited material to be involved in another synthesis. He describes this third and final stage as relying upon 'latent memory', a key idea that I shall examine shortly.²⁴⁴ Before then, I would like to explore the theoretical roots of his concept of 'synthesis' and how he understands it in terms of an approach to history.

The idea of striving towards a 'synthesis' of the musical language has appeared several times in Boulez's writings, particularly from the early 1960s. One of the first appearances of the term 'synthesis' occurs in his article "À la limite du pays fertile" (Paul Klee) (1955), published at a time when he was establishing his own

nicht weniger sie mit Gründen zu unterstützen oder zu widerlegen'.] Hegel (1807) pp. 11-12 (in German) and p. 3 (in English)

²⁴³ See: this dissertation p. 211.

²⁴⁴ See: this dissertation p. 198.

consciously dialectical conception of music. Its context reveals very accurately the way in which Boulez conceives this term. The article captures his struggle at this time to integrate new developments in music technology, such as the possibility of non-equal temperament tuning systems, into a coherent aesthetic technique.²⁴⁵ Commenting on these developments, Boulez writes:

[T]hese techniques [of new music technology] will begin to be really fruitful when they adapt to the needs of genuinely modern musical thought. They will then appear as source and origin of a new synthesis, which will embrace all sound possibilities.²⁴⁶

Another example of the idea of synthesis appears in an article dating from 1958, soon after Boulez's shift towards a consciously dialectical approach. He writes:

I believe that our generation will be concerned as much, if not more, with synthesis as with discovery properly so called: the enlargement of techniques, the generalisation of methods and the rationalising of writing procedures. In short, a synthesis of the great creative currents which have manifested themselves since the end of the nineteenth century.²⁴⁷

In the same year as this article, he writes elsewhere that 'for several years we have attempted a synthesis of means inherited from our preceding generation'.²⁴⁸ Elsewhere, he criticises music in general, as it lags behind science in the striving towards a general synthesis.²⁴⁹

²⁴⁵ Indeed, in consideration of this article, I would suspect that his conception of the idea of 'synthesis' was considerably provoked by electro-acoustic developments and his attempts to 'synthesise' them with the inherited musical practice of western art music.

²⁴⁶ ['ces techniques commenceront à être vraiment fécondes lorsqu'elles s'adapteront aux besoins de la pensée musicale véritablement moderne. Elles apparaîtront alors comme la source et l'origine d'une nouvelle synthèse qui embrassera toutes les possibilités sonores.'] Boulez (1955a) p. 317 (in French) and p. 160 (in English).

²⁴⁷ ['je crois que notre génération sera vouée à la synthèse, autant, sinon plus, qu'à la découverte proprement dite: élargissement des techniques, généralisation des méthodes, rationalisation des procédés d'écriture; en somme, une synthèse des grands courants créateurs qui se sont manifestés principalement depuis la fin du XIXe siècle.'] (My translation.) Boulez (1958e) p. 164 (in French) and p. 177 (in English).

²⁴⁸ ['il s'agissait, il y a quelque années, de faire une synthèse des moyens mis à notre disposition par la génération précédents.'] (My translation.) Boulez (1958d) p. 421.

²⁴⁹ Boulez suggests that compared to mathematicians and scientists, musicians are far behind developments towards a general synthesis. See: Boulez (1963b) pp. 27-28 (in French) and p. 29 (in English).

This insistence upon attempting to synthesise the various developments in musical technique is a striking feature of Leibowitz's writings. Leibowitz claims that the 'acquisitions' of musical language today will form a synthesis²⁵⁰ and that 'musical history [...] is always a living synthesis of everything that preceded it.'²⁵¹

Although the principle of synthesis has remained an important essential part of Boulez's aesthetic approach, the aspiration of achieving a synthesis of the musical language permeating his writings in the late 1950s and early 1960s is rejected in his later texts. For example, in an article published in 1975, he rejects what he calls 'the utopia of a collective style'²⁵² (i.e. a synthesis of the musical language) not only on the grounds of it being impossible to achieve but also because it would be undesirable. This undesirability is based on the recognition that a single musical language, used by all composers, would be too limiting.²⁵³ Boulez claims that Schoenberg and the Second Viennese School were the last composers to be 'enchanted' with the 'utopia' of a 'collective language'.²⁵⁴

The principle of synthesis, understood as part of Boulez's dialectical process and not merely as the 'utopia of a collective style', is discussed by Boulez in a paper dating from 1960. He stresses that this concept has always been, and remains, a vital component in the 'logical evolution of any language'. That is to say, the notion of synthesis is not merely an element of Boulez's own theory: it has always operated throughout history. He succinctly expresses his understanding of the concept of synthesis in the context of the musical language:

²⁵⁰ Leibowitz (1947) p. 268 (in English).

²⁵¹ *Ibid.*, p. xxv (in English).

²⁵² ['le utopie d'un style collectif.'] (My translation.) Boulez (1975b) pp. 125-126.

²⁵³ See: *ibid.*

²⁵⁴ I refer to Boulez's statement that 'Who dreams today to work towards a collective language? Schoenberg and the Viennese School were probably the last to be enchanted with such a utopia. ['Qui songerait encore aujourd'hui à œuvrer en faveur d'un langage collectif? Schönberg et l'école viennoise ont été probablement les derniers à s'enchanter de cette utopie.'] (My translation.) Boulez (1989a) p. 73.

[I]deas that are more “general” and more “abstract” at every stage replace those of the foregoing period. Thus the logical evolution of music appears as a series of “reductions” [...] however [...] the new formal system becomes correspondingly wider than the old and in a sense subsumes it.²⁵⁵

The ‘subsuming’ of one musical system after the next is clearly the idea of synthesis followed by synthesis. One notes, in particular, the explicit reference to the idea of ‘reduction’, which is for Boulez, the aim of all speculations i.e. (the reduction to general principles).

The dialectical conception of musical history manifested in the quotation above is virtually identical to Leibowitz. Writing specifically on the development of twelve-tone technique after tonality, Leibowitz claims that:

[T]he twelve-tone technique constitutes a synthesis of all preceding techniques, since these techniques developed in the world of chromaticism which they could organize only *in part*, while the new technique organizes it *completely*.²⁵⁶

This passage emphasises the need to take a ‘complete’ view, rather than a partial view, of recent developments in the musical language. However, the implicit belief that the new language encompasses all the developments of previous systems - i.e. a belief in linear ‘progress’ - is not a view shared by Boulez. Although I shall examine the striking parallels between the conception of music history by Boulez and Leibowitz, as well as their key differences, in chapter IV,²⁵⁷ I would like to consider the idea of progress now.

²⁵⁵ [‘les notions du nouveau domaine sont plus “générales” et plus “abstraites” que celles qui composaient le précédent domaine, abandonné. Ainsi l’évolution logique de la musique se présente comme une suite de “réductions” [...] correspond naturellement un système formel plus large que le précédent, l’englobant en quelque sorte.’] Boulez (1960e) pp. 367-368 (in French) and p. 84 (in English).

²⁵⁶ Leibowitz (1947) pp. 103-104 (in English).

²⁵⁷ See: this dissertation p. 267.

'Progress'

I would like to stress that the idea of synthesis is also the motor of Boulez's dialectical approach. Whilst the overall dialectical process should be regarded as a synthesis in itself, I would argue that the ambition of creating a synthesis is one element driving the process along. The idea of synthesis understood as a motor of the dialectic involves the rational element of the composer attempting to establish his own 'orientations' in history. If one considers the statement above, without recognising that Boulez is discussing the idea of synthesis as the motor of a dialectical approach, one can seriously misunderstand his aesthetic position. Leaving aside anecdotal suggestions for Boulez's idea of synthesis, considered only from a theoretical viewpoint this idea does not necessarily imply a belief in a linear progressive conception of history with a finite end, a 'final consummation', as in Hegelian and Marxist Theory. Indeed, Boulez himself explicitly rejects this linear progressive view:

I do not envisage a final consummation, a kind of "apotheosis" of that which precedes it, an industrial stage in some way, in relation to a superseded craftsman. To the contrary, I think that this synthesis is only the indispensable base in order to begin, with a minimum of intellectual guarantees, towards new discoveries, which perhaps may lead to reconsideration of all or part of Western traditions.²⁵⁸

The rejection of a linear conception of progress is attributed by Boulez to the sensitivity in the post-war era to the rights of others and the re-establishment of 'the parity of rights that colonialism or exoticism had brought to a maximum point of

²⁵⁸ ['je ne l'envisage pas comme point terminal, comme "apotheose" de ce qui s'est fait auparavant, stade industriel en quelque sorte, par rapport à un artisanat dépassé; bien au contraire, je pense que cette synthèse est seulement la base indispensable pour pouvoir partir, avec un minimum de garanties intellectuelles, vers de nouvelles découvertes, qui remettront peut-être en question tout ou partie des traditions occidentales.'] (My translation.) Boulez (1958e) p. 164 (in French) and p. 177 (in English). Born also observes that Boulez's 'modernist' belief in evolution has elements of 'postmodern' cultural relativism. See: Born (1995) p. 96 (in English).

Note the line in this passage describing the 'industrial stage of development succeeding that of the home craftsman'. This is a clear rejection of a crudely reductionist Marxist approach.

distortion'.²⁵⁹ The linear conception of progress clearly establishes value judgements concerning what is more or less advanced than something else. With the acts committed in the name of 'progress' by the Nazis, together with the sudden accessibility of recorded non-Western musics in Europe, this overarching meta-narrative linear conception of history was undermined. However, Boulez acknowledges that before the events of the twentieth century, the linear conception of progress, although incorrect and 'naïve', was actually 'productive', as it stimulated creative boldness.²⁶⁰

Whilst Boulez rejects a linear conception of progress he does not reject the idea of progress, or (unfortunately with regard to clarity) the term 'progress' itself. On several occasions, he has used the term of progress, which has led to the confusion that he believes in a linear progressive view of history. This is nowhere more obvious than in two comments he makes on Schoenberg. In one text, Boulez argues that Schoenberg's 'greatest lesson' is 'an awareness of the necessity of progress in music'.²⁶¹ In another text, he criticises Schoenberg for retaining a linear view of progress.²⁶² Elsewhere, in an interview from 1985-86, Boulez uses the term 'progress' but employs the organic metaphor of the virgin forest to depict the non-linear aspect. He writes that '[p]rogress goes through all kinds of developments and curves and sometimes even retrogradations. Progress is more like a virgin forest than a line'.²⁶³ The same idea is depicted in one of Boulez's favourite quotations, drawn from Claudel's *Le soulier de satin* (1929), 'God writes straight with curved lines'. Without using the term 'progress' explicitly, this statement encapsulates the need to explore new 'virgin' territories without becoming too preoccupied with moving directly from A to B:

²⁵⁹ ['la parité des droits que colonialisme ou exotisme avait portés à un point maximum de distorsion'.] (My translation.) Boulez (1963e) p. 555.

²⁶⁰ ['avec naïveté', 'productives'.] Boulez (1961d) p. 497 (in French) and p. 36 (in English).

²⁶¹ Boulez (1977d) p. 124 (in English).

²⁶² See Boulez in: Boulez and Gable (1985-86) p. 106 (in English).

²⁶³ *Ibid.*

I cannot represent a rich existence without the dangers and the excess of dispersion, providing that at the centre of a multiple activity remains the firmness of direction. The apparent useless detours are only the multiple manifestation of a unique will[.]²⁶⁴

In some articles, he attempts to avoid any confusion with his understanding of the term of 'progress' by employing instead 'evolution',²⁶⁵ perhaps due to its association with Darwinian Theory and therefore its 'organic' quality. 'Evolution' does not have the monolithic connotations of 'progress', suggesting instead species evolving simultaneously and in response to each other (as in an ecosystem).

The idea with which Boulez replaces a linear-progressive view of history is that of 'discontinuous history'. He draws this idea from Souvtchinsky, his close friend in the 1940s and 1950s. Boulez quotes from a text by Souvtchinsky which proposes that:

[The] history [of the arts] must be understood both as an uninterrupted process and also as a sequence of discontinuous and distinct facts and events.²⁶⁶

In another passage which is not cited by Boulez, Souvtchinsky expands upon what he means by this. He writes that:

Historical development can appear so much as dynamic processes, as a torrent, as an uninterrupted chain of causal relations, where each chain, each moment is determined, and "explained" by the precedent, in preparing the following; however it can also be seen and understood as a discontinuous sequence of events, of facts each having its defined aspect,

²⁶⁴ ["Dieu écrit droit au moyen de lignes courbes".] [...] 'Je ne peux pas me représenter une existence riche sans les dangers et les excès de la dispersion, pourvu qu'au centre d'une activité multiple demeure la fermeté de la direction. Ce qui paraîtra détours inutiles n'est que la manifestation multiple d'une volonté unique'.] (My translation.) Boulez in: Boulez and Clavé (1990) p. 2. It should be noted that Boulez is specifically responding to a question concerning whether the transmission of music allow the composer to make a coherent approach and avoid dispersion. Boulez makes exactly the same argument in his acceptance speech on receiving the Siemens prize in 1979. See: Boulez (1979a) p. 561 (in French) and pp. 525-526 (in English).

²⁶⁵ For example, see Boulez in: Boulez and Coutaz (1968-70) p. 1333 (in French). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

²⁶⁶ ['elle devrait être comprise, et comme un processus ininterrompu, et comme une suite de faits, d'événements discontinus et distincts'.] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

limited in time and space, and so to speak statistical. [...]The evolution of the arts unfolds, all in all, by jerks from one creative shock to another[.]²⁶⁷

Understood in Boulez's dialectical theory, this idea embraces both the rational aspect of 'culture' which is apparently continuous'²⁶⁸ with the appearance of the unforeseen,²⁶⁹ which, as I shall consider shortly, is bound with the realisation of the *freedom* of the great artist.

The idea of discontinuous history first appears in Boulez's writings in 1951, before his development of a consciously dialectical approach. As in the above statement, he understands this discontinuity as connected to the unforeseeable, but here he associates this with the unforeseeable work rather than the unforeseeable composer. He writes that:

The discontinuity of the tradition is apt to get overlooked, in that the "necessary" work, though consolidating the tradition that is in progress, is not foreseeable by it, but is absorbed and justified by it *a posteriori*.²⁷⁰

I shall return to this idea of discontinuity, particularly in light of Boulez's concept of the unforeseen, later.²⁷¹

²⁶⁷ ['Le développement historique peut apparaître en tant que processus dynamique, comme un torrent, comme une chaîne ininterrompue de rapports de causalité, où chaque chaînon, chaque moment est déterminé, et "expliqué" par le précédent, tout en préparant le suivant; mais il peut aussi être vu et compris comme une suite discontinue d'événements, de faits, ayant chacun son aspect défini, limité dans le temps et l'espace, et pour ainsi dire statique. [...] L'évolution des arts se déroule en somme par saccades, d'un choc créateur à l'autre'.] (My translation.) Pierre Souvtchinsky, 'A propos d'un retard' in 'La Musique et ses problèmes contemporains', *Cahiers de la compagnie Renaud-Barrault* 2nd year, 3rd book 1954 pp. 122-123. Cited in Aguila (1992) p. 46. Aguila notes the shared idea of discontinuous history used by both Boulez and Souvtchinsky, although, as I have already mentioned, Boulez, himself, acknowledges his friend's assistance in this respect.

²⁶⁸ ['si l'on conçoit le phénomène de la culture comme un processus dialectique, apparemment continu'.] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

²⁶⁹ I examine the idea of the 'unforeseen' shortly. See: this dissertation p. 207.

²⁷⁰ ['L'on ne semble pas se rendre compte du fait discontinu de cette évolution; en ce sens que l'œuvre nécessaire, consolidant cette tradition en marche, n'est pas *prévisible* par elle, qu'elle s'intègre à elle et la justifie *a posteriori*.'] Boulez (1951a) p. 79 (in French) and p. 13 (in English).

²⁷¹ See: this dissertation p. 210.

In summary, the idea of synthesis does not equate with a belief in linear progress. Breatnach is, therefore, mistaken to claim that 'tradition in the Boulezian sense is a form of continuous evolution.'²⁷² This idea does, however, imply that the new work is a synthesis previously unknown to that point. In other words, it must offer something new and not merely repeat that which has gone before. Boulez writes:

Each important work [...] is a new aggregate where a unique will has succeeded in a synthesis unknown up to then. [...] This synthesis has been made once and for all and it has rendered forever impossible all the syntheses of the same order which can only be reproductions without originality.²⁷³

As this new synthesis was created through the dialectical process, it was previously unforeseeable. Subsequent compositions cannot repeat this synthesis as the resultant work would not offer anything new and therefore not contribute to the 'goal' of all speculations which is to 'point the way to general principles'.²⁷⁴ However, one can see that this aspect of unforeseeability is not merely an attempt to achieve originality for its own sake, but a vital part of the dialectical process and one that I would like to examine next.

The unforeseen

The concept of the 'unforeseen',²⁷⁵ or strictly speaking the 'unforeseeable', is very important in Boulez's aesthetic approach. The term 'unforeseen' appears in the writings of several of his influences, most notably Baudelaire who used it as a title for a poem.²⁷⁶ In Boulez's writings, this concept can sometimes also appear as 'surprise' or 'unexpected'.²⁷⁷

²⁷² Breatnach (1996) p. 7 (in English).

²⁷³ ['Chaque œuvre importante [...] est une agrégation nouvelle où une volonté unique a abouti à une synthèse inconnue jusqu'alors [...] Cette synthèse a été faite une fois pour toutes et elle a rendu à jamais impossibles toutes les synthèses du même ordre qui ne pourraient être que des reproductions sans originalité'.] (My translation.) Boulez (1989a) p. 39.

²⁷⁴ I refer to a quotation by Boulez I considered earlier. See: this dissertation p. 198.

²⁷⁵ ['imprévu'.]

²⁷⁶ See: Baudelaire (1957b) pp. 218–219 (in French).

²⁷⁷ ['surprise' 'inattendues'.]

As I explained earlier in chapter II,²⁷⁸ after the experience of *Structure 1a* (1952), Boulez strove towards an aesthetic conception that could reintroduce the idea of the unforeseen into musical composition. In an interview with Jameux dating from 1984, Boulez states this shift quite categorically and admits that '[w]hen I was younger, I sought to foresee a work in its 'entirety'.'²⁷⁹ However, he soon recognised that:

In my experience it is impossible to foresee all the meanders and virtualities in the material with which one starts. However much of a genius one might be at the level of intuitive vision, or rapid, expert evaluation, it seems to me that, if one could do so, composing would lose its main point: surprise.²⁸⁰

When composition becomes automatic and unthinking, it becomes 'opposite of an organic development'.²⁸¹ He continues by insisting that 'an organic development must have its own strong logic, which needs, however, to be deduced during the process of composition, and above all not before.'²⁸²

For Boulez, the unforeseen element of the new musical work is the hallmark of the appearance of the *free* autonomous subject. This is the proof that the composer has overcome the limitations of the inherited material and shaped it into his own language. He has rejected fixing his goals to the inherited limitations of the existing material and has escaped being condemned to repetition: he is now able to 'renew' and 'surpass' what he *is*. He argues that the unforeseen is *the* defining criterion of what constitutes a work. In one of his most memorable phrases that I have cited on

²⁷⁸ See: this dissertation p. 80.

²⁷⁹ ['Plus jeune, je cherchais à prévoir une œuvre, et à la prévoir dans son "entièreté".'] (My translation.) Boulez in: Boulez and Jameux (1984) p. 17.

²⁸⁰ ['Suivant mon expérience, il est impossible de prévoir tous les méandres et toutes les virtualités contenus dans le matériau de départ. Aussi génial serait-on dans cette vision prémonitoire, dans ce coup d'œil d'estimation – d'expertise –, il me semble, d'abord, que composer serait privé de sa plus éminente vertu: la surprise.'] Boulez (1957a) p. 411 (in French) and p. 29 (in English).

several occasions in this dissertation, he claims that 'creation is only possible when the unforeseeable becomes necessity.'²⁸³ This encapsulates both the rational process of making the material become necessary as well as the notion of the free unforeseen autonomous subject.

Boulez draws from several sources to make this point that the composer's initial speculation inevitably becomes modified. I would briefly like to consider three examples.

One example he uses to describe this unforeseeability is his reference to Henry Miller, who undertook an exercise to draw a horse but eventually ended up with a picture of an angel.²⁸⁴ Boulez makes a parallel with this in his own composition:

One begins with a certain intention, and as it transforms, one finishes with something very different. In the large-scale works, above all, I do not like a foreseeable conclusion.²⁸⁵

On another occasion, he draws a parallel with this idea and Kafka's novels in which:

[Kafka] constructs [...] a type of labyrinth where the logic is perfect, but which carries you into some absolutely unexpected zones; you believe you are going to one side, and you are carried, without knowing it, in another direction. I discovered that it is exactly the same when one composes a work.²⁸⁶

²⁸¹ ['c'est le contraire d'un développement organique'.] (My translation.) Boulez in: Boulez and Jameux (1984) p. 17.

²⁸² ['Un développement organique doit avoir son propre logique, forte, mais qui a besoin de se déduire et de se mettre à jour au fur et à mesure de la composition, et surtout pas avant.'] (My translation.) *Ibid.*

²⁸³ ['il n'y a de création que dans l'imprévisible devenant nécessité.'] (My translation.) Boulez (1952c) p. 288 (in French) and p. 133 (in English).

²⁸⁴ See Boulez in: Boulez and Szendy (1993) p. 144 (in French). For Boulez's earlier reference to Miller see: Boulez (1963d) pp. 545-546 (in French) and p. 77 (in English).

²⁸⁵ ['on part avec une certaine intention, et au fur et à mesure des transformations, on finit par quelque chose très différent. Dans des œuvres à longue échéance, surtout, je n'aime pas l'aboutissement prévisible.'] (My translation.) Boulez in: Boulez and Szendy (1993) p. 144.

²⁸⁶ ['il construit [...] une sorte de labyrinthe où la logique est parfaite, mais qui vous conduit dans des zones tout à fait inattendues; vous croyez aller d'un côté, et vous êtes entraîné, sans le savoir, dans

The third example is Boulez's description of himself as a 'sleepwalker'.²⁸⁷ This is a deliberate reference to Schoenberg's famous description of himself as a 'somnambulist' who 'reveals the inmost essence of the world and utters the most profound wisdom in a language which his reason does not understand'.²⁸⁸ Boulez elaborates upon this by adding that '[m]ethod and intuition are not at all opposed [...]. Intuition is more or less unconscious; it works by itself, and the method, of course, is something you are very much aware of.'²⁸⁹ In other words, it is the composer's intuition that is the key factor in leading the composer towards the unforeseen.

At this point, I would like to reintroduce the idea of 'discontinuity' I highlighted earlier. I suggested that it was a way of combining a rational approach to history whilst preserving the element of the unforeseen. When one pursues Boulez's statements on this matter, he seems to propose that one cannot predict the future, as it is unforeseeable, but with hindsight, it is possible to understand it as one synthesis after the next. In the same way, the great artist can 'see' these trends and reveal these to the rest of humanity. One would deduce from this that history is created through both rational and non-rational elements and consequently it is unforeseeable. However, one can rationalise it *a posteriori*. In the following, Boulez connects this unforeseen aspect with the great artist:

[D]espite all such "preparation", the appearance of a great creative artist is always something unexpected, something unpredictable.²⁹⁰

This unforeseen element is the 'intuition' of the great artist-as-seer that I examined earlier.

une autre direction. J'ai découvert qu'il en va exactement de même quand on compose une œuvre'.] (My translation.) Boulez in: Boulez and Cott (1985) pp. 148-149.

²⁸⁷ Boulez (1979a) p. 563 (in French) and p. 527 (in English).

²⁸⁸ Schoenberg (1912) p. 142 (in English). Of course, Schoenberg, himself, is quoting Schopenhauer.

²⁸⁹ Boulez in: Boulez and Di Pietro (2001) p. 7 (in English).

²⁹⁰ ['malgré toutes les "préparations", l'apparition d'un grand créateur est toujours un fait inattendu et imprévu.'] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

Having established that Boulez considers the 'unforeseen' an integral and vital part of all dialectical composition, I would like to consider how he conceives this within his own approach to music. A key manifestation of the unforeseen element in composition occurs in the 'proliferation' of musical structures.

Proliferation

The notion of 'proliferation', or 'deduction',²⁹¹ of musical structures from a number of 'general principles' is one of the most important elements of Boulez's aesthetic approach. As these proliferations arise through the dialectical interaction of the composer and the musical material, they are unforeseeable in their entirety at the outset of composition. In the way that Boulez uses this term, it implies the potential for development that a given compositional idea possesses. In particular, he tends to connect this idea with automatism,²⁹² making this association explicit when he writes that the composer 'has to keep a close watch on the proliferation of these automatic structures'.²⁹³ However, Boulez stresses that this proliferation (or deduction) refers to the 'necessity' of the language: that each musical element is given a function and that each element was unforeseeable.²⁹⁴ This proliferation is, therefore, based upon the introduction of the composer's 'intuition' into the process of musical 'invention'. Boulez sums this up in a variation on a memorable phrase of his own when he claims that what interests us in a work is the 'unforeseeable deduction becoming necessary'.²⁹⁵

²⁹¹ ['proliferation' 'déduction'.] In *Jalons* (1989) and *Le Pays fertile – Paul Klee* (1989), Boulez uses the term 'deduction' in place of 'proliferation'. For example see: Boulez (1989a) p. 52 (in French) and (1989c) pp. 10-11 (in French) respectively. However, he continues to use the term 'proliferation' after that time specifically with regard to the 'proliferation' of musical structures rather than as an abstract principle. I have employed 'proliferation' for two main reasons. First, this term appears in almost all of the quotations that I cite on this matter. Second, although 'deduction' is arguable more deliberate and perhaps more precise, I would suggest that 'proliferation' is more revealing of the origin of this term: Boulez's compositional practice.

²⁹² Automatism to be understood as the automatic generation of musical structures by the consistent application of a musical logic. For my earlier examination of this idea see: this dissertation p. 102.

²⁹³ ['La prolifération de ces structures automatiques devra être surveillée avec attention'.] Boulez (1957a) p. 413 (in French) and p. 32 (in English).

²⁹⁴ Boulez describes this *necessary* deduction of each element as being based on the notion of 'responsibility'. ['responsabilité'.] See: Boulez (1989a) p. 49.

²⁹⁵ ['la déduction imprévisible devenant nécessaire.'] (My translation.) *Ibid.*, p. 53.

For Boulez, the idea of proliferation is essential to develop the musical material, to 'look at it from every angle, more and more ways of varying it, of transforming it, of augmenting it, of multiplying it.'²⁹⁶ He highlights Bach's chorales as 'the great model' for proliferation of a small idea.²⁹⁷ The greater the proliferation from the key principles, the more 'fertile'²⁹⁸ those principles are and consequently, the more valuable they are.

I would suggest that this idea of proliferation, which appears an important part of Boulez's compositional theory even in his earliest works, might have initially come from the teachings of Messiaen. Not only are there parallels between Messiaen's conception of rhythm which uses different devices such as superimposition to vary and develop rhythmic motifs but also another student of Messiaen, Jean Barraqué, uses this idea which he calls 'proliferating series' to refer to processes yielding the unlimited exploitation of a material.²⁹⁹ However, one should recognise that Boulez has placed the concept of 'proliferation' within his mature dialectical approach.

It is vital to understand the concept of proliferation as that which follows on from the 'general principles'. These two aspects of the dialectical principle – the reduction to general principles and then the proliferation from those principles – form one of the most striking ways that Boulez depicts the dialectical process in his writings. Arguably the most succinct expression of these two aspects of his dialectical conception of music to appear in his writings occurs in 'Conclusion provisoire' at the end of *Penser la musique aujourd'hui* (1963). He writes that his preceding study of musical technique is:

²⁹⁶ ['je le regarde sous tous les angles, de plus en plus de façons de le varier, de le transformer, de l'augmenter, de le multiplier.'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 14.

²⁹⁷ ['le grand modèle'.] (My translation.) *Ibid.*, p. 15

²⁹⁸ I use this term as Boulez employs it. I would suggest that its history can be traced to Klee's painting *À la limite du pays fertile*. See: this dissertation p. 80.

²⁹⁹ ['séries proliférantes'.] (My translation.) Brunel (1995) p. 159.

[A]n attempt to construct a coherent system by means of a methodical investigation of the musical world, deducing multiple consequences from a certain number of rational points of departure.³⁰⁰

The idea of ‘deducing multiple consequences from a certain number of rational points of departure’ is that of the proliferation of ‘general principles’ that emerge from the speculative stage of the dialectic. This is a fundamental idea in Boulez’s aesthetic theory and one for which he finds confirmation in the theoretical texts by Klee. In his book on Klee, Boulez highlights what he considers the two most important principles in his writings:

1. To reduce the elements which we deploy in whatever language to their same principle, to that which is so important, the complexity of a language, understanding from them first the principle, being capable of reducing it to extremely simple principles.
2. He teaches us at the same time, the power of deduction: the power to start with a unique subject, to take multiple consequences that proliferate. Satisfying oneself with a single solution is insufficient – it is necessary to reach a cascade, a tree of consequences.³⁰¹

This quotation makes essentially the same point as that which appears at the end of *Penser la musique aujourd’hui* (1963). However, in this later text (on Klee), Boulez explicitly uses the concept of ‘proliferation’ and reveals further how he understands this concept in relation to his own aesthetic theory. He insists that it is vital to avoid a reductionist approach to composition which eliminates the unforeseen by choosing only one solution to the problems of the material. Instead, the principles must enable more than one solution – they must enable the fertile proliferation of ideas - and these multiple solutions must be explored by the composer.

³⁰⁰ [‘me livrant à une investigation méthodique de l’univers musical, déduisant des conséquences multiples d’un certain nombre de points de départ rationnels, j’ai tenté de construire un système cohérent.’] Boulez (1963b) p. 166 (in French) and pp. 142-143 (in English).

³⁰¹ [‘1. À réduire les éléments dont nous disposons dans n’importe quel langage à leur principe même, c’est-à-dire, et c’est ce qui est si important, quelle que soit la complexité d’un langage, à en comprendre d’abord le principe, à être capable de le réduire à des principes extrêmement simples.
2. Il nous apprend, du même coup, la puissance de la déduction: pouvoir, à partir d’un unique sujet, tirer des conséquences multiples, qui prolifèrent. Se satisfaire d’une seule solution est tout à fait

At this point, I would like briefly to examine two of the consequences of Boulez's desire to proliferate ideas. These are, first, his well-documented tendency to regard several of his own compositions as 'works in progress' and, second, the notion of 'dérives'.

The 'work in progress' and dérives

The term 'work in progress', widely associated with the Irish writer James Joyce,³⁰² is applicable to many of Boulez's compositions. The Third Piano Sonata (1957-) can be described as a 'work in progress' and also as an open work. These two terms are easily confused and should be distinguished at this point. The 'open work' is characterised by its ability to 'lend itself to different configurations' whereas the 'work in progress' is 'not terminated',³⁰³ in other words it has not yet been performed in a definitive version. The definition of the 'work in progress' therefore includes not only works such as the Third Piano Sonata, as it contains movements that have yet to be written but also works that appeared 'terminated' but have subsequently been radically reconsidered and re-composed. In this category, one could place *Pli selon pli* (1957-), which has been radically re-composed and appeared in different versions with different instrumentation ensembles. Whereas *Pli selon pli* has been re-written and extended for major compositional reasons, *Soleil des eaux* (1948, rewritten 1950, 1958 and 1965) and *Visage nuptial* (1947, rewritten 1951-52 and 1985-89) have been re-written on practical grounds of orchestration³⁰⁴ (in light of Boulez's conducting work) and are now considered 'finished'.³⁰⁵

Boulez has drawn parallels between his own tendency to consider some of his musical compositions as 'works in progress' and the working practises of several

insuffisant, il faut parvenir à une cascade, à un arbre de conséquences.'] (My translation.) Boulez (1989c) pp. 10-11.

³⁰² For Boulez's acknowledgement of this association and his use of this term (in English) see: Boulez (1960a) p. 437 (in French) and p. 148 (in English).

³⁰³ ['elle n'est pas terminé'.] (My translation.) Boulez in: Boulez and Szendy (1993) p. 144.

³⁰⁴ See Boulez in: Boulez and Gable (1985-86) p. 110 (in English).

³⁰⁵ ['achevé'.] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 45.

writers. One example is the *Essais* (1588) of Montaigne (1533-92), written and re-written over a long period of time. Boulez has referred to the *Essais* on two occasions, proposing that '[t]he *Essais* constitute a kind of philosophical journal in which the author keeps returning to reflect on the same fundamental concepts.'³⁰⁶ One is struck by the dialectical connotations Boulez draws from Montaigne's work. Another writer to whom Boulez has compared his own tendency to re-write musical compositions is Proust (1871-1922). Boulez suggests that his own proliferation of ideas 'is like writing a novel where you add one chapter and then another. I compare it with Proust whose novel just expanded and expanded.'³⁰⁷ In this respect, he argues that Proust manifests the same tendency as Wagner, both of whom would write a work, then, in retrospect, develop a theme for another work and eventually end up with a cycle.³⁰⁸ This touches upon an inevitable aspect of the tendency to proliferate ideas increasingly satisfactorily: the expansion of the work which can lead to new works. Boulez calls these new works which are created from pursuing and proliferating ideas from previous works 'dérives'. He describes his conception of 'dérives':

I sometimes take a fragment of a successful work, but a fragment that has not been used, or has only been used very summarily. Then I graft it, so that it gives birth to another plant.[...] Those are moments which are extracts from one context and placed in another in order for them to proliferate.³⁰⁹

On some occasions, Boulez has used a particular rhythmic idea that emerged from one work but suggested and deserved developing in a work of its own. He cites several examples of his own compositions that can be considered 'dérives'.

³⁰⁶ ['Les *Essais* étant une sorte de journal philosophique, où l'auteur revient sans cesse à réfléchir sur les mêmes concepts de base'.] Boulez (1976a) p. 240 (in French) and p. 263 (in English). The other mention of Montaigne's *Essais* appears in an interview in 1990. See: Boulez and Grange, (1990) pp. 45-46 (in French). Boulez may have been influenced to cite Montaigne by the publication of 'Essai sur les *Essais*' (Gallimard, 1968), a study of Montaigne's *Essais* by Butor, a good friend of Boulez.

³⁰⁷ Boulez in: Boulez and McCallum (1989) p. 8 (in English). This reference to Proust also appears in an interview dating from 2001. See Boulez in: Boulez and Di Pietro (2001) pp. 3-4 (in English).

³⁰⁸ See: Boulez (1970a) pp. 270-271 (in French) and p. 257 (in English).

³⁰⁹ ['Je prends quelquefois un fragment d'une œuvre aboutie, mais un fragment qui n'a pas été utilisé, ou qui ne l'a été très sommairement. Et je le greffe, pour qu'il donne naissance à une autre plante.

Eclats/Multiples (1970) is described as a 'parent' of *Répons* (1981-), which itself has led to the works which are explicitly titled *Dérive I* (1985), *Dérive II* (1990) and *Dérive III* (unfinished).³¹⁰

Summary of the notion of 'proliferation'

Both the idea of the 'work in progress' and the notion of 'dérives' should be understood as Boulez's attempt to proliferate his musical ideas satisfactorily. He acknowledges this when he reveals that some works of his 'are still in the process of being made because, for me, it is the proliferation that is important.'³¹¹

Not only is the idea of 'proliferation' a product of a dialectical relationship between speculation and experience, it also displays the principle of 'renewal' (or 'doubt') that I highlighted earlier as part of the first stage of the dialectic.³¹² This is because when the composer composes, inevitably he considers all the acquisitions he has accumulated in his own previous works. This requires him to re-question (i.e. 'doubt') his own works and practice and eventually to arrive at a synthesis which is new and unforeseen. Boulez explains that this revision of his earlier works is due to the need to bridge the gap between the 'utopia' of the work and its 'reality'. The improvement in his technique over his compositional career³¹³ has enabled him to make 'utopia and reality more or less coincide', a defining feature of a 'finished work'.³¹⁴

[...] Ce sont des moments qui sont extraits d'un contexte et placés dans un autre, pour y proliférer.' (My translation.) Boulez in: Boulez and Szendy (1993) p. 147.

³¹⁰ ['parentés'.] *Ibid.*

³¹¹ ['sont encore dans le procès de fabrication parce que, pour moi, c'est la prolifération qui importe.'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 59.

³¹² See: this dissertation p. 161.

³¹³ I refer to Boulez's statement that 'I reconsider my works on the technique with which I have been able to acquire between the moment I have conceived them and the moment I terminated them.' ['Je remets mes œuvres sur le métier avec ce que j'ai pu acquérir entre le moment où je les ai conçues et le moment où je les termine.'] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 46.

³¹⁴ Boulez claims that 'in the first versions [of his works] the reality and the utopia do not coincide. In a finished work, the utopia and reality more or less coincide. As long as the utopia stays removed from the reality, one cannot be satisfied.' ['dans la première mouture, la coïncidence de la réalité et de l'utopie ne s'opérerait pas. Dans une œuvre achevée, il y a plus ou moins coïncidence entre utopie et réalité. Tant que l'utopie reste éloignée de la réalité, on ne peut être satisfait.'] (My translation.)

Summary of the third stage of the dialectic: 'Latent memory' and 'gesture'

I have established that the third stage of the dialectic is the point at which the composer arrives at a 'synthesis' of 'general principles'. Due to the appearance of the composer's intuition, this synthesis was previously unforeseeable. However, whilst he attempts to make a 'reduction' to 'general principles', these principles should enable the proliferation of ideas. The more 'fertile' the principles, the more powerful is their capacity for deduction.

In *Jalons* (1989), Boulez proposes the concept of the 'latent memory' of the composer. The composer's 'latent memory' emerges when the inherited material from which he originally drew upon in order to compose becomes distant and 'abolished' by the new work. Boulez explains that the term 'latent' refers to the composer's 'gesture' that emerges at this stage of the dialectic.

The concept of gesture ['geste'] appears throughout Boulez's writings and is one of the most elusive concepts to define. It can be interpreted literally as bodily gesture, as in the following passage:

The musical idea is dependent on the gesture at all the moments of its existence: the artisan's gesture which furnishes him tools, the performer's gesture that a long, painful and difficult apprenticeship renders master of those chords, of keys, of those pieces of wind or brass by which every sound becomes manifested.³¹⁵

This describes the way in which the particularities (i.e. the gesture) of the instrument-maker and performer affect and are intertwined with the musical idea

Boulez in: Boulez and Grange, de La (1990) p. 46. As I have discussed elsewhere, Boulez names this coincidence of utopia and reality as 'professionalism'. See: this dissertation p. 34.

³¹⁵ ['L'idée musicale est tributaire du geste à tous les moments de son existence: geste de l'artisan qui lui fournit des outils, geste de l'exécutant qu'un long et pénible, et difficile, apprentissage va rendre maître de ces cordes, de ces clefs, de ses morceaux de bois ou de métal par lesquels tout son être va devoir se manifester.'] (My translation.) Boulez (1980d) (page numbers unknown). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

itself. However, Boulez's account of the gesture of the composer provides a more revealing insight into this concept. He argues that each composer possesses a unique gesture which shapes his response to the inherited material. His gesture can, therefore, be regarded as the innate 'disposition' which selects certain elements or characteristics of a language. In essence, the composer sees in other works elements that relate to his own experiences. Nevertheless, although these works 'propel' him towards his own new compositions, his gesture remains unique. Boulez explains this in the following argument in which he castigates musicology for its failure:

to see from the beginning how the gesture [of the composer] applies itself to others, therefore deforming the gesture of others by adding or by removing it in a specific way; how that gesture affirms itself, recognises itself as such; how, finally it refines itself, amplifies itself, renders itself irreducible to all other categories of gesture.³¹⁶

One can see that Boulez equates the gesture of the composer with his own unique particularity, distinguished from the material itself. This emphasis upon the particularity of the composer appears in a statement by Hegel I quoted earlier³¹⁷ and that I would like to consider again. Hegel writes that '[the artist] could impart perfection to his work only by emptying himself of his particularity, depersonalising himself and rising to the abstraction of pure action.'³¹⁸ I would argue that the reference to 'pure action' can be considered as comparable to the notion of gesture. Hegel's argument that the artist should rid himself of the gestural springs from the same determination shown by Boulez to eliminate *chance* from the work of art. This elimination was undertaken to enable the possibility of making the work completely consistent, 'self-possessed' and capable of expression. However, as I have already argued,³¹⁹ Boulez recognised that chance always remains and I would suggest this

³¹⁶ ['voir d'abord comment ce geste s'applique à autrui, déforme donc le geste d'autrui en ajoutant ou en retranchant d'une façon spécifique; comment ce geste s'affermi, se reconnaît comme tel; comment, enfin, il s'affine, s'amplifie, se rend irréductible à toute autre catégorie de geste.'] (My translation.) (My translation.) Boulez (1989a) pp. 44-45.

³¹⁷ See: this dissertation p. 176.

³¹⁸ ['er konnte ihm die Vollendung nur dadurch erteilen, dass er seiner Besonderheit sich entäusserte, und zur Abstraktion des reinen Tuns sich entkörperte und steigerte.'] Hegel (1807) p. 429 (in English) and p. 495 (in German).

³¹⁹ See: this dissertation p. 81.

accounts for his favourable attitude to the composer's gesture in his later writings. One should, therefore, consider the composer's gesture as chance contained within the composer.

Returning to the term 'latent': this refers to the revelation of the composer's unique gesture which remains 'latent' until the material becomes self-possessed. The composer has assimilated the consequences of the inherited music history and has absorbed them into his own expression. This is summarised by Boulez when he writes that '[t]he fundamental element of the confrontation [between the composer and history] progressively disappears and is replaced, almost completely, by the experience of himself.'³²⁰

In a later article from 1990, Boulez provides a further insight into this third stage in relation to re-recording works he first recorded in the 1960s and 1970s.³²¹ He argues that after knowing a work for a significant length of time interpretative decisions 'ensue from an intimate mixture of intuition and rationality, a mixture which is at the base of yourself. [...] You feel completely implicated by the thought of the other and you can model it.'³²² At this point, one gains a 'double vision' of the work which has become both 'near and far'. One's relationship with the thought of others has become 'easy', as it has become internalised; Boulez uses the phrase, 'it has become natural to you'.³²³ I would argue that this description can be applied to the third stage of the dialectic. The dialectical confrontation of the composer and the historical material becomes resolved. Whereas in the first stage of the dialectic the foreign

³²⁰ ['L'élément capital de cette confrontation disparaît progressivement pour faire place, presque exclusivement, à l'expérience envers lui-même.'] (My translation.) Boulez (1989a) p. 40.

³²¹ See: Boulez in: Boulez and Grange, de La (1990) p. 43 (in French). Boulez was at this time re-recording several works for Deutsche Grammophon.

³²² ['ils découlent alors d'un mélange intime d'intuition et de rationalité, un mélange qui vient du fond de vous-même. [...] Vous vous sentez complètement impliqué par la pensée de l'autre et vous pouvez la modeler.'] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 43.

³²³ ['double vision', 'proche et distant', 'avec aisance', 'elle vous est devenue naturelle'.] (My translation.) *Ibid.* pp. 43-44.

nature of the inherited material was accentuated, by the third stage it has been 'consumed',³²⁴ by the composer who now understands it as his own.

'Annihilation' of the material

Earlier in this chapter I considered Boulez's metaphor of the 'jet engine' and its depiction of the relationship between the composer and the inherited material. It appears in the following quotation encapsulating the overall dialectical process:

In order to free his personality, [the composer] must effect a real work of force, in the course of which he consumes, like a "jet engine", the possible energy of the material that he finds at his disposition. Later, when he has taken possession of a certain domain, his attitude will no longer submit to that type of energy³²⁵

Note the phrase in this excerpt concerning when the composer 'has taken possession of a certain domain'. This is one of the clearest articulations in Boulez's writings of the idea of making the inherited material become *necessary* to one's own thought and therefore self-possessed. More typically, Boulez refers to this idea of 'consumption' in terms of 'annihilating' others through the composition of a new work. For example, he claims that '[i]t is not sufficient to negate the existence of others by words, but by annihilating them by real acts...'.³²⁶

³²⁴ The notion of 'consuming' history is very apparent in the following passage, written in Boulez's overtly 'literary' style which describes his contact with Stravinsky's music. Note the way in which Boulez portrays the way in which he removes everything he needs for his own work after which they become absorbed into his own expression: 'After having experienced a primitive, cannibalistic relation, / having devoured the influence, / absorbed personality and radiation, / stripped the work of all substance / that concerned me, / I turn myself egotistically towards the future / - my future - / which no longer *understands* him.' ['Après avoir éprouvé une relation primitive, cannibale, / avoir dévoré l'influence, / absorbé personnalité et rayonnement, / dépouillé l'œuvre de toute substance qui me concernait, / je me tourne égoïstement vers le futur / - mon futur - / qui ne le *comprend* plus.'] (My translation.) Boulez (1982) p. 59.

³²⁵ ['Pour dégager sa personnalité, il doit effectuer un réel travail de force, au cours duquel il consomme, comme un "réacteur", l'énergie éventuelle du matériel qu'il trouve à sa disposition. Plus tard, lorsqu'il aura pris possession d'un certain domaine, son attitude ne sera plus aussi soumise à cette espèce d'énergétique.'] (My translation.) Boulez (1963e) p. 554.

³²⁶ ['Il ne suffit pas de nier l'existence d'autrui par des mots, mais de l'annihiler par des actes réels...'] *Ibid.*, p. 553. This formulation of overcoming the limitations of the inherited material is particularly Existentialist in tone. For example, de Beauvoir argues that '[t]he conflict is not of words

Conclusion on Boulez's dialectical approach

In summary, Boulez's dialectical approach is based on the aim of realising a particular conception of *freedom*.

The first stage of the dialectic is concerned with the chance material inherited by the composer. This material is the only means of conceiving his musical work. However, this material does not belong to him and, in this sense, it remains exterior to his way of thinking. The composer's primary task then becomes how to overcome the *chance* material in order to make it *necessary* to himself and realise his *freedom* as an autonomous subject.

The second stage involves applying 'doubt' to the inherited concepts in order to reveal their mediated, historical aspect. This 'doubt' is often presented by Boulez in polemical phrases such as 'I hate the past! I hate remembering!' and 'In praise of amnesia'. The notion of doubt is strongly connected to the idea of 'renewal' in that the composer constantly 'renews' or questions his position to history. Doubt displays both rational and 'affective' elements and it involves breaking-up [éclater] the material into its constituent parts. The composer attempts to bring all the inherited acquisitions into a complete and *necessary* whole by conceptualising every aspect into his own rationalised technique. Although this involves taking a 'global view' of the musical situation in which the composer finds himself, one's knowledge cannot be complete. The gaps are filled by the composer's 'intuition' in a moment of 'seeing'. This is the entrance of the composer's chance in an 'initial choice' which situates the composer in history. This is, of course, the appearance of the autonomous subject.

The third stage of the dialectic involves 'synthesis' of the inherited material to general principles. These general principles are the result of the second stage of the

or ideologies, it is real and concrete.' ['La lutte n'est pas de mots ou d'idéologies, elle est réelle et concrète.'] (My translation.) Beauvoir, de (1947a) p. 644.

dialectic. Boulez stresses that it is vital that these principles lead to unforeseen consequences which he calls 'proliferation' or 'deduction'. The greater and more 'fertile' the proliferation from the general principles, the better and more valuable it is. At this stage, the composer uses 'latent memory' because the inherited material has been completely 'absorbed' into one's own means of expression.

Earlier in this dissertation, I mentioned that a work by Mallarmé entitled *Igitur* (1869) has constituted one of the most important influences on Boulez's aesthetic development. I would like to conclude this chapter with a consideration of *Igitur* in light of Boulez's overall dialectical theory.

Igitur

Igitur is an unfinished work intended for the theatre that probably dates from between 1867-1869, when Mallarmé was in his twenties, and published posthumously.³²⁷ As I discussed in chapter II, it can be considered as the first of three important texts by Mallarmé that have been cited by Boulez which concentrate on the problems of chance and form. The other two texts are 'Un coup de dés' (1897) and the projected plans for *Le Livre* (posthumous).³²⁸ *Igitur* has been widely understood as an attempt by Mallarmé to overcome his writing 'impotence' he felt during his twenties by facing the fundamental problems of the initial moment of creation: the problem is that of how to begin.³²⁹ I would suggest that it also helped Boulez in a comparable way for his own musical practice. It appears to have served as a source of theoretical inspiration in order to move beyond the impasse of *Structure 1a* (1952) and the idea of consistency. Indeed, I would suggest that it is significant that his first written reference to *Igitur* was in 'Aléa' (1957), the text marking the completion of his shift towards a dialectical conception of music.

³²⁷ See: Bonniot (1900) p. 424 (in French). These years correspond with Scherer's dates. See: Scherer (1957) p. 13 (in French).

³²⁸ Bonniot suggests that the ideas explored in *Igitur* (1869) were finally expressed in the poem 'Un Coup de Dés' (1897). See: Bonniot (1900) pp. 429-430 (in French).

³²⁹ For example, see: McCalla (1976) pp. 47-48 (in English).

The text of *Igitur* is highly complex and ambiguous. Igitur is an absolute being who exists outside of time. He is the last descendant of a noble race who possesses perfect self-awareness (*conscience de soi*). At midnight, time is frozen as Igitur descends the stairs of the 'human spirit'.³³⁰ He is required to perform a task – to confront chance by making a prediction and throwing the dice. Igitur makes the prediction and throws the dice. In this moment, the text suggests that he has forgotten human speech and thought in the negation of chance.³³¹ He considers blowing out the candle in order to extinguish chance but recognises that chance is contained within his breath. Beside the final paragraph, Mallarmé writes 'chance absorbé'.³³²

I would like to identify several key ideas in Boulez's dialectical approach within the story of *Igitur*.

First and most importantly, Igitur possesses perfect self-awareness. Although it is not clear from the text what this exactly signifies, Bonniot clarifies this matter in his preface. He writes that 'the Hero believes self-consciousness by achieving himself so perfectly that he annuls chance'.³³³ In other words, Igitur believes that through being completely consistent in every respect he can eliminate chance.

Second, Igitur, as the sole descendent of an entire race, is faced with the entirety of history up to then. This clearly symbolises the problem encountered by the artist who attempts to situate himself within history.

Third, time has stopped (at midnight) as Igitur descends the stairs of the 'human spirit'. This is the point at which one disrupts the passage of history through the

³³⁰ See: Mallarmé (1869) p. 434 (in French).

³³¹ I refer to: [Igitur] 'a [...] oublié la parole humaine en le grimoire [a magician's book or undecipherable writing], et la pensée en un luminaire [throughout *Igitur* there are ambiguous references to light and shade] l'un annonçant cette négation du hasard'. *Ibid.*, p. 442.

³³² Mallarmé (1869) p. 443 (in French).

application of 'doubt' in order to get closer to the 'human spirit'. This interpretation is confirmed in the following statement by Boulez which explicitly connects the idea of the 'descent of *Igitur*' and doubt:

The deliberate aim of relearning, re-finding, rediscovering, resurrecting [...] goes beyond the maximum point of doubt which breaks-up [éclater] inherited knowledge; it is the descent of *Igitur*...³³⁴

This interpretation is not unique to Boulez as Bonniot makes this point in the preface to *Igitur*, a text that Boulez has almost certainly read.³³⁵ Bonniot describes *Igitur*'s separation from himself as a 'Cartesian scission':³³⁶ the moment of 'doubt'.

The fourth point in *Igitur* that resonates with Boulez's aesthetic conception of music is the most obvious: the 'throw of the dice'. Note that *Igitur* is required to make a prediction which suggests making some type of speculation. This throw of the dice refers to the confrontation between *Igitur* and chance. *Igitur* seeks to overcome the problem of chance by having perfect self-awareness. At the moment at which he throws the dice, the text suggests that *Igitur* forgets all human concepts. This has clear parallels with Boulez's insistence upon 'amnesia' and the need to forget all concepts in order to be able to create something which is distinctly one's own.³³⁷

Fifth, when *Igitur* considers blowing out the candle, he is contemplating attempting to 'cheat' the confrontation with chance through ignorance. This act would have been the avoidance of history, an aesthetic position regularly condemned in Boulez's

³³³ ['le Héros croit la conscience de soi par lui atteinte si parfaite qu'il annule le Hasard'.] (My translation.) Bonniot (1900) p. 430.

³³⁴ ['Le propos délibéré de réapprendre, retrouver, redécouvrir, renaître, enfin, passe par ce point maximum du doute qui fait éclater le savoir hérité; c'est la descente d'*Igitur*'.] (My translation.) Boulez (1963e) p. 560.

³³⁵ I refer to the overt similarity between a passage in Bonniot's preface and in Boulez's 'Aléa' that I have considered before. See: this dissertation p. 108.

³³⁶ ['scission cartésienne'.] (My translation.) Bonniot (1900) p. 427.

³³⁷ One recalls that Claudel, from whom Boulez draws the line 'I hate the past! I hate remembering!', wrote an article on Mallarmé's *Igitur* in 1926. See: Claudel (1926).

writings. Igitur stops himself blowing out the candle because he recognises chance is contained within his breath (i.e. within his choice to blow).³³⁸

Sixth and following on from the previous point, Igitur recognises that chance is always implied in every act: 'toute pensée émet un coup de dés'. Therefore, one must consider ways in which the inevitable chance can be 'absorbed'. This would, of course, be achieved through the idea of the 'Constellation' that shapes Mallarmé's later poem 'Un coup de dés'.³³⁹

In summary, one can see the key elements of Boulez's aesthetic approach in the poetic form of *Igitur*. It can be interpreted as the confrontation between the artist and the non-self-possessed material, which is based on chance. Like Boulez, Igitur attempted to confront chance by making himself completely self-aware and consistent (à la *Structure 1a*). Cage's response to chance was to attempt to trick it through ignorance, by chance procedures – to 'blow out the candle'. However, Boulez concluded that one must attempt to confront chance, recognise it and absorb it into one's own artistic technique. This is the outline of Boulez's dialectical approach. It tackles the fundamental problem that Boulez confronted in the mid-1950s: how to overcome the unavoidable inherited chance material in order to realise one's *freedom* as an autonomous subject.

³³⁸ I would suggest that one can understand both Cage's tactics to avoid confronting *chance* as well as the extreme form of musical automatism in *Structure 1a* (1952) as examples of blowing out the candle.

³³⁹ I examined these ideas in detail in chapter II. See: this dissertation p. 107.

CHAPTER IV: ÉCLATS

So far in this dissertation, I have examined the evolution of Boulez's aesthetic conception of music. I explored his embryonic ideas in chapter I, considered his transition towards a consciously dialectical approach in chapter II, and analysed his mature theory of musical composition in chapter III. One can consider the first three chapters, therefore, to be tracing, in broad terms, the chronological formation of Boulez's thought.

Chapter IV, however, takes as its point of departure the dialectical framework set out in chapter III and pursues six dialectics in Boulez's writings. These dialectics are prominent themes throughout his texts and are the focus of six independent sections in this chapter: '1. History', '2. Analysis', '3. Technique', '4. Listening', '5. Technology' and '6. Institution'. The relationship between chapters III and IV is dialectical in the sense that the concepts analysed in chapter III have shaped the various strands of his musical thought to be considered in chapter IV. In short, the concepts - or 'general principles' - have proliferated into the fragmented, although related, strands of Boulez's thought, simultaneously expanding and enriching the underlying dialectical framework.

In each of the independent sections, I examine a particular 'material' and consider the ways in which Boulez argues this material tends to become fossilised. I then examine his call for a critical relationship with these materials.

In the section on history, the material is the notion of music history itself, which tends towards 'sedimentation' and, in turn, leads to certain ways of working with musical material. I outline Boulez's advocacy of 'globalising' the understanding of music history in order to embrace non-Western musics and to consider other art-

forms. The section on analysis examines the ramifications for the use of uncritical analytical methods on compositional practice today. I then outline the Gestaltist approach to musical works that Boulez developed during his analysis classes at Basel in the early 1960s. In '3. Technique', I look at the problems Boulez identifies regarding the fossilisation of the terminology used to describe music and the consequences for composition. Most of this section is concerned with an examination of Boulez's proposal for a new, coherent system to describe music which he articulates in *Penser la musique aujourd'hui*. In the section on listening, I explore the dialectical relationship between the sonic material of the performed work itself and the listener's perception and interpretation of it. As in his approach to analysis, Boulez draws heavily on Gestalt Theory in his conception of the way in which music is perceived. The section on technology focuses upon the means of making sound and its relationship to musical thought. This section traces Boulez's line of thought on technology from his time at the RTF in the early 1950s to IRCAM today. Finally, in the section '6. Institution', I examine the institutional 'material' which inevitably shapes the ways music is created, produced and received. I consider Boulez's work to promote new music within the framework of various institutions, from his teaching at Darmstadt to his vision of IRCAM.

Although these sections appear loosely in the order they occur in musical practice,¹ they are written in such a way that they can be read individually. All the sections refer back to the dialectical concepts I examined in chapter III. '1. History', '2. Analysis' and '4. Listening' are clearly based on the three-part dialectical structure: this is highlighted by the sub-headings. Nevertheless, it should be noted that I do not attempt to make a literal concept-by-concept translation of the dialectical principle in these areas. Indeed, on many occasions, Boulez adopts completely different terms

¹ This order can be summarised as follows: the composer's initial response to history, his analysis of historical works, the establishment of his own technique, the listener's response to the resulting work, and the notion of institutionalising contemporary music. The exception is the section entitled 'Technology' which appears after 'Listening'. Although one would expect an analysis of Boulez's conception of performance technology to appear before the section on listening I have decided upon this for two reasons. First, I consider that the consecutive sections of 'Technique' and 'Listening' facilitate comparisons to be made as both mirror each other (i.e. they concern the production and

to describe similar, but separate, parallel concepts in various areas of musical activity. I have, therefore, endeavoured to retain this specificity for each section. This is much more obvious in '3. Technique', '5. Technology' and '6. Institution' in which the subject matter warrants its own particular form.

reception of music respectively). Similarly, the successive sections on 'Technology' and 'Institution' share the common theme of IRCAM, but examined from two different perspectives.

1. HISTORY

A conception of music history is, for Boulez, fundamentally part of composition today. Within his dialectical conception of music, Boulez stresses the importance of the inherited – i.e. historical – material as this is the only means of communication. This section focuses on this material, the ways in which this material becomes fossilised and ‘sedimented’ and Boulez’s proposals to overcome this problem. Throughout this section, I shall consider his own interpretation of music history that can be pieced together from many of his texts.

At the outset, one must recognise that his conception of writing a music history is viewed from his own compositional perspective. To interpret history is, therefore, to rationalise and situate composition today rather than an intellectual endeavour in itself.

First stage of the dialectic

As I established in chapter III, a fundamental tenet of Boulez’s aesthetic theory is that all concepts are inherited and that they are the only means of thought. In terms of his approach to music history, this inheritance is the concretised ‘collective interpretation’ of musical works. Boulez claims that ‘above all, an age makes its personal interpretation of works of the past: both a personal and a collective interpretation’.¹ The notion of interpretation being either personal or collective is also a key idea in Sartre’s writings. For Sartre, collective interpretation refers to the collectively established interpretation of a society at a particular time. The most obvious example of this is the sedimented language. Personal interpretation, on the other hand, is the individual’s response to collective interpretation which he can either choose to accept or reject.

Fossilisation of music history

Boulez argues that not only musical material but also music history has a tendency to become fossilised. His aversion to fossilised forms of music history can be witnessed even in his earliest writings and appears to be based on three factors. First, by regarding music history as a fixed entity its richness is neglected through oversimplification. Second, the fixed aspect of this conception of history can be considered as a symptom of a non-dialectical approach, as the dialectical process is founded on a constant movement of thought. Third, a fossilised conception of history inherently claims that history can be fixed and objectified. This approach fails because it does not acknowledge that one's interpretation is relative (both collectively and personally). Indeed, it tends to deny that interpretation is involved at all.

These three reasons are based on Boulez's claim that one's interpretation of the world does not exist independently from oneself: one cannot place oneself outside the world in which one lives. The dialectic model acknowledges this impossibility of accessing an objective reality outside oneself.

Fossilised history as protection

In his criticisms of fossilised approaches to music history, Boulez claims history is conceived as a means of protection against confronting reality. He calls people who use history as protection 'fetishists', writing that they conceive history as 'an egg in which they enclose themselves'.² He adds that 'imagination [...] will always laugh at fetishisms, it alone will know how to interpret tradition'.³ This suggests that one's 'imagination', Boulez's concept of the *free* autonomous subject, is the only means of

¹ ['Avant tout, au fait qu'une époque donne son interprétation personnelle des œuvres d'un passé: interprétation personnelle et collective.'] (My translation.) Boulez (1961c) p. 381 (in French) and p. 120 (in English).

² ['un oeuf dans lequel ils rêvent de s'enfermer'.] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

overcoming this limiting fossilisation. The problem is that the idea of tradition 'far from recovering an objective and unique reality, encompasses, to the contrary, an incredibly diverse number of the most subjective points of view which can exist'.⁴ In an interview dating from 1990, Boulez provides his clearest statement on this conception of history as a means of protection. He writes that:

I am forced to recognise that today people develop primarily a defensive reflex and live under the shade of that gigantic tree that is the past. They cling to a notion of immobile History, fixed around short and glorious periods.⁵

This neatly summarises Boulez's attitude towards what can be categorised as a fossilised or conservative conception of history. I would now like to consider the ways that he claims contribute towards this fossilisation.

The means of promoting a conservative view of music history

I have isolated four particular ways in Boulez's writings by which he argues a conservative view of history is promoted. These are the oversimplification of music history into schools and periods, the 'nostalgia' for a 'golden age', the establishment of the musical canon and the use of aesthetic slogans.

First, he attacks the over-simplification of music history into compositional 'schools' and historical periods, which neglects the individual musical works themselves.⁶ Boulez argues that rather than over-simplifying composers into

³ ['L'imagination [...] se rira toujours des fétichismes, elle seule saura interpréter la tradition'.] *Ibid.*

⁴ ['loin de recouvrir une réalité objective et unique, englobe, au contraire, un nombre incroyablement divers de points de vue les plus subjectifs qui puissent exister'.] (My translation.) Boulez (1963e) p. 554.

⁵ ['Je suis bien forcé de reconnaître qu'aujourd'hui les gens développent majoritairement un réflexe de défense et vivent à l'ombre de cet arbre gigantesque qu'est le passé. Ils attachent à une notion de l'Histoire immobile, fixée autour de périodes courtes et glorieuses.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 2.

⁶ In particular, he unsurprisingly disputes the term of the 'Darmstadt School' which suggests a 'supreme ideology' and a 'dictatorial propaganda' but was 'infinitely more spontaneous and less dogmatic than one would believe today'. See: Boulez (1996) (no page numbers). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material. The

'tendencies', he prefers, instead, to think of 'great personalities'. He writes that 'there are dominant personalities' and others which are not.⁷ He claims that 'there is of course no such thing as tradition, merely a succession of individuals making reciprocal use of models, accepting them or not. [...] A strong personality will inevitably transform [the model], whether consciously or not'.⁸ Despite the misleading similarity between this statement and one made by Margaret Thatcher in the 1980s which is particularly noticeable to the British reader, Boulez's argument springs from his dialectical conception of music history. In this respect, his approach is comparable to that of Leibowitz who advocated understanding music history 'not as a history of classified events [...] but as the succession of generations of musicians who were men like us'.⁹

Second, music history can become fossilised through a 'nostalgia' for a 'golden age' or 'lost paradise'.¹⁰ Boulez criticises this fetishistic approach, as it acts as a 'refuge from present-day realities'.¹¹ In aesthetic terms, a nostalgic approach is founded upon a vision of history 'petrified in time' and 'magically stops at an arbitrary point of history'.¹² This aesthetic position claims to place oneself outside history and does not become actively involved in making the musical material necessary to the musical issues of today. Boulez writes that 'those who are nostalgic for a paradise

composers of the Darmstadt generation, Boulez argues, did not share a common aesthetic although they shared a collective rejection of the past. See Boulez in: Boulez and Menger (1990) p. 8 (in English). Similarly, he criticises the way in which he is considered a composer of serial or post-serial works, although, he argues, serialism only lasted between 1950 and 1952. See Boulez in: Boulez and Grange, de La (1990) p. 42 (in French).

⁷ ['"tendance"' 'grande personnalité' 'il y a des personnalités dominantes'.] *Ibid.*, pp. 42-43.

⁸ ['il n'y a pas de tradition, mais seulement une chaîne d'individus qui se sont servis réciproquement de modèles ou de repoussoirs... L'interprète [...] se conforme à l'exemple ou le rejette; dans tous les cas, doué d'une forte personnalité, il le transformera d'une façon plus ou moins consciente'.] (My translation.) Boulez (1989a) p. 438. I provide here the English translation as it appears in Bradshaw's transcription due to its more provocative tone to the English reader. Boulez (1990) p. 356 (in English).

⁹ Leibowitz (1947) p. xiii (in English).

¹⁰ This is the same idea that Boulez describes as 'short and glorious periods' in the quotation indented above.

¹¹ ['refuges par rapport à une réalité actuelle'.] Boulez (1976a) p. 236 (in French) and p. 260 (in English). Boulez is commenting specifically on the use of romanticism but his argument is applicable to all forms of nostalgia.

¹² ['La vision pétrifiée d'un temps magiquement arrêté à un point arbitraire de l'histoire'.] (My translation.) Boulez (1963e) p. 554.

lost are ruffled by a future which, in their eyes, is cloaked in a frightening nightmare.¹³ His strong criticisms of a nostalgia for a golden age are very similar to those made by Leibowitz. Both argue against a passive attitude to history which leads to creative 'impotence'. For example, Boulez, as recently as 1989, criticises the approach to the past which is 'passive and impotent nostalgia'.¹⁴ Leibowitz, forty years earlier, likewise stresses the need to avoid celebrating a "Golden Age" which can never be surpassed, beloved of those whose creative impotence keeps them from looking ahead'.¹⁵ In particular, Boulez attacks the nostalgia for romanticism today which contradicts the spirit of romanticism itself. He argues that 'we lay a veneer of conservation and restoration upon an epoch and upon men who possessed above all the virtue of forward movement; ignoring their whole attitude of progress and discovery, we grip them in a genetic paralysis which distorts the underlying meaning of their work and activity.'¹⁶ As he points out, 'the romantics were not timid, they were impelled towards the unknown, and with such temerity sometimes!'¹⁷

The third way that music history becomes fossilised is through passive acceptance of the established musical canon. As Boulez notes, 'a successful work deceptively appears to us [...] as coming from itself'.¹⁸ In other words, the masterpiece takes on the appearance of being 'natural'. However, 'history is not a well-oiled machine that advances smoothly along rails composed of masterpieces'.¹⁹ One must avoid passive

¹³ ['les nostalgiques des paradis perdus se hérissent devant un avenir qui revêt, à leurs yeux, l'aspect d'un cauchemar effrayant.'] (My translation.) Boulez (1961d) p. 496 (in French) and p. 35 (in English).

¹⁴ ['nostalgie passive et impuissante.'] (My translation.) Boulez (1989b) p. 1. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

¹⁵ Leibowitz (1947) p. xiii (in English).

¹⁶ ['On plaque notre mentalité de conservation et de restitution sur une époque et sur des hommes qui possédaient avant tout la vertu du mouvement; au contraire de leur attitude entière de progrès et de découverte, nous les affublons d'une paralysie génétique qui fausse le sens profond de leur œuvre et de leur action.'] (My translation.) Boulez (1989a) p. 438 (in French) and Boulez (1990) p. 356 (in English).

¹⁷ ['les romantiques n'étaient pas frileux, ils se sont lancés vers l'inconnu, et avec quelle témérité, parfois!'] (My translation.) Boulez in: Boulez and Lompech (1990) p. 23. Examples of adventurous romantics cited by Boulez are Wagner, Liszt and Chopin (the latter reinvigorating pianism and the harmonic sensibility).

¹⁸ ['Une œuvre réussie nous apparaît [...] trompeusement comme allant de soi.'] (My translation.) Boulez (1963e) p. 558.

¹⁹ ['l'Histoire n'est pas une machine bien huilée dont on voudrait nous faire croire qu'elle avance sans à-coups sur les rails des chefs-d'œuvre.'] Boulez (1961d) p. 496 (in French) and p. 35 (in English).

acceptance of inherited masterpieces and, instead, challenge them. This does not mean, however, 'disrespect' or 'destruction' but, according to Boulez, 'vigilance' towards masterpieces. He writes that '[v]igilance is desire supported of confrontation, organic reaction in the perpetual growth of the spirit.'²⁰ 'Vigilance' described in this way is a synonym for the principle of 'doubt'.²¹ He also warns against seeking to find masterpieces of today and placing them alongside masterpieces of the canon. He suggests:

There is a better way: to acquire the instinct, the flair, which will make us grasp the adventures, indeed the stammerings of today as the stages of a becoming which must concern all of us most profoundly.²²

Boulez's rejection of the passive acceptance of all inherited masterpieces is a strong feature of Leibowitz's conception of music history. Leibowitz argues that history should not be understood 'as the semi-miraculous trysting-place of several masterpieces' but, as I mentioned above, as 'the succession of generations of musicians who were men like us, who strove and struggled'.²³ The implication in the latter point is that one must analyse the underlying function and necessity shaping the composition of a given musical work rather than accept it unthinkingly.

Artaud also rejects the 'idea of masterpieces' because 'past masterpieces are fit for the past, they are no good to us'.²⁴ However, he continues in a manner that is anathema to Boulez's aesthetic position:

²⁰ 'La vigilance est désir soutenu de confrontation, réaction organique dans la perpétuelle croissance de l'esprit.' (My translation.) Boulez (1963e) p. 559.

²¹ For my examination of the principle of 'doubt' see: this dissertation p. 161. One recalls that the term 'vigilance' appears in Boulez's description of his 'desperate' attempt to dominate *chance* 'by an arduous, sustained and vigilant effort'. For my earlier consideration of this phrase see: this dissertation p. 107. In this light, one can understand this phrase as referring to the fact that even by 'doubting' everything that is inherited, '*chance* persists'.

²² ['Il y a mieux à faire: acquérir l'instinct' le flair, qui nous fera saisir les aventures, voire les balbutiements d'aujourd'hui comme less étapes d'un devenir qui devrait tous nous concerner au plus profond de nous-mêmes.'] (My translation.) Boulez (1979d) (no page numbers).

²³ Leibowitz (1947) p. xiii (in English).

²⁴ *Ibid.*

We have the right to say what has been said and even what has not been said in a way that belongs to us, responding in a direct and straight-forward manner to present-day feelings everybody can understand.²⁵

Boulez would reject as naïve the idea of 'responding in a direct and straight-forward manner everybody can understand'. However, the notion of expressing oneself 'in a way that belongs to us' is comparable to Boulez's desire to make the material self-possessed.

Similarly, Cage argues that the idea of masterpieces should be avoided, as they are manifestations of a 'stabilized truth'²⁶ which eliminates the important 'fumbling',²⁷ (note the similarity with Boulez's concept of 'doubt') of contemporary music. Cage writes:

Masterpieces and geniuses go together and when by running from one to the other we make life safer than it actually is we're apt never to know the dangers of contemporary music.²⁸

Returning to my examination of the means by which a conservative approach to music history is promoted, the fourth and final example in Boulez's writings is the use of slogans. Slogans, which once again over-simplify musical creation, are characteristic of 'littérateurs', a dismissive term Boulez uses to denote musical dilettantes who regard music like fashion.²⁹ Although he does not provide any names

²⁵ Artaud (1938) p. 55 (in English).

²⁶ Cage (1958a) p. 46 (in English). Interestingly, in a lecture by Boulez dating over 30 years after Cage's article, Boulez uses the same (equivalent French) term in connection with masterpieces. However, he argues that the indicator of a masterpiece is its instability and condemns the tendency of the 'authenticity' movement towards stabilising masterpieces. ('The masterpiece certainly closes a door [...] for it engenders instability, the desire to nullify the model in transgressing it. Wanting to stabilise the masterpiece by securing it to its époque at the point of making it a prison, indeed a tomb, appears to me the peak of inauthenticity.') ['Le chef d'œuvre ferme certainement une porte [...] car il engendre l'instabilité, le désir d'anéantir le modèle en le transgressant. Vouloir stabiliser le chef d'œuvre en l'arrimant à son époque au point de faire de celle-ci une prison, voire un tombeau, voilà qui me paraît le comble de l'authenticité.'] (My translation.) Boulez (1989b) p. 24. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

²⁷ Cage (1958a) p. 46 (in English).

²⁸ *Ibid.*

²⁹ See: Boulez (1963d) p. 530 (in French) and p. 64 (in English).

of 'littérateurs' he writes that they were frequent between the two world wars.³⁰ These 'littérateurs' concentrated on superficial aspects of musical style rather than uncovering the underlying structures of music history. The tendency towards the use of slogans is also displayed in the post-war era, as Boulez acknowledges in an interview dating from 1985. Indeed, the examples of slogans he provides include his own 'aleatoricism' together with the 'spatial', the 'informal' and the 'sonorous object'.³¹ All of these slogans were 'valid notions which, devoid of their content, no longer have any sense.'³² This acknowledgement that slogans can be useful is due to the fact that, unlike the formation of compositional schools, musical periods and masterpieces, slogans help the composer 'formulate the future reality'³³ and are not (yet) a sedimented understanding of history. That is to say, slogans can become useful, as they provide the composer with a 'phantasmagoria' of the future work.³⁴

All of these four means by which music history can become fossilised can be manifested in several different aesthetic approaches to making music. Three aesthetic approaches that Boulez identifies are neoclassicism, postmodernism and the rise of the 'authenticity' movement. I would briefly like to consider his ideas on these aesthetic approaches to history.

Neoclassicism, postmodernism and the 'authenticity' movement

A striking feature of Boulez's earliest writings is his attacks on neoclassicism. His denunciation of neoclassicism, and other approaches that he considers as drawing upon a fossilised conception of history, has inspired his most polemical writings. These attacks should be seen in the context of Paris in the immediate post-war

³⁰ Interestingly, in an essay from 1946 Schoenberg makes this same criticism of what he call the 'pseudo-historians' in the inter-war period. In particular, he decries the usage of the slogan 'New Music'. See: Schoenberg (1946) p. 114 (in English).

³¹ ['aléatoire', 'spatial', 'informel', 'objet sonore'.] (My translation.) Boulez in: Boulez and Cott (1985) p. 146. The term 'aléatoire' was first used, in connection with music, by Boulez himself in his article 'Alea' (1957). The term 'informel' refers to Adorno's concept of musique informelle.

³² ['notions valides qui, vidées de leur contenu, n'ont plus aucun sens.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 146.

³³ ['à formuler la réalité future'.] (My translation.) Boulez (1985a) p. 27.

period. Before the end of the Second World War, several important composers, most notably Stravinsky, were writing neoclassical works. Neoclassicism was also being fostered through the teachings of Nadia Boulanger. This situation had been encouraged by the Nazis who had banned all serial works by the Second Viennese School. Boulez's over-sensitivity towards neoclassicism³⁵ can, therefore, be seen as a response to this situation as well as an attempt to define his own aesthetic position. In his mature dialectical theory, Boulez criticises neoclassicism because it is inconsistent and merely pretends to synthesise the inherited musical language. Note the term 'synthesis' in the following:

Pseudo-syntheses only use the forms of the past with a view to flattering a rather low taste, which is that of reminiscence. In order to excite that taste of reminiscence and to make it a pleasurable exercise, one conceals already existing objects, not enough to provoke disarray but just enough to trigger salivation. This practice is only assimilable to erotic manoeuvres designed to arouse...let's say, tired hearts... but unfortunately not to be found in the inventory of the Divine Marquis!³⁶

This passage describes a fetishistic relationship between the musical work and the listener. The reference to 'pseudo-syntheses' implies that neoclassical works are not dialectical, as they use material which has not been 'analysed' and made *necessary*.

Since the 1940s and 1950s, Boulez has not been so vehemently opposed to neoclassicism. Indeed, in an interview dating from 1992 in which he discusses neoclassicism, he acknowledges that all composers and musics 'have the right to

³⁴ For my earlier consideration of Boulez's notion of 'phantasmagoria' see: this dissertation p. 157.

³⁵ Messiaen also contributed to this sensitivity. In an interview, Messiaen describes the principle of neoclassicism as 'totally damnable; I'd even say it's completely absurd.' Messiaen in: Messiaen and Samuel (1976) p. 120 (in English).

³⁶ ['pseudo-synthèses, elles ne sont que l'utilisation des formes du passé, en vue de flatter un goût assez bas, qui est celui de la réminiscence; pour exciter ce goût de la réminiscence, et lui donner plaisir à s'exercer, on occulte des objets déjà existants, pas assez pour provoquer le désarroi, mais suffisamment pour déclencher la salivation; cette manière de faire n'est assimilable qu'aux manœuvres érotiques destinées à réveiller... disons, les cœurs blasés: dommage qu'elle manque à l'inventaire dressé par le divin marquis!'] (My modified translation.) Boulez (1961a) p. 519 (in French) and p. 54 (in English).

exist'.³⁷ One composer whose neoclassical tendencies aroused heavy criticisms in Boulez's earliest writings but who has subsequently become celebrated is Berg.

Whittall mischievously suggests that Boulez's later acceptance of Berg's music is due to a recognition that his early flute sonatina is quite Bergian and also because the story of Berg's *Lulu* (1929-35), depicting a man who seems predestined to humiliation, could be appreciated by a Frenchman who felt the impact of the Second World War.³⁸ Likewise, Nattiez also remarks upon Boulez's change in attitude towards Berg, but he attributes this to his conducting of Berg's *Wozzeck* (1914-22) in 1974.³⁹ I would argue that both Whittall and Nattiez share a common misconception in respect to Boulez's attitude towards Berg. Whilst in his earliest articles Boulez heavily criticised Berg's romanticism, this is much more indicative of his hostility towards any form of fossilisation rather than towards Berg as a composer. It is noteworthy that Boulez chose to analyse *Wozzeck* in 1960 in his classes at Basel and that in 1963 he discusses Berg in favourable terms.⁴⁰ Even in his earliest article 'Incidences actuelles de Berg' (1948),⁴¹ a text that seems to have contributed greatly to this misconception,⁴² he does not question Berg's ability as a composer.

Boulez's denunciation of Schoenberg should be regarded in a similar light. Boulez rejected the conservative elements of Schoenberg's music, not necessarily the merits of his entire *œuvre*. Indeed, Boulez's championing of Webern is understandable as he seemed the least conservative and the composer who was furthest away from neoclassicism in the post-war period.

³⁷ ['toutes ont le droit d'exister.'] (My translation.) Boulez in: Boulez and Szaersnovicz (1992) p. 44.

³⁸ Whittall (1967) p. 137 (in English).

³⁹ See: Nattiez (1986a) p. 18 (in English). Nattiez does not explain *why* Boulez conducted *Wozzeck*.

⁴⁰ See: Boulez (1961a) p. 519 (in French) and p. 54 (in English).

⁴¹ Strictly speaking, 'Incidences actuelles de Berg' (1948) is Boulez's joint first article as 'Propositions' (1948) was published in the same edition of *Polyphonie*.

⁴² This misconception has been particularly encouraged by Boulez's broadly sarcastic tone in this text.

In a similar manner to his revision of Berg, Boulez has also praised Mahler's music. Whereas Mahler's sentimentality might have been unbearable for Boulez early in his career, by the 1970s he could overlook it and perceive Mahler's 'obstinate will to supersede the categories of the past, to force them to express something different from their original purpose.'⁴³ He adds that 'in Mahler's world nostalgia undeniably exists, but it shares this for better or worse with critique, indeed sarcasm.'⁴⁴ This statement, with its lack of reproach, could not have appeared in Boulez's earlier writings.

An aesthetic approach that shares several key features with neoclassicism is postmodernism. Both approaches adopt an 'objective' attitude to the inherited material, although postmodernism is arguably more characterised by plurality than neoclassicism. This plurality of material is a feature of postmodernism that Boulez disparagingly refers to as an 'aesthetic supermarket',⁴⁵ as the composer chooses any material regardless of its original context and function. In general, Boulez's criticisms of postmodernism are essentially the same as his attacks against neoclassicism. In a interview in 1985, which was concerned with the issue of postmodernism, he argues that 'I perceive in certain currents today a dead solution, a way of protecting oneself against the adventure of the present.'⁴⁶ He continues by identifying a 'sort of anxiety with those who try very hard to find refuge in former values which no longer correspond to anything today.'⁴⁷ This argument is founded on the same intellectual criteria that he applies to neoclassicism. Indeed, he makes

⁴³ ['une volonté si obstinée de passer outre aux catégories du passé, de les forcer à exprimer ce pour quoi elles n'étaient pas originalement destinées.'] (My modified translation.) Boulez (1976b) p. 283 (in French) and p. 303 (in English).

⁴⁴ ['Dans le monde de Mahler, la nostalgie existe, indéniablement; mais elle partage tant bien que mal son territoire avec la critique, voire le sarcasme.'] (My translation.) *Ibid.*, p. 277 (in French) and p. 297 (in English).

⁴⁵ ['C'est le supermarché esthétique.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 144. Boulez is specifically commenting on the use of musical elements from non-Western cultures without regard for their original context. I discuss Boulez's attitude to non-Western musics shortly. See: this dissertation p. 247.

⁴⁶ ['j'aperçois dans certains courants musicaux d'aujourd'hui, c'est une solution morte, une façon de se protéger contre l'aventure au présent.'] (My translation.) Boulez in: Boulez and Cott (1985) pp. 140-141.

⁴⁷ ['il y a une sorte d'anxiété chez ceux qui s'évertuent à trouver refuge dans des valeurs anciennes qui ne correspondent plus à rien d'actuel.'] (My translation.) *Ibid.*, p. 141.

this link between neoclassicism and postmodernism explicit when he argues that, like Stravinsky's neoclassicism, postmodern buildings are 'already as dead and even more dead than those that they wanted to replace.'⁴⁸ The problems of postmodernism are compounded further as today's composer has an enormous wealth of musical documents from around the globe from which to choose. Boulez describes this problem as 'asphyxia by excess'.⁴⁹ I shall return to this issue after considering his views on the rise of the 'authenticity movement'.

Boulez's attitude to the rise of the authenticity movement⁵⁰ is based on the same theoretical grounds as his criticisms of neoclassicism and postmodernism. There are three important problems Boulez cites that I have identified in his writings.

First, the authenticity movement tends to regard inherited documents as 'inert' and 'static' whereas in reality they are 'surprisingly mobile'.⁵¹ For example, it is always necessary to introduce present-day pragmatic choices concerning performance. Therefore, he argues, one should avoid attaching the value of a work directly to the work itself.⁵² Valéry makes precisely the same point in which he notes the common tendency to 'consider the *works* as well-defined entities.' He stresses, like Boulez, that 'a work can only be considered *in* or *according to* a well-determined observer, and never in itself' and that 'the reality of the work contains innumerable incidents or exterior accidents, and their effects accumulate and combine to result in the work's *matter*'.⁵³

⁴⁸ ['Je peux constater aussi bien que nos "nouveaux" bâtiments post-modernistes sont déjà aussi morts et même plus morts que ceux qu'ils voulaient remplacer.'] (My translation.) *Ibid.*, pp. 143-144.

⁴⁹ ['l'asphyxie par excès.'] (My translation.) Boulez (1998) p. 24.

⁵⁰ I refer specifically to the development towards 'authentic' performances of works from the Western tradition with the aim of replicating exactly the original instruments and stylistic techniques.

⁵¹ ['inerte' 'statique' 'étonnement mobile.'] (My translation.) *Ibid.*, p. 25.

⁵² I am paraphrasing a passage by Boulez which concerns the issue of 'taste' but can equally be applied to the problem of interpreting works of the past. See: Boulez (1961a) p. 513 (in French) and p. 50 (in English).

⁵³ ['à considérer les *oeuvres* comme des entités bien définies' [...] 'un ouvrage ne peut être considéré que *dans* ou *selon* un observateur bien déterminé, et jamais en soi' [...] 'la réalité de l'exécution de cet ouvrage est faite d'innombrables incidents intimes ou accidents extérieurs, dont les effets

Second, in order for a performance to be completely authentic one would need, theoretically, an authentic listener. This authentic listener is required in order to be able to interpret the work authentically and this necessitates that one entirely recreates the historical circumstances in which the work first appeared. This is clearly impossible. Boulez writes that 'literal fidelity seems to me the greatest of untruths and the greatest *infidelity* towards the actual work, which is obstinately restricted to the circumstances of its original appearance.'⁵⁴ In another text dating from as recently as 1998, he argues that 'profound fidelity is not hampered by small superficial fidelities: alone the transgression saves us from becoming trapped, it unifies, beyond apparent contradictions, past and present in view of a hypothesis of the future.'⁵⁵ Elsewhere, he again rejects this approach and claims that 'I am not a fetishist of the work – they are like trees – it is necessary to prune them from time to time to assure they survive.'⁵⁶ He suggests that this desire for authenticity, and its implied re-creation of a particular historical circumstance, is usually based on the aspiration 'to create a certain euphoria of the golden age.'⁵⁷ This recalls the criticisms he made 35 years previously on what he described as the fetishistic approach to music.⁵⁸ Indeed, he continues by employing the same metaphor (that appeared in an earlier article) of history as a protective 'egg' and claims that the 'historicising shell [of the authenticity movement] suffocates those who cloak themselves in it, reduces them in an asphyxiating rigidity'.⁵⁹

s'accumulent, se combinent dans la *matière* de l'ouvrage.'] (My translation.) Valéry (1928) p. 293 (in French).

⁵⁴ ['Dans la fidélité littérale, je ne vois personnellement qui le plus grand mensonge et la plus grande infidélité envers l'œuvre que l'on veut obstinément circonscrire dans le cadre de son apparition première.'] Boulez (1977b) p. 445 (in French) and pp. 288-289 (in English).

⁵⁵ ['La fidélité profonde ne s'embarrasse pas des petites fidélités superficielles: seule, la transgression nous sauve de l'enfermement, elle unifie, au delà des contradictions apparentes, passé et présent en vue d'une hypothèse pour le futur.'] (My translation.) Boulez (1998) p. 28.

⁵⁶ ['Je ne suis pas un fétichiste de l'œuvre: c'est comme pour les arbres: il faut tailler de temps en temps pour assurer leur survie.'] (My translation.) Boulez in: Boulez and Billaz (1983) p. 113-114.

⁵⁷ ['à créer une certaine euphorie de l'âge d'or.'] (My translation.) Boulez (1998) p. 25. This idea is presented by Boulez 8 years earlier when he writes that '[e]very search for authenticity is dedicated to the restoration of a past which today we conceive as comparatively idyllic, suggesting a golden age that never existed.' Boulez (1990) p. 356 (in English).

⁵⁸ I considered this earlier. See: this dissertation p. 230.

⁵⁹ ['carapace historicisante suffoque ceux qui s'en revêtent, les comprime dans une rigidité asphyxiante.'] (My translation.) Boulez and Foucault (1985) (page numbers unknown).

This conception of history as a protective shell leads to the third problem of the authenticity movement that I have identified in Boulez's writings: it presupposes the ability to situate oneself outside of history. On this issue, he writes that 'one pretends to reconstitute a reality which disappeared a long time ago [...] the ideal of the perfect voyeurism'.⁶⁰ He concludes that 'all historic reconstitution, musical or not, aims to endow us with the power of immortal beings, passing through the centuries and seeing humanity in its successive stages.'⁶¹ Clearly, Boulez rejects this outright in his development of a dialectical conception of music that acknowledges the involvement of the subject in history. As I established at the beginning of this section, every interpretation of historical documents is inevitably coloured by the values and circumstance of today. Boulez categorically states this when he claims that 'we judge any period by our own criteria and our own conventions.'⁶²

Although Boulez rejects the rigid and passive approach to history as displayed by the authenticity movement, he does not discount the possibility of appreciating works of the past. This is possible because there are some constant factors in taste which 'depend primarily on reactions to human existence, shared by all human beings, and on similarities that exist between all forms of society.'⁶³ These constant factors, which Boulez calls the 'transcending element' of a work,⁶⁴ become more difficult to access the older the work is relative to the present day. He writes that 'the further removed from an age, the more difficult it becomes to judge the quality of its products'.⁶⁵ This is because they are obscured by the more immediate aspects of works of the past which depend on 'contingencies of thought as much as those of

⁶⁰ ['On prétend restituer une réalité depuis longtemps disparue [...] l'idéal du parfait voyeurisme'.] (My translation.) Boulez (1998) p. 24.

⁶¹ ['toute reconstitution historique, musicale ou non, vise à nous douer de ce pouvoir qu'ont les dieux d'être immortels, de passer à travers les siècles et de voir l'humanité dans ses étapes successives.'] (My translation.) *Ibid.*, p. 25.

⁶² ['Nous jugeons une période avec nos critères, et nos conventions'.] Boulez (1961a) p. 514 (in French) and p. 50 (in English).

⁶³ ['elles dépendent, avant tout, des réactions communes à tout être, face au monde, et aux points de similitude sur lesquels se rencontrent toutes les formes de société.'] Boulez (1961a) p. 517 (in French) and p. 53 (in English).

⁶⁴ ['L'élément transcendant'.] *Ibid.*

social forms'.⁶⁶ These immediate aspects are the elements that are specific to a particular culture at a particular period: the elements that distance the present-day listener to works of the past.

The problems that Boulez identifies in these fossilised approaches to music history – neoclassicism, postmodernism and the authenticity movement – are compounded by the plethora of documents available to the composer today. Boulez describes this problem as 'asphyxia by excess'⁶⁷ in which the vast range of music has become 'extraordinarily encyclopaedic at best, archival at worst.'⁶⁸ These historical documents include not only scores and recordings of Western music⁶⁹ but also non-Western musics.⁷⁰ Although, at face value, one might suspect that the increased availability of musical documents would destabilise fossilised approaches towards writing a history of music, in practice, it has led to the opposite situation. Boulez writes that 'the enlargement of the repertoire, far from favouring a fluid perception of History, has, for the first time, sedimented it in archaeological layers.'⁷¹ He claims that today we are faced with the 'the fear of being imprisoned by a history which continues unceasingly to accumulate treasures of knowledge.'⁷² His solution is that of his approach to all forms of sedimentation: to apply the principle of doubt.

2. Second stage of the dialectic: Speculation on history

To describe the application of 'doubt' to the inherited documents, he uses various terms. I have already noted the idea of 'vigilance' earlier in this section. He also

⁶⁵ ['il devient, au fur et à mesure que l'on s'éloigne d'une période déterminée, et à moins qu'on ne soit un spécialiste [...] qu'il devient éminemment difficile de juger d'une œuvre, d'estimer jusqu'à sa qualité.'] *Ibid.*, p. 514 (in French) and p. 50 (in English).

⁶⁶ ['des contingences de la pensée que de celles des formes sociales'.] *Ibid.*, p. 517 (in French) and p. 53 (in English).

⁶⁷ ['l'asphyxie par excès'.] (My translation.) Boulez (1998) p. 24.

⁶⁸ ['extraordinairement encyclopédique pour le mieux, archiviste pour le pire.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 2.

⁶⁹ See Boulez in: Boulez and Tétaz (1985) p. 5 (in French).

⁷⁰ I shall consider this later. See: this dissertation p. 247.

⁷¹ ['L'élargissement du répertoire, loin de favoriser une perception fluide de l'Histoire, l'a, dans un premier temps, sédimentée en couches archéologiques.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 2.

employs the concept of ‘amnesia’ and its related concept of ‘memory’ that I examined in chapter III.⁷³ He argues that today ‘memory is accumulated in a way which is increasingly burdensome’⁷⁴ and which can ‘suffocate’ creation.⁷⁵ To overcome this problem, one must be ‘amnesic’: hence Boulez’s celebrated phrase ‘[i]n praise of amnesia’ in his article on Stravinsky’s neoclassicism.⁷⁶ This is a rejection of merely passively cataloguing music history into various periods and types.

Another related concept to the idea of doubt in music history is that of ‘revolution’. A prime example of this concept appears in his statement that ‘[m]usic is in a state of permanent revolution’.⁷⁷ This refers to the constant evolution of the musical language. In another essay, he reveals the connection between this idea of ‘permanent revolution’ and ‘permanent ‘discovering’, the latter being a synonym for the idea of constant renewal: i.e. doubt.⁷⁸ The term ‘revolution’ itself is particularly evocative of Surrealist literature and I would suggest this is probably the primary cultural reference to which Boulez refers. In addition, the quotation marks around the phrase ‘permanent revolution’ point to the specific political term associated with Trotsky. However, its meaning for Trotsky is not in the sense that Boulez presents – of permanent discovery.⁷⁹

Up to this point, I have examined Boulez’s criticisms of the passive acceptance of all fossilised and sedimented interpretations of music history. He advocates that one should counter these immediate forms with the principle of ‘doubt’. In the previous

⁷² Boulez (1990) p. 358 (in English).

⁷³ See: this dissertation p. 164.

⁷⁴ [‘la mémoire s’accumule d’une façon de plus en plus pesante’.] (My translation.) Boulez (1998) p. 24.

⁷⁵ Boulez argues that the question of ‘how to make memory and creation coexist without the former suffocating the latter’ is one of the most important issues for today. [‘comment faire coexister mémoire et création sans que la première étouffe la seconde’.] (My translation.) *Ibid.*, p. 24.

⁷⁶ For my earlier discussion of this article see: this dissertation p. 164.

⁷⁷ [‘la révolution permanente de la musique’.] Boulez (1963d) p. 538 (in French) and p. 71 (in English).

⁷⁸ [‘découverte permanente – comparable à une “révolution permanente”’.] Boulez (1960a) p. 431 (in French) and p. 143 (in English).

⁷⁹ See: Outhwaite and Bottomore (1993) p. 456 (in English).

paragraph, I touched upon the need to attempt to discern the underlying causes and developments which gave rise to particular musical works. This is, of course, the beginning of the second stage of Boulez's dialectic – that of speculation – which I would now like to consider in the context of writing a history of music.

Boulez's approach to speculation upon music history bears all the characteristics of his dialectical approach. This speculative stage has as its goal the establishment of general principles. As I shall consider later in this section,⁸⁰ for Boulez the general principles underpinning music history are those of dissociation, renewal and consistency that I identified in chapter I.⁸¹ At this point, I would like to examine how he speculates upon music history by considering the notion of the 'global' view.

Taking a 'global' view of history

In chapter III, I established that Boulez insists that the composer must attempt to synthesise the musical acquisitions into a 'global' whole. Similarly, this idea appears within his approach to music history. He describes taking a global view of history in three ways.

First he describes 'lines of force' which appear to be underlying movements in thought which exist in society in general, rather than only being delimited to the sphere of music. He writes:

In a specific age, we obey certain general lines of force which are not only confined to music but are attached to the major currents of thought (whether we are aware of them or not): this is an indisputable fact.⁸²

⁸⁰ See: this dissertation p. 262.

⁸¹ See: this dissertation p. 57.

⁸² ['A une époque déterminée, nous obéissons à certaines lignes de force générales, non confinées à la musique, mais se rattachant aux grands courants de pensées (que nous en ayons conscience ou non); c'est un fait indéniable.'] (My translation.) Boulez (1961c) p. 382 (in French) and p. 121 (in English).

As I shall consider shortly, this accounts for Boulez's desire to open the field of music history to consider developments in non-musical spheres.

Second, he refers to what he describes as the 'points of similarity' which can be traced between one historical era and the next.⁸³ This idea is manifested in Boulez's concept of the 'conjunction' that I shall consider later.

The third expression appears to have been coined by Boulez, as it derives from a musical analogy: the idea of 'harmonic resonances'. He argues that:

Each age possesses its own collective harmonic resonances. The marks of interest that a collectivity gives at a certain historical period in preference to another arise from a set of similar givens which can claim parallel solutions.⁸⁴

The idea of taking a 'global view' in order to discern the 'lines of force' or 'harmonic resonances' is one of Boulez's most distinctive principles.

The need to globalise the inherited acquisitions can be observed in three ideas in his writings. First, he advocates that one should avoid limiting one's field of vision only to Western music but, potentially, should include all musics. Second, and perhaps most strikingly in his writings, he promotes an interdisciplinary conception of the arts. One can understand this as an attempt to break down the often-rigid barriers between the art-forms. Third, he uses the specific term 'conjunction' to describe parallel developments between particular artists. All of these three attempts to open and widen the field of research should be seen as ways of expanding one's understanding of music. I would now like to consider these ways of opening the field of research in turn: first the inclusion of non-Western musics.

⁸³ ['points communs'.] Boulez (1963d) p. 540 (in French) and p. 72 (in English).

⁸⁴ ['Chaque époque possède ses propres résonances harmoniques collectives. Les marques d'intérêt qu'une collectivité prodigue à telle période de l'histoire de préférence à telle autre, proviennent de données similaires pouvant prétendre à des solutions parallèles'.] (My translation.) *Ibid.*

(i) Taking a global view: Boulez's interest in non-Western musics

Besides the fact that Boulez insists upon broadening the field of musical study on a theoretical level, he appears to have been genuinely attracted towards non-Western musics from his earliest years in Paris.⁸⁵ Three people encouraged this attraction in particular. Two of these were writers who can be categorised as ethnomusicologists: André Schaeffner and André Souris. By the late 1940s, Boulez had read Schaeffner's *Essais de musicologie et autres fantaisies* and Souris' *Conditions de la musique et autres écrits*.⁸⁶ The other important figure who encouraged this attraction is Messiaen, who analysed several non-Western 'works' in the classes Boulez attended in the mid-1940s. In his interview with Claude Samuel, Messiaen recollects that Boulez was especially 'enthusiastic' about Balinese and native African music.⁸⁷ I would also like to add that Boulez has acknowledged an interest in Asian music - specifically its concept of time, which is one that differs from that of Western music.⁸⁸

Although Boulez possesses an enthusiasm for non-Western musics, he nevertheless stresses that they will 'never communicate to us their beauty and their meaning but will remain permanently inaccessible.'⁸⁹ This is because in order to gain a full appreciation of a particular music and its expressive values, one must understand its function (i.e. its necessity) within its original society. This is clearly based on

⁸⁵ Boulez confirms this himself and dates his first encounter with non-Western musics around 1944-45. See: Boulez (1980a) p. 131 (in French).

⁸⁶ Piencikowski notes that Boulez was familiar with these two writers. See: Piencikowski (1991a) xx (in English). Certainly, one can confirm that Boulez has explicitly acknowledged the influence of Schaeffner in several writings, the earliest being in 'Trajectoires: Ravel, Stravinsky, Schoenberg' (1949). See: Boulez (1949) p. 44 (in French) and p. 189 (in English).

⁸⁷ Messiaen adds that he hears these influences in Boulez's *Le marteau sans maître* (1955). See Messiaen in: Messiaen and Samuel (1976) p. 119 (in English). Boulez has himself referred to African music, particularly in respect to 'heterophony' that I consider elsewhere. See: this dissertation p. 320. In an interview with Samuel, Boulez denies that there is a Balinese influence on *Le marteau sans maître* (1955) but notes that the concept of time in Balinese music influenced the composition of *Répons* (1981-). See: Boulez in: Boulez and Samuel (1984-85) p. 4 (in French).

⁸⁸ Specifically, he notes the impact of the non-linear concept of time associated with Asian music, which also, as he observes, attracted Stockhausen. See Boulez in: Boulez and Gable (1985-86) p. 112 (in English).

⁸⁹ ['leur message, et leur beauté, ne nous seront jamais livrés, nous resteront à jamais inaccessibles.'] Boulez (1961a) p. 518 (in French) and p. 53 (in English).

Boulez's dialectical view of music in which one can only communicate through one's conceptual inheritance. Boulez continues by arguing that 'we can neither reconstitute nor fully comprehend that function, which is the carefully protected taste of one social or religious caste.'⁹⁰ It is particularly problematic for a Westerner to appreciate non-Western musics, as the latter are typically (although not always) more strongly linked to a religious or social function than Western music today. Similarly, non-Western musics are usually not conceived in terms of the individual 'work' produced by a single author to be savoured in itself.⁹¹

Although Boulez argues that a Westerner cannot successfully appreciate the expression of non-Western musics, he recognises that one can draw much from them. Upon initial encounter with a non-Western music, the Western listener is typically struck by the different musical instruments involved,⁹² and thereafter by the musical structures, after which he may be able to speculate upon the underlying laws governing the music. These speculations are often flawed, Boulez argues, as they are based on misunderstandings, but 'these misunderstandings are often fruitful: you take from a culture that which you want and this reveals in you your own work'.⁹³ Elsewhere, he even goes as far as to suggest that a limited knowledge of other cultures can be more fertile than a wide knowledge, as the former forces one to use one's imagination more powerfully than the latter. Recalling his own experiences, he claims that:

the more the windows on other [cultures] were small, the more my imagination was powerful. Too much knowledge of things inspires us to respect it and forbids spontaneous usage. In contrast, a sporadic knowledge shakes up the imagination: beginning with a small kernel, the grain of sand in the oyster becoming a pearl, that your idea is given flesh, without being preoccupied by a deeper preliminary study of civilisations.⁹⁴

⁹⁰ ['Cette fonction, nous sommes incapables de la restituer et de la comprendre: c'est le goût protégé d'une caste, religieuse ou sociale.'] *Ibid.*

⁹¹ See: Boulez (1980a) p. 135 (in French).

⁹² *Ibid.* p. 132 (in French).

⁹³ ['ces malentendus sont souvent fructueux: vous prenez d'une culture ce que voulez qu'elle révèle en vous de votre propre travail.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 144.

⁹⁴ ['plus les fenêtres sur les ailleurs étaient petites plus mon imagination était puissante. Une trop grande connaissance des choses nous inspire le respect et nous en interdit l'emploi spontané. Par

This is Boulez's acknowledgement of the usefulness of the 'partial speculation'⁹⁵ presented in the context of speculating upon the underlying principles of non-Western musics. Yet, in this context, he adds a further qualification. In order to avoid an attitude towards non-Western musics that could be described as imperialistic, he stresses that one must try to speculate upon the function and *necessity* of the music.⁹⁶ In other words, one must seek to penetrate the surface in order to arrive at the underlying principles and not merely adopt an attitude which plunders a musical idea or particular instrument, for example, and crudely places it within a Western context. Boulez highlights the issue of bringing together musical ideas from across the world and more generally the compatibility of cultures as one of the 'great problems of the future'.⁹⁷

(ii) Global view: music and other art-forms

Boulez's attempt to broaden artistic creation beyond the bounds of the separate art-forms is a striking feature of his writings. Consider the following, written on the parallels often displayed between concurrent art-forms:

in the evolution of diverse expressive means, there are mandatory solutions inscribed in a predestination of history: an osmosis more or less conscious which gives a communal profile within a given epoch, the means employed in a different domain coincide at a profound level. Without it being necessary, or perhaps possible, to make a systematic report, the coincidence is there, sometimes diffuse, sometimes of a surprising exactitude.⁹⁸

Clearly, Boulez conceives the development of the various art-forms not merely as a series of technical innovations or 'progress' within a given medium but as the manifestation of broader historical trends that he calls elsewhere the 'lines of

contre, une connaissance sporadique met en branle l'imagination; c'est à partir de ce petit noyau, tel le grain de sable dans l'huître devenant perle, que votre idée prend corps, sans se préoccuper d'une étude préalable approfondie des civilisations.'](My translation.) Boulez (1980a) p. 139.

⁹⁵ I considered the notion of the 'partial speculation' in chapter III. See: this dissertation p. 155.

⁹⁶ *Ibid.* p. 144 (in French).

⁹⁷ ['un des grandes problèmes du futur.'](My translation.) *Ibid.*, p. 145.

force'⁹⁹ of a particular age. At this point, I would briefly like to outline his aesthetic conception of the relationship of music and literature as well as music and drama, as these art-forms have stimulated much of Boulez's thought.

There are three main texts by Boulez concerned with examining the relationship of music and words. These are 'Ton, Wort, Synthese' (1958), 'Poésie – centre et absence – musique' (1962) and a transcript of a talk Boulez presented at the French Department at UCLA entitled 'Poetry and Music: A Roundtable discussion' (1992).¹⁰⁰ In all three texts, Boulez's treatment of the subject remains more or less constant, containing three striking images on which I would like to focus. Due to the scope of this dissertation, I have avoided considering his discussions of purely practical issues concerning the relationship of music and words, and in particular, his reflections on vocal writing.¹⁰¹

The first image I would like to consider is Boulez's description of poetry as 'an irrigation source' for his music.'¹⁰² He explains that this means the poem has structural implications that shape the development of the music. Composing with words and music is not only based on the evocation of the affective content of the poem but also on parallels at a deeper structural level. To describe these parallels, he uses the Baudelairean term 'correspondances', a term I shall examine in this context shortly. What is curious about the metaphor of 'irrigation' is that it does not, in itself, suggest some type of transference of underlying formal structures from poetry

⁹⁸ Boulez (1989c) p. 23 (in French).

⁹⁹ For my earlier discussion of the notion of 'lines of force' see: this dissertation p. 245.

¹⁰⁰ A shorter version of 'Ton, Wort, Synthese' (1958) was published in the same year as 'Son et verbe' (1958) (see: Boulez (1958c)). This text was joined by Boulez to 'Fluidité dans le devenir sonore' (1958) (see: Boulez (1958d)) to become the extended version, 'Ton, Wort, Synthese' (see: Boulez (1958e)). The other texts I mentioned are as follows: Boulez (1962) and Boulez; Loselle; Caws; Perloff (1992) respectively.

¹⁰¹ For details of Boulez's ideas on vocal writing, I would recommend the following texts: 'Son et verbe' (1958), 'Poésie – centre et absence – musique' (1962) and 'Dire, jouer, chanter' (1963). See: Boulez (1958c), Boulez (1962) and Boulez (1963c) respectively.

¹⁰² ['source d'irrigation'.] Boulez (1958e) p. 167 (in French) and p. 180 (in English). Both Worton and Stacey highlight Boulez's use of the metaphor 'irrigation' but do not examine it further. See: Worton (1981) p. 58 (in French). See: Stacey (1987) p. 28 (in English). Stacey provides a different reference to the quotation that I have used - Boulez (1958c) p. 42 - 'Son et verbe' (1958) the English translation of *Sound and Word*.

to music or encapsulate their dialectical relationship that Boulez describes elsewhere. It, perhaps, reinforces the view that the composer should not attempt a crude transference of a literary idea into a musical idea but try a more flexible approach. Certainly, one can understand the term 'irrigation' as the process of the poem 'giving life' to the music, although this seems a rather uncharacteristically loose analogy. I would suggest that the fact that Boulez first uses this metaphor in 1958¹⁰³, the same year as he was revising his composition *Le soleil des eaux*, may be significant. This composition takes its name from a play by Char which concerns the revolt of fishermen whose way of life was threatened by industrial pollution of the river Sorgue.¹⁰⁴ Of the two poems Boulez sets,¹⁰⁵ the second, *La Sorgue: chanson pour Yvonne*, is concerned with the river. The river is characterised as a powerful force which is 'often punished', presumably by human industry. It is tempting to view the subject of this poem as a parallel to Boulez's conception of the relationship of poetry (the 'irrigation source') and music. For example, one could interpret the poem, i.e. the river, as something that needs to be treated respectfully so that the music can flourish. Boulez clearly connects these two ideas (i.e. the river and the source of irrigation), as he connects these metaphors in a later article discussing Beethoven.¹⁰⁶

Arguably, a more precise description of Boulez's conception of the relationship between words and music appears in 'Poésie – centre et absence – musique' (1962). He begins this article by quoting from Mallarmé:

Music and Letters are alternating faces – one spreading here into the darkness and the other glittering there with certainty – of a single phenomenon. I called it the Idea. One of these

¹⁰³ This article would be expanded to become 'Son, verbe, synthèse' (1958).

¹⁰⁴ Stacey summarises this story. See: Stacey (1987) p. 42 (in English).

¹⁰⁵ Neither poem appears in Char's play but in a group of poems entitled 'La sieste blanche' published in the collection *Les matinaux* (1950).

¹⁰⁶ Boulez uses the metaphor of the river to refer to Beethoven's musical legacy which continues to 'irrigate'. He writes: 'the river / Beethoven / remains *deaf* to reproaches. / It irrigates'. [*le fleuve / Beethoven / reste sourd aux objurgations. / Il irrigue.*] Boulez (1970b) p. 226 (in French) and p. 211 (in English).

In addition, one also notes the connection between the metaphor of irrigation and the notion of 'fertile land' drawn from Klee.

modes inclines toward the other and disappears into it, only to reappear with borrowed riches: by this double oscillation a whole genre is achieved.¹⁰⁷

It is 'Music' that is 'spreading here into the darkness' and 'Letters' that are 'glittering with certainty'. One can understand this as literally referring to the non-conceptual nature of musical meaning compared to the inherently conceptual nature of linguistic meaning and, from the following passage, it is clear that Boulez understands it in this way.¹⁰⁸ However, Mallarmé's capitalisation of 'Music' and the notion that the non-conceptual and the conceptual are alternate facets of the Idea suggests that 'Music' might not literally refer to sound but Mallarmé's poetic notion of 'Music' as 'an ensemble of relations existing within everything'.¹⁰⁹ Therefore, Boulez's understanding of Mallarmé's text may be based on a misunderstanding, albeit a highly productive misunderstanding.

In the quotation, Mallarmé's description of a 'double oscillation' suggests a dialectical relationship between Music and Letters. This concurs with Boulez's notion of composing with music and literature in which the literary theme inspires the musical form but sometimes clashes with the 'composer's idea and forcibly modifies it, and in so doing gives it a different direction and a different meaning, both unforeseen.'¹¹⁰ Again, the terms Boulez uses here are unmistakably dialectical.

After citing the above quotation, Boulez continues by proposing that 'if I must give this alternating phenomenon a name, I will call it "centre and absence"'.¹¹¹ As he does not provide a reference for this phrase, Miller assumes, incorrectly, that it is

¹⁰⁷ ['la Musique et les Lettres sont la face alternative ici élargie vers l'obscur; scintillante là, avec certitude, d'un phénomène, le seul, je l'appelai, l'Idée. L'un des modes incline à l'autre et y disparaissant, ressort avec emprunts: deux fois, se parachève, oscillant un genre entier.'] Boulez quoting Mallarmé in: Boulez (1962) p. 467 (in French) and p. 183 (in English).

¹⁰⁸ Adorno also makes this distinction between music and language. Adorno (1956) p. 2.

¹⁰⁹ ['l'ensemble des rapports existant dans tout, la Musique.'] (My translation.) Mallarmé (1897c) p. 368. For my earlier discussion of this statement see: this dissertation p. 252.

¹¹⁰ ['cet argument se heurte à la forme initialement prévue, et la force à s'infléchir, lui donnant ainsi une direction, un sens nouveaux imprévus.'] Boulez (1962) p. 481 (in French) and p. 195 (in English).

derived from Mallarmé.¹¹² However, the term 'centre and absence' comes from a text by Michaux entitled 'Entre centre et absence' (1938), that I considered earlier in chapter III.¹¹³ Boulez, referring back to the original quotation by Mallarmé, reveals how he understands 'centre and absence' at the end of his article with the help of a third image, 'crystallisation' ['cristallisation']:

A poem around which music has crystallised can be, like a fossil, both *uncognisable* and *recognisable*. Centre and absence; as Mallarmé put it, an alternative face of the Idea, "the one reaching into the darkness and the other glittering with certainty!"¹¹⁴

The image of crystallisation, in this passage compared to a fossil but elsewhere compared to the imprints found in Pompeii's volcanic stone,¹¹⁵ reflects Boulez's idea that the poem is complete in itself and becomes 'the object of musical crystallisation'.¹¹⁶ The idea of crystallisation suggests that there is a deep structure to be discerned within the poem that should be mirrored in the music. Indeed, Boulez makes this point in an article dating from the year before in which he writes that the composer attempts to communicate the poem's 'internal structure' as closely as possible in musical terms.¹¹⁷ This 'internal structure' is very similar to the idea of 'correspondances' that I noted in Boulez's writings earlier.¹¹⁸ As I established earlier, the notion of correspondances refers to the poet's discovery of the 'intimate and secret relations of things'. However, Boulez's understanding of 'correspondances' between the various art-forms appears to be less unreservedly

¹¹¹ ['centre et absence'.] Boulez (1962) p. 467 (in French) and p. 183 (in English). Boulez first cites this phrase 'centre and absence' in passing in 'Son et verbe' (1958). See: Boulez (1958c) p. 426 (in French) and p. 42 (in English).

¹¹² Miller (1978) p. 60 (in English).

¹¹³ For my translation of the concluding lines of Michaux's poem, see: this dissertation p. 192.

¹¹⁴ ['Le poème, centre de la musique, a loisir d'en être, telle la pétrification d'un objet, à la fois MÊconnaissable et REconnaissable. Centre et absence (croise du faisceau); selon Mallarmé, face alternative de l'Idée, "ici élargie vers l'obscur; scintillant là, avec certitude"!'] Boulez (1962) p. 484 (in French) and p. 198 (in English)

¹¹⁵ See: Boulez; Loselle; Caws; Perloff (1993) p. 7 (in English) and also Boulez in: Boulez and Gazier (1990) p. 18 (in French).

¹¹⁶ ['objet d'une cristallisation musicale.'] Boulez uses this phrase to describes his approach to Mallarmé's poem *Une dentelle s'abolit* in his second *Improvisation sur Mallarmé*. Boulez (1961b) p. 462 (in French) and p. 169 (in English).

¹¹⁷ ['la structure interne'.] Boulez (1961b) p. 462 (in French) and p. 170 (in English).

¹¹⁸ See: this dissertation p. 193.

ambitious than that of the Symbolists. Whilst he uses this term, and acknowledges that it is often fertile artistically, he argues that it is at:

the elementary stage of common perception which can no longer envisage the means [...] of a profound contact. It is the initial shock which can lead to nothing if at any moment there arises problems of *realisation* that cannot be overcome and threaten communication. [...] Communication is established by means the intermediary of *structure*, whether it be aesthetic or grammatical.¹¹⁹

In other words, Boulez stresses the need to oppose dialectically the initial correspondance, i.e. an initial speculation, with the real problems of establishing parallels between the art-forms. The composer must grapple with the real problems of composition and communication. Although Boulez has primarily discussed the notion of 'correspondances' with regard to combining poetry and music, one can consider his ideas on the integration of music and theatre similarly. I would now like to examine briefly Boulez's ideas on music and theatre.

Boulez has extensive experience of bringing music and theatre together. Initially, he gained this experience through his involvement with the Compagnie Renaud-Barrault which sometimes involved the composition of scene music for specific productions.¹²⁰ Later, he would gain considerable experience from the considerable conducting work he undertook in the late 1960s and 1970s.¹²¹ There are numerous articles dating from that time concerned with the works he had encountered during his conducting, some of which consider the relationship of music and theatre. The

¹¹⁹ ['le stade élémentaire de la perception commune, qui n'envisage pas encore les moyens [...] d'un contact approfondi. Elle est le choc initial, qui peut, d'ailleurs, ne pas aboutir, des obstacles de *réalisation* se révélant, à un moment, infranchissables, réfractaires à la communication. [...] il se produit communication par l'intermédiaire de la *structure*, sous quelque aspect qu'on veuille bien considérer cette dernière: esthétique, ou grammaticale.'] (My modified translation.) Boulez (1962) pp. 481-482 (in French) and p. 196 (in English). (My translation.) Boulez is writing specifically on the integration of poetry and music.

¹²⁰ Unfortunately, virtually all of Boulez's work written for the Compagnie Renaud-Barrault remains unpublished. The only exception, to my knowledge, is the publication of three musical examples from Boulez's scene music for 'L'Orestie' (1955) which highlight three types of vocal writing. See: Rostand (1956) pp. 11-13 (in French).

¹²¹ Boulez conducted the Cleveland Orchestra 1967-72, BBC Symphony Orchestra 1969-75, New York Philharmonic 1971-77 and conducted Wagner at Bayreuth 1976-80.

articles that most illuminate Boulez's thoughts on this subject primarily draw from his involvement on productions of Wagner's *Parsifal* and the *Ring*. These include 'Chemins vers *Parsifal*' (1970), 'Le Temps re-cherché' (1976) and 'La Tétralogie: commentaire d'expérience' (1977).¹²² To these articles I would add his interview with Pesko (1974) and 'L'opéra malade du lieu' (1983).¹²³

Boulez's attitude towards opera and music theatre can, at first glance, appear contradictory. His youthful statements calling for all opera houses to be bombed can seem opposed to his considerable conducting work in this field in the 1960s and 1970s. The question he asks himself in an article in 1983 is whether the genre of opera has produced codes that are impossible to transgress today.¹²⁴ In other words, can today's composer find a means of expressing himself within the medium of music theatre whilst avoiding a musical and theatrical language inherited from the nineteenth century?¹²⁵ Boulez's response is like that of his conception of the integration of music and words. He writes that 'one must force oneself much more to find a structural correspondence between the semantic of theatre and the semantic of music',¹²⁶ and that both he and Stockhausen do not rely on superficial links between music and theatre but profound 'correspondances'.¹²⁷

Similarly, like his approach to combining music and words, Boulez describes a dialectical relationship between music and theatre. In an interview in 1974, he stresses that one must begin by avoiding repetition of what has already been achieved. One then proceeds to realise or redefine a 'global concept' between music and theatre.¹²⁸ However, the establishment of a global concept does not imply that the relationship between music and theatre should be conceived as static. The

¹²² See: Boulez (1970a), Boulez (1976a) and Boulez (1977b) respectively.

¹²³ See: Boulez and Pesko (1974), and Boulez (1983a).

¹²⁴ See: Boulez (1983a) p. 16 (in French).

¹²⁵ Boulez criticises the use of motivic work, thematicism and the symbolism of intervals and of diatonic-chromatic relationships in the composition of opera and music today. See Boulez in: Boulez and Pesko (1974) p. 97 (in French).

¹²⁶ ['On devrait s'efforcer beaucoup plus de trouver une correspondance structurelle entre la sémantique du théâtre et la sémantique de la musique'.] (My translation.) *Ibid.*

¹²⁷ ['correspondances'.] (My translation.) *Ibid.*, p. 98.

¹²⁸ ['concept global'.] (My translation.) *Ibid.*, p. 95.

balance between the musical element and the dramatic element must constantly change. He writes that 'keeping [action and music] in constant proximity can only be forced and artificial, since their two rhythms of action, so to speak, are not the same.'¹²⁹ He, therefore, criticises productions in which either the music or the libretto dominates.¹³⁰ At certain moments in a given work, the music is more important than the drama and therefore the musical writing and musical logic take priority. This usually occurs to produce a certain feeling at a time of reflection. In terms of information concerning the drama, it is the 'quality' of information that is important rather than the 'quantity' of information.¹³¹ At other times, the dramatic action is more important than the music and the logic of the drama takes priority. This is usually to enable the audience to comprehend information concerning the drama and to develop the plot. In this situation, 'quantity' of information is more important than 'quality'.¹³² Writing specifically on opera, although this could apply to music theatre in general, Boulez argues that '[i]t is [...] clear that opera is a perpetual transition from strict, formal thinking on the musical plane to strict, formal thinking on the dramatic plane.'¹³³ This dialectical conception of the relationship of music and theatre manifests itself in Boulez's understanding of the history of this genre. He argues that the early Italian operas were more orientated towards the dramatic action, i.e. the libretto.¹³⁴ From the Passions of Bach to the operas of Mozart, a

¹²⁹ ['Le rapprochement constant ne pourrait être que forcé et artificiel, les deux rythmes d'action, pour ainsi dire, n'étant pas les mêmes.'] Boulez (1977b) p. 442 (in French) and p. 286 (in English).

¹³⁰ Boulez cites Kagel as falling into the former category (see Boulez in: Boulez and Pesko (1974) p. 99 (in French)) and many opera producers as falling into the latter category (see: Boulez (1966c) p. 414 (in French) and p. 241 (in English)). The latter situation, concentrating on the libretto above the music, is particularly dangerous because the libretto, according to Boulez, is usually the most ephemeral, anecdotal aspect of the opera (*ibid.*, pp. 415-416 (in French) and p. 242 (in English)). Indeed, Boulez's definition of opera stresses this anecdotal aspect of the drama. He writes that 'opera is, in effect, the total engulfing of a dramatic anecdote by musical form, through a more or less precise 'formal' rhetoric'. ['L'opéra est en effet la saisie d'une anecdote dramatique par la forme musicale, au moyen d'une rhétorique plus ou moins précise, plus ou moins "formelle".'] (My modification.) (*ibid.*, p. 414 (in French) and p. 241 (in English)).

¹³¹ ['qualité de l'information 'quantité'.] (My translation.) Boulez in: Boulez and Pesko (1974) p. 100. For my consideration of the terms of quantity and quality in Boulez's account of musical technique see: this dissertation p. 312.

¹³² ['quantité de l'information 'qualité'.] (My translation.) *Ibid.*, p. 100.

¹³³ ['On voit [...] que l'opéra est une perpétuelle transition d'une pensée formelle rigoureuse dans le domaine musical à une pensée formelle rigoureuse sur le plan dramatique.'] Boulez (1966c) p. 415 (in French) and p. 241 (in English).

¹³⁴ See Boulez in: Boulez and Pesko (1974) p. 98 (in French).

balance is struck between the importance of the libretto (the dramatic action) and the music. This can be seen in the mixture of arias and choruses, in which the music is more important, and recitatives, in which the drama is more important. Boulez writes that this balance of focusing on the music and then on the drama was 'always a dialectical relationship'.¹³⁵ With Wagner, Boulez argues, 'the free [musical] form and the strict [musical] form interpenetrate each other'.¹³⁶ Later, Berg would present two possibilities for the music-theatre dialectic. In *Wozzeck* (1914-22), the musical large-scale form is more strictly written than the local form, whereas in *Lulu* (1929-35) the large-scale form is less strictly written than the local form.¹³⁷

Having considered briefly Boulez's attitude towards establishing parallels between the different art-forms, I would now like to consider the parallels he makes between specific artists, composers and writers.

(iii) Global view: the 'conjunction'

Boulez uses the term 'conjunction' ['conjonction'] to refer to a parallel either between two composers or between two artists generally (e.g. a composer and a painter). The first time this term appears is in 1957 in two articles, most notably 'Aléa' (1957) but also 'La conjunction Stravinsky-Webern' (1957). This latter Stravinsky-Webern conjunction is also the subject of the text 'D'une conjunction – en trois éclats' (1958) dating from the following year. 'Aléa' reveals that the source of this term is Mallarmé, as at the beginning of Boulez's conclusion he writes, albeit without specific reference, 'towards this supreme conjunction with probability'.¹³⁸ This is a line that appears around the middle of Mallarmé's poem 'Un coup de dés' (1897), without any capitalisation or distinguishing large letters. In consideration of

¹³⁵ ['ce fut toujours un voisinage dialectique']. (My translation.) Boulez in: Boulez and Pesko (1974) p. 98.

¹³⁶ ['la forme libre et la forme stricte s'interpénètrent.']. (My translation.) *Ibid.*

¹³⁷ *Ibid.*, pp. 98-99.

¹³⁸ ["Vers cette conjunction suprême avec la probabilité"]. Boulez (1957a) p. 419 (in French) and p. 37 (in English). This is identified by Walsh. See: Walsh (1991b) p. 37 footnote 6 (in English). For the original line by Mallarmé see: Mallarmé (1897a) p. 464 (in French).

Mallarmé's deep interest and knowledge of the study of language itself,¹³⁹ it is helpful to note that in linguistics, a conjunction is a word linking two ideas together. One could postulate that the notion of the 'supreme conjunction' refers to a profound linkage between two ideas.

In 'La conjunction Stravinsky-Webern' (1957) and 'D'une conjonction – en trois éclats' (1958)¹⁴⁰ he refers to a Stravinsky-Webern conjunction. Used for the first time as his own aesthetic idea rather than within a quotation, I would argue that the usage of the term here is not particularly obvious. The idea of a Stravinsky-Webern conjunction is based on the fact that both Stravinsky and Webern served as two 'orientations'¹⁴¹ for the post-war generation, presumably (although Boulez does not make this clear) due to the former's rhythmic developments and the latter's pitch developments.¹⁴² He continues by expressing his hope that this conjunction will lead to a 'synthesis'.¹⁴³ I would argue that Boulez sees a 'conjunction' here because he continues to associate the technical acquisitions developed by Stravinsky in rhythm and Webern in pitch with his own teachers of Messiaen and Leibowitz respectively.¹⁴⁴

The conjunction Boulez establishes between Debussy (rather than Stravinsky) and Webern in an interview in 1992 is much more compelling. A shared feature he identifies is their interest in composing concentrated short works. For example, Debussy's *Etudes for Piano*, which Boulez analysed at Basel, uses a concentration of means and a developmental logic similar to Webern, albeit with a different vocabulary.¹⁴⁵ Boulez also draws attention to the fact that both favour restrained dynamics whilst avoiding pre-established forms, grand rhetoric and repetition.¹⁴⁶

¹³⁹ I do not only refer to his reflections on the French language in the course of his activities as a poet but also to his experience of teaching English.

¹⁴⁰ See: Boulez (1957b) and Boulez (1958b) respectively.

¹⁴¹ ['repères'.] Boulez (1958b) p. 162 (in French) and p. 218 (in English).

¹⁴² Boulez continues to suggest that these two developments might result in a 'synthesis'.

¹⁴³ For my discussion of the idea of synthesis, see: this dissertation: p. 199.

¹⁴⁴ I discuss this in chapter I. See: this dissertation p. 75.

¹⁴⁵ See Boulez in: Boulez and Szaersnovicz (1992) pp. 45-46 (in French).

The conjunctions Boulez makes between composers, visual artists and writers are of particular interest. He makes conjunctions as follows: Debussy-Cézanne-Mallarmé, Schoenberg-Kandinsky, Webern-Mondrian, Stravinsky-Picasso, and Berg-Joyce. I would briefly like to consider these conjunctions.

The Debussy-Cézanne-Mallarmé conjunction is proposed by Boulez in 1956, albeit without using the actual term 'conjunction'. He asks himself if these artists are the 'root of all modernism?'¹⁴⁷ He notes that Mallarmé inspired arguably the first musical work which hints at a break from tonality towards modernism, Debussy's *Prélude à l'après midi d'un faune* (1892-94).¹⁴⁸ Unfortunately, he does not expand upon this conjunction in this article or elsewhere, presumably as he considers it is self-explanatory.

The Schoenberg-Kandinsky conjunction is, arguably, the most obvious and well-known due to their famous friendship and correspondence.¹⁴⁹ The primary source of Boulez's description of this conjunction appears in the article 'Le parallèle Schoenberg-Kandinsky' (1966). Boulez argues that they share a similar attitude to artistic creation, as they emphasised the need to reflect on their own craft based on the needs of expression.¹⁵⁰ In a later article, he states this more succinctly when he portrays their careers as thus: 'prophetic 'type' works, explosion and codification'.¹⁵¹ Clearly, there is a 'conjunction' between this and Boulez's own musical career. He also compares Schoenberg's 'emancipation of tonality' to Kandinsky's 'emancipation of the object' in painting.¹⁵²

¹⁴⁶ *Ibid.*, p. 46.

¹⁴⁷ ['la racine de toute modernité?'] Boulez (1956b) p. 155 (in French) and p. 20 (in English).

¹⁴⁸ *Ibid.*

¹⁴⁹ Boulez seems particularly knowledgeable of the history of the friendship between Schoenberg and Kandinsky. For example, in an interview in 1990, he notes that Schoenberg and Kandinsky met between 1910-13, subsequently corresponded and spent their summers together. See Boulez in: Boulez and Menger (1990) p. 14 (in English).

¹⁵⁰ See: Boulez (1966e) p. 154 (in French) and p. 344 (in English).

¹⁵¹ Boulez (1974b) p. 291 (in French) and p. 328 (in English).

¹⁵² ['L'émancipation de la tonalité' 'l'émancipation de l'objet'.] (My translation.) Boulez (1966e) p. 154 (in French) and p. 344 (in English)

The earliest mention of the Mondrian-Webern conjunction is in 1969, although Boulez provides a fuller account in *Le pays fertile (Paul Klee)* (1989) and in two interviews dating from the early 1990s.¹⁵³ In short, Boulez argues that the trajectories of their artistic careers are similar, although neither was probably aware of each other's work. At the start of their respective careers, both Mondrian and Webern used the inherited language and technique of their time, Mondrian still working with representation and Webern with tonality. For most of their subsequent years, their works became increasingly concise and abstract. Boulez sees parallels between Mondrian's tendency to leave areas of the canvas white with Webern's use of silence. He also compares the painter's vertical and horizontal lines and Webern's rigid manipulation of cells.¹⁵⁴ Towards the end of their respective lives, both attempted to lessen the abstract nature of their works. Webern's last two cantatas are more expansive in time and serially more flexible than before and Mondrian's 'New York' period produced works in the 'boogie-woogie' style.

As he detects a similarity in the overall trajectory of Mondrian and Webern, Boulez also establishes the Stravinsky-Picasso conjunction on the same basis. He argues that 'one cannot deny a profound similarity in their trajectory'.¹⁵⁵ This parallel is certainly not new and can be seen in several musicological texts including Adorno's *Philosophy of Modern Music* (1949).¹⁵⁶

The conjunction between Berg and the writer James Joyce is based on the formal aspects of specific works rather than their overall aesthetic attitude and artistic career. Boulez draws a parallel between Berg's concentration on a particular formal idea in each scene in his opera *Wozzeck* (1914-22) and Joyce's similar approach to each chapter in *Ulysses* (1914-22), written in exactly the same period. Again, Boulez

¹⁵³ See: Boulez and Souster (1969); Boulez (1989c); Boulez and Menger (1990) and Boulez and Szaersnovicz (1992).

¹⁵⁴ This specific point is only made by Boulez in Boulez and Menger (1990) p. 14 (in English).

¹⁵⁵ See: Boulez (1989c) p. 24 (in French).

¹⁵⁶ See: Adorno (1949) p. 191 (in English).

acknowledges that he is not suggesting there was a direct influence between the two artists, as they probably were unaware of each other's work.¹⁵⁷

In addition, I would argue that it is possible to suggest a conjunction between Boulez himself, i.e. between the overall trajectory of his career, and that of another artist. It is tempting to consider the conjunction which seems to be implied by Boulez himself in his book *Le pays fertile (Paul Klee)* (1989): the Boulez-Klee conjunction.

As one can see, the idea of the 'conjunction' is dotted throughout Boulez's writings and interviews. There are two important points to note concerning this idea. First, conjunctions between different art-forms do not usually occur simultaneously. As Boulez notes, developments in the visual arts and literature often appear before parallel developments in music. Second, the 'conjunctions' between the different levels appear at underlying structural levels, not merely in surface features. Writing on the conjunction of music and painting, he argues that 'whilst there is a type of reciprocity, indeed influence, between the two worlds, it is not often on the same plane, far from it.'¹⁵⁸

Concluding remarks on the global view: the music historian as 'seer'

All of these three means of broadening the field of vision, that is the inclusion of non-Western musics, the interdisciplinary approach to the arts and the notion of the 'conjunction', can be considered as ways of aspiring towards a global conception of music history. However, as I noted in chapter III,¹⁵⁹ Boulez acknowledges that one cannot 'see' everything in its complete totality – there are always parts missing. To overcome this problem, intuition intervenes and enables one to speculate on the material.

¹⁵⁷ See: Boulez (1989c) pp. 22-23 (in French).

¹⁵⁸ ['Lorsqu'il y a une sorte de réciprocité, sinon d'influence, entre les deux mondes, ce n'est souvent pas sur le même plan, loin de là.'] (My translation.) *Ibid.*, p. 20.

¹⁵⁹ See: this dissertation p. 187.

With regard to music history specifically, Boulez writes that it is not possible to know all of music history in its entirety. He argues that '[i]n the permanent revolution of music one finds immediate bombs as well as time-bombs.'¹⁶⁰ The idea of 'bombs' refers to the impact that particular musical works have on the evolution of the musical language. 'Time-bombs' are musical works that do not have much influence on composers initially but 'explode' later. The opposite situation can also occur. A musical work 'may have had a decisive historical influence at a given moment in time and later lost all its sparkle'.¹⁶¹ The variation in meaning of the particular work is dependent upon the values and circumstances of the present-day society. In this sense, the variation in importance over the course of decades of a particular work arguably reveals much more about the present-day than the time in which the work was written.

Up to this point in stage two of the dialectic, I have considered Boulez's attempts to broaden the field of study available to the music historian in order to understand better music history. I have also noted that he insists that it is impossible to achieve a complete and definitive version of music history and that intuition is inevitably involved in speculating upon history.

The act of speculation itself upon music history is the crucial task of anyone seeking to understand the underlying mechanisms shaping developments in music. As I established in chapter III, all speculations seek to arrive at 'general principles'. In Boulez's writings, one can discern three 'general principles' that have emerged during his own speculations upon the underlying mechanisms shaping the development of music. These are the concepts of 'renewal', 'dissociation' and 'consistency' that I identified in chapter I.¹⁶² It should be noted that these concepts are most applicable to Western art music, as this has been the primary object of

¹⁶⁰ ['Dans la révolution permanente de la musique, on trouve [...] des bombes immédiates, et des bombes à retardement...'] Boulez (1963d) p. 539 (in French) and p. 71 (in English).

¹⁶¹ ['qui aura eu une influence historique déterminante à un moment donné, pourra voir décliner totalement son étoile'.] (My modified translation.) Boulez (1961c) p. 381 (in French) and pp. 120-121 (in English).

¹⁶² See: this dissertation p. 57.

Boulez's reflections. These three concepts are manifestations of a rationalising and generalising attitude undertaken by Western composers over the last few centuries. Indeed, they are not merely the underlying mechanisms Boulez has found in his reflections upon music history but intrinsic characteristics of the dialectical process itself. I would like to consider these three concepts in turn: first, renewal.

3. Third stage of the dialectic: General principles (renewal, consistency, and dissociation)

The principle of renewal manifests itself in the tendency towards increasingly varying the musical material. This idea underpins Boulez's insistence in his earliest article (in 1948) that 'all parts must have equal importance'.¹⁶³ This claim is based on the desire to develop each aspect of music as fully as possible – no part is given less importance in comparison to another – and leads towards an essentially polyphonic conception of music. As I shall consider shortly, the tendency towards renewal is not only 'applied', as it were, to the given material: it also becomes involved in the selection of the material from the start. Boulez highlights the increasing emphasis on material which enables the possibility of greater variation.¹⁶⁴ The source of this idea is most likely to have been Leibowitz¹⁶⁵ who also uses the term 'renewal', also stresses the necessity of working through each musical idea as fully as possible¹⁶⁶ and, most strikingly, also places the utmost importance on polyphony.¹⁶⁷ One can appreciate that this principle of constant renewal or constant variation of the musical material constitutes one factor in the ever-increasingly

¹⁶³ ['toutes les parties doivent avoir une importance égale'.] Boulez (1948a) p. 256 (in French) and p. 49 (in English).

¹⁶⁴ The desire for the capacity for greater variation in the musical material is one of the main factors leading towards dissociation. The greater the dissociation of the material, that is the more it is broken-down into its constituents units, the greater the possibility of varying the material.

¹⁶⁵ As I noted earlier. See: this dissertation p. 58.

¹⁶⁶ This is in opposition to Messiaen's tendency, particularly in certain sections of his orchestral works, to compose with essentially homophonic 'blocks' of sound. For my earlier reference to this see: this dissertation p. 130.

¹⁶⁷ The importance granted to polyphony by Leibowitz can be observed throughout his essay 'Prolégomènes à la musique contemporaine' published in two parts in *Les Temps Modernes*. See: Leibowitz (1945a) and Leibowitz (1945b).

rationalisation and exhaustion of a given musical system. This is because it tends towards formal homogeneity: consequently the composer cannot clearly articulate form, and the language exhausts its expressive capabilities.¹⁶⁸ Another key factor, intimately bound to the notion of renewal, is that of 'dissociation'.

The 'phenomenon' of dissociation refers to the way in which the musical material becomes increasingly dismantled into its individual elements. This concept is connected to the aim of developing the compositional material as fully as possible. It is also closely linked to the notion of the malleability or 'ductility' of the musical material. The inherent 'ductility' of a given material enables the composer to manipulate the material in a wide range of contexts and therefore opens a correspondingly wide field of expressive possibilities. Wagner was the first composer to focus upon the ductility of the material, according to Boulez. Before Wagner, Beethoven had explored and exhausted the possibilities of struggle between clearly defined themes and motifs.¹⁶⁹ Wagner took this example and began to compose, unlike Beethoven, with motifs that were 'eminently transformable',¹⁷⁰ obeying no pre-existing hierarchy (in other words, they were 'neutral'¹⁷¹), were not defined by a single tempo,¹⁷² and could change according to the expressive needs of the drama.¹⁷³ This was achieved, in part, by the reduction of the material from the motivic work of Beethoven to the individual *intervals* in Wagner's music.¹⁷⁴ Whilst

¹⁶⁸ I discuss this problem in the section on Listening. See: this dissertation p. 333.

¹⁶⁹ See: 'For the first time with Wagner, we see emerge musical material which is both complete and incomplete'. ['Pour la première fois avec Wagner, nous voyons s'épanouir un matériau musical qui est à la fois achevé et inachevé.'] (My translation.) Boulez (1970a) p. 267 (in French) and p. 253 (in English).

¹⁷⁰ ['éminemment transformables']. Boulez (1976a) p. 243 (in French) and p. 266 (in English).

¹⁷¹ This neutral quality enables the composer to integrate it easily into the different contexts. See: Boulez (1970a) p. 267 (in French) and pp. 253-254 (in English). Also see: this dissertation p. 347.

¹⁷² See: Boulez (1976a) p. 244 (in French) and p. 267 (in English). Boulez writes here that Wagner's motives can undergo tempo transformations.

¹⁷³ ['l'expression de l'instant']. (My translation.) *Ibid.* Examples of the characteristics of Wagner's ductile motifs provided by Boulez are arpeggios, variations of arpeggios and dotted rhythms. These elements are transformable but retain their identity when transformed. *Ibid.*, p. 245 (in French) and p. 267 (in English).

¹⁷⁴ Boulez claims that 'Wagner puts the accent on the *interval* which, by multiple ambiguity, can be adapted to a number of harmonic circumstances.' ['Wagner met l'accent sur l'*intervalle* qui, par ambiguïté multiple, pourra s'adapter à nombre de circonstances harmoniques']. (My translation.) Boulez (1970a) p. 267 (in French) and p. 254 (in English).

possessing these ductile aspects, however, Wagner's motifs retained their identity. Boulez writes:

One can note that the most frequent motifs in the work are those, precisely, which possess the greatest double capacity for adaptability and remaining itself. They are, one could say, Ariadne's thread in the dramatic labyrinth.¹⁷⁵

An important consequence of Wagner's developments was the implicit suggestion of an unspecified abstract matrix to govern the appearance of motifs, which sometimes shifted the focus between pitch, harmony and rhythm. This abstract matrix, Boulez claims, enabled Schoenberg to draw consequences that led towards Serialism.¹⁷⁶ However, whereas Wagner used themes, Schoenberg used the pure abstraction of simple intervals. Schoenberg's focus upon intervals was, itself, suggested in Wagner's work.¹⁷⁷ That is to say, Schoenberg's material was dissociated to the level of the individual intervals.

Following on from Schoenberg's development of the musical material, it is significant that Boulez finds in Webern's *Bagatelles* (1913) that 'the musical figure is reduced to the state of the atom, reduced very often to isolated elements of a single note, only having a logical link with the globality of other isolated notes, according to a law of chromatic complementarity, for example.'¹⁷⁸ This clearly is a further dissociation of the musical material to the level of the single note. I would suggest that the dissociation of the single note into its different sound components of pitch, duration, dynamic, etc., as manifested by post-war total serialism, should be seen as a further step showing the phenomenon of dissociation. Indeed, in the last twenty-five years or so, one can also add the sound synthesis work enabled by new

¹⁷⁵ ['On peut noter que les motifs qui sont employés avec le plus de fréquence au cours de l'ouvrage sont ceux, précisément, qui possèdent au plus haut point cette double capacité de s'adapter et de rester soi-même. Ce sont, pourrait-on dire, les fils d'Ariane de ce labyrinthe dramatique.'] (My translation.) Boulez (1977b) p. 447 (in French) and p. 290 (in English).

¹⁷⁶ See: Boulez (1976a) p. 245 (in French) and p. 267 (in English).

¹⁷⁷ As I noted above.

¹⁷⁸ ['la figure musicale est réduite à l'état d'atome, réduite très souvent à des éléments isolés d'une seule note, n'ayant de liens logiques qu'avec la globalité des autres notes isolées, selon une loi de

technology which allows the exact manipulation of sound frequencies as a continuation of this process. One can see that the phenomenon of dissociation, the breakdown of the musical material into ever-smaller constituents, is a key feature of Boulez's conception of music history.

The principle of consistency, arguably the most pervasive notion in Boulez's writings, has been considered in depth in chapters I and II. Therefore, at this point, I shall only very briefly consider it in terms of music history.

The principle of consistency can be traced on several levels in Boulez's concept of music history. First, there is the consistency of the rules governing each moment of a particular musical work. This is the consistent application of grammatical rules, a feature which formerly led to the establishment of a particular language, e.g. tonality, but since the post-war period in particular, each work required its own grammar. Second, there is the consistency between the parts of a given work in order to create cohesion and unity. This enables the listener to hear one part as related to another and consequently allows him to understand the parts as meaningful and intentional. Third, and particularly after the dissociation of the musical material into its sound components in the twentieth century, the consistency between all levels of the structure – not only to enable meaning (as in the second instance of consistency) but also to justify the work. This is particularly a problematical issue in the twentieth century.

The three principles of renewal, dissociation and consistency result in the establishment of musical systems that emerge, become exhausted and then are subsumed into another system. This is the third stage of the dialectical process: the 'synthesis'.

complémentarité chromatique'.] (My translation.) Boulez (1980e) (no page numbers). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

Synthesis

As I argued in the previous chapter, one can understand the idea of synthesis as both the result and the motor of the dialectical process. I also established that Boulez's idea of synthesising all the acquisitions available to the composer bears a strong similarity with Leibowitz's writings on this subject. This similarity is consequently reflected in their attempts to establish their own history of music.

Both Boulez and Leibowitz divide Western art music history into three historical periods which display the principle of synthesis. First, they understand modality as the synthesis of various common principles in use before medieval music. Then, through the 'generalising' of techniques, the various modes became synthesised into tonality and equal temperament emerged. Boulez argues that this generalising of modality that resulted in tonality was based on the generalising principle of transition.¹⁷⁹ He also claims that, around the same time, a comparable synthesis in rhythm occurred in which Greek metres became subsumed into the metrical system.¹⁸⁰ The third and final synthesis (to this date) happens as tonality progressively becomes sedimented and its expressive functions become weakened. At this point, serialism synthesises tonality with generalising principles such as permutation.¹⁸¹ At each synthesis, from pre-modality to modality, from modality to tonality, and from tonality to serialism, it is the attempt to rationalise developments that had hitherto been unrationalised that drives this dialectical process. Leibowitz argues that:

[T]he intuitive acquisitions of a particular polyphonic period are organized, by a consciousness which apprehends them clearly, into a complete synthesis of the premises which made them possible, and become the basis for future acquisitions.¹⁸²

¹⁷⁹ See: Boulez (1960e) p. 368 (in French) and p. 85 (in English).

¹⁸⁰ See: Boulez (1961d) p. 494 (in French) and p. 34 (in English).

¹⁸¹ See: Boulez (1960e) p. 368 (in French) and p. 85 (in English).

¹⁸² Leibowitz (1947) p. 104 (in English).

Immediately, one is struck not only by Leibowitz's obviously dialectical view to history but also that he considers that each synthesis is a '*complete synthesis*' (my italics) of intuitive developments. Evidently, Leibowitz whole-heartedly believes in the idea of 'progress' of the musical language. The twelve-tone technique is not merely a synthesis of, and a solution to, the problems encountered within tonality but it also synthesises the features of modality. This is made clear when he argues that the twelve-tone technique retains the specialisation of the modal system, as each series has a different character whilst retaining the universalism of tonality as everything can be transposed.¹⁸³ Boulez rejects the claim that there is an overall progress of language. He argues that whenever a language becomes sedimented and its expressive potential consequently diminishes, the composer's attempts to synthesise the inherited elements are influenced by the preoccupations of a given society at a given time. The composer immersed in a given social climate may favour particular features more than others. Boulez criticises the belief in progress of the musical language, as displayed by Leibowitz:

The evolution of the language obeys the general law by which energy diminishes [...] This evolution, however, was undertaken under the banner of absolute progress. One would consider, therefore, the style of the preceding generation as certainly inferior to that of the current epoch.¹⁸⁴

I would suggest that Leibowitz's argument that serialism has all the advantages of modality and tonality appears a little contrived. Boulez does not attempt to force the history of music into such a crude meta-narrative of 'progress'.¹⁸⁵ He argues that whilst there was a 'generalising' of principles from one musical system to the next, some qualities were lost.¹⁸⁶ With the advent of tonality and the metrical system, the subtlety and complexity of Gregorian melodies was no longer possible. More

¹⁸³ *Ibid.*

¹⁸⁴ ['l'évolution du langage obéit à la loi générale de dégradation de l'énergie [...] Cette évolution, toutefois, s'est effectuée longtemps sous le signe du progrès absolu. On considèrait alors le style de l'époque précédente comme, à coup sûr, inférieur à celui de l'époque.'] (My translation.) Boulez (1961d) p. 497 (in French) and p. 36 (in English).

¹⁸⁵ For my discussion of the notion of progress see: this dissertation p. 203.

¹⁸⁶ The following account is drawn from: *ibid.*, pp. 497-498 (in French) and pp. 36-37 (in English).

obviously, the individual power and variety of the modes were forfeited with the introduction of equal temperament. Serialism, also, lacks certain qualities available within tonality, most notably the power of immediately understanding tonal functions.¹⁸⁷

The unforeseen great composer

As I have already highlighted before,¹⁸⁸ a hallmark of Boulez's dialectical theory is the concept of the unforeseen. Again, in the context of this section, he insists on the unforeseen element in writing a music history. In his criticisms of conservative and 'fetishistic' approaches towards music history that I examined earlier, Boulez emphasises their absence of the unforeseen:

The unexpected always defeats the fetishists, because they lack the necessary antennae. [...] Far from being a refusal of history, the unforeseeable and the unforeseen are its most radiant manifestations.¹⁸⁹

In history, this unforeseen element is the hallmark of the *free* autonomous subject overcoming the limitations of the inherited material. This *freedom*, and the related unforeseen aspect, is particularly indicative of a great artist, who changes the development of history forever. To support this claim, Boulez paraphrases an argument made by Souvtchinsky:

¹⁸⁷ Elsewhere, Boulez writes that 'The evolution of western thought has driven composers to normalise all interval relationships in a fixed, definitive hierarchy, having first gradually removed all the particularisms. However, on the other hand, these particularisms have finally reappeared as archaisms, either temporal or geographical, and the distributive element in the hierarchy has been introduced to the interior of the hierarchy itself in order to corrode it and finally remove it of its powers.' ['L'évolution de la pensée occidentale a conduit les compositeurs à normaliser tous les rapports d'intervalles entre eux dans une hiérarchie fixe définitive, après avoir peu à peu supprimé tous les particularismes. Mais, d'une part, ces particularisations ont fini par resurgir en tant qu'archaïsmes – temps ou lieu; d'autre part l'élément distributif de la hiérarchie s'est introduit à l'intérieur de cette hiérarchie même pour la corroder et finalement lui ôter ses pouvoirs.'] (My modified translation.) Boulez (1958e) p. 164 (in French) and p. 177 (in English).

¹⁸⁸ See: this dissertation p. 207.

There is, in fact, a dialectical relationship between history and the individual: history certainly provokes the individual but the individual remodels history which, after him, will no longer have the same face as before. A "genius" is both prepared and unexpected. He is prepared because he cannot be independent from the age in which he lives. [...] In some way, the relations of a creative artist and tradition are symbolised by the propulsion in and by a certain milieu.¹⁹⁰

Once the unforeseen great composer has left his mark, one can understand his impact and his work in the wider historical context. It is only after the event that one can begin to comprehend its historical relevance and re-trace it to its sources and cultural environment. This retrospective understanding can often obscure the fact that the new developments were hitherto unforeseeable and that they arise from a 'discontinuity'¹⁹¹ in history. Boulez makes this point when, writing on the musical tradition, he argues that '[o]ne does not seem to register the discontinuity of that evolution, in that the necessary work, consolidating the tradition in progress, is not *foreseeable* by it and integrates itself and justifies itself to it *a posteriori*.'¹⁹²

With respect to this unforeseen element of the composer in response to history, Boulez distinguishes three types of composer. Although he names these types as categories of composers and even provides specific examples of the types, they should not be understood as strict categories in which composers should be crudely placed. Rather, these types distinguish different attitudes towards history rather than precise aesthetic categories. Indeed, Boulez notes that these different types of composer can be seen within the same composer at different periods in his life. He

¹⁸⁹ ['C'est bien cela qui déroute les fétichistes: l'attendu, pour lequel ils manquent d'antennes. [...] Loin d'être refus de l'histoire, l'imprévisible, et l'imprévu, en sont les plus éclatantes manifestations.'] Boulez (1961d) p. 502 (in French) and p. 40 (in English).

¹⁹⁰ ['Il existe, en effet, un rapport dialectique entre l'histoire et l'individu: l'histoire provoque l'individu, indéniablement, mais l'individu remodèle l'histoire qui, après lui, n'aura plus le même visage qu'avant son apparition; un "génie" est à la fois préparé et inattendu. Il est préparé, car il ne saurait être indépendant de son époque [...] En quelque sorte, les rapports d'un créateur et de la tradition pourraient se symboliser par la propulsion dans et par un milieu donné.'] *Ibid.*, p. 501 (in French) and p. 40 (in English).

¹⁹¹ For my discussion of the concept of discontinuity see: this dissertation p. 210.

¹⁹² ['L'on ne semble pas se rendre compte du fait discontinu de cette évolution; en ce sens que l'œuvre nécessaire, consolidant cette tradition en marche, n'est pas *prévisible* par elle, qu'elle s'intègre à elle et la justifie *a posteriori*.'] Boulez (1951a) p. 79 (in French) and p. 13 (in English).

writes that 'the fluctuations in a creative artist's attitude can be absolutely irregular and unforeseeable: these are accidents of taste or better still, his *misadventures*.'¹⁹³

First, there are composers who anticipate the future and change the development of music. Boulez appears to subdivide this type into two categories. First, there are 'precursors',¹⁹⁴ composers who, by conscious analysis or by unconscious intuition, 'reveal functions that are latent'¹⁹⁵ of a particular age. They tend to lack in weight and their works will only blossom later in the works of other composers.¹⁹⁶ An example Boulez provides of a 'precursor' is Satie¹⁹⁷ whose discoveries were given a formal logic by Debussy, a composer who falls into the other category of 'cursors'.¹⁹⁸ This second type of future-orientated composer is much more substantial and attempts to bring aesthetic developments together. One implicitly assumes that Boulez would place himself into this category.

Second, there are composers who identify and adapt themselves to the present age. Boulez does not provide an example of this category but instead offers several names that are the opposite of this, most of whom would fall into the first type of response to history I considered above. He describes these as 'poètes maudits',¹⁹⁹ as they are 'dephased',²⁰⁰ with contemporary taste: i.e. they do not share the tastes of contemporary culture. The examples Boulez provides are Poe, Cézanne, Webern,

¹⁹³ ['Les fluctuations dans l'attitude d'un créateur pourront être tout à fait irrégulières et imprévisibles: ce sont les accidents du goût, ou mieux ses *avatars*.'] (My translation.) Boulez (1961a) p. 515 (in French) and p. 51 (in English).

¹⁹⁴ ['"précurseurs"'] Boulez (1961a) p. 516 (in French) and p. 51 (in English). It is interesting to note that Messiaen employs this term when he describes Schoenberg and Berg as the precursors to Boulez's serialism. See Messiaen in: Messiaen and Samuel (1976) p. 116 (in English).

¹⁹⁵ ['mettre à jour des fonctions latentes'.] Boulez (1961a) p. 515 (in French) and p. 51 (in English).

¹⁹⁶ See: *ibid.*, p. 516 (in French) and p. 52 (in English).

¹⁹⁷ See: *ibid.*

¹⁹⁸ ['*curseurs*']. *Ibid.*

¹⁹⁹ Boulez does not use this term explicitly here but refers to 'le signe de la malédiction', a reference to the poètes maudits. See: Boulez (1961a) p. 517 (in French) and p. 52 (in English). The term 'poètes maudits' is associated with Verlaine who wrote essays entitled *Les Poètes maudits* on writers such as Mallarmé and Rimbaud. See: footnote in Walsh (1991b) p. 188 (in English). Boulez also refers the *poètes maudits* in the same way – he writes 'manifestation de la "malédiction"' – in 'Trajectoires' in 1949. See: Boulez (1949) p. 43 (in French) and p. 188 (in English).

²⁰⁰ ['déphasage']. Boulez (1961a) p. 516 (in French) and p. 53 (in English). The identical term also appears in Boulez (1961d) p. 500 (in French) and p. 38 (in English).

and Boulez's own generation.²⁰¹ The following generation usually corrects this dephasing, often to the extent that 'it will seem hard to understand that it could not have been able to perceive, at this same moment, the profound ties which connect, during a determined period of his history, this collectivity and the individual who has transfigured it.'²⁰²

Third, there are composers who attempt to form a synthesis with the past. This is attempted by considering the present age in an historical perspective and 'integrating local and temporal functions into more general functions.'²⁰³ Boulez suggests that this is often illusory. A composer who succeeds in achieving this is Berg. Boulez argues that Berg's best works are a 'synthesis of his romantic taste' whilst removing this romantic inheritance to the second degree.²⁰⁴ To describe this attitude towards romanticism, Boulez cites Valéry's 'I am seeing myself seeing' I considered in chapter III.²⁰⁵

Summary

In summary, Boulez's conception of music history is grounded in his dialectical conception of music. He condemns approaches that reinforce sedimented views of history, in particular neoclassicism, postmodernism and the 'authenticity' movement. He stresses that one should doubt all sedimented forms of music history

²⁰¹ See: Boulez (1961a) p. 517 (in French) and p. 53 (in English).

²⁰² ['elle ne comprendra plus que l'on n'ait pas été en mesure d'apercevoir, au moment même, les attaches qui reliaient en profondeur, pendant une période déterminée de son histoire, cette collectivité et l'individu qui l'a transfigurée.'] (My translation.) Boulez (1961d) p. 500 (in French) and p. 38 (in English). Boulez compares this dephasing with the model who is shocked when he first sees his portrait that a painter has made of him. This idea is also expressed by de Beauvoir who writes that 'One could believe that men are loathed to envisage today their weaknesses and that they demand the fine arts to present themselves in a retouched and embellished portrait.' ['On pourrait croire que les hommes répugnent toujours à envisager leurs faiblesses et qu'ils demandent aux beaux-arts de leur présenter d'eux-mêmes un portrait retouché et embelli.'] (My translation.) Beauvoir, de (1945) pp. 385-86.

²⁰³ ['intégrant les fonctions locales et temporelles à des fonctions plus générales.'] (My translation.) Boulez (1961a) p. 515 (in French) and p. 51 (in English).

²⁰⁴ ['à synthétiser le goût romantique'.] (My translation.) *Ibid.*, p. 519 (in French) and p. 54 (in English).

²⁰⁵ ['je me voyais me voir'.] *Ibid.* For my discussion of this phrase see: this dissertation p. 192.

and seek to uncover the underlying *necessity* and general principles of musical works. In addition, one should attempt to broaden one's understanding of music history by opening the field of music to include non-Western musics as well as non-musical disciplines. Finally, one should recognise that music history is discontinuous as it is shaped by the *free* autonomous subject.

2. ANALYSIS

The most important influence on Boulez's conception of music analysis was unquestionably his teacher, Messiaen. Boulez attended Messiaen's private analysis class around 1944-45 at the home of Guy Bernard-Delapierre.¹ These classes included analyses of works such as Berg's *Lyric Suite* (1928), Schoenberg's *Pierrot lunaire* (1912) and Stravinsky's *Rite of Spring* (1913).² Messiaen claims that he often included music in his analysis classes that was traditionally neglected in French academia.³ He would analyse very recent works as well as much older music dating from the Middle Ages and the Renaissance.⁴ He also discussed non-Western music, a feature of his classes that certainly made an impact on Boulez.⁵ I compare Boulez's ideas on analysis with those of Messiaen at the end of this section.⁶

There are several other important influences on Boulez's approach to musical analysis. In the immediate post-war period, one should recognise Leibowitz's analyses of serial music as influential. Likewise, de Schloezer should be acknowledged not only for his insistence on analysing music as an 'object'⁷ but more importantly for his incorporation of Gestalt Theory into his reflections on music. De Schloezer also adopts an approach to music analysis which does not merely include a note-by-note account of the music but also considers aesthetic issues. In this respect, his approach is similar to that of Adorno, who Boulez knew

¹ See Messiaen in: Messiaen and Samuel (1976) p. 40 (in English).

² Heyworth (1973) p. 9 (in English).

³ See Messiaen in: Messiaen and Samuel (1976) pp. 105-106 (in English).

⁴ See: Breatnach (1996) pp. 70-71 (in English). Messiaen, himself, notes this when he speaks of making analyses of 'exotic, ancient and ultra-modern music'. See Messiaen in: Messiaen and Samuel (1976) pp. 105-106 (in English).

⁵ For my discussion of Boulez's attitude towards non-western musics see: this dissertation p. 247. To this list of neglected areas of music that Messiaen identifies, he adds orchestration and rhythm, the latter in particular stimulating much of Boulez's thought in the late 1940s and early 1950s. See Messiaen in: Messiaen and Samuel (1976) pp. 105-106 (in English). For my discussion of Boulez's early conception of rhythm see: this dissertation p. 61.

⁶ See: this dissertation p. 289.

⁷ ['objet'.] (My translation.) Schloezer, de (1947) p. 20. As I shall return to this point later. See: this dissertation p. 279.

primarily from 1956 onwards⁸ and who probably contributed towards Boulez's conception of analysis.

The only major example of Boulez's own analytical work is his analysis of the *Rite of Spring*, one of his earliest publications.⁹ In addition, he has made public the series of his own *Structure 1a* (1952) and occasionally provides fragmentary analytical remarks about his works. Between 1960 and 1963, he taught composition and analysis at Basel. During this time, he analysed Berg's *Wozzeck* (1914-22), Stockhausen's *Gruppen* (1955-57), Webern's Second Cantata (1941-43), Debussy's Etudes for piano and one movement of Boulez's own *Pli selon pli* (1958-), amongst other works. Only brief notes of these lectures remain.¹⁰

The following discussion of Boulez's approach to analysis is drawn from numerous sources, in particular 'Discipline et communication' (1961), 'Question d'héritage' (1971), the second chapter of *Jalons* (1989) entitled 'Idée, réalisation et métier' and the unpublished 'Mémoire et création' (1989).¹¹ Throughout this section, I shall use the convention he employs of referring to the single musical work as the object of analysis. This convention can appear a little confusing at times, as the composer does not merely consider one inherited work when composing a new composition but a broader history of works. However, it does serve to simplify his explanation. For this reason, I have retained this feature.

1. First stage of the dialectic: Sedimentation, doubt and 'éclats'

Musical analysis, often identified by Boulez in the most general sense of the 'commentary', refers to any literary text or graphic illustration attached to a musical work which purports to 'comment'¹² upon or describe a work or aspects of a work.

⁸ See: this dissertation p. 33.

⁹ See: Boulez (1953a).

¹⁰ These lectures notes are held at the Paul Sacher Archive in Basel, Switzerland.

¹¹ See: Boulez (1961c), Boulez (1971c), Boulez (1989a) and Boulez (1989b) respectively.

¹² On occasion, Boulez uses the term 'commentary' ['commentaire'] to refer to an analytical text. This term is present in several of the quotations in this section. In the context of this section, one should understand the term 'commentary' as a text which informs the listener's understanding of a

Its length can range from an in-depth technical and interpretative analysis to, theoretically, merely the title itself. As I shall show later, analysis does not have to attempt to take a complete approach to the work. For example, one can choose to consider a specific feature of a work, or works. Nor does analysis require the strict application of a particular analytical method.

Sedimented analytical techniques

In chapter III,¹³ I established that Boulez claims that the composer cannot create something from nothing and consequently he must begin by taking the inherited material as his point of departure. As a result of this, analysis takes on a fundamental role in the compositional process, as it defines the relationship of the composer to the inherited musical material. Indeed, the vast majority of Boulez's writings on musical analysis consider it from the composer's perspective.¹⁴ It is, therefore, concerned with the practical approach taken by the composer towards understanding history and not merely a task undertaken for itself.¹⁵ This compositional perspective is not, unfortunately, stated clearly and therefore confusion can arise in understanding his writings on this matter. Breatnach notes this aspect when she writes that for Boulez 'musical analysis serves a double purpose: it enables an artist to clarify his own position in relation to the works analysed [...] and at the same time helps to liberate him artistically. Moreover, in analysing the work of one's predecessors, one inevitably establishes a relationship with the past'.¹⁶

completed work/s (or feature/s of a completed work/s) rather than the composer's initial vision of a projected work.

¹³ See: this dissertation p. 144.

¹⁴ This tendency (to view musical matters from the composer's perspective) can also be seen in his approach to writing a music history. See: this dissertation p. 229.

¹⁵ I should be noted that Boulez does not seek to define and limit the possible scope of musical analysis to his own compositional approach towards analysis. He explicitly acknowledges the validity of other forms of analyses that are not undertaken as a means of composition. He stresses that 'one cannot fix the goals of musical analysis. Musical analysis can serve many people to try and perceive the content and the form of a work. [‘On ne peut pas fixer de buts à l’analyse musicale. L’analyse musicale peut servir à beaucoup des gens pour essayer de percevoir le contenu et la forme d’une œuvre.’] (My translation.) Boulez in: Boulez and Tétaz (1985) p. 5.

¹⁶ Breatnach (1996) pp. 6-7 (in English).

Although Boulez insists on the importance of some kind of analysis as a prelude to musical composition, from his earliest writings on this subject he rejects the notion of employing a fixed - i.e. sedimented - analytical technique. The problem with this, Boulez suggests, is that it can be executed in an unthinking passive manner which amounts to:

counting the fruits of a tree, or describing them without taking into account the tree itself and ignoring its process of fruit-bearing. We are saturated with immense tables of ridiculous symbols, mirrors of nothing, fictitious timetables of trains which never leave!¹⁷

This problem manifests itself in the empirical approaches to musical analysis which disregard the specificity of the particular musical work in hand. Rather than entering the individual musical universe of the given work, the analyst merely adopts an empirical attitude to the work. Boulez claims that this approach contains within it a 'germ of academicism' which is 'dangerous'.¹⁸ Adorno identifies the same problem when he writes that analysis 'easily associates itself in music with the idea of all that is dead, sterile and farthest removed from the living work of art.'¹⁹

2. Second stage of the dialectic: Doubt and speculation

One can understand Boulez's insistence upon retaining mobility within analysis as a manifestation of the principle of 'doubt'. The analyst must proceed without falling into analytical 'clichés' and instead constantly doubt his relationship to the work in question. This constitutes Boulez's call for 'self-criticism' in the process of analysis (and, in turn, in composition).²⁰

¹⁷ ['à compter les fruits d'un arbre, ou à les décrire sans tenir compte de l'arbre lui-même et en ignorant impavide le processus de fécondation. Nous sommes saturés de ces immenses tableaux aux symboles dérisoires, miroirs de néant, horaires fictifs de trains qui ne partiront point!'] (My translation.) Boulez (1963b) p. 12 (in French) and p. 17 (in English).

¹⁸ ['un germe d'académisme, le plus dangereux de tous'.] (My translation.) Boulez (1961c) p. 383 (in French) and p. 122 (in English).

¹⁹ Adorno (1982) p. 171 (in English).

²⁰ ['autocritique'.] For an example of Boulez calling for 'self-criticism' in the analytical process see: Boulez (1961c) p. 384 (in French) and p. 123 (in English).

Whilst Boulez rejects the unthinking application of a rigid analytical method, he nevertheless advocates that one should begin by some type of 'technical analysis', alternatively called 'vocabulary analysis'.²¹ This is the stage at which the analyst makes himself acquainted with the musical features of the work by breaking it down into its constituent elements (*éclatement*).²² Boulez argues that this aspect of analysis can be taught and constitutes the analyst's 'tools'²³ with which he begins his approach to the work. In the most general terms, this concerns what he calls the 'alphabet' (presumably the details of the musical vocabulary²⁴), any *a priori* grammar (if applicable) and all aspects on an 'elementary' level.²⁵

This stage of 'technical analysis' is equivalent to the dissociation (or 'analysis') of a concept into its constituent elements that I considered in chapter III. It involves the attempt to break the complex inherited material into its simple parts. He describes this first step as consisting of 'the most minute and exact observation possible of the musical facts confronting us'.²⁶

As in his conception of musical composition,²⁷ Boulez continues by advocating speculation upon the inherited material of the chosen musical work during analysis. One must focus upon the details of musical material itself rather than non-musical aspects that are only associated with the music. Otherwise, one imposes an idea onto the music itself that is foreign to it. There are several types of approaches to analysis that Boulez argues often fail to begin in this way which introduce concepts from philosophy, sociology, psychology or provide a poetic description.

²¹ Boulez (1971c) p. 118 (in English).

²² See: this dissertation p. 174.

²³ ['outils'.] (My translation.) Boulez in: Boulez and Tétaz (1985) p. 5.

²⁴ For my discussion of Boulez's concept of 'vocabulary' see: this dissertation 323 (footnote).

²⁵ ['l'alphabet, la grammaire, toutes les choses élémentaires'.] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 46.

²⁶ ['l'on se doit de partir d'une observation aussi minutieuse et aussi exacte que possible des faits musicaux qui nous sont proposés'.] (My slightly modified translation.) Boulez (1963b) p. 14 (in French) and p. 18 (in English).

²⁷ I refer to my earlier examination of Boulez's advocacy on using models based on the material of sound alone. See: this dissertation p. 181.

Philosophical analyses, more often than not, display the analyst's misunderstandings of philosophy and often lead towards 'naivete' and 'pretentiousness'.²⁸ These misunderstandings are due to a lack of education in philosophy compared to that of music.²⁹ Psychological analyses, Boulez argues, are flawed, as they are dependent upon a generally accepted system of conventions which trigger certain associative reflexes. If the system of conventions is lost, he argues, all that would remain are effects that imitate human reactions, which exist outside music. He is most scathing about what he calls the 'poetic analysis'. He argues that one arrives at 'half-technical, half-literary commentaries, where one finds precisely nothing that is truly technical and nothing truly poetic.'³⁰

Boulez suggests that commentators who attempt to concentrate on 'exterior'³¹ factors other than the music itself often seem 'embarrassed'³² by music's apparent lack of meaning and social function.³³ To these 'commentators', he emphasises that 'music cannot undertake the exposition of rational ideas; it does not support any of them, or supports all of them, without discrimination: it betrays its own nature in trying to use concepts which are foreign to it.'³⁴

In his insistence upon primarily focusing upon musical matters, Boulez's approach is comparable that of de Schloezer. De Schloezer criticises the approach to music which neglects the music itself and instead forces the music to become a means (for

²⁸ I refer to the following line: 'the naivety would be disarming if it was not sometimes so outrageously pretentious.' [*la naïveté serait désarmante si elle n'était parfois outrageusement prétentieuse.*] (My translation.) Boulez (1985a) p. 28.

²⁹ The exception Boulez cites is that of Adorno, who was trained in both philosophy and music. See: Boulez (1985a) p. 28 (in French). Boulez also warns of confusing aesthetic ideas with sociology in an article dating from 1976. See: Boulez (1976a) p. 236 (in French) and p. 260 (in English).

³⁰ See Boulez in: Boulez and Menger (1990) p. 10 (in English).

³¹ [*'vue extérieurs'*.] (My translation.) Boulez (1963d) p. 550 (in French) and p. 81 (in English).

³² [*'gênait'*.] *Ibid.*

³³ One of the main culprits in providing commentaries that concentrate upon extra-musical factors are composers themselves, describing their own works. These commentaries are written in order to facilitate comprehension of the work as well as to legitimise the work – Boulez refers to this type of commentary as 'texts of excuse, of camouflage'. (My translation.) See Boulez in: Boulez and Szendy (1993) p. 141 (in French).

³⁴ [*'la musique ne saurait prendre en charge l'exposé d'idées rationnelles; elle n'en supporte aucune, ou les supporte toutes, sans discrimination: on trahit sa nature en essayant de la rendre responsable de*

the listener) of 'abandoning himself to a vague euphoria both sentimental and sensual, crossed by fleeting emotions, by momentum without objects, by internal impressions'.³⁵ De Schloezer rejects this because it involves listening to music for its result³⁶ and does 'not serve to determine the essential traits of the musical fact'.³⁷ To counter this, he proposes that music should be studied as a real object, as in painting, not in its responses.³⁸ By doing this 'the concrete offers to thought a resistance of another order than the vague, the mobile, although not less obstinate'.³⁹ Described in this way, de Schloezer comes close to depicting a dialectical conception of analysis shared by Boulez. One must dialectically confront the reality of the inherited musical material which is presented in the form of a musical work.

However, it should be recognised that Boulez does not completely dismiss analyses that draw from other fields. Notably, he writes of Adorno's texts in positive terms and also seems favourable to applying semiotic analysis, drawn from literature, to music.⁴⁰ With regard to drawing from other art-forms as a means of stimulating music analysis, Boulez is similarly positive. As I have noted before on several occasions, his reflections on non-musical art-forms have stimulated much of his own aesthetic conception of music. He insists, however, that one can only draw underlying structural parallels or equivalences with other art-forms. These parallel structural levels are not identical to each other, so care must be taken to consider the differences between art-forms and not crudely transpose similar ideas. Boulez finds this concern for structural principles particularly in the writings of Klee.⁴¹ Klee,

concepts qui lui sont étrangers.' (My translation.) Boulez (1963d) p. 550 (in French) and p. 81 (in English).

³⁵ ['l'auditeur généralement se contente de s'écouter ou plutôt de s'abandonner à une vague euphorie à la fois sentimentale et sensuelle, traversée d'émotions fugaces, d'élans sans objets, d'impressions internes'.] (My translation.) Schloezer, de (1947) pp. 17-18.

³⁶ See: *ibid.*, p. 18 (in French).

³⁷ ['ne peut nous servir à déterminer les traits essentiels du fait musical'.] (My translation.) *Ibid.*, p. 19.

³⁸ See: *ibid.*, p. 20 (in French).

³⁹ ['le concret offre à la pensée une résistance d'un autre ordre que le vague, le mobile, mais non moins obstinée.'] (My translation.) *Ibid.*

⁴⁰ See Boulez in: Boulez and Tétaz (1985) p. 5 (in French). Boulez suggests that semiotic analysis is underdeveloped in music, with the exception of Nattiez's work.

⁴¹ To Klee, I would also add Mallarmé who drew considerably from his reflections on 'Music'. For my earlier discussion of this see: this dissertation p. 252.

Boulez argues, acknowledges that music and painting both have their 'specificity' and that 'the relation between them can only be structural in nature.'⁴² Klee draws from other disciplines in order to illuminate further his ideas upon his own discipline of painting. In this respect, Boulez suggests, his commentaries on art are unusual, as they genuinely reflect on his own discipline.⁴³

I have established that Boulez stresses that one should primarily concentrate on making oneself acquainted with the musical features themselves rather than extra-musical factors. I would now like to consider the approach he advocates towards speculating upon the musical work.

Taking a 'global' view

At Basel in the early 1960s Boulez favoured an approach to analysis that drew from Gestalt Theory.⁴⁴ He concentrated on the overall shape and features of a given work and attempted to 'obtain a bird's eye view of the whole procedure and see how a composer contrives to formulate his thinking by means of such a system'.⁴⁵ According to Boulez:

By far the most important thing is to observe the existence of points shared by different structures, and to mark the different areas of a work composed of such-and-such characteristics; to see how, in one section, certain features are avoided only to be concentrated in a future development; to follow, for instance, the interferences that may arise between forms or structures.⁴⁶

⁴² ['spécificité' 'la relation entre eux peut être seulement de nature structurale.'] (My translation.) Boulez (1989c) p. 44.

⁴³ Boulez writes that most writings on the arts are usually really about another subject, e.g. Claudel's are humanistic, phantasmatic reflections. See Boulez in: Boulez and Menger (1990) p. 10 (in English).

⁴⁴ See: Boulez (1971c) p. 117 (in English). In this recourse to Gestalt Theory, Boulez's approach is similar to that of De Schloezer. For an example of De Schloezer's use of Gestalt Theory see: Schloezer, de (1947) pp. 53-54 and pp. 113-114 (in French).

⁴⁵ Boulez (1971c) p. 116 (in English).

⁴⁶ *Ibid.*, p. 117.

In this Gestalt approach to analysis, one attempts to see the features of the work within its globality and not merely consecutively. This means that one does not merely *describe* the features but attempts to understand them in their relationship to the other parts and to the overall Gestalt itself. In an article from 1971, he emphasises this need not only to analyse moment by moment musical objects but also to proceed to 'the more general plane of musical objects, local structures and overall formal relationships.'⁴⁷ This understanding requires the introduction of 'intuition', a key idea I examined in chapter III,⁴⁸ on the part of the analyst in order to perceive the links between different structures and sections.⁴⁹

In 1989 Boulez repeats that one should begin analysing a work by describing its overall form. This involves examining the different sections and their details.⁵⁰ However, he provides more information on other aspects of his approach to analysis, aspects that I would like to consider in the third stage of Boulez's dialectical conception of analysis: synthesis.

⁴⁷ *Ibid.*, p. 118.

⁴⁸ See: this dissertation p. 187.

⁴⁹ For further details on the role of intuition in Gestalt Theory see: this dissertation p. 187. In addition, Boulez notes that, in respect to modern music (particularly Webern), the most didactic works are the most analysed as they are the simplest to find formal schemas. This results in Webern's works often being analysed because each note is determined with strict logic. Boulez considers that the most important aspects of invention and Webern's obsession to reduce the musical knowledge to its barest can easily escape analysis. See: Boulez (1971c) p. 116 (in English). Boulez makes the same point in 1991, contrast Webern's 'extreme clarity and extreme legibility' with Berg's 'concealed references'. I refer to Boulez statement that 'Webern *shows* us what he makes whereas Berg conceals what he makes. There is in Berg something *voluntarily* esoteric, even beyond the concealed references.' Berg puts more in than you can hear at a first listening. 'Webern, to the contrary, is the extreme clarity and extreme legibility'. ['Webern nous *montre* ce qu'il fait, tandis que Berg s'applique à cacher ce qu'il fait. Il y a dans Berg quelque chose de *volontairement* ésotérique, au-delà même des références cachées. [...] Webern, au contraire, c'est l'extrême clarté, l'extrême lisibilité.'] (My translation.) Boulez in: Boulez and Szaersnovicz (1992) p. 44.

⁵⁰ See: Boulez (1989b) pp. 43-44 (in French). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

3. Third stage of the dialectic: ‘general principles’ and ‘synthesis’

Throughout all of his writings on music analysis, Boulez stresses that one must go beyond the level of describing *what* is there and instead seek to ascertain *why* it is there. The ‘*why*’ (alternatively called the stage of ‘analytic *interpretation*’)⁵¹ can only be discerned after ‘analysing’ the work into its constituent parts and attempting to speculate upon the material. It constitutes, therefore, the third stage of the dialectic at which one arrives at the ‘general principles’ of a given work.⁵² Boulez describes this stage as ‘finding a schema, a law of internal organisation which takes account of these [musical] facts with the maximum coherence’.⁵³ In short, one should seek to identify the *necessity* and the function leading to the creation of a particular work.

Although one should seek to arrive at general principles, Boulez does not claim that other, less complete, analyses are without value. Indeed, in practice, he argues against the assumption that analysis should always be exhaustive. One can pursue one’s own particular interests and focus upon secondary details of works. The key to understanding his openness towards what he calls ‘partial’ or ‘false’ analyses is that there is no correct ‘answer’ of what the work ‘means’ – i.e. what the composer originally intended to express. He makes this clear when he writes that ‘it is not a matter of finding an objective why and reconstituting the supposed approach of the composer’.⁵⁴ Rather than ‘limiting the work to the limits of the author’s creative

⁵¹ Boulez typically contrasts what he calls ‘the *why*’ with the preliminary stage of mere describing *what* is there. [‘*l’interprétation analytique*’] (My translation.) Boulez (1961c) p. 383 (in French) and p. 122 (in English).

⁵² For my earlier discussion of the idea of ‘general principles’ see: this dissertation p. 198.

⁵³ [‘il s’agit ensuite de trouver un schéma, une loi d’organisation interne qui rende compte, avec le maximum de cohérence, de ces faits’.] (My slightly modified translation.) Boulez (1963b) p. 14 (in French) and p. 18 (in English).

⁵⁴ [‘Il ne s’agit pas de trouver un pourquoi objectif et de reconstituer la démarche supposée du compositeur’.] (My translation.) Boulez (1989b) p. 44. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

imagination: a paralysing constraint',⁵⁵ one dialectically engages with the composer through his resulting work and this 'propels' one to develop one's own approach.⁵⁶ Boulez clearly states that one should seek to find 'not a general truth but a particular truth, transitory, and grafting his own imagination on the imagination of the analysed composer.'⁵⁷ This is what he means when he writes that 'the false analysis is the most revelatory of a personality.'⁵⁸ I shall return to this statement shortly.

Boulez's conviction in the usefulness of false analyses has strengthened since he first stated it in 1961: 'I would almost say that inferences that are false but full of future possibilities are more useful than those that are correct but sterile.'⁵⁹ During the 1980s, he remains hesitant, claiming in 1989 that 'the productive analysis is probably, in the most casual case, the *false* analysis'.⁶⁰ By 1993, Boulez appears to have greater belief in the 'false analysis' to the point of advocating it, when he claims that 'I have always said that the analysis that seems to me the best was the creative, inventive analysis, that which draws different conclusions from those of the author. The creative analysis is the analysis which *falsifies*.'⁶¹

⁵⁵ ['de circonscrire fermement l'œuvre dans les limites de l'imagination créatrice de cet auteur: contrainte paralysante'.] (My translation.) Boulez (1963b) p. 13 (in French) and p. 18 (in English).

⁵⁶ In an attempt to avoid this limiting approach to his own works, Boulez has rarely provided analyses of his works. He writes that 'I have practically never given the key to my works: I find that it is much more interesting if there are misunderstandings.' ['je ne donne pratiquement jamais la clef de mes œuvres'.] Boulez in: Boulez and Nattiez (1982) p. 195.

⁵⁷ ['trouvant dans l'œuvre non pas une vérité générale, mais une vérité particulière, transitoire, et greffant sa propre imagination sur l'imagination du compositeur analysé.'] (My translation.) Boulez (1989a) p. 37.

⁵⁸ ['L'analyse fausse est la plus révélatrice d'une personnalité.'] (My translation.) Boulez in: Boulez and Nattiez (1982) p. 195.

⁵⁹ ['Je dirais presque que des conséquences fausses, mais riches d'avenir, sont plus utiles que des conséquences justes, mais stériles.'] Boulez (1961c) p. 383 (in French) and p. 122 (in English). He makes essentially the same point specifically in relation to analyses that seek only the original composer's intentions, which he attacks for not being 'fruitful'. ['fructueuse'.] (My translation.) Boulez (1963b) p. 13 (in French) and p. 18 (in English).

⁶⁰ ['L'analyse productive est probablement, dans le cas le plus désinvolte; analyse *fausse*.'] (My translation.) Boulez (1989a) p. 37.

⁶¹ ['J'ai toujours dit que l'analyse qui me semblait la meilleure était l'analyse créatrice, inventive celle qui tire des conclusions différentes de celles de l'auteur. L'analyse créatrice est l'analyse qui *fausse*.'] Boulez in: Boulez and Szendy (1993) p. 137.

Having established that Boulez argues that the false analysis is justified in order to develop one's own ideas, he nevertheless criticises analyses of his own *Structures* (1952) for taking this approach. He writes that 'the conclusions [of the analyses] were false in relation to what was really there' in that they neglected his desire to avoid all tradition and to create a unified language. ['des conclusions

The claim in the last quotation, that one should be able to draw different conclusions to the author, is a crucial element in Boulez's approach and one I would like to examine next.

The unforeseen and 'self-definition'

The 'general principles' drawn from the work in question propels the analyst towards new compositional territories previously unforeseen. Boulez argues that, at least for himself as a practising composer, 'musical analysis is that which permits us to draw lessons from the work we are analysing.'⁶² He writes that:

Once any phenomenon, however embryonic, is discovered in a score, the student must apply his intelligence and his logical faculties to deduce its possible future consequences. He must in fact extrapolate, and this is primarily a question of intuition, creative intuition.⁶³

An appreciation of this element of 'deduction' is crucial to understanding Boulez's conception of the role of analysis.

The term 'deduction' [déduction] is littered throughout Boulez's writings dating from the late 1980s onwards.⁶⁴ This deduction is based on what he calls 'active memory'⁶⁵ because one actively 'deduces' the underlying general principles governing the musical universe of a given work. This is in opposition to the approach that merely accepts the work as what is given: a sedimented form. Clearly, 'active memory' is a synonym for 'doubt' I considered in chapter III: whilst

passablement fausses par rapport [...] à ce que j'ai fait réellement.' (My translation.) Boulez (1963e) p. 564.

⁶² ['l'analyse musicale est ce qui doit nous permettre de tirer les leçons de l'œuvre que nous analysons.' (My translation.) Boulez in: Boulez and Tétaz (1985) p. 5.

⁶³ ['A partir d'un phénomène, même embryonnaire, constaté dans une partition, il conviendrait d'appliquer son esprit, et sa logique, et de déduire les conséquences possibles en vue du futur. Il s'agit en somme d'extrapoler: l'intuition, l'intuition créatrice'.] Boulez (1961c) p. 383 (in French) and p. 122 (in English).

⁶⁴ It is particularly used in *Jalons* (1989), a fact demonstrated by its inclusion in the index.

⁶⁵ ['mémoire active'.] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 46.

recognising that the inherited material (memory) is unavoidable, one must 'forget' it by making it *necessary*. One can see that deduction re-introduces the fields of possibility open to the composer during analysis and composition. These possibilities, which include the inherited conceptions of the potentialities of the particular formal, thematic, harmonic and instrumental materials,⁶⁶ are typically described as the 'labyrinth' of the work.

The 'labyrinth', a concept probably derived from the *nouveau roman* movement,⁶⁷ is a metaphor that depicts the musical work as an object containing both unachieved paths (in that its composer declined to choose particular developments in favour of others) and unforeseeable paths.⁶⁸ He writes that 'it remains essential [...] to safeguard the potential of the unknown enclosed within a masterpiece.'⁶⁹ In other words, one must not eliminate this 'potential of the unknown' by concentrating exclusively upon the composer's intentions. However great the composer, Boulez argues, he could not have conceived all the consequences of his actions.⁷⁰

The goal of this 'deduction', and of the analytical process itself, is to arrive at the composer's 'thought'. Boulez writes:

Our study [of a given musical work] would only become sterile if it did not seek to examine the composer's *thought*, in its most general sense. Who could be capable of deduction by

⁶⁶ See: Boulez (1989b) p. 43 (in French). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

⁶⁷ I considered the influence of the *nouveau roman* on Boulez's conception of mobile form in chapter II. See: this dissertation p. 119.

⁶⁸ For my consideration of Boulez's use of the metaphor of the 'labyrinth' see: this dissertation p. 119.

⁶⁹ ['il reste primordial [...] de sauvegarder le potentiel d'inconnu enclos dans un chef-d'œuvre.'] (My translation.) Boulez (1963b) p. 13 (in French) and p. 18 (in English). This 'unknown potential' which future composers will explore is the hallmark of the lasting masterpiece. Boulez writes that what makes a work 'privileged' over centuries 'is, principally, the incitement to something else, the force of engenderment, the refusal of immobility, the potential of fermentation that it possesses. ['privilegiée' 'est, principalement, l'incitation à autre chose, la force d'engendrement, le refus qu'elle oppose à l'immobilité, le potentiel de fermentation qu'elle possède.'] (My translation.) Boulez (1989b) p. 22. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

⁷⁰ See: Boulez (1963b) p. 13 (in French) and p. 18 (in English).

any other way? Deduction is only made possible by a sufficiently “abstract” view of details and particular procedures, which it *reduces* to an initial generative act.⁷¹

During analysis, one seeks to go beyond the material of sound itself to reach back, through the labyrinth, to the composer’s original Idea and intentions.⁷² However, Boulez recognises that this is an impossible target. He writes that ‘[a]nalysis is the pursuit – vain, without doubt, in the absolute – of the labyrinth which joins the idea to the realisation.’⁷³ The path that led the composer from the initial idea to the realisation inevitably ‘burns’ away and disappears ‘to become a work’.⁷⁴ Consequently, it is through the task of seeking to reduce a given work to an ‘initial generative act’ that one arrives at a better understanding of one’s own practice.

However, this understanding of Boulez’s conception of analysis neglects an Existential aspect evoked by his deliberate use of specific terminology. In an article dating from 1961, he expresses succinctly his definition of analysis: ‘[t]he profound object of analysis is self-definition by the intermediary of another.’⁷⁵ As I considered in chapter III,⁷⁶ the concept of self-definition alludes to the Existential notion that one defines oneself (one’s ‘Being’) through that which one encounters and the

⁷¹ [‘Notre étude ne serait que stérile si elle ne visait à rechercher la *pensée* du compositeur, dans ce qu’elle a de plus général. Qui serait, autrement, capable de déduction? Cette dernière n’est rendue possible que par une vue suffisamment “abstraite” des détails et des procédés particuliers, qu’elle *réduit* à une démarche génératrice.’] (My translation.) Boulez (1963d) p. 540 (in French) and p. 72 (in English).

⁷² Elsewhere, Boulez writes that the analyst must seek the ‘relationship that may exist between the expression of a form and the content of the composer’s thought.’ Boulez (1971c) p. 116 (in English). Although this statement appears to contradict Boulez’s assertion that the analyst only seeks the composer’s thought, I would argue that this is because these statements address different issues. Whereas the task of analysis is to seek the composer’s thought, the value of the work itself is determined by the ‘consistency’ or coincidence between its form and the composer’s thought (i.e. its ‘professionalism’) For my consideration of the idea of ‘professionalism’ see: this dissertation p. 34.

⁷³ [‘l’analyse est la poursuite – vaine, sans doute, dans l’absolu – du labyrinthe qui joint l’idée à la réalisation.’] (My translation.) Boulez (1989a) p. 36.

⁷⁴ [‘il est brûlé par la réalisation [...] pour devenir une œuvre’] (My translation.) *Ibid.*, p. 33.

⁷⁵ [‘Ce que l’on recherche profondément par l’analyse, c’est se définir soi-même par l’intermédiaire d’un autre.’] Boulez (1961c) p. 383 (in French) and p. 123 (in English). Boulez makes a similar statement almost thirty years earlier: ‘Analysis permits the revelation of oneself to oneself’. [‘Ce que l’analyse permet, c’est d’abord la révélation de soi à soi’] (My translation.) Boulez (1989a) p. 64. It should be noted, however, that Boulez does not insist that one’s relationship to works of the past is purely utilitarian. In his conversations with Deliège, he also recognises that one also attempts to grasp what is ‘permanent’ in the works. [‘saisir ce qu’il y a en elles de permanent.’] (My translation.) Boulez in: Boulez and Deliège (1975) p. 34.

choices that one makes. Note also, in this statement, that Boulez refers to the composer of the inherited music and not to the musical work itself ('the intermediary of *another*'). This characteristic feature of his conception of analysis recalls his view of music history as the history of individual personalities and not as a series of masterpieces.⁷⁷

There are two notable examples Boulez cites which support his claim that it is through the intermediary of another that one defines oneself. In the first example in which he paraphrases an argument made by Proust, note the presence of the term 'existence', an indication of Boulez's existential perspective on this issue:

in reading a book you discover yourself, and what you discover is that of which you have need. The only thing in which a writer himself can take delight, adds Proust, is that his work is capable of helping someone to live his own existence. To that I subscribe completely.⁷⁸

In the second example, Boulez quotes from an essay by Michel Butor on Baudelaire. Butor writes that:

Certain people may suggest perhaps that, in wanting to speak of Baudelaire, I have only succeeded in speaking of myself. It would certainly be better to say that it is Baudelaire who was speaking of me. *He is speaking of you.*⁷⁹

In the same article in which Boulez quotes from Butor, he explains how he understands this idea in practice. He argues that 'it is the evolution of our own thought that we see described, with varying success, in those studies which set out,

⁷⁶ See: this dissertation p. 196.

⁷⁷ See: this dissertation p. 233.

⁷⁸ ['qu'en lisant un livre vous vous découvrez vous-même, et ce que vous y découvrez, c'est ce dont vous avez besoin. La seule chose dont un écrivain puisse se réjouir, ajoutait Proust, c'est que son œuvre soit capable d'aider quelqu'un à vivre sa propre existence. À quoi je souscris entièrement.'](My translation.) Boulez in: Boulez and Cott (1985) p. 151.

⁷⁹ ['Certains estimeront peut-être que, désirant parler de Baudelaire, je n'ai réussi à parler que de moi-même. Il vaudrait certainement mieux dire que c'est Baudelaire qui parlait de moi. *Il parle de vous.*'](My modified translation.) Boulez (1961c) p. 383 (in French) and p. 123 (in English). Boulez quotes, without reference, from Butor's essay on Baudelaire in Boulez's 'Discipline and communication' This originally appears in a note ('Autre notre') in Butor (1961a) p. 267. The italics that appear in the last line ('*il parle de vous*') are added by Boulez.

above all, to examine the recent past.’⁸⁰ One cannot divorce oneself from the past and look at a given work ‘objectively’ because one’s relationship to the past is dialectical.

Conclusion

In conclusion, I would like to consider a statement in *Penser la musique aujourd’hui* (1963) in which Boulez defines the ‘indispensable constituents of an active analytical method’:

It must begin with the most minute and exact observation possible of the musical facts confronting us; it is then a question of finding a schema, a law of internal organisation which takes account of these facts with the maximum coherence; finally comes the interpretation of the compositional laws deduced from this particular application.⁸¹

Boulez stresses that all these three elements are required: analysis must involve some type of technical analysis as well as a search for the ‘law of internal organisation’ and interpretation.⁸² The first two constituents of an active analytical method are the first and third stages of the dialectic (doubt/éclats and synthesis to general principles). The third stage of the dialectic (synthesis to general principles) is, of course, achieved through the speculative process of stage two. The final constituent Boulez describes in the passage above – the interpretation of compositional laws – suggests that the consequences drawn from the particular work should be placed within a broader context. This echoes one of the primary lessons Boulez attributes to Messiaen: the importance of considering ‘the historical

⁸⁰ [‘C’est donc l’évolution, le devenir de notre propre pensée que nous avons vu, tant bien que mal, s’inscrire dans des études qui se proposaient, avant tout, de scruter un proche passé.’] Boulez (1963b) p. 14 (in French) and p. 19 (in English).

⁸¹ [‘les constituants indispensables d’une méthode analytique active’ ‘l’on se doit de partir d’une observation aussi minutieuse et aussi exacte que possible des faits musicaux qui nous sont proposés; il s’agit ensuite de trouver un schéma, une loi d’organisation interne qui rende compte, avec le maximum de cohérence, de ces faits; vient, enfin, l’interprétation des lois de composition déduites de cette application particulière.’] (My slightly modified translation.) *Ibid.*, p. 14 (in French) and p. 18 (in English).

⁸² See: *ibid.*

perspective indispensable to situate the musical language.’⁸³ However, unlike Boulez, Messiaen would *begin* by considering the cultural milieu and work towards the particular musical facts. In an interview with Samuel, Messiaen discusses his typical approach to analysing an opera:

We place its psychological climate, previous events that have influenced it and, in another sense, its posterity. For an opera, we are concerned with theatre, with the disposition of scenes, the division of the text, the orchestration, the instrumental forces, the vocal writing, the language of the composer (harmony, melodic lines, rhythmic system) and with form.⁸⁴

Clearly, this contradicts Boulez’s insistence upon concentrating primarily upon the musical features rather than extra-musical ideas, as advocated in the following passage by Boulez:

Can we ever resolve ourselves to lose context, to forget time which the history books remind us with omnipresent tyranny? Can we ignore the circumstances, banish them from our memory, bury them by forgetting them in order to be only guided by the interiority of the work? Can we, *from the start*, lose time in order to re-find it in all its validity?⁸⁵

Despite their differences in how they approached analysis, both Boulez and Messiaen manifest a highly personal and non-dogmatic conception of analysis. This is probably one of the main direct influences that Messiaen had on Boulez, as it is a feature Boulez identifies as characteristic of Messiaen’s analytical approach.⁸⁶

In summary, there are several points concerning Boulez’s conception of analysis I would like to make. Although his approach to analysis can be divided into three

⁸³ [‘la perspective historique indispensable pour situer le langage musical’.] (My translation.) Boulez (1992) p. 4.

⁸⁴ Messiaen in: Messiaen and Samuel (1976) p. 108 (in English).

⁸⁵ [‘Pourrons-nous jamais nous résoudre à perdre le contexte, à oublier le temps dont les manuels nous rappellent avec tyrannie l’omniprésence? Pourrons-nous ignorer les circonstances, les bannir de notre mémoire, les enfouir dans l’oublier pour ne nous guider que sur l’intériorité de l’œuvre? Pourrons-nous *d’abord* perdre le temps pour le retrouver alors dans toute sa validité?’] (My translation.) Boulez (1976a) p. 237 (in French) and p. 261 (in English).

⁸⁶ Boulez notes that the consequences Messiaen drew from analyses of work were very personal. See: Boulez (1992) p. 5 (in French).

theoretical stages, it must be recognised that these stages are blurred in practice. Following on from this, his proposal for musical analysis should not be misconstrued as constituting a strict analytical methodology. It is chiefly considered from the composer's perspective and has as its goal the 'revelation of oneself to oneself', an illumination and clarification of the composer's practice and place in history. It is therefore limited in its application and cannot, necessarily, be used to compare one work with another.⁸⁷

⁸⁷ It cannot compare works in the way that established analytical techniques can, such as Schenkerian Analysis or Set Theory.

3. TECHNIQUE

This section examines Boulez's proposal for a new musical technique, a central preoccupation displayed in his writings. I begin by considering his theoretical approach towards conceptualising the serial universe as a task in itself, the primary sources for the employment of new terminology and his objectives. Then, I investigate his proposal in detail. This entails looking at the specific terms he employs, their history, and how they fit into his overall theory. Due to the nature of the subject matter and for the purposes of clarity, this section does not follow the three-part dialectical model I identified in chapter III. Instead, I have concentrated on analysing the geometry of Boulez's musical language and, therefore, refer back to the dialectical model wherever appropriate.

Although I draw from a variety of texts, the principal source material of this section is *Penser la musique aujourd'hui* (1963). This is because it constitutes Boulez's most complete and detailed explication of his vision of musical technique.¹ *Penser la musique aujourd'hui* incorporates papers presented at Darmstadt in 1960 and, although it consists of two chapters, 'Considérations général' and 'Technique musical', proceeded by an introduction, 'De moi à moi',² Boulez originally intended to have six chapters. The 'missing' four chapters would have constituted the final four chapters and been created from the material published in the articles 'Temps, notation et code' (1960) 'Forme' (1960) and 'Conclusion partielle' (1960).

The first major question I would like to address concerning *Penser la musique aujourd'hui* is its raison d'être. Bradshaw, who co-translated the book from the original French, suggests several possibilities. First and most obviously, it can be considered as an attempt to justify Boulez's own musical technique. On this, I would point to his tendency towards presenting as 'objective' fact features that are part of

¹ Indeed, it is Boulez's only planned book in contrast to the collection of writings of *Relevés d'apprenti* (1966) and *Points de repères* (1981).

² Boulez (1960b); Boulez (1960c) and Boulez (1963a) respectively.

his own compositional practice. Second, Bradshaw suggests that Boulez's study was also a means of formulating his own thought after his earlier 'quasi-instinctive' works.³ I would agree with this and add that most of Boulez's writings, particularly in the 1950s and early 1960s, can be considered similarly. Third, Bradshaw argues that Boulez's writings on musical grammar, as found in *Penser la musique aujourd'hui*, are 'clearly intended as a musical manifesto, as well as a statement of intent'.⁴ In other words, it is not merely a summary of the direction of modern music, or a justification of existing serial works but, rather, aimed towards the composition of future works. This manifesto character, together with the extended description of all aspects of the musical language, has led to a common misunderstanding in the reception of Boulez's book: that it is a set of instructions to create a work. Charles writes that '[Boulez's] writings allot so much space to technique and risk being mistaken for catalogues of recipes'.⁵ This is despite Boulez's clear statement at the conclusion of his book that his study is not a 'recipe for manufacture' but 'by a methodical investigation of the musical universe, deducing multiple consequences from a certain number of rational points of departure, I have attempted to construct a coherent system'.⁶ This phrase is an excellent starting point to approach *Penser la musique aujourd'hui* in the context of this study. It succinctly encapsulates Boulez's dialectical method and clearly displays the two elements of 'analysis' (dissociation into constituent parts) and proliferation (or deduction) I examined in chapter III.⁷ The task that he sets himself, 'to construct a coherent system', is that of creating a new, completely *necessary* and consistent musical language based, in some way, on the serial principle. However, his project is not merely to rethink the musical language but radically to doubt and reconstruct the way in which music is conceived.

³ Bradshaw (1986) p. 129 (in English).

⁴ *Ibid.*, p. 140 (in English).

⁵ Charles (1965) p. 146 (in English).

⁶ ['me livrant à une investigation méthodique de l'univers musical, déduisant des conséquences multiples d'un certain nombre de points de départ rationnels, j'ai tenté de construire un système cohérent.'] (My translation.) Boulez (1963b) p. 166 (in French) and pp. 142-143 (in English).

⁷ One notes, in particular, the marked similarity between this and the key ideas that Boulez highlights in Klee's writings. For my earlier examination, see: this dissertation p. 213.

To this end, Boulez proceeds by doubting the inherited concepts used to describe music and then proceeds to create new concepts, i.e. new terminology. These new concepts, which avoid reproducing the tonal assumptions and archaisms of traditional concepts, help Boulez to map out the entirety of musical possibilities available to the composer at the time of writing. For example, a key concept Boulez employs is the 'field'.⁸ This is clearly influenced by recent developments in music technology enabling composition outside equal-temperament and metrical rhythms. By mapping out the 'field' of possibilities in this way, he attempts to synthesise, that is reduce to general principles, the conceptual apparatus used to describe music in order to arrive at the possibility of a musical synthesis.

His task is to establish a more 'scientific' terminology⁹ to describe the possibilities of the serial universe, including mobile form, in terms that are more 'neutral' than inherited tonal terms.¹⁰ However, even in his first attempt to use new, scientific, terminology (in 'Aléa' (1957)), he stresses that this terminology only 'half applies to music'¹¹ and may cause misunderstandings. Nevertheless, he argues, these misunderstandings are an essential 'provisional risk'¹² in order to clarify the new musical universe open to the composer today.

There are three primary influences on Boulez's attempt to mapping-out the conceptual territory of the new musical technique. First, despite the more obvious introduction of terminology from other disciplines, he nevertheless continues to employ selected existing musical terms. Examples include those of pitch, intensity, textural indications (such as polyphony and monophony) and tessitura. These terms

⁸ I shall examine the notion of the 'field' shortly. See: this dissertation p. 304.

⁹ Philippot (1925-) a fellow Leibowitz student and good friend of Boulez, applauds Boulez's recourse to mathematical terminology in an article which lavishes praise on *Penser la musique aujourd'hui* (1963), describing it as 'infallible and definitive' (p. 155) as well as 'magisterial' (p. 155). See: Philippot (1966) pp. 159-160 (in English).

¹⁰ I use the term 'neutral' here to evoke Boulez's concept of neutral sounds (in which sounds can easily be placed within a hierarchy). I would suggest that neutral terms can, in a similar manner, form part of a total conception of the musical work and its composition. For my consideration of Boulez's idea of 'neutrality' see: this dissertation p. 347.

¹¹ ['ces termes s'appliquent tant bien que mal à la musique'.] (My slight modification.) Boulez (1957a) p. 416 (in French) and p. 34 (in English).

¹² ['risque provisoire'.] (My translation.) *Ibid.*, p. 416 (in French) and p. 35 (in English).

are typically re-defined by Boulez in a way that modifies their traditional meaning. The second source of terminology appears in the conspicuous adoption of mathematical terms. This is most likely to derive from Boulez's education in mathematics and is manifested in terms such as the 'field', 'module' and 'distribution'. The third primary source is acknowledged by Boulez to be Structuralism (alternatively known as Structural Linguistics).¹³ This is an area I would briefly like to consider further at this point before continuing.

Structuralism was a dominant intellectual influence in France in the early 1960s,¹⁴ the time of *Penser la musique aujourd'hui* (1963). Its founding father was the linguist Ferdinand de Saussure (1857-1913) whose book *Course in General Linguistics* (1916) had a highly significant impact on the course of post-war French thought. Whilst Boulez must have directly encountered the writings of Saussure in the late 1950s and early 1960s, there are a number of other writers I would like to mention who have influenced Boulez and who may be termed structuralist.

The most obvious structuralist is Claude Lévi-Strauss, the structural anthropologist, whose writings have been cited on several occasions by Boulez in articles dating from the early 1960s.¹⁵ Boulez may have initially encountered Lévi-Strauss's ideas through Leibowitz, as Lévi-Strauss and Leibowitz were friends.¹⁶ Michel Foucault, a friend of Boulez and often labelled as a post-structuralist due to his focus upon the instability of textual meaning, may have also contributed towards Boulez's knowledge of Structuralist theory.¹⁷ Another possible influence on Boulez's structuralist approach is Scherer's *L'Expression littéraire dans l'œuvre de*

¹³ Although not acknowledged at the time of writing, he acknowledges the structuralist influence on *Penser la musique aujourd'hui* (1963) in an interview from 1985. See Boulez in: Boulez and Tétaz (1985) p. 5 (in French). Boulez argues that the Structuralist influence was not absorbed by literal imitation but by a process of 'osmosis'. Boulez also adds that he has gone past this stage of Structuralism.

¹⁴ Rice and Waugh (1989) p. 22 (in English).

¹⁵ I examine elsewhere one idea of Lévi-Strauss quoted by Boulez in two separate articles that I consider expresses an important idea in Boulez's aesthetic approach. See: this dissertation p. 152.

¹⁶ Kapp (1988) p. 4 (in English).

¹⁷ Foucault's discourse theory considers the way discourses (e.g. aesthetics) make claims to value and power. He rejects the idea of history as teleological, and emphasises discontinuity instead. He rejects totalising theories such as Marxism and structuralism.

Mallarmé' (1947). Although Scherer's study begins by considering Mallarmé's influences and ends by attempting to place Mallarmé in a historical context, most of Scherer's book adopts an approach that prefigures structuralist linguistic analyses. He does not analyse any single poem in isolation, or consider the imagery or semantic meaning of Mallarmé's work. Rather, he examines its linguistic features such as punctuation, the usage of familiar words, the ways in which specific word types are employed (e.g. noun, article, adjective) in addition to the structures of phrases.

Boulez's adoption of Structuralist methodology is understandable as it shares many key ideas both with his dialectical conception of music and with his earliest artistic influences, particularly surrealism. Structuralism stresses the need to challenge inherited ideas, argues that there is an underlying 'deep structure' to the world (or language) which must be discovered and claims that this underlying structure shapes the way in which one thinks. Rice and Waugh describe this fundamental tenet of Saussure's Structural Linguistics:

Language, according to Saussure, is not a mere tool devised for the re-presentation of a pre-existent reality. It is, rather, a constitutive part of reality, deeply implicated in the way the world is constructed as meaningful.¹⁸

Having noted that *Penser la musique aujourd'hui* displays the influences of Structuralism as well as Boulez's mathematical background, it should be stressed that he was not the only music theorist seeking to replace old terminology and establish a coherent terminology to describe musical technique. Several writers in the post war period felt the need to improve and clarify inherited musical terminology by replacing it with their own.¹⁹ Arguably, one of the earliest examples was by Boulez's teacher, Leibowitz, in his book *Schoenberg et son école* (1947).²⁰ It is tempting to consider Leibowitz's book, perhaps itself influenced by his friend

¹⁸ Rice and Waugh (1989) p. 3 (in English).

¹⁹ For example, Craft. See: Craft (1958) pp. 58-62.

²⁰ For example, see Leibowitz's definitions of melody and rhythm. See: Leibowitz (1947) p. 3 (in English).

Lévi-Strauss, as a possible influence on *Penser la musique aujourd'hui* (1963). Another writer who attempted 'to define as strictly as possible the terms of the musical vocabulary'²¹ was de Schloezer in his book *Introduction à Jean-Sebastien Bach* (1947). However, I would argue that Boulez's book shares most closely the approach and ambition of establishing a comprehensive account of musical technique with Schaeffer's *Traité des objets musicaux* (1966). Written between 1950 and 1965,²² Schaeffer's book is much greater in scope than Boulez's, yet both display similarities. The most obvious similarity is the appropriation of linguistic theory. Indeed, unlike Boulez, Schaeffer frequently acknowledges ideas drawn from the writings of Jakobson and Saussure.²³

So far I have briefly set out the theoretical approach of Boulez in *Penser la musique aujourd'hui* and his overall aims. What follows is my attempt to clarify and place in context the ideas within his book.²⁴

Musical Technique: Morphology-Syntax / Rhetoric-Form

Boulez divides musical technique into the distinct categories of morphology and syntax. This distinction is drawn from linguistics and is the traditional division of grammar.²⁵ It differs from Schaeffer's distinction of Typology and Morphology primarily because Schaeffer is concerned with the classification of existing sounds, usually recorded sounds, rather than the creation of sound structures from scratch.²⁶ The first occasion on which Boulez uses the terms morphology and syntax (together

²¹ ['définir aussi strictement que possible les termes du vocabulaire musical.'] (My translation.) Schloezer, de (1947) p. 11.

²² Palombini (1993) p. 179 (in English).

²³ Roman Jakobson (1896-1982) was a structural linguist and a leading member of the Prague School. He was closely associated in the 1940s with Lévi-Strauss. See the entry for 'Jakobson' in: Matthews (1997).

²⁴ The only other attempt (to my knowledge) to clarify *Penser la musique aujourd'hui* (1963) is Bradshaw's short description. See: Bradshaw (1986) pp. 127-129 (in English).

²⁵ See the entry for 'grammar' in: Matthews (1997) (in English).

²⁶ I am drawing from Palombini's definition of Schaeffer's 'typology' and 'morphology'. Palombini writes that typology is concerned with isolating and classifying sounds and whereas morphology describes them. See: Palombini (1993) p. 66 (in English).

with rhetoric) is in 'Éventuellement' (1952).²⁷ In *Penser la musique aujourd'hui*, he focuses on morphology and syntax, although he mentions briefly a third category, rhetoric, and suggests a possible fourth, form. Nevertheless, I would emphasise that the main categories under which Boulez's account of musical technique is classified are those of morphology and syntax. I consider that it would be helpful to attempt to define these large-scale categories as Boulez employs them before examining his ideas on musical technique in more detail.

Morphology, in linguistics, refers to the analysis of the structure within words and not the role of the overall word within a sentence or the word order.²⁸ Boulez's use of the term 'morphology' shares some similarities with the linguistic definition. One can draw a parallel, for example, between the formation of a single word with the formation of a single sound 'object' by its various components (pitch, duration, dynamic, timbre). However, Boulez includes not only the components of a single sound object but also local structures, global structures and serial structures²⁹ under the category of 'morphology'. In linguistics, it would be incorrect to refer to the morphology of a sentence structure in a comparable manner to Boulez's description of the morphology of local and global structures, as this would fall under syntax. Therefore, I would argue that his usage of this term is closer to its etymological roots, i.e. the study of structure or form, than to linguistic usage. In his writings, morphology denotes that which is concrete and is often merely used as a synonym for form or structure. Therefore, morphology concerns features intrinsic to sound.

Syntax, on the other hand, is employed by Boulez to denote that which is abstract, i.e. syntactical rules, and refers to the ways in which structures are related to each other. Therefore, his usage of this term is close to the linguistic usage, in which syntax is defined as being concerned with the relationships between words within a

²⁷ For example, Boulez refers to 'the search for a dialectic between morphology, syntax and rhetoric'. ['Rechercher une dialectique entre la morphologie, la syntaxe, et la rhétorique'.] See: Boulez (1952c) p. 272 (in French) and p. 119 (in English).

²⁸ For example, the word 'singer' would be divided into 'sing' and '-er' which marks it as a noun denoting an agent. See the entry for 'morphology' in: Matthews (1997) (in English).

²⁹ I shall discuss local, global and serial structures shortly. See: this dissertation p. 310.

sentence, and not the individual formation of the words themselves.³⁰ Syntax is concerned with the extrinsic aspects of sound.

Morphology and syntax are the categories by which Boulez conceives his musical universe in *Penser la musique aujourd'hui*, and, moreover, in most of his early writings. I would suggest that this is primarily due to their implied focus upon practical matters rather than issues concerning meaning. Nevertheless, he emphasises that morphology and syntax are merely elementary stages of musical composition and that one should not confuse these categories of musical technique as meaningful in themselves. In both categories, questions of taste are demanded from the composer,³¹ stressing that 'it must be remembered that the real work of *composition* begins here, at a point where it is often thought that only applications have still to be discovered; all these methods must be given a *meaning*.'³²

Another term Boulez appears to use for 'meaning' is 'rhetoric'. In linguistics, rhetoric is a discipline concerned with the effective use of language, to persuade or give pleasure and is distinguished from grammar (under which fall the categories of morphology and syntax).³³ In an article from 1961, around the same time that he was working on *Penser la musique aujourd'hui*, Boulez pairs rhetoric with form.³⁴ The pairing of rhetoric and form is implied in his statement at the beginning of the 'Conclusion provisoire'. He writes that after his discussion of technique, one arrives at the 'threshold of form'.³⁵ This appears on the same page as the above quotation in

³⁰ See the entry for 'syntax' in Matthews (1997) (in English). Also, the study of any aspect of a text concerning meaning is called semantics.

³¹ For example, Boulez writes 'When we write a work, we use a coherent ensemble of morphology and syntactical functions; already, at this elementary stage, we have involved questions of taste.' ['Lorsque nous écrivons une œuvre, nous utilisons un ensemble cohérent de fonctions morphologiques et syntaxiques; déjà, à cet étage élémentaire, nous sommes amenés à faire preuve de goût'.] (My translation.) Boulez (1961a) p. 521 (in French) and p. 56 (in English).

³² Boulez (1963b) p. 142 (in English).

³³ See the entry for 'rhetoric' in: Matthews (1997) (in English).

³⁴ ['phénomènes élémentaires'.] Boulez describes morphology and syntax as 'elementary phenomena' and rhetoric and form, by inference, are not. See: Boulez (1961a) p. 523 (in French) and p. 57 (in English).

³⁵ ['au seuil de la forme'.] Boulez (1963b) p. 165 (in French) and p. 142 (in English).

which he stresses that 'all these methods must be given a *meaning*.'³⁶ From these two statements, one can establish that form is the product of musical creation and this is intimately part of musical meaning (which is associated with musical rhetoric).³⁷ The notion that the product is form is clearly observable in Boulez's dialectical conception of musical composition that I examined earlier. Unlike the distinction of morphology and syntax, the categories of rhetoric and form are not a traditional linguistic division. One can understand this rhetoric-form pairing in the light of his formalist conception of form and content (i.e. rhetoric) being the same. This idea can be seen in the writings of Lévi-Strauss.³⁸

Both the categories of rhetoric and form are not considered in *Penser la musique aujourd'hui*. Instead, he divides his account of musical technique into two sections: morphology (misleadingly called 'Technique musical') and syntax (called 'Syntax'). First, I shall examine his account of morphology.

Morphology

As I have established, Boulez's term 'morphology' can broadly be defined as the study of structure. It appears in three contexts in his writings. These are the morphology of the sound components, the morphology of structures (both local and global) and the morphological characteristics of a series. I would briefly like to establish what morphology means in these contexts.

The morphology of the sound components³⁹ refers to the way in which the composer constructs the sound object from its individual components. These components are pitch, duration, intensity, articulation, space (real space), tempo and time. This usage

³⁶ ['à toutes ces méthodes, il faut donner un *sens*']. *Ibid.*, p. 166 (in French) and p. 142 (in English).

³⁷ Elsewhere, Boulez links the notion of form and rhetoric in his definition of opera: 'Opera is in fact the total engulfing of a dramatic anecdote by musical form, and this achieved by a more or less clearly defined, 'formal' rhetoric. See: Boulez (1966c) p. 414 (in French) and p. 241 (in English).

³⁸ As I considered elsewhere. See: this dissertation p. 152.

³⁹ Note that Boulez uses the terminology of 'sound components' ['composantes sonores'] and not Stockhausen's term of 'parameters'. For an example of Boulez's usage see: Boulez (1963b) p. 37 (in French) and p. 37 (in English).

of the term morphology is nearest to the linguistic usage in which one writes of the morphology of the individual word.

The morphology of local structures and global structures denotes the way in which the composer constructs musical structures. Local structures broadly correspond to shorter musical structures (e.g. a musical phrase) and global structures to the overall formal features (e.g. the sections).⁴⁰ It is important to remember that Boulez places his consideration of the construction of global structures under the category of morphology not syntax, despite occasions on which he seems to imply the opposite. For example, he writes of going 'from the morphological microstructure to the rhetorical macrostructure.'⁴¹ Although this statement is correct, it does not mean morphology is *only* concerned with the microstructure, in other words, the components of a single sound object.

The morphological characteristics of a series describe the particular features of a given series, such as its intervallic structure.

Having established that the category of morphology appears in Boulez's writings in three different contexts, I would now like to examine the way in which he subsequently divides this category and conceptualises this area in more detail. Although what follows is the theoretical approach Boulez adopts towards the morphology of the components of a sound object, this approach is transferable to describing the morphology of local and global structures as well as the morphology of a series.⁴² However, it is noticeable that it is most applicable to the morphology of a sound object and one suspects that it is for this reason that he primarily discusses morphology in terms of a single sound object and not in its other contexts.

⁴⁰ I shall return to this distinction later. See: this dissertation p. 310.

⁴¹ ['en remontant de la micro-structure morphologique jusqu'à la macro-structure rhétorique.'] Boulez (1960d) p. 364 (in French) and p. 94 (in English).

⁴² Later, I shall briefly consider the ways in which Boulez transfers these concepts into the other morphological contexts.

1. Morphology of the individual sound object

The most fundamental theoretical step taken by Boulez in *Penser la musique aujourd'hui* (1963) can be easily overlooked today, as it was prefigured over a decade earlier: the division of sound into its individual components. This highly significant development on which total serialism was founded differs radically from earlier manipulations of pitch and rhythmic units, as all the various components of sound are granted structural roles.⁴³ This is, of course, a manifestation of his attempt to make every aspect of the musical work *necessary* and expressive.

Boulez's definition of the various components of sound contrasts sharply with that of his teacher, Leibowitz. Whereas Leibowitz argues that music is constituted of melody, harmony and rhythm,⁴⁴ Boulez describes music in more scientifically precise terms. In *Penser la musique aujourd'hui*, four basic components of sound are defined: pitch, duration,⁴⁵ intensity and timbre.⁴⁶ These components occur within the fields or 'envelopes' of space and time.⁴⁷ Space (real space) concerns the location of the sound sources within a particular space, an aspect of music that Boulez describes as an '*index of distribution*'.⁴⁸ Time is the field in which sound objects occur (with tempo being specific to duration and constituting 'the standard which will give a *chronometric* value to numerical relationships'.⁴⁹ As is well known, the sound

⁴³ As I discussed earlier, the development of total serialism in Boulez's writings is founded on the principles of consistency (which is strongly connected to the notion of necessity and the structural role of every element), constant renewal (the full development of each musical element) and dissociation.

⁴⁴ Leibowitz (1947) p. 3 (in English).

⁴⁵ Note that Boulez writes 'duration', not 'rhythm'. See: My dissertation p. 61.

⁴⁶ He sometimes includes articulation as a fifth component.

⁴⁷ The idea of the 'envelope' first appears in 'Aléa' (1957) in which he defines 'timbre', 'tempo' and 'type of writing' as "enveloping phenomena" ['tempo', 'timbre', 'type d'écriture', 'phénomènes enveloppants']. Boulez (1957a) p. 416 (in French) and p. 34 (in English). (My modified translation.) I have translated 'type d'écriture' as 'type of writing' rather than 'style', as in the English translation, as the latter implies the use of stylistic genres which is certainly not what Boulez has in mind.

⁴⁸ ['*indice de répartition*']. Boulez (1963b) p. 72 (in French) and p. 66 (in English).

⁴⁹ ['l'étalon qui donnera une valeur *chronométrique* à des rapports numériques.'] *Ibid.*, p. 53 (in French) and p. 50 (in English).

components are subsequently assigned numerical values which can be manipulated to create structures.⁵⁰

Boulez insists upon recognising that although the composer applies the series to the different sound components and that therefore all components of the resulting work have structural importance (i.e. are made *necessary*), this does not inevitably mean that the sound components have equal importance. He admits that in total serialism metrical relationships were overlooked in rhythm, register was ignored in timbre, harmony was disregarded in dynamics and pitch, and balance was neglected in dynamics. His meticulous description of the characteristics of the different sound components and their interactions can be viewed as an attempt to counter these problems and to prevent a vulgar reductionist approach. Pitch and duration remain the most important components, as they primarily 'integrate'. This means that pitch and duration structures can be both articulated and perceived as distinct values.⁵¹ This is in contrast with intensity and timbre which primarily 'coordinate' and which cannot be perceived as distinct values and instead help the listener to understand pitch and duration structures (as well as larger scale formal structures).

As I considered earlier,⁵² the allocation of structural importance to components other than pitch distinguishes Boulez's approach from that of Leibowitz. Despite his teacher's insistence on the structural *necessity* of every aspect of the musical work, Leibowitz's theoretical blindspot disregarded the possibility of granting structural importance to rhythm. Indeed, he was able to define it as 'the articulation of sound-forms in time',⁵³ suggesting that its role was explanatory rather than functional.

Another issue concerning the division of sound into its components is that of the relationships between the components. In *Penser la musique aujourd'hui*, he claims

⁵⁰ Boulez notes that the series can be applied to tempo as well as the basic sound components.

⁵¹ I examine elsewhere Boulez's notion that structure is primarily perceived in discrete values. See: this dissertation p. 330.

⁵² See: this dissertation p. 63.

⁵³ Leibowitz (1947) p. 3 (in English).

that the components are interdependent: despite their theoretical isolation, they remain dependent on each other.

Boulez's clearest treatment of this issue appears in an article entitled 'Forme' (1960). He describes the sound object using the concept of the 'formant'. This notion is drawn from acoustics and concerns the way in which the single sound object is constructed of overtones, or privileged frequencies called formants. Frequency (pitch) is a function of time and the sum of frequencies is subject to the 'coefficient' dynamic envelope which is also a function of time. Therefore the concept of sound is not arithmetical but an interaction of components: in Boulez's terminology, sound is a 'vectorial compound'.⁵⁴ The components are not independent in their existence - only in their evolution and character. Fluid hierarchies can be established between components to articulate form. The hierarchisation of one sound component means that the other components 'are free to *integrate* themselves ... to *co-exist* with it'⁵⁵ Clearly, all the formants rely on each another and shape the character of the particular sound object. In this respect, Boulez describes acoustic formants as the 'ensemble of determining criteria'.⁵⁶ The principle of formants enables Boulez to describe the timbre of sound as based upon the distribution⁵⁷ of formants divided into groups of greater or lesser importance according to the pitch and dynamic in relation to the fundamental.

The field (or space)

The most important theoretical concept in Boulez's technique, highlighted by several commentators,⁵⁸ is the 'field', alternatively called the 'space'.⁵⁹ The notion

⁵⁴ ['composition vectorielle'.] Boulez (1963b) p. 36 (in French) and p. 36 (in English).

⁵⁵ ['ont loisir de s'y intégrer ou, simplement, coexister'.] *Ibid.*

⁵⁶ In the same way, Boulez uses the metaphor of the formants to refer to larger scale structures which create the character of the work.

⁵⁷ The concept of the *distribution* of formants is applied to form.

⁵⁸ For example, see: Bradshaw (1986) p. 137 (in English) and Charles (1965) pp. 154-155 (in English). Koblyakov, in particular, describes the 'field' as 'one of the most essential elements' in Boulez's thought. Koblyakov (1990) p. 114 (in English).

⁵⁹ ['champ', 'espace'.]

of the field is first mentioned in 'Éventuellement' (1952),⁶⁰ subsequently appears in 'Aléa' (1957)⁶¹ as a much more developed concept before it receives its most expansive examination in *Penser la musique aujourd'hui* (1963). It refers to any particular theoretical field defined by two extremes in which sound 'objects' are subsequently placed.⁶² The concept of the field is a means of mapping out the entire possibilities open to the composer within defined limits. In this sense, the field is the musical equivalent of the global view I examined in chapter III. Boulez applies this concept to the three areas of morphology I identified above.⁶³

The term of 'space', in particular, is to be distinguished in this context from two other usages in Boulez's writings: 'real space', which refers to the aural distribution of sound in a particular location, and spatial metaphors, such as the 'spiral' metaphor of *Répons* (1981-). Quite often, these two alternative meanings occur simultaneously, for example the spiral metaphor of *Répons*, which impacts on the musical structure and is reflected in its aural distribution.

The notion of the field is a key idea that appears in the writings of several of Boulez's contemporaries, including Cage, Schaeffer and Stockhausen.

Writing as early as 1937, Cage claims that 'the present methods of writing music, principally those which employ harmony and its reference to particular steps in the field of sound, will be inadequate for the composer, who will be faced with the entire field of sound.'⁶⁴ Although the term 'field' is used in here in its most general sense, Cage nevertheless stresses the importance of opening up a complete field of

⁶⁰ See: this dissertation p. 87.

⁶¹ In 'Aléa', he writes that 'for the various groups of characteristics [pitch, duration, intensity, etc] there are, therefore, fields of encounter in which chance can operate on the definitively fixed musical event.' ['Pour les différents ensembles de caractéristiques, il y a donc des champs de rencontre où gît la chance de l'événement musical définitivement fixé.'] Boulez (1957a) p. 414 (in French) and p. 32 (in English).

⁶² The concept of the sound object, usually distinguished by the term 'object' alone, refers to a coherent musical idea that has been realised and can be manipulated and developed.

⁶³ These are the morphology of the components of a sound event, the morphology of structures and the morphological characteristics of a series.

⁶⁴ Cage (1937) p. 4 (in English).

sound beyond its traditional partitioning of equal temperament. By 1957, his ideas bear the imprint of his correspondence with Boulez. He proposes the notion of the 'total sound-space' in which the limits are determined by frequency, amplitude, timbre, duration and morphology (attack, decay). Clearly, the terms are largely inherited from the influence of Boulez and the Darmstadt School in general, although Cage continues in a way that reveals his own particular understanding. He writes that 'by the alteration of any one of these determinants, the position of the sound in sound-space changes.'⁶⁵ This appears to a spatial metaphor for the infinite possibilities of the sound field.

Another writer who uses the term 'field' is Pierre Schaeffer. However, unlike Cage, Schaeffer's conception of this term and its history is remarkably similar to that of Boulez. This is particularly true with respect to Schaeffer's usage of the notion of the 'perceptive field',⁶⁶ which derives from Gestalt Theory. I shall consider this feature in terms of Boulez's musical technique shortly.⁶⁷

Stockhausen also employs the concept of the field. In correspondence between Stockhausen and Boulez in 1953, Stockhausen describes the idea of choosing sounds within a field.⁶⁸ This idea would later be put into practice in his composition *Zeitmasse* (1955-56) which involves fields of controlled freedom with respect to the tempi. Aguila notes that this idea, in which 'fields' were integrated with 'strict writing' (defined sound objects), impacted on Boulez's conception of music.⁶⁹

Returning to *Penser la musique aujourd'hui*, Boulez presents and elaborates upon the notion of the field in a manner that suggests it can be applied to all

⁶⁵ Cage (1957) p. 9 (in English).

⁶⁶ See: Schaeffer (1966) pp. 588-591 (in French). This notion of the 'perceptive field' can be understood as a synonym for the concept of the 'physiological field' I examined earlier. See: this dissertation p. 187.

⁶⁷ See: this dissertation p. 304.

⁶⁸ See: this dissertation p. 126.

⁶⁹ See: Aguila (1992) pp. 225-226 (in French). For example, compare this with Boulez's statement that he conceives the serial universe as '*fields*' rather than as '*defined* objects'. ['champs' 'objets définis'.] Boulez (1963b) p. 42 (in French) and p. 41 (in English).

morphological aspects of music.⁷⁰ However, clearly it is most applicable to the individual sound components, particularly pitch. It would seem that Boulez started his theoretical investigation into the morphological aspects of music by first examining pitch, as many of his descriptions apply most easily to pitch. Due to this, I would now like to consider the details of his conception of the field in relation to pitch.

The field: Generation-distribution, value-density

Boulez subdivides the overall category of morphology into 'generation' and 'distribution'.⁷¹ Generation describes the way in which the sound object (component, structure or series) is created. Distribution refers to the ways in which these objects are deployed within a field. Unlike the distinction between morphology and syntax, generation and distribution are mathematical in origin (although they do not conform to a classical distinction).

These two concepts constitute a way of conceiving every moment of the compositional process. Having established a defined field of possibilities, the composer creates a musical object and then subsequently distributes it within that field. Boulez describes the way in which this task is executed in particularly abstract and rather confusing terms. He defines two categories: value and density that I would now like to examine.

⁷⁰ Indeed, as I shall show later, Boulez applies the notion of fields to the morphology of the series. See below for the general way in which Boulez presents the idea of the field.

⁷¹ The original French terms are 'engendrement' and 'répartition'. In *Penser la musique aujourd'hui* (1963), 'engendrement' in this context is translated as 'initiation' but elsewhere, p. 39 (in French) and p. 38 (in English), it is translated as 'generation'. I have used the term 'generation' in all cases, not only for the sake of consistency but also I would suggest that 'generation' in this context is clearer. It should be noted that 'répartition' implies a division of an area in order to scatter or arrange things which is, perhaps, not as obvious in the English meaning of 'distribution'.

Value

The category of value is concerned with the way in which sound components are deployed within a field or space. He distinguishes between absolute value and relative value:

Absolute value within a defining interval, or module; each value will occur only once, within this module, a value being defined in relation to some unit of division of the space in question.⁷²

Relative value, that is to say, value considered as the absolute value reproduced by addition to multiples of the module, from 1 to n times: each value will have from 1 to n corresponding values.⁷³

Described in these abstract terms, it is difficult to understand precisely what Boulez means. In a statement from 1990, he clarifies this absolute-relative distinction. He writes that absolute value refers to the 'pitch or interval which is still not localised in the register; relative value is that which takes pitches and intervals when they are situated in the concretisation of the register.'⁷⁴ From this, one can establish that absolute value refers to a sound object that is not yet placed at a specific register within a field, e.g. a pitch-class rather than a specific pitch. Relative value refers to the sound object that has been placed at a specific register, e.g. at middle C.⁷⁵ Both absolute and relative value describe the *qualitative* aspect of the sound object.

⁷² [*Valeur absolue* à l'intérieur d'un intervalle de définition, ou modulo; toute valeur ne devra se trouver qu'une fois, exclusivement, à l'intérieur de ce modulo, une valeur étant définie par rapport à une unité d'analyse quelconque de l'espace considéré'.] Boulez (1963b) p. 38 (in French) and p. 38 (in English).

⁷³ [*Valeur relative*, c'est-à-dire valeur considérée comme la valeur absolue reproduite par modulo, de 1 à n fois: à toute valeur absolue correspondront de 1 à n valeurs relatives'.] *Ibid.*, p. 39 (in French) and p. 38 (in English).

⁷⁴ [*la hauteur ou l'intervalle qui ne sont pas encore localisés dans le registre; la valeur relative c'est celle que prennent hauteurs et intervalles quand ils se situent dans le concret du registre.*] Boulez (1991b) p. 20. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

⁷⁵ Under the category of 'relative pitch', Boulez describes what he rather misleadingly calls the 'tessitura'. The concept of tessitura is not used in the traditional sense but refers to the deployment of a grid of relative values within a field. Although it can be applied to duration and dynamics, it is mostly clearly manifested in pitch in which the notes of a series are assigned specific registers.

The division of the field or space into 'units' and 'modules',⁷⁶ as described in the two definitions above, is an important step in Boulez's conception of music technique. He provides examples of this division of space applied to all the sound components. In pitch, he considers equal temperament in which the module constitutes the octave and the unit of division is the semitone. This suggests that the module is conceived as a repeated interval which slots over the unit divisions within a given field. In duration, the unit can be the smallest value which is then multiplied (additive rhythm) or subdivided (cyclical rhythm). The application of these abstract definitions to dynamics and timbre is more problematical than to pitch and duration. With respect to dynamics, the composer could divide the dynamic field into exact units and select precise dynamic levels to be executed using new technology. In timbre, Boulez acknowledges that relative value can only be applied by analogy. He offers the suggestion that a succession of timbres can be considered as a module forming a period.

Upon initial consideration, Boulez's particular description of the division of space appears to be a tonal 'archaism'. It assumes that one divides the space into units, a division comparable to semitones in pitch and units of duration in time. Whilst later in his study he allows for what he calls 'smooth space' (undivided spaces)⁷⁷ as well as non-equal divisions, his main definition shown above assumes equal divisions to be the norm. In addition, his notion of the module appears to be a clumsy attempt to retain the essentially tonal features of the octave in pitch and metre in duration. However, this division of the field or space is based on Boulez's claim that the

⁷⁶ 'Modules' are alternatively called the 'interval'. Occasionally, Boulez shifts from the mathematical use of the term 'interval' to discussing its musical use – e.g. the interval of an octave or perfect 5th. See: Boulez (1963b) p. 86 (in English). Specifically with regard to the field of time, Boulez sometimes describes this division as 'striated time' ['le temps strié']. For example, see: Boulez (1960d) p. 360 (in French) and p. 91 (in English).

⁷⁷ In 'smooth space', a notion that Charles suggests was prefigured by Xenakis (see: Charles (1965) p. 158 (in English)), there are no divisions of the field and therefore the composer must proceed to place sound events by a different approach. This is achieved by a 'statistical distribution of frequencies' in which one places the sound event by statistical means rather than by a selection of a given unit. (Boulez (1963b) p. 88 (in English)) The notion of 'statistical distribution' echoes the correspondence between Stockhausen and Boulez I examined earlier in which the German composer writes of 'statistical composition' – sounds chosen within a field. See: this dissertation p. 126.

perception of music is primarily founded upon perceiving 'discontinuous' values within a 'perceptive field'.⁷⁸ I examine this idea, which is derived from Gestalt Theory, in the section on 'Listening'.⁷⁹

Density

The category of density of generation is concerned with the distribution of the sound objects within the field or space. As such, it describes the *quantitative* aspect of the sound object/s. Boulez provides the following definitions:

Fixed density of generation: each original X will correspond to a Y of the same type and the same weight, the index of density being established as a fixed value between 1 and n.⁸⁰

Mobile density of generation: each X will correspond, by transformation, to a Y, of different type and weight.⁸¹

Compared to 'value', density seems primarily to refer to the temporal dimension of distributing sound objects.

2. Morphology of local and global structures

Boulez conceives the morphology of 'local structures' and 'global structures' in a similar manner to the morphology of sound components. The notion of 'local structures' refers to any 'sound organism', i.e. any small-scale structure that one could alternatively describe as the basic material of a given work. 'Global structures' refer to larger-scale structures such as an overall section. In 'Forme' (1960), a text

⁷⁸ This is, of course, a use of the concept of discontinuity that I examined earlier. See: this dissertation p. 210.

⁷⁹ See: this dissertation p. 330.

⁸⁰ [*Densité fixe de l'engendrement*: à tout original X donné, correspondra tout Y de même homogénéité et de même poids, l'indice de densité s'établissant sur une valeur fixe choisie de 1 à n'.] Boulez (1963b) p. 39 (in French) and p. 38 (in English).

⁸¹ [*Densité mobile de l'engendrement*: à tout X correspondront, par transformation, des Y différents d'homogénéité et de poids'.] *Ibid.*

which is particularly difficult to comprehend, Boulez defines two types of local structures: static and dynamic.

Static structures have a constant density of events, that is to say, the 'criteria of selection' applied to musical objects is always the same. The criteria of selection appears to be a means of filtering musical objects created through automatism, as Boulez subsequently adds that there can be either a constant criterion of selection or an absence of a criterion of selection.⁸² The example of an absence of the application of a criterion of selection that he provides is the refusal of a particular register.⁸³

Dynamic structures, on the other hand, have an evolutionary structure, as the criteria of selection changes.⁸⁴ This tends towards the exclusion of the automatism of musical objects. Boulez argues that dynamic structures can be described quantitatively in terms of the density of the events.⁸⁵

Key oppositional pairs in Boulez's discussion of morphology

At this point, I would briefly like to clarify a number of terms Boulez uses not only in his description of the morphology of local structures but also in his account of morphology generally. Although he employs a wide range of terms, I would propose that there are five distinct oppositional pairs in Boulez's writings. Two of the oppositions work in tandem: These are the fixity-mobility opposition and the quality-quantity opposition. The other three oppositions describe more extrinsic features, i.e. whether a morphological feature is present or not and in which field. These are simple-complex, presence-absence and vertical-horizontal.

The oppositional pair of fixity and mobility is used throughout Boulez's writings on morphology. These two terms also appear under the guises of static-variable, repose-

⁸² See: Boulez (1960d) pp. 360-361 (in French) and p. 91 (in English).

⁸³ See: *ibid.*, p. 360 (in French) and p. 91 (in English).

⁸⁴ See: *ibid.*

⁸⁵ See: *ibid.* See above for my consideration of the idea of density.

dynamic and constant-evolutionary. All of these oppositional pairs are applied to several different levels of morphology, but all denote the same principle: a fixed structure, sound component or serial element in contrast to a mobile element. One must recognise in this distinction the concept of mobility I highlighted in chapter II⁸⁶ that incorporates the notion of ‘multiple possibilities [...] within a particular field of choice’. This conception of mobility manifests itself in Boulez’s claim that the composer is making variable choices within a ‘criterion of selection’, in other words within a defined field of choice.

Working in tandem with the fixity-mobility oppositional pair is that of quality-quantity. Quality and quantity appear to be near synonyms used to describe intrinsic and extrinsic properties of a sound or structure. In Boulez’s description of local structures, he also largely equates the qualitative aspects with ‘value’ and the quantitative aspects with the density of musical events.

Both of these first two oppositional pairs of fixity-mobility and quality-quantity are particularly difficult to define with precision in the way in which they are employed in *Penser la musique aujourd’hui*. Indeed, quality-quantity is perhaps one of the most opaque categorisations in Boulez’s systematisation of technique. As I have already mentioned,⁸⁷ the division of morphology and syntax can be conceived as comparable to intrinsic and extrinsic properties as can the subdivisions of generation and distribution (in morphology), production, and placing (in syntax).⁸⁸ The way in which Boulez ‘multiplies’ and ‘superimposes’⁸⁹ the same oppositional pairs, often with different terminology for different features, adds to this confusion. The remaining three oppositional pairs, however, are comparatively straightforward in their meanings.

⁸⁶ See: this dissertation p. 111.

⁸⁷ See: this dissertation p. 298.

⁸⁸ I shall examine the categorisation of production and placing in syntax later in this section. See: this dissertation p. 318.

In the distinction between ‘simple’ and ‘complex’, ‘simple’ appears to refer to the theoretical abstraction of a single element, e.g. a single sound component, whereas ‘complex’ denotes the combination of more than one simple element. There are two types of complexes: homogeneous and heterogeneous.⁹⁰ Homogeneous complexes consist of a single structure whereas heterogeneous complexes are the result of the interaction of two or more structures superimposed. This process creates a complex of complexes. Although Boulez appears to suggest that the terms ‘single’ and ‘complex’ are applicable to the three morphological contexts I identified earlier,⁹¹ he typically reverts to the assumption that complexes refer to local and global structures (and not sound components or series). I would propose that this assumption is based on his association of the term ‘complex’ with Cage’s notion of ‘sound complex’, which broadly corresponds to Boulez’s concept of local structures.⁹²

The fourth oppositional pair is the positive-negative couplet, alternatively written as presence-absence and choice-refusal. Boulez argues that this is a fundamental binary principle in the creation of form in the ‘indeterminate, amorphous universe’ of serialism.⁹³ This description is not restricted to his accounts of musical technique in *Penser la musique aujourd’hui* and ‘Forme’ (1960), as it appears in other essays, for example in an essay on Wagner.⁹⁴ The origin of the binary opposition is almost impossible to pinpoint, as it is such a ubiquitous principle. For example, one recalls Sartre’s ideas of choice and refusal. Within a musical context, in his article ‘Introduction à la Musique Concrète’ (1949), Schaeffer proposes the idea of

⁸⁹ I deliberately use Boulez’s terms of ‘multiplication’ and ‘superimposition’ as these are terms that Boulez uses to describe a particular compositional device. For my explanation of this, see: this dissertation p. 314.

⁹⁰ Boulez (1963b) p. 36 (in English).

⁹¹ See: this dissertation p. 300.

⁹² Boulez attributes the idea of sound-complexes to Cage in 1952, writing ‘we owe equally to Cage the idea of sound-complexes’. [‘Nous devons à John Cage également l’idée de complexes de sons’.] Boulez (1952c) p. 290 (in French) and p. 135 (in English). More specifically, in that same year, Christian Wolff employed the terms of simple and complex sounds in a manner that foreshadows that of Boulez. See Wolff in: Boulez Cage, Feldman and Wolff (1952) p. 172 (in English).

⁹³ [‘l’univers indéterminé, amorphe’.] Boulez (1960d) p. 360 (in French) and p. 91 (in English).

⁹⁴ Boulez applies this idea to Wagner’s instrumentation in which the ‘presence’ and ‘absence’ of a particular instrument or group of instruments at certain points is a kind of ‘characterisation’ and helps Wagner define the form. See: Boulez (1977b) p. 439 (in French) and p. 283 (in English).

variation by omission.⁹⁵ As Maconie notes, Schaeffer also suggests the corresponding idea of variation by substitution of related material. The latter idea is essentially identical to Boulez's concept of 'multiplication'. Having established that the composer can either choose or refuse a particular musical element or structure, it would seem a logical extension to be able to multiply, that is superimpose, objects or structures.⁹⁶ This idea of multiplication makes its first appearance in Boulez's writings in 'Éventuellement' (1952).⁹⁷

The fifth oppositional pair is vertical-horizontal. Although apparently self-evident today, the terms 'vertical' (corresponding to the field of pitch) and 'horizontal' (corresponding to the field of time) were perhaps not as prevalent in the early 1960s. These terms, implicitly founded on a notational conception of composition, also appear in Leibowitz's writings.⁹⁸ However, the obscure concept of a third dimension, the diagonal dimension, is specifically coined by Boulez. This does not refer 'explicitly to the succession or to the superposition',⁹⁹ i.e. to the vertical or the horizontal, but indicates the 'participation in two states of fact, and its situation of intermediary'.¹⁰⁰ In other words, it testifies to the ambiguity between musical ideas that can be conceived as both vertical and horizontal material. In summary, the vertical, horizontal and diagonal dimensions are the fields in which local structures are distributed.

⁹⁵ Maconie (1976) p. 33 (in English).

⁹⁶ Koblyakov describes these 'multiplication techniques' as the superimposition of different serial 'objects'. See: Koblyakov (1990) first cited on p. 4 (in English). It is interesting to note that the superimposition of two structures to derive a third is a musical 'translation' of his dialectical principle of synthesis.

⁹⁷ See: Boulez (1952c) p. 283 (in French) and p.128 (in English). The notion of multiplication also appears in 'Aléa' (1957) in which he writes that 'certain structures could be either juxtaposed or superimposed'. ['certaines structures seraient juxtaposables ou superposables'.] Boulez (1957a) p. 415 (in French) and p. 34 (in English).

⁹⁸ For example, in a line by Leibowitz that Boulez has quoted he writes that 'Rhythm is merely an element which is produced spontaneously by *horizontal and vertical* sound-forms' (My italics.) Leibowitz (1947) p.274 (in English). For Boulez's quotation of this passage see: Boulez (1949) pp. 55-56 (in French) and p. 200 (in English).

⁹⁹ ['Cette dimension diagonale ne se référerait plus explicitement à la succession ou à la superposition'.] (My translation.) Boulez (1963e) p. 566.

3. *Morphology of a series*

The morphology of a series is a problematical category in Boulez's thinking, as it can be placed under both morphology and syntax. The morphological features of the series (i.e. its internal features and symmetries) and the series derived from the original series constitutes the basis of the serial network which forms the syntax of a given work. Boulez divides the category of the morphology of the series into intrinsic and extrinsic characteristics. As I consider extrinsic characteristics to concern syntax,¹⁰¹ I shall examine only intrinsic characteristics at this point.

The intrinsic characteristics a series possesses (i.e. its morphological features) depend, according to Boulez, on its structure. These characteristics include isomorphic¹⁰² figures (repeated intervals) and forms of symmetry and asymmetry. As I shall consider shortly, the intrinsic characteristics of a series shape the selective possibilities available for a particular work.

Boulez identifies two basic types of series structure: symmetrical and asymmetrical. The symmetry of symmetrical series depends on the prime, retrograde, inverted prime and the inverted retrograde as well as regular transformations, for example permutations and the augmentation of intervals. Totally symmetrical series can be broken down into 'isomorphic' figures, for example Webern's series often display 2, 3, 4 or 6 note symmetries. Partially symmetrical series contain both isomorphic figures and non-isomorphic figures. There are two types of partial symmetry: manifest or concealed partial symmetry. Manifest partial symmetry consists of continuous isomorphic figures i.e. the notes of the isomorphic figure are consecutive whereas concealed partial symmetry includes discontinuous isomorphic figures i.e. the notes of the isomorphic figure are not consecutive. Complete asymmetrical series are very rare. It is also possible to move from one type of series (for example, a

¹⁰⁰ ['sa participation à deux états de fait, et sa situation d'intermédiaire'.] (My translation.) *Ibid.*

¹⁰¹ Boulez identifies textural aspects such as homophony under extrinsic characteristics of a series.

¹⁰² As I discussed earlier, the principle of isomorphism is a feature of Gestalt theory See: this dissertation p. 187.

totally symmetrical series) to another type (for example, a partially symmetrical series) by a transformation of the original. Transformations can also result in asymmetrical series giving rise to isomorphic objects. These serial transformations disrupt the principle of non-repetition and create privileged regions by a 'dialectic of linkage'¹⁰³ which, in turn, creates the form.

A derived series that contains isomorphic figures from the original series is called a 'privileged series'. Privileged series enable 'serial networks' to be established. The number of privileged transpositions equals the number of isomorphic figures in the totally symmetrical original series and is common in Webern's music. The number of derived series with an intervallically exact figure as the original equals the number of isomorphic figures in the partially symmetrical original series. If the original series is changed then the privileged network series becomes changed. In addition, isomorphic figures can create privileged linking functions as well as privileged networks. In the event of a series containing two isomorphic families, the series will form part of a double network of privileged series.

There are other types of derived series that are not privileged series. They contain incomplete series or a reduction of series and facilitate serial variation and development. There are two types of non-privileged series: limited series and defective series. Limited series can consist of a structural reduction of a complete series and can only result from totally symmetrical series. Limited series can also consist of a fragment freed from the original transposition and inversion within the complete series from which it is derived. However, the serial fragment does not necessarily have to be a continuous fragment but must respect the essential condition of chromatic complementarity i.e. the new series in which the fragment is placed must contain all twelve notes. Defective series are the result of mechanical procedures which are independent of the serial structure, for example, if the module is changed or the frequencies are 'filtered'. However, Boulez stresses that the

¹⁰³ ['la dialectique de l'enchaînement'.] (My translation.) Boulez (1963b) p. 47 (in French) and p. 45 (in English).

procedures must be structurally justified (for example, filtering out about an axis of symmetry, or filtering out a privileged family of intervals). These transformations are helpful, as they avoid the continual employment of the sound spectrum or broad scale of values (this is especially useful in dynamics and duration). Boulez admits that these serial operations sound abstract, but he argues that they 'refer exclusively to the concrete sound object for the properties of this object generates the structure and procures the formal qualities of the deduced sound world.'¹⁰⁴ Each serial organisation creates a particular serial network according to the sound components originally chosen by the composer. Therefore:

The internal structure of a series is crucial in the development of its organisational potential; consequently it should not be left to chance; on the contrary, it is necessary to foresee the precise direction in which these powers are to be deployed.¹⁰⁵

He expands upon this point at the beginning of the chapter 'Technique musicale', emphasising that 'the series is [...] the germ of a developing hierarchy [...] with a view to ordering a FINITE ensemble of possibilities connected by predominant affinities'.¹⁰⁶ That is to say, through the manipulation of a series, the composer will establish a serial network of derived series which will create a limited, self-contained, *necessary* serial universe specific to a particular serial material and musical work.

It should be noted that, like the areas of the morphology of the sound components and local structure, Boulez applies the notion of the field to the morphology of the series. He argues that if one designates *a* as representing one pitch series and *b* as representing *a* transposed then *ab* will result in an enlargement of the original

¹⁰⁴ ['elles ne s'en réfèrent pas moins – et exclusivement – à l'*objet sonore concret*, car ce sont les propriétés mêmes de cet objet qui engendrent les structures de l'univers sonore déduit et lui procurent ses qualités formelles'] *Ibid.*, p. 43 (in French) and pp. 41–42 (in English).

¹⁰⁵ ['La structure interne d'une série est décisive en ce qui concerne le développement de ses pouvoirs organisateurs; il convient donc de ne pas la laisser au hasard, et de prévoir, au contraire, en quel sens précis ils se déploieront.'] *Ibid.*, p. 78 (in French) and p. 70 (in English).

¹⁰⁶ Boulez *ibid.*, p. 35 (in English).

field.¹⁰⁷ From this, he deduces that other fields, which in this context he calls 'fields of fixity', can be deduced.

Having considered Boulez's morphological approach to music technique, I would now like to consider briefly his views on syntax.

Syntax

Boulez subdivides syntax into the categories of 'production' and 'placing'.¹⁰⁸ Generally, placing appears to denote general quantitative *external* characteristics (within a space) such as the 'nature' and 'existence' of sound organisms. Production refers to qualitative intrinsic characteristics developing from serial structures.

Syntax: Serial Usage

The first type of serial usage Boulez describes is characterised by the '[u]niquity of the serial hierarchy; fixed typology and characterology'.¹⁰⁹ This type attempts to use a single series as the basis of the entire work and is a feature of Schoenberg's music. Boulez criticises this type as only superficially intellectually attractive and because it contradicts developments in current thought (he describes it as a 'Newtonian model'.¹¹⁰) He claims that unity cannot be achieved by a mechanical allegiance to a central authority and that '[i]t would surely be illusory to try to link all the general structures of a work to one and the same global generative structures'.¹¹¹ He

¹⁰⁷ See: Boulez (1963b) pp. 107-108 (in English).

¹⁰⁸ The original French terms are 'production' and 'mise en place'. These are the same English translations as found in *In Boulez On Music Today* (1971) and *Orientations* (1986). Boulez (1960d) p. 362 (in French) and p. 92 (in English).

¹⁰⁹ ['Unicité de la hiérarchie sérielle; typologie et caractérologie fixes'.] Boulez (1963b) p. 118 (in French) and p. 103 (in English).

¹¹⁰ ["modèles" newtoniens'.] *Ibid.*, p. 114 (in French) and p. 99 (in English)

¹¹¹ ['Il me paraît, en effet, illusoire de vouloir obligatoirement rattacher toutes structures générales d'une œuvre à une même structure d'engendrement global'.] *Ibid.* He also adds that the use of a specific series for a specific work as means of justification shows an ignorance of the law of large numbers and consequently depends on a quite utopian concept.

emphatically rejects this type as 'hardly satisfactory' and 'Schoenbergian practice at its most unimaginative.'¹¹²

The second type of serial usage is identified by the 'uniquity of the series; selectivity due to the internal structural characteristics'¹¹³ and is exemplified by Webern's music who used more limited serial material than Schoenberg. Each component in the series is attributed an ensemble selected by common characteristics, linked to a central organising factor, but exists through its own characteristics. The series is thus 'considered as a structural power of mediation between the sub and super-ensembles.'¹¹⁴ The sound components are free to envelop each other and offer more varied possibilities than the first type of serial usage.

The third type of serial usage employs '[o]ne (or more) multiform series of varying typology and characterology'.¹¹⁵ This type of serial usage is typified by Berg's music. Berg often did not limit himself to a single series and typically used transformations of the original series to create new series. There is usually a fundamental series, structurally related to one sound component, which undergoes transformations related to other components and which results in different series linked by structural parallelisms or 'accidents of positioning'¹¹⁶ in which the series is linked by original figures. Clearly, this serial usage is much more complex than the previous two.

The serial usage Boulez proposes is based on a generalised series. He argues that a generalised series is indispensable to the creation of elementary morphology and the

¹¹² ['ne me satisfait guère' 'Il joint la pratique schönbergienne dans ce qu'elle a de moins imagitatif'.] *Ibid.*, p. 106 (in French) and p. 101 (in English). Scott Lee is incorrect, therefore, to claim that Boulez was trying 'to generate an entire composition from a single germ'. Lee (1986-87) p. 184 (in English).

¹¹³ ['Unicité de la série; sélectivité due aux caractéristiques structurelles internes'.] Boulez (1963b) p. 118 (in French) and p. 103 (in English).

¹¹⁴ ['sera considérée comme pouvoir structurel de médiation entre sous-ensembles et sur-ensembles.'] *Ibid.*, p. 119 (in French) and p. 103 (in English).

¹¹⁵ ['Série(s) multiforme(s) à typologies et caractérolgies variantes'.] *Ibid.*, p. 118 (in French) and p. 103 (in English).

¹¹⁶ ['accidents de mise en place'.] *Ibid.*, p. 119 (in French) and p. 104 (in English).

creation of a hierarchy required to define a work. The generalised series enables the composer to formulate objects which can then be the basis of serial generation. Each original object leads to specific developments, the use of defective and limited series and the use of various sub-ensembles (i.e. the deployment of local structures rather than thematic development. In practice, this results in selective operations concerning only one structure at a time (but linked organically to the larger structure) and results in 'justified freedom'¹¹⁷ with 'the essential decisions being left to the momentary initiative of the composer.'¹¹⁸ Whereas Webern and Berg worked with serial ensembles, Boulez advocates working with partial local structures having their own independence but affiliated to the global structure. The serial structures need not be closely parallel and may be established from point to point, point to ensemble, and ensemble to ensemble.¹¹⁹

All series possess intrinsic and extrinsic characteristics which, as I have mentioned before,¹²⁰ fall under both the categories of morphology and syntax. I would like to begin by considering the intrinsic characteristics of a series.

Extrinsic characteristics of a series

The extrinsic characteristics of syntax comprise monody, homophony, polyphony and heterophony. As Bradshaw notes, these categories seem to describe different types of texture.¹²¹ Of the textures that Boulez cites, perhaps heterophony is the most unusual, as it refers to the simultaneous combination of an original monodic line

¹¹⁷ ['liberté justifiée'.] *Ibid.*, p. 120 (in French) and p. 104 (in English).

¹¹⁸ ['la part indispensable étant réservée à l'initiative instantanée, si je puis dire, du compositeur.'] *Ibid.*, p. 121 (in French) and p. 104 (in English).

¹¹⁹ This description of point to point, point to ensemble, and ensemble to ensemble recurs throughout *Penser la musique aujourd'hui* (1963). Stacey argues that 'the first category describes the combination of individual lines. The second category describes the combination of lines: for example, one pair of lines may form a 'counterpoint' to another pair. The third category describes the juxtaposition of the groups described in category two.' Stacey (1987) p. 12 (in English). I would add that the terms points and ensembles also enable Boulez to apply these concepts in both the vertical and horizontal dimensions.

It is interesting to note that as early as 1949, Cage describes musical method as 'point to point procedure'. Cage (1949) p. 64 (in English).

¹²⁰ See: this dissertation p. 315.

with one or more near-identical lines. In this way, one affirms the 'identity of the group by admitting all the variants, indeed the individual 'deviances'.'¹²² The examples of heterophony are rare in Western music,¹²³ but common in African music, which Boulez studied in Messiaen's classes.¹²⁴

The principle of non-identity

An important syntactical aspect of serialism that Boulez highlights concerns the principle of non-identity. Whereas tonality is based on the principle of identity because it relies upon working towards specific 'keys', serialism is based on the principle of non-identity, as it emphasises all twelve semitones more or less equally. Therefore, any features that provisionally reinstate the principle of identity within a serial work should be either avoided or treated with extreme care. Boulez argues that this is because the traditional reference (with which the listener is more familiar) will be stronger than the serial network of the new serial work,¹²⁵ a claim that is borne out in musical practice.¹²⁶

Two examples of the principle of identity that Boulez discusses in *Penser la musique aujourd'hui* are octaves and common triads.¹²⁷ With regard to octaves, he distinguishes between *actual octaves* and *virtual octaves*. *Actual octaves* are established from point to point in a context of homogeneous co-ordination, usually a homogeneity of duration, dynamics or timbre. In other words, *actual octaves* can be heard clearly due to the relative simplicity of the non-pitch sound components. All *actual octaves* must be avoided. *Virtual octaves* occur between two sound-

¹²¹ Bradshaw (1986) p. 139 (in English).

¹²² ['l'identité du groupe tout en admettant les variantes, voire les "déviations" individuelles.'] (My translation.) Boulez (1980a) p. 142.

¹²³ Boulez cites Beethoven's Adagio in the Ninth symphony as a rare example. See Boulez in: Boulez and Szendy (1993) p. 141 (in French).

¹²⁴ See: this dissertation p. 247.

¹²⁵ See: Boulez (1961a) p. 525 (in French) and p. 60 (in English).

¹²⁶ One can easily note the incongruity of tonal allusions appearing in a serial work. It should be stated that the problem of tonal allusions appearing in serial works was recognised much earlier than the 1960s: for example, by Leibowitz. See: Leibowitz (1947) p. 278 (in English).

¹²⁷ See: Boulez (1963b) pp. 48-53 (in French) and pp. 46-50 (in English).

complexes with octave relationships at the extremities. He suggests two strategies to overcome the problem of virtual octaves. The composer can introduce contradicting intervals to 'divert the ear from its tendency to simplify'.¹²⁸ Alternatively, there can be two simultaneous complexes at different tempi which helps to reduce the effect of identity. With regard to common triads, and all other tonal associations which can result from the superimposition of structures, Boulez proposes that all should generally be avoided. However, they can be permitted in musical situations in which they might be disguised, such as when they are played staccato or within a highly dense complex texture. As Boulez states, 'it is impossible to speak of laws governing pitch without mentioning their dependence on other formal criteria.'¹²⁹ Like pitch, he largely rejects the provisional reinstatement of the principle of identity in duration, manifested in the establishment of a clear regular pulse.¹³⁰

Conclusion

In conclusion, *Penser la musique aujourd'hui* constitutes Boulez's attempt to construct a coherent means of describing and conceiving musical technique. This involves careful consideration of the terms used in order to be able to synthesise the new developments in serialism and in technology. Despite this rather 'objective' aspiration, Boulez's account of musical technique is particularly historically dated by his choice of intellectual support for this task: Structural linguistics. Indeed, several linguistic terms appear throughout his account of musical technique, not least the primary overarching categories of morphology and syntax.

As a very brief summary of Boulez's new conception of music, under the category of morphology he proceeds by defining a field in the three areas of composition: the sound component, the local structure and the series. He subsequently (usually) partitions that field, for reasons concerning the perception of musical structures, and

¹²⁸ ['détourneront ainsi l'attention auditive de sa tendance simplificatrice.'] *Ibid.*, p. 50 (in French) and p. 47 (in English).

¹²⁹ ['On ne peut, en fin de compte, parler des lois régissant les hauteurs sans mentionner leur dépendance à l'égard des autres critères formels'.] *Ibid.*, p. 53 (in French) and p. 50 (in English).

places musical 'objects' (alternatively called 'structures' or 'organisms') within the field. Throughout this approach, he uses specific oppositional pairs as a means of conceptualising the new musical universe. Syntax, for Boulez, is unique for each (serial) work and is dependent upon the serial network established between related series.

Although Boulez's employment of new terminology in *Penser la musique aujourd'hui* has led to its well-documented difficulty of comprehension, there are other contributing factors that should be noted here. First, the subject matter of serial music technique is inherently dense and resistant to straightforward explication in words. Second, as is often the case in English translations, specific terms in the original French have been translated into several different English words, creating extra confusion for the English reader.¹³¹ Third, Boulez applies a small number of ideas – the oppositional pairs – to varying aspects of musical technique. He typically presents the same idea under different terms, depending on context, and also 'multiplies' (or 'superimposes') these ideas upon themselves. Fourth, despite Boulez's evident desire to apply more or less objective terminology to map out the field of musical possibilities, some parts of the book appear to be a description of his idiosyncratic compositional technique.

Although Boulez applies linguistic terminology to musical technique, he does not attempt to force a simplistic translation of linguistic terms such as 'word' and 'sentence' into musical equivalents such as 'note' and 'phrase'.¹³² However, due to

¹³⁰ See: Boulez (1963b) p. 53 (in French) and p. 51 (in English).

¹³¹ For example, in the article 'Form' (1960) in *Orientations* (1986), the French word 'répartition' is translated as 'distribution' and also as 'disposing'. Also, the French word 'engendrement' is translated as 'initiation', 'generation' and also 'origination'. For the sake of consistency, I have used 'distribution' and 'generation' for 'répartition' and 'engendrement' respectively throughout this dissertation.

¹³² However, as Stacey notes, Boulez does use the terms of 'vocabulary' and 'grammar'. (See: Stacey (1987) p. 10 (in English).) Whilst grammar is clearly understood as a synonym for syntax, vocabulary is not purely, as Stacey suggests, an analogy 'to describe the cells of which a piece is made, that is, its intervals'. (Stacey (1987) p. 10.) Boulez often appears to use 'vocabulary' in a loose way that suggests he conceives it as the musical material through which the composer expresses himself. For example, he claims that in *Structures* (1952) he attempted 'to eliminate from my vocabulary absolutely every trace of heritage, whether it be in the figures, the phrases, the developments, the

his avoidance of simplistic translation of terms from one medium to another, these terms have lost their sharpness and definition. In particular, Boulez's use of the term 'morphology' is not always consistent and therefore it is not clear what it exactly means. This has contributed considerably to the difficulty of understanding *Penser la musique aujourd'hui*.

form'. (Boulez (1963e) p. 564.) Similarly, in his writings on analysis he sometimes refers to the idea of 'vocabulary-analysis' (Boulez (1971c) p. 118 (in English)). Unfortunately, in an interview from 1985, he clouds this terms by arguing that Debussy's vocabulary was new but the musical elements (e.g. the chords and scales) were not. (See Boulez in: Boulez and Cott (1985) p. 145 (in French)).

4. LISTENING

This section examines the approach to listening advocated by Boulez, the way in which he argues music is perceived, and what he claims happens when one listens to a work. Despite the common perception of Boulez as a composer who tends to neglect the listener, he has discussed the issue of listening throughout his writings and, in certain respects, I would argue that his thoughts on this matter have helped to shape his ideas on composition.¹ During articles from the 1950s and 1960s, he sometimes touches upon this subject.² By the 1970s, one can see the emergence of his preoccupation with the problem of the perception of musical structures.³ However, it is in Boulez's writings and interviews dating from the 1980s and 1990s that he reveals the most about his conception of musical perception. Of special note is the unpublished lecture course 'Le Concept d'écriture' (1990-91), presented at the Collège de France, which concerns the ways in which different types of musical structures are perceived.⁴

Boulez's conception of listening is clearly founded on the dialectical framework I set out in chapter III. I have, therefore, structured this section similarly. This has the advantage of facilitating comparisons between Boulez's conceptions of composition and listening which inevitably mirror each other (as they constitute the production and reception of the musical work). There are several contradictions between Boulez's dialectical approach towards composition, which is very carefully conceived, and his arguably less-considered dialectical conception of listening. I shall consider these contradictions as I encounter them.

¹ Boulez's reticence in his early writings to discuss music listening appears to be primarily based on the impossibility of defining with any fixity what a particular musical work 'expresses'.

² Most notably in the article 'Son et verbe' (1958), which would later be subsumed into 'Son, verbe, synthèse' (1958). See: Boulez (1958c) and Boulez (1958e).

³ Deliège also observes this feature, writing that particularly after *Éclats* (1965) Boulez has been preoccupied with the perception of musical writing. See: Deliège (1988) p. 199 (in French).

⁴ See: Boulez (1991b). I examine in detail Boulez's ideas on perception described in 'Le Concept d'écriture' (1991) later in this section. See: this dissertation p. 334.

As in his conception of analysis, Boulez writes about listening to music from the perspective of the composer. This manifests itself through approaching the issue of perception as an influential factor in the process of composition.⁵ This assumption must be kept in mind, as it shapes the entire tone and theoretical approach of his writings on perception.

1. First stage of the dialectic: Inherited concepts and ‘first-degree’ listening

In chapter III, I established that the first stage of Boulez’s dialectical theory acknowledges that all concepts are inherited and that the composer cannot invent something from nothing. Applied to listening, this would suggest that all ways of listening are inherited and that the listener’s perception is inevitably based on culturally and historically acquired givens: it is impossible to listen to music ‘as it is’. Although Boulez acknowledges that the musical conditioning of a Western child inevitably means Western music is ‘rooted in our very beings and our experience’,⁶ he nevertheless often appears to believe in the possibility of an ahistorical and acultural form of listening. I shall return to this issue at the end of this section.⁷

Boulez is highly critical of what he calls ‘first degree’ listening - listening to a work for the first time without an in-depth knowledge of the work. Writing on Mahler, although his argument can be applied generally, he claims that ‘[f]irst degree listening often rests on comfortable clichés, saccharine commonplaces and fleeting glimpses of a countryside in which the past appears in a series of vignettes.’⁸ In other words, the listener tends to fall back on his sedimented understanding of past musical works. The listener should, instead, return to the work in order to penetrate its complexity. This claim can be tracked back to 1955 and comprises the main

⁵ For example, I examine later Boulez recognition that there are limits to how much information the ear can perceive. This limit shapes what the composer writes. See: this dissertation p. 333.

⁶ [‘intimement liée à notre être, à notre expérience’.] Boulez (1961d) p. 501 (in French) and p. 40 (in English).

⁷ See: this dissertation p. 342.

argument in 'Première et second audition' (1955). His disdain for immediate comprehension is shared by many of his influences, most notably Mallarmé.⁹ One recalls Mallarmé's concept of 'reportage' which refers to the everyday communal language in which meanings are transmitted using words as 'currency'. Leibowitz cites this idea, in all but name, as a typical problem in the performance of concert music. He writes that:

The perception of the content of the sounds and signs is too often less an active, a living re-creation of the musical work – as it should be – than a merely passive reproduction of graphic signs (i.e. musical notation), the true meaning of which has become sedimented.¹⁰

Boulez highlights this problem of passively reproducing culturally sedimented meanings. He argues that the Western attitude towards the musical work 'as a unique object of contemplation' results in its being 'opposed to all active participation'.¹¹ Moreover, he argues that this problem has increased in the twentieth century. Whereas amateurs of music in the nineteenth century followed contemporaneous artistic events, 'listening has progressively become passive.'¹²

2. Second stage of the dialectic: speculation and 'references'

In order to counter this passivity, Boulez insists upon the listener adopting an 'active' approach. This is the second stage of the dialectic and constitutes the principle of 'doubt' applied to listening. This 'active' approach involves the listener constantly 'speculating' upon the underlying principles of a given work. He insists that, during the performance of a work, the listener must concentrate on the sounds

⁸ Boulez (1979e) p. 297 (in English).

⁹ Breatnach correctly identifies Mallarmé's disdain for 'immediate' comprehension of language but falls into this trap herself. She writes that Mallarmé 'brought to his listening a mind unfettered by technical musical knowledge. What he experienced as he listened was a direct, aural contact with structure and structural principles'. Breatnach (1996) p. 80 (in English).

¹⁰ Leibowitz (1947) p. xxiv (in English).

¹¹ ['unique objet de contemplation' [...] 'oppose sa résistance à toute participation active.'] [My translation.] Boulez (1960a) p. 433 (in French) and p. 145 (in English).

¹² ['L'écoute est progressivement devenue passive.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 4.

themselves and their structural relationships.¹³ Before considering what this might involve, I would like to set out briefly Boulez's thoughts on extra-musical elements, which influence the way in which the listener perceives a work: the emotional context of the work.

Boulez argues that music cannot, in itself, communicate anything other than itself. This means that aspects such as poetic, philosophical and political ideas, as well as emotions, to a certain degree, cannot, strictly speaking, be conveyed by music.¹⁴ This is, of course, a distinctly formalist conception of musical expression perhaps most clearly articulated by Hanslick. Hanslick, like Boulez, claims that music cannot 'represent feelings'¹⁵ and that 'the ideas which a composer expresses are mainly and primarily of a *purely musical* nature.'¹⁶

The main example Boulez cites of music being unable to carry specific philosophical and political ideas is Wagner's music. He argues that Wagner's music resists the ideology that it intended to convey and, if anything, it contradicts the conservative reactionary political ideology of the drama with the progressive subversive music.¹⁷ Boulez argues that attempts by composers to use music as a vehicle for extra-musical ideas or ideology generally produce works of which 'the least that can be said is that the result is disappointing'.¹⁸ When music is combined with a text, for example a poem or a programme, 'any text can be set to any music, music being by its very nature devoid of *direct* meaning itself and therefore unable to communicate

¹³ This is, of course, the parallel to Boulez's insistence in composition upon making speculations upon the musical language based on nothing other than the material of sound itself.

¹⁴ See: 'music cannot undertake the task of expounding rational ideas'. ['la musique ne saurait prendre en charge l'exposé d'idées rationnelles'] Boulez (1963d) p. 550 (in French) and p. 81 (in English). Also see '[music], possessing a huge repertory of resources to translate the composer's subjectivity but none whatever to give a rational explanation of his attitude or his ideological preferences.' ['étant capable de traduire avec un grande luxe de ressources la subjectivité du compositeur, mais non d'expliquer rationnellement son comportement ou ses options idéologiques.'] (My slight modification.) Boulez (1976a) p. 255 (in French) and p. 276 (in English).

¹⁵ Hanslick (1891) p. 11 (in English).

¹⁶ *Ibid.*, p. 36.

¹⁷ See: Boulez (1976a) p. 254 (in French) and p. 275 (in English).

¹⁸ ['Le résultat n'est pas à la hauteur des espérances, c'est le moins qu'on puisse constater'] *Ibid.*, p. 255 (in French) and p. 276 (in English).

any – or, alternatively, to support all – meanings indifferently.’¹⁹ In short, music is incapable of communicating specific ideas: at the most, it can embody an aesthetic attitude such as Wagner’s progressive musical composition.

The communication of emotion in music, Boulez argues in 1960, relies on either an established system of conventions in which a particular musical situation triggers emotional responses associatively or through the imitation of human reactions. Like the musical language itself, the system of conventions is constantly evolving and results in specific signs gradually changing or losing their power and significance over time.

It cannot [...] be denied that the musical conventions for the unambiguous expression of, say, joy or grief lose their power, and even their significance, with the stylistic changes and transformations that occur from one age to another. The “symbolism” of music evolves just as the language does.²⁰

In other words, the emotional content is not, necessarily, intrinsic to the music itself but based on culturally learnt aspects. Hanslick makes the same claim, arguing that whilst music may evoke emotions through representing their ‘dynamic’ properties,²¹ ‘there is no *causal nexus* between a musical composition and the feelings it may excite’.²²

However, by 1977, Boulez qualifies this assertion by acknowledging that there are ‘innate psychological reactions’ which are not merely imitative, for example

¹⁹ [‘on peut faire chanter n’importe quel texte sur n’importe quelle musique; cette dernière étant, par excellence, non signifiante *directement*, elle ne peut donc rendre compte d’aucune “signification”, ou les supporter toutes indifféremment.’] Boulez (1962) p. 474 (in French) and p. 189 (in English).

²⁰ [‘Il reste [...] à avouer que des conventions sonores destinées à traduire “en clair” la joie, la douleur, par exemple, s’estompent, voire s’abolissent au fur et à mesure que changent et se transforment les caractères, les propriétés stylistiques; la “symbolique” évolue aussi bien que le langage lui-même’.] Boulez p. 475 (in French) and p. 190 (in English).

²¹ Hanslick (1891) p. 37 (in English).

²² *Ibid.*, p. 25.

chromaticism sounds unstable compared to diatonicism.²³ I shall discuss Boulez's thoughts on perception and innate responses later in this section.²⁴

Having established that Boulez insists upon focusing upon the structure of music during listening, I would like to examine what he argues this involves. As I shall explain, he argues that an 'active' approach to listening consists of speculating constantly on the underlying structural principles of the work. This constant speculation occurs in many different ways simultaneously, but principally it involves the notion of 'referencing' time.

The 'field' and 'references'

Like his approach to composition, Boulez conceives listening in terms of the field which is sub-divided and in which sound objects are placed. The division of the field is crucial in Boulez's conception of listening and based on his claim that music is primarily based on a hierarchy of 'discontinuous' values.²⁵ Perception of structure, he argues, is chiefly founded upon discrete units, the occasional exceptions being glissandi in pitch, crescendo and diminuendo in dynamics and accelerandi and decelerandi in tempo.²⁶ However, whereas in composition the fields concerned several different aspects of music, for example the fields of the various sound components, in listening the primary field is time. He writes that 'the conception of time is [...] based on a module. [...] A pulsation, whether regular or irregular, helps one to measure time as the module of space allows one to conceive distance'.²⁷ This

²³ ['réactions psychophysiologiques innées'] Boulez (1977b) p. 447 (in French) and p. 290 (in English).

²⁴ See: this dissertation p. 334.

²⁵ This is, of course, a use of the concept of discontinuous that I examined earlier. See: this dissertation p. 210.

²⁶ See: Boulez (1991b) p. 4. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material. In *Penser la musique aujourd'hui* (1963), Boulez describes all these expressions of non-discrete fields as glissandi. Therefore, he writes of dynamic glissandi (crescendo or diminuendo). It is interesting to note that Schaeffer also cites the example of glissandi as displaying a continuous field. See: Schaeffer (1966) p. 634 (in French).

²⁷ ['La conception du temps [...] est [...] fondée sur un module. [...] Une pulsation, qu'elle soit régulière ou irrégulière, aide à mesurer le temps comme le module de l'espace permet de concevoir la distance'.] (My translation.) Boulez (1989c) p. 84.

idea is based on Gestalt Theory,²⁸ in which stimuli are perceived within a 'physiological field' in response to the 'external environmental field'. Crucially, the listener attempts to map out this external field, i.e. the totality of possibilities, when he is provided with a particular stimulus. He fills in the 'missing' steps between events by means of 'referencing' the events against the divisions of the field.

The 'references or 'markers'²⁹ that a listener follows during the course of a work constitute a means of structuring 'musical time'.³⁰ This is clearly an important for Boulez as he claims that 'all music is of course based on this ductility of musical time' through which the listener follows 'references'.³¹ He conceives this as 'a kind of graining process [fibrage] - comparable to the 'grained space' [espace fibré] of ensemble theory'.³² Note the implied subdivision of the field in the idea of 'grained space'. This process of listening, often described as the 'angle of listening',³³ is divided into two categories: 'real memory exercised on real objects' and 'potential memory ('para-memory') exercised on classes of objects'.

Before developments in the twentieth century, musical works had an implicit formal schema, for example sonata form, which was either followed or subverted. These schemas provided established, *a priori*, 'references' that helped the listener to perceive form. These markers required a 'real memory exercised on real objects'.³⁴

²⁸ For my earlier consideration of Gestalt Theory see: this dissertation p. 187.

²⁹ The notion of references (translated as 'markers' in *Orientations* (1986)) appears in Boulez's writings as 'références', 'repères' or 'signales'. For example, the first two terms appear in the following: Boulez (1960d) p. 363 (in French) and p. 94 (in English). The latter term appears in: Boulez (1989c) p. 107. Clearly this is an important idea as it constitutes the title of *Points de repères* (1981) as well as being suggested in the title of *Jalons* (1989).

³⁰ This 'musical time' is to be distinguished from 'objective' clock time as it involves one's perception of structure. ['temps "objectif"'] (My translation.) Boulez in: Boulez and Szaersnovicz (1992) p. 45.

³¹ ['à la base de toute musique il y a cette ductilité du temps musical'.] Boulez (1979e) p. 279 (in French) and p. 299 (in English).

³² ['une sorte de fibrage (pouvant se rapprocher de l'espace fibré de la théorie des ensembles)'.] Boulez (1960d) p. 363 (in French) and p. 94 (in English).

³³ ['angle d'audition'.] Examples of this appear in the following: Boulez: (1958e) p. 422 (in French); Boulez (1960d) p. 363 (in French) and p. 93 (in English).

³⁴ ['mémoire réelle s'exerçant sur des objets réels'.] (My translation.) *Ibid.*, p. 363 (in French) and p. 94 (in English).

that is, an ‘immediate memorisation’ of explicitly articulated references.³⁵ As the references became more irregular during the Romantic period they became ‘decreasingly... referenceable’.³⁶ Consequently, formal schemes began to lose their clarity and their meaning.

In the twentieth century, as a response to this loss of ‘referenceability’, composers had to link form and content which resulted in a unique form for each work.³⁷ This has also had certain consequences in listening. The lack of ‘referenceability’ has necessitated a new mode of listening which involves the ‘potential memory (‘para-memory’) exercised on classes of objects potential memory’.³⁸ The example that Boulez provides of ‘para-memory’ is the use of a network of possibilities that are then applied again but with a slight modification.³⁹ One will arrive at two classes of objects whose connection is signalled by their common properties: Boulez calls these properties ‘virtual because they are not directly made explicit’⁴⁰ (in contrast to ‘real memory of real objects’). As this type of work is not articulated through reference to *a priori* schemas, the listener can only comprehend the form retrospectively, *a posteriori*. I shall return to the notion of retrospective understanding later.⁴¹

Fixity and mobility

These references can be ‘fixed’ or ‘mobile’, that is, regular or irregular. Boulez writes that ‘[f]ixity and mobility are in fact the most important markers of

³⁵ [‘une “mémorisation” immédiate plus ou moins consciente’.] (My translation.) Boulez (1958d) p. 422.

³⁶ [‘de moins en moins... repérables’.] (My translation.) *Ibid.*

³⁷ Boulez claims that the irregular references in works today are the primary reason why contemporary music is not appreciated by many people today in contrast to the popularity of contemporary painting. See: Boulez (1989c) p. 110 (in French).

³⁸ [‘mémoire virtuelle (para-mémoire) s’exerçant sur des classes d’objets’.] (My translation.) Boulez (1960d) p. 363 (in French) and p. 94 (in English).

³⁹ See: *ibid.*, p. 363 (in French) and pp. 93-94 (in English).

⁴⁰ [‘propriétés que l’appellerai virtuelles car elles ne sont pas directement explicitées’.] (My translation.) *Ibid.*, p. 363 (in French) and p. 94 (in English).

⁴¹ See: this dissertation p. 338.

perception.⁴² The listener needs fixity in order to help him gain a sense of structure but the composer needs mobility in order to develop ideas and create interest. The composer must, therefore, find a 'point of personal equilibrium between absolute variation and absolute repetition.'⁴³

If there is an excess of mobility in a work, problems will arise in perception. This problem is particularly characteristic of total serialism in which composers concentrated upon the principle of perpetual variation, i.e. constant renewal, of sound components. If all aspects of the music are renewed, this inevitably leads to homogeneity and a lack of articulation.⁴⁴ More obviously, it leads to 'absurdity'⁴⁵ because the results sound random: i.e. the 'linkage' of musical events becomes too unpredictable. Boulez cites Webern as the first composer to recognise this problem,⁴⁶ arguing that his solution was to reduce the material to instantly recognisable motifs of 3 or 4 sounds. Boulez dates his own recognition of this problem to 1955,⁴⁷ although it would seem difficult to believe that he did not notice this problem sooner after *Structure 1a* (1952). His response was to fix certain registers⁴⁸ as well as concentrating upon internal formal symmetries.

⁴² ['Fixité et mobilité sont en fait les repères de perception les plus importants.'] (My translation.) Boulez in: Boulez and Szaersnovicz (1992) p. 47.

⁴³ ['un point d'équilibre personnel, particulier, entre la variation absolue et la répétition absolue.'] (My translation.) *Ibid.*

⁴⁴ For example, if the 12 semitones are strictly permuted, pitch regions (i.e. elements of fixity) are not present.

⁴⁵ I refer to Boulez's acknowledgement that 'We, the "serialists", have been too long obsessed with non-repetition. It was always necessary to vary and to renew. That risked being confined to the absurd.' ['Nous, les "sériels", avons été trop longtemps obsédés par la non-répétition. Il fallait tout le temps varier, renouveler. Cela risquait de confiner à l'absurde.'] (My translation.) *Ibid.*

⁴⁶ 'Webern was the first to register that with twelve absolutely equal sounds, perception was gradually lost.' ['Webern, le premier, s'est rendu compte qu'avec douze sons absolument égaux, la perception était à peu près perdue.'] (My translation.) *Ibid.*

⁴⁷ See Boulez in: Boulez and Cott (1985) p. 148 (in French).

⁴⁸ This fixity of register recalls the notion of 'tessitura' that I consider in the section on 'Technique'. See: this dissertation p. 308. Nattiez makes the valid point that this fault contradicts Boulez's statement in *Penser la musique aujourd'hui* (1963) that the series is the 'germ of a hierarchy founded on psycho-physiological acoustic properties.' ['La série est [...] le germe d'une hiérarchisation fondée sur certaines propriétés psycho-physiologiques acoustiques.'] Boulez (1963b) p. 35 (in French) and p. 35 (in English). See: Nattiez (1987) p. 205 (in French).

If there is an excess of fixity in the work, i.e. too much repetition, and consequently 'if you can foresee [the developments of the work], the work is dead. Immediately.'⁴⁹ That is to say, there is no surprise for the listener during the course of the work and the 'linkage' becomes too predictable. The most common example of works with too much fixity is music that focuses upon a single musical component to the neglect of others components.⁵⁰ He argues that 'one cannot found a language upon a single element and there resides the inadequacy.'⁵¹ Whilst an early target of this criticism is Varèse,⁵² today it is minimalism in which '[t]here is no surprise. [...] The passivity of this type of listening approaches that of cows looking at passing trains.'⁵³

Perception

I would now briefly like to set out some of Boulez's thoughts on perception. His most substantial and sophisticated writings on perception date from the 1980s and 1990s, influenced by the concurrent development of music psychology. Although he draws from what he calls 'psychoacoustics', i.e. the study of musical perception, he expresses some reservations, particularly in the empirical approach that seeks to isolate musical elements by disregarding context.⁵⁴ However, as with all of his influences, Boulez takes what he considers relevant for his own work.

In the following, which is primarily drawn from the course 'Le concept d'écriture' (1990-91), Boulez describes the 'speculation on the harmonic writing' and 'vertical

⁴⁹ ['si vous pouvez les prévoir, l'œuvre est morte. Immédiatement.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 148.

⁵⁰ One should recognise that this type of music is also attacked by Boulez for constituting a partial speculation and not a global speculation (an attempt to synthesise all the aspects of music into a rational framework).

⁵¹ Boulez in: Boulez and Menger (1990) p. 12 (in English).

⁵² I refer to Boulez's statement that Varèse's concentration upon rhythm is a 'facile solution which solves nothing'. ['C'est une solution de facilité qui ne résout rien.'] Boulez (1948a) p. 262 (in French) and p. 54 (in English).

⁵³ ['il n'y a pas de surprise [...] La passivité de ce type d'audition se rapproche beaucoup de celle, fameuse, des vaches regardant passer les trains.'] (My translation.) Boulez in: Boulez and Cott (1985) p. 147.

writing'.⁵⁵ This is the constant speculation made by the listener when listening to the sound objects of a work and attempting to speculate upon their logic. This constant speculation plays on the 'surprise of the linkage, on its as yet unseen side, on its unique quality, indeed unforeseeable.'⁵⁶ One notes the need for the unforeseen in listening.

In his examination of perception, Boulez states that every 'sound object'⁵⁷ appears in the dimensions of the 'vertical' and 'horizontal'.⁵⁸ The vertical dimension broadly corresponds to harmony and is the 'domain of simultaneous time'.⁵⁹ The horizontal dimension is more complicated to understand but is connected with counterpoint, particularly in its simplest forms – that is, 'successive'⁶⁰ musical events in time. For both dimensions, Boulez notes that if what he calls the 'linkage' of events is too 'charged', i.e. if it is too excessively 'mobile', the listener will be overloaded with information. Therefore, a balance between fixity and mobility must be achieved.

Before considering the ways in which an 'object' can be developed in the vertical and horizontal dimensions and its consequent implications on perception, Boulez describes three types of 'fictive writing'.⁶¹ Fictive writing does not change or transform the object but merely 'exposes the object in different lights'⁶² to the listener. The first type of fictive writing Boulez identifies is 'stasis'. This refers to the fact that if an object is presented in a static period of time, the listener can perceive greater details (such as complex pitch clusters) than otherwise.⁶³ The

⁵⁴ Boulez in: Boulez and Menger (1990) p. 17 (in English). This is, of course, a manifestation of the Gestaltist notion of taking a global view of the stimulus in order to gain an understanding of it.

⁵⁵ ['La spéculation sur l'écriture harmonique' 'l'écriture verticale'.] (My translation.) Boulez (1991b) p. 10. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

⁵⁶ ['la surprise de l'enchaînement, sur son côté inédit, sur sa qualité unique, voire imprévisible.'] (My translation.) *Ibid.*, p. 11.

⁵⁷ The concept of the sound object, usually distinguished by the term 'object' alone, refers to a coherent musical idea that has been realised and can be manipulated and developed.

⁵⁸ I consider the concepts of the 'vertical' and the 'horizontal' elsewhere. See: this dissertation p. 314.

⁵⁹ ['le domaine du temps simultané'.] (My translation.) *Ibid.*, p. 12.

⁶⁰ I refer to Boulez's term 'successive time'. ['temps successif'.] *Ibid.*

⁶¹ ['écriture fictive'.] (My translation.) *Ibid.*, p. 13.

⁶² ['l'exposer [...] à différents éclairages'.] (My translation.) *Ibid.*, p. 14.

⁶³ See: *ibid.*, p. 12.

second type is 'parallelism' in which the object is identified due to it being moved within a field without being modified. The obvious example of this is parallel chords.⁶⁴ The third type of fictive writing is 'description'. This refers to the breaking up of a vertical object (a chord) in a short period of time in order to enable the listener to perceive the constituent parts more fully. An example of this is an arpeggio but a vertical object can be broken up in other ways.⁶⁵

Vertical writing

Boulez continues by establishing two starting points from which the composer can generate vertical objects, both of which have vital implications in the issue of perception.⁶⁶ These starting-points are part of the composer's 'pre-compositional stage'.⁶⁷ First, the object can be placed within a world of theoretical coordinates, i.e. an abstract 'matrix'. This takes the 'absolute' object as the starting material from which the composer can deduce 'relative' objects. The possibilities for this include deducing a family of objects, varying the elements of the object and then transforming it completely, transposing the object etc.⁶⁸ The second approach by which objects can be generated does not apply to abstract grids and focuses, instead, upon considerations of the physical sound spectrum. This approach takes a 'relative' object and deduces other 'relative' objects.⁶⁹ Intervals become problematic as they sound differently in different registers.⁷⁰ As this approach does not involve a matrix, the composer must arrive at new relative objects through relations of proximity which permit the listener to follow the transformations.⁷¹ These transformations can

⁶⁴ See: *ibid.*, pp. 12-13.

⁶⁵ See: *ibid.*, p. 13. Earlier in this lecture, Boulez also calls this type of fictive writing a 'descriptive figure'. ['figure descriptive'.] (My translation.) *Ibid.*, p. 10.

⁶⁶ To these two ways of generating vertical objects, Boulez adds a potential third way which he does not pursue. It is the approach which takes 'pure concrete objects' and does not attempt to place them within a rational system at all. Although Boulez does not specify to what he alludes, I would suggest that this may be a reference to *musique concrète* or, more recently, 'sampling'. [pur concrète d'objets'.] (My translation.) *Ibid.*, p. 18.

⁶⁷ ['l'état pre-compositionnel'.] (My translation.) *Ibid.*

⁶⁸ See: *ibid.*, pp. 17-18.

⁶⁹ ['objet relatif'.] (My translation.) *Ibid.*, p. 16.

⁷⁰ See: *ibid.*, p. 18.

⁷¹ See: *ibid.*, p. 17.

occur gradually, in which case the listener can follow them, or they can move in larger steps which increases the difficulty of perception.⁷² The composer can also break the continuity of transition and move in a zigzag between the initial object and final object but he must ensure that the continuity is perceivable.⁷³

The vertical object, Boulez claims, can be placed in a field in two ways. It can be transposed and remain unchanged by a scale or grid. Alternatively, it can be transposed but become modified by the scale.⁷⁴ In contemporary works which define their own language, Boulez argues the composer must introduce an explicit constant element (an invariant) to enable the relationships between vertical objects to be perceived.⁷⁵

Vertical objects are perceived as a unit, 'we synthesise the object and we perceive it as a whole'.⁷⁶ They are perceived immediately and the only perception difficulties that can occur are created by either not knowing the code the objects obey or not being able to attempt to foresee the linkage of vertical objects.⁷⁷ Boulez adds that the relations between a succession of vertical objects are also perceived 'globally' as well as instantaneously.

Horizontal writing

Unlike vertical objects, a monody is perceived in successive time: the listener must refer to its immediate past and readjust as he follows the line. At the end of the path, 'we try to globalise our listening, and to give a coherent final sense to a successive series of events'.⁷⁸ For this, the listener can be aided by the underlying harmony, the symmetries and repetitions in the line itself, the dynamics, the orchestration, and

⁷² See: *ibid.*, pp. 17-18.

⁷³ See: *ibid.*, p. 18.

⁷⁴ See: *ibid.*, p. 19.

⁷⁵ See: *ibid.*

⁷⁶ ['nous synthétisons l'objet et nous le percevons comme une tout'.] (My translation.) *Ibid.*, p. 22.

⁷⁷ See: *ibid.*

⁷⁸ ['nous essayons de globaliser notre écoute, et de donner un sens final cohérent à une série d'événements successifs.'] (My translation.) *Ibid.*

most importantly by the rhythmic structure and its periodicities.⁷⁹ With the introduction of more than one line 'the attention, and therefore the faculty of perception, must divide itself.'⁸⁰ The exception to this is the instance of heterophony in which the lines are perceived globally.⁸¹

Returning to polyphony, he argues that if two superimposed lines are similar the perception 'globalises' them, whereas if they are dissimilar, the 'perception divides itself'.⁸² In fugues, the composer makes certain lines – the subject and counter-subject – necessary to follow but leaves other lines optional.⁸³ Two other factors complicate the perception of polyphonic lines which Boulez identifies as register and continuity. If two lines are close within the same register, perception of the two lines becomes more difficult. If there is discontinuity in time or in space (in intervals) then, once again, perception becomes difficult.⁸⁴

3. Third stage of the dialectic: synthesis, the unforeseen and proliferation

Already in my brief account of Boulez's ideas on horizontal and vertical objects, one notices that he conceives perception in terms of understanding objects in their 'globality'. This is clearly based on the Gestalt concept of perceiving stimuli within a 'physiological field' by intuition.⁸⁵ This globality is also a feature of his insistence that modern works are understood retrospectively after performance. At this point, the listener begins to understand the relevance of the various references that appeared throughout the work. Boulez argues that '[t]he only possibility of being

⁷⁹ See: *ibid.*

⁸⁰ ['l'attention, et donc la faculté de perception, va devoir se diviser.'] (My translation.) *Ibid.*, p. 23. Later in this lecture, Boulez writes that it 'provokes a divided listening'. ['provoquer une écoute divisée.'] (My translation.) *Ibid.*, p. 26.

⁸¹ Boulez equates heterophony with what Klee describes as 'the variation of perspectives'. Boulez claims that Klee's writing on this subject helped him to understand better the musical concept of heterophony. See: Boulez (1989c) p. 75 (in French).

⁸² ['globaliser' 'la perception va se diviser.'] (My translation.) *Ibid.*, p. 23.

⁸³ See: *Ibid.*, p. 25.

⁸⁴ See *Ibid.*, p. 26.

⁸⁵ For my earlier examination of this, see: this dissertation p. 187.

able to recognise [musical] form requires the work of the memory.’⁸⁶ Due to this, he claims to have ‘resolved the antinomy between form as something thought and form as something experienced; since the concrete deductions on which it is founded, within a coherent system of formal logic, demonstrate that it can be experienced only by being thought.’⁸⁷

Despite Boulez’s claim to have ‘resolved’ the problem of form as something ‘thought’, one recalls that Sartre had arrived at the same conclusion several years previously in his influential work *L’Imaginaire: Psychologie phénoménologique de l’imagination* (1940). Sartre distinguishes between the ‘Imaginary’ of an artwork (one’s experience of it) and its ‘reality’ (its physical nature). For music specifically, this leads Sartre to the conclusion that the performance of a work is merely the single instance of a particular performance at a particular time and venue. The artwork, on the other hand, only resides in the ‘Imaginary’ outside a specific time or place (i.e. the artwork only exists when it is thought).

As I have already established, Boulez argues that when the listener hears a work, he speculates constantly upon the underlying general principles of the musical writing of the work. This is where the primary unforeseen element of listening occurs. However, at the outcome of the work, the listener’s retrospective understanding of the work is inherently unforeseen. This unforeseen aspect is not only applicable to the first hearing of a work but also, with respect to great works, to repeated listenings. Boulez writes that ‘[t]he simplistic works do not change in their

⁸⁶ [‘La seule possibilité d’être en mesure de reconnaître la forme requiert le travail de la mémoire.’] (My translation.) Boulez (1989c) p. 107. In this respect, music differs fundamentally from painting as one moves from the details to the globality and not vice versa. Boulez notes that with painting, one initially sees the totality and then one proceeds to examine the details whereas in music the details come first in the moment and the totality after the musical is finished. See: *ibid.*, p. 87 (in French).

⁸⁷ [‘Enfin me semble résolue l’antinomie forme pensée – forme vécue, car des déductions concrètes sur lesquelles elle se fonde au sein d’un système formel logique cohérent, il ressort qu’elle ne peut être que vécue pour être pensée.’] Boulez (1960d) p. 366 (in French) and p. 96 (in English). I shall return to this issue shortly. See: this dissertation p. 343.

relationship with you. That is their death.’⁸⁸ Each time a listener hears a great work, his perception of it changes.

This ability to perceive new aspects of a musical work upon repeated listenings is important. It touches upon Boulez’s desire to conceive the work not merely as a single solution but as numerous solutions. This recalls his advocacy of attempting to strive towards a ‘tree of consequences’ that ‘proliferate’. In an interview with Nattiez, Boulez insists that musical communication ‘always exists in ambiguity’.⁸⁹ Rather than provide a single definite meaning, the musical work should explore ambiguity in a manner comparable to Mallarmé’s recourse to poetic allusion (‘Literature’).

Nowhere is this ambiguity more obvious than in mobile form. Boulez acknowledges the multiplicity of meaning in mobile form in a text dating from 1968. He writes that ‘[t]he solution will never be the same, it is a plural solution; a multiple solution in which it is always necessary to find the path.’⁹⁰ He reveals that what really interests him is ‘a work that contains a profound dose of ambiguity which permits many solutions and meanings.’⁹¹ In this sense, mobile form not only absorbs the chance of the composer and the material, as I established in chapter II, but also the chance of the listener. Valéry argues that all ‘speculation on artistic creation must consider the

⁸⁸ [‘Les œuvres simplistes, dans leur relation avec vous, ne changent pas. Et ça, c’est leur mort.’] (My translation.) Boulez in: Boulez and Cott (1985) p. 148. The flip-side of this argument dates from 1963 in which he claims that ‘any work that can in any sense be called a masterpiece is precisely [...] one that permits of the element of surprise’. [‘toute musique qui relève du chef-d’œuvre, justement [...] est une musique qui, à chaque moment, laisse passage à la faculté de surprise.’] Boulez (1960a) p. 433 (in French) and p. 145 (in English).

⁸⁹ After Nattiez asks Boulez if musical communication exists he replies that ‘It always exists in the ambiguity’. [‘Elle [communication musicale] existe toujours dans l’ambiguïté.’] (My translation.) Boulez in: Boulez and Nattiez (1982) p. 196. This recalls ‘Information Theory’, a structuralist theory mentioned briefly by Boulez in *Penser la musique aujourd’hui* (1963) (see: Boulez (1963b) p. 21 (in English)). In Information Theory, communication is not concerned with the content of the message but in terms of the predictability of the message. The greater the unpredictability, the more information is conveyed. If the message is completely predictable, no information is conveyed. See: Greene (1975) p. 90 (in English).

⁹⁰ [‘La solution ne sera jamais la même, c’est une solution plurale, une solution multiple, dans laquelle il faut toujours découvrir le chemin.’] (My translation.) Boulez (1968b) p. 506 (in French) and p. 462 (in English).

⁹¹ [‘l’œuvre qui m’intéresse [...] est celle qui a une dose profonde d’ambiguïté, ce qui lui permet d’avoir beaucoup de solutions et de sens.’] *Ibid.*

diverse 'heterogeneous' conditions which are imposed on the work and are found necessarily implied in the work. The paradoxical destiny of the artist orders him to combine definite elements in order to act on an indeterminate person.'⁹² As there is no fixed determinate meaning in the material and the composition of the work, there is no fixed determinate listener. Chance is always present in the way in which the listener hears a work (even the same listener will hear a work differently under different circumstances).

Boulez's conception of mobile form as the absorption of chance inherent in the composer, material and listener accounts for his reluctance to consider a commonly presented problem of mobile form. This problem, as Stoianowa notes,⁹³ is that the listener does not perceive the performed version of a mobile work in terms of its other potential works. In other words, the listener fails to relate what could have been performed with what is performed and therefore does not appreciate the mobile nature of the work. Boulez responds by claiming that '[t]he interest [of a given work] is not in comparing two faces of a work, but rather of knowing that that work will never have a definitively fixed face.'⁹⁴

The notion that the meaning of a given musical work is mobile (with or without mobile formal elements) has important other consequences in Boulez's aesthetic theory. He acknowledges that 'the work is susceptible to reception on several levels: one cannot imagine a reception for everyone.'⁹⁵ In other words, the inherent ambiguity of the work ensures that it is impossible for the composer to conceive every way in which his work could be interpreted. Therefore, he must concentrate on

⁹² ['toute spéculation sur la création artistique doit tenir grand compte de la diversité "hétérogène" des conditions qui s'imposent à l'ouvrier et se trouvent nécessairement impliquées dans l'ouvrage. Le destin paradoxal de l'artiste lui enjoint de combiner des éléments définis pour agir sur une personne indéterminée.'] (My translation.) Valéry (1928) p. 299 (in French).

⁹³ See: Stoianowa (1974) p. 20 (in French).

⁹⁴ ['Il n'est pas important pour moi que l'auditeur perçoive immédiatement la mobilité' [...] 'elle prenne chaque fois un visage légèrement différent. L'intérêt n'est pas de comparer deux visages d'une œuvre, mais bien de savoir que cette œuvre n'aura jamais un visage définitivement fixé.'] (My translation.) Boulez in: Boulez and Deliège (1975) p. 108.

⁹⁵ ['l'œuvre est susceptible de réception à plusieurs niveaux: on ne peut pas imaginer une réception pour tout le monde'.] (My translation.) Boulez in: Boulez and Billaz (1983) p. 116.

himself and his own means of expression: ‘the creator has to be intensely himself and remain himself’.⁹⁶ Boulez continues and claims that ‘[w]anting to touch a given audience now risks no longer touching another in fifty years time. Every close target is transitory.’⁹⁷ The composer should not become fixated upon whether or not his work is understood by a particular social group or whether it is popular.

Summary

In conclusion, Boulez’s conception of listening is clearly underpinned by his dialectical theory to music generally. In many regards, his conception of listening is not merely an aspect of music ‘tacked on’ to an already existing compositional theory. One senses that his conception of the field, in particular, that appears throughout his compositional approach was understood initially from its Gestalt roots – that one perceives stimuli within a ‘physiological field’ in response to the ‘external environmental field’. However, in some respects Boulez’s approach to listening appears to contain flaws and contradictions in relation to his dialectical conception.

First, Boulez’s conception of listening appears to betray a belief in the capacity for hearing sounds free from the listener’s cultural heritage. His complete rejection of tonality in his own compositions⁹⁸ indicates that he believes that the Western listener is capable of comprehending music without applying tonal criteria. Described in Boulez’s dialectical terms, I would propose that, whilst the listener can listen to musical works in ways that are not founded on principles of tonality, nevertheless, he cannot throw his entire tonal background into ‘doubt’. In this respect, one could argue that Boulez falls into the same trap as Cage.

⁹⁶ [‘Le créateur a à être intensément lui-même et encore lui-même: ce n’est qu’à ce prix qu’il pourra concerner le plus de gens possible.’] (My translation.) *Ibid.*, p. 113.

⁹⁷ [‘Vouloir toucher tel type de public maintenant, c’est risquer de ne plus toucher tel autre dans cinquante ans. Toute cible trop proche est transitoire.’] (My translation.) *Ibid.*

⁹⁸ For specific examples, see my discussion of Boulez’s stipulation upon avoiding octaves and triads, both of which reinstate the tonal principle of identity. See: this dissertation p. 321.

Second, as Nattiez observes, the principle of constant renewal of serialism causes inevitable problems in perception. Boulez has acknowledged this problem and pinpointed the need for some fixed elements in music. These fixed elements are present even in *Structure 1a* (1952) in the fixed registers chosen by Boulez, one of the few choices he permitted himself. Indeed, the fact that he felt compelled to make these choices in a work that was primarily exploring the limits of total control is significant. It suggests that despite his understanding of history in terms of the principles of constant renewal,⁹⁹ as a composer he recognised the need to intervene and limit this principle for the purposes of facilitating perception.

The third problem in Boulez's approach to listening concerns his emphasis on the retrospective understanding of modern works. This implies a diminishing of the importance of the performance of the musical work itself, as the work is 'experienced only by being thought',¹⁰⁰ not by being performed. One could argue that the work is experienced after it has finished and as the musicians are taking their bows. By adopting this position, Boulez appears to confirm the frequent accusation that he is less concerned with sound and more concerned with structural problems of writing.¹⁰¹ Whilst recognising that this is not completely correct – the listener is involved in constant speculation throughout the performance of a work – Boulez's concern with structural problems is, of course, based on his desire to make every

⁹⁹ As well as the principles of consistency and dissociation which underpin *Structure 1a* (1952).

¹⁰⁰ I refer to a passage by Boulez I cited earlier. See: this dissertation p. 338.

¹⁰¹ Bonnet writes that Boulez 'persists in considering writing as the real area of musical invention and affirms the necessity of abstracting himself, in the early stages, from sonic reality in order to compose through the neutral symbols of *écriture*.' Bonnet (1987) p. 174 (in English). Maconie writes that 'Boulez's essay [*Éventuellement*] (1952) shows him to be [...] concerned with *l'écriture*: with solving the problem of total serial predetermination in notational terms.' Maconie (1976) p. 35 (in English).

aspect of the musical work *necessary* and expressive. This raises certain problems to which I shall return in the conclusion.

5. (PERFORMANCE) TECHNOLOGY

In this section, the term 'performance technology' includes all means of performance such as the symphony orchestra as well as electro-acoustic equipment and the use of computers. Performance technology is perhaps the most important 'material' at the composer's disposal, as it most radically shapes his composition and enables certain musical possibilities to occur (and therefore denies other possibilities). I shall begin by plotting a short history of the development of performance technology that can be pieced together from Boulez's writings. Thereafter, I examine his own experiences with technology, from his time working at the GRMC to the development of IRCAM.

The late nineteenth century background: Berlioz-Wagner-Mahler

The nineteenth-century composers whose orchestration Boulez rates most highly are Berlioz, Wagner and Mahler, claiming that '[t]he Berlioz-Wagner-Mahler affiliation is undeniable.'¹ Berlioz is credited not only with inventing the modern orchestra² but also with being one of the first composers to discuss matters of orchestration.³ This desire to discuss orchestration in print is, of course, a feature of Wagner's writings.⁴ However, Berlioz and Wagner differ, in that the former emphasises an 'imaginary' approach to orchestration,⁵ as he tends towards orchestral ideas unrestricted by matters of reality, whereas the orchestration of the latter is 'realistic',⁶ as he confronts the practical problems of orchestration. One of the main characteristics of

¹ ['La filiation Berlioz-Wagner-Mahler est indéniable.'] (My translation.) Boulez in: Boulez and Grange, de la (1989) p. 82.

² ['Berlioz a inventé l'orchestre moderne.'] (My translation.) *Ibid.*

³ In an article from 1969, Boulez considers Berlioz's *Traité d'orchestration* (1844) in which he describes a huge imaginary orchestra. See: Boulez (1969) pp. 229-235 (in French) and pp. 213-219 (in English).

⁴ As Boulez notes. See: Boulez (1977c) pp. 211-212 (in French) and p. 233 (in English).

⁵ See: Boulez (1969) p. 227 (in French) and p. 212 (in English).

⁶ ['réaliste'.] Boulez (1976a) p. 251 (in French) and p. 273 (in English).

Wagner's orchestration that Boulez highlights is his contrast of strongly characterised groups against a rather undifferentiated orchestra.⁷ The presence or absence of these groups helps Wagner to articulate form. Mahler's 'sharp knowledge of timbre and an intuitive genius for its effect'⁸ manifests itself in his combination of timbres and a resulting ambiguity.⁹

The evolution and expansion of the orchestra in the late nineteenth century, particularly accelerated by the works of Berlioz, Wagner and Mahler, enabled a vast resource of unexplored timbral possibilities and led to greater professional competency of performance.¹⁰ However, these positive aspects were, conversely, founded upon an aspect that inhibited future development rather than helped it: the standardisation of the orchestra.

Boulez argues that Berlioz was one of the earliest composers to recognise that the standardised orchestra could 'paralyse' the imagination of future composition.¹¹ This paralysis can be witnessed today¹² in the specialisation of orchestral performers in particular areas of music (e.g. 'specialists' in the 'authenticity' movement or as 'generalists' in standard orchestras). Regardless of the type of performer, their approach to performance becomes restrictive: 'the instrumental technique is paralysed due to the demand that the classical repertoire must satisfy above all the norm of music composed a long time ago'.¹³ Elsewhere, he reiterates this criticism '[l]ike highly qualified workers, the more their degree of specialisation is raised, the more they have the impression of mastering a knowledge kept only for an elite. This

⁷ For three occurrences of this particular reference to Wagner's orchestration see: Boulez (1970a) pp. 269-270 (in French) and p. 256 (in English); Boulez (1976a) pp. 251-252 (in French) and p. 273 (in English); Boulez (1977b) p. 439 (in French) and p. 283 (in English).

⁸ ['une connaissance aigüe du timbre, et une intuition géniale de son "rendement".'] (My translation.) Boulez (1968c) p. 344 (in French) and p. 305 (in English).

⁹ See Boulez in: Boulez and Szaersnovicz (1992) p. 45 (in French).

¹⁰ See: Boulez (1969) p. 229 (in French) and p. 214 (in English).

¹¹ See: *ibid.*

¹² This problem has been compounded today by the culture having 'orientated towards historicism and conservation.' Boulez (1977a) p. 487 (in English).

¹³ ['la facture instrumentale est paralysée parce que la demande pour le répertoire classique doit satisfaire avant tout les normes d'une musique composée depuis longtemps.'] (My translation.) Boulez (1983b) p. 7.

corporate mentality creates pitfalls capable of paralysing the evolution of musical life.’¹⁴ Instead, there should be more ‘mobility’ for performers so that they can play in other types of ensembles.¹⁵

Ways forward in the twentieth century: Explorations into percussion and new technology

One can identify two main musical developments that are, in effect, responses to the standardisation of the orchestra. These are the explorations into percussion, particularly in the first half of the twentieth century, and, perhaps more obviously, the developments in electro-acoustic technology in the latter half of the twentieth century. Although Boulez’s interest in electro-acoustic technology would remain with him throughout his life, his curiosity towards explorations in percussion writing was a feature of his development in the late 1940s and early 1950s.

In an interview with Samuel, Boulez claims that twentieth-century experiments into percussion were primarily due to the need felt by composers ‘to use sounds which escape a hierarchy, sounds which do not go in a scale, in a given gradation.’¹⁶ This refers to the idea of ‘neutrality’. Boulez argues that in Western music, structure is usually created through ‘neutral’ sounds which can be ‘integrated’ within a hierarchy to give meaning.¹⁷ For example, the pitch of ‘C’ is neutral because its meaning is completely dependent upon context. The more individual the sound, the less neutral it becomes and the less it can be placed within a context without

¹⁴ [‘Comme des ouvriers hautement qualifiés, plus leur degré de spécialisation est élevé, plus ils ont l’impression de maîtriser un savoir restreint à une élite. Cette mentalité corporatiste crée des écueils capables de paralyser l’évolution de la vie musicale.’] (My translation.) Boulez in: Boulez and Clavé (1990) p. 3.

¹⁵ [‘mobilité’.] (My translation.) Boulez (1983b) p. 9. Boulez makes the same point in the following: Boulez (1988) (no page numbers) (unpublished in French). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

¹⁶ [‘les compositeurs ont ressenti le besoin d’employer des sons qui échappent à une hiérarchie, des sons qui n’entrent pas dans une gamme, dans une échelle données.’] (My translation.) Boulez in: Boulez and Samuel (1984-85) p. 1.

¹⁷ See: Boulez (1991b) p. 2. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

disrupting that context.¹⁸ Percussion instruments are the prime example of non-neutral sounds, as they tend to remain 'autonomous', due to their 'strong personality', and do not 'integrate' into a 'hierarchy'.¹⁹ The desire to avoid referring to previously established hierarchies was, according to Boulez, the primary inspiration for Cage's experiments in percussion.²⁰

The increased importance of percussion in the first half of the twentieth century was also promoted by the desire to make timbre carry a structural function (i.e. to make it become *necessary*). This tendency is, of course, founded upon the concept of dissociation I set out in chapter I.²¹ Before the twentieth century, percussion was primarily used for pictorial effects, underlying rhythms and articulating the general discourse. However, composers such as Ravel and Stravinsky began to write for percussion in a way that granted it structural functions.²² In addition, Varèse and the Futurist movement explored percussion, although the works of the latter, particularly those by Luigi Russolo (1885-1947), appear to have fostered Boulez's reluctance towards writing for percussion. He claims that 'one can write for percussion without knowing how to write music and there is the danger.'²³ He dismisses much of the Futurists works in music as 'weak' and undertaken by 'dilettantes'.²⁴

Varèse and the Futurists are, of course, not only associated with the exploitation of percussion but also with electronic technology. Indeed, Russolo's manifesto *The Art of Noises* (1913) was one of the first occasions on which electronic technology had been proposed as a means of creating new sounds from new instruments. As Born

¹⁸ See: *ibid.*, pp. 2-3.

¹⁹ ['autonomie parce qu'il ne s'intègre pas dans une hiérarchie [...] parce qu'il possède une forte personnalité.'] (My translation.) Boulez in: Boulez and Samuel (1984-85) p. 1.

²⁰ See: Boulez (1953b) p. 167 (in French) and p. 175 (in English). A connected idea appears in 'Éventuellement' (1952) (the previous year) in which Boulez credits Cage with recognising that instruments designed for tonality no longer correspond to the needs of the new music. See: Boulez (1952c) p. 288 (in French) and p. 134 (in English).

²¹ See: this dissertation p. 57.

²² See Boulez in: Boulez and Samuel (1984-85) p. 1 (in French).

²³ ['on peut écrire pour la percussion sans savoir écrire la musique, et là est le danger.'] (My translation.) Boulez in: Boulez and Samuel (1984-85) p. 1.

²⁴ ['dilettantes.']. (My translation.) Boulez in: Boulez and Samuel (1984-85) p. 1.

notes, Varèse shared many of the aspirations of the Futurists in his call for new instruments and his interest in science and technology.²⁵

The influence of Futurism and Varèse on Boulez in the 1940s is perhaps not obvious today. However, I would argue that their initial impact can be seen on Boulez's choice of instrumental study: the ondes martenot.²⁶ The ondes martenot would be his first foray into new electronic technology, used as a means of opening up new possibilities in sound. I would now like to consider his work with and writings on new technology throughout the course of his career, starting with his involvement with Pierre Schaeffer.

Boulez's career with technology: From the GRMC to IRCAM

The first experience Boulez gained with electronic technology was in 1951 at the GRMC (Groupe de Recherche de Musique Concrète) founded by Schaeffer in Paris. On that occasion, Boulez worked on two studies for tape which have never been published. The intellectual fruits of this experience can be seen in the short penultimate section in 'Éventuellement' (1952).²⁷ He discusses the merits of musique concrète, writing in favourable tones towards Schaeffer's efforts, but expresses his reservations concerning a lack of organisation of sound objects.²⁸ By the middle of the 1950s, and provoked by a personal disagreement between himself and Schaeffer, Boulez would condemn the aesthetic position of musique concrète.

In 'Éventuellement' (1952), Boulez appears to conceive new technology purely as a means of performing that which could not be achieved by manual means, for

²⁵ See: Born (1995) p. 51 (in English).

²⁶ Developed in the 1920s by Maurice Martenot, this early electronic instrument was played either via a keyboard or by a ribbon attached to the finger by a ring. The ribbon mechanism enabled the performer to play within the entire pitch field in a range of more or less a piano keyboard. Details taken from Piston (1955) p. 352 (in English).

²⁷ See: Boulez (1952c) pp. 290-293 (in French) and pp. 135-138 (in English).

²⁸ See: *ibid.*, p. 290 (in French) and p. 136 (in English).

example complex rhythms.²⁹ This is noted by Jameux, who writes that Boulez's attitude towards technology was 'with compositional preoccupations that predated the encounter, and which were in any case external to it.'³⁰ Similarly, Maconie claims that Boulez conceived technology as 'a mirror of theory [...] and not as a tool' enabling the composer to 'conceive a perfect structure of relationships, and then to turn to the tape recorder, sound-generator, etc., to obtain a 'print-out'.³¹ It would be the 1970s before Boulez's writings would genuinely consider technology as a compositional 'tool', as part of the compositional process.

Even in Boulez's early attitude towards technology, there is a major difference between his aesthetic position and that of Schaeffer. This difference is summed up neatly by Boulez in 1980 in which he identifies two general approaches to electro-acoustic music. The first involves taking found sounds and manipulating them, as in *musique concrète*. The problem with this is that 'one is condemned to dispersion and inefficacy'.³² This criticism dates back to Boulez's *Fasquelle* entry for 'Concrète (Musique)' in 1958 in which he makes the argument that little attention is given to the selection of the 'concrète' material and that this 'produces an anarchy which [...] is fatally detrimental to composition.'³³ In other words, it relies too heavily on the accident at the outset of composition. Consequently, he rejects *musique concrète* as not having 'any real importance'.³⁴ The second general approach towards electro-acoustic music that Boulez identifies is the construction of sound from scratch, 'reinventing'³⁵ sound in which 'one is dedicated to the purity of an absolutely ex

²⁹ See: *ibid.*, pp. 290-291 (in French) and p. 136 (in English). In an article from the same year, Boulez predicts that with the 'mechanical means of reproduction' structures will not be bound by instrumental limits, eg. equal temperament. See: Boulez; Cage; Feldman; Wolff (1952) p. 170 (in English).

³⁰ Jameux (1984) p. 13 (in English).

³¹ Maconie (1976) p. 35 (in English).

³² ['on se condamnait à la dispersion et à l'inefficacité'.] (My translation.) Boulez (1980c) p. 29.

³³ ['entraîne fatalement une anarchie préjudiciable à la composition'.] Boulez (1958a) p. 344 (in French) and p. 226 (in English).

³⁴ ['son rôle n'a plus guère d'importance'.] *Ibid.*, p. 343 (in French) and p. 226 (in English). According to Walsh's footnote in the English translation, Boulez significantly revised this article for *Relevés d'apprenti* (1966) making it 'more caustic'. See: Walsh (1991b) p. 226 (in English).

³⁵ ['réinventer'.] (My translation.) Boulez (1980c) p. 28.

nihilo creation'.³⁶ This is clearly the approach he has favoured since the middle of the 1950s. In an essay dating from 1959, Schaeffer criticises this approach as it '[p]uts the cart before the horse'.³⁷ It assumes prior knowledge of the character of particular invented sounds, a task that Schaeffer argues is very difficult. Instead, he argues, the composer must use and manipulate existing sounds (as in *musique concrète*) in order to understand their musical characteristics.³⁸

Around the time of Boulez's withdrawal from the fringes of the *musique concrète* circle in the middle of the 1950s, he wrote an article hinting at his major technological preoccupations of that time. "'À la limite du pays fertile' (Paul Klee)" (1955) constitutes one of Boulez's most expansive account of his conception of new technology. A noticeable feature of this text is his desire to pursue the available fields of possibilities in the various sound components. He writes that not only can the composer use technology to make the entire field of pitch possible³⁹ but it can also be used to perform dynamics in an exact discrete scale.⁴⁰ However, he acknowledges that the new possibilities will be limited, to a certain extent, by what is perceptible by the ear.⁴¹ Importantly, he notes that recent experiments in tape have revealed that pitch, duration and dynamics are 'inseparably linked'.⁴² In a sense, one can understand this as the first step towards his formulation of a dialectical relationship to technology rather than merely conceiving it as a means of performing highly complex works.

Boulez's experience with new technology in the 1950s led to the composition *Poésie pour Pouvoir* (1958). After a single performance, he withdrew the work due to

³⁶ ['on se vouait à la pureté d'une création absolument ex nihilo'.] (My translation.) *Ibid.*, p. 29.

³⁷ ['On met la charrue avant les bœufs'] (My translation.) Schaeffer (1959) p. 15 (in French).

³⁸ See: Schaeffer (1959) p. 15 (in French). One should understand Schaeffer's *Traité des objets musicaux* (1966) as a means of clarifying and classifying existing sound types.

³⁹ See: Boulez (1955a) p. 319 (in French) and p. 161 (in English).

⁴⁰ See: *ibid.*, p. 327 (in French) and p. 168 (in English).

⁴¹ See: *ibid.*, p. 320 (in French) and p. 161 (in English). For my discussion of Boulez's ideas on perception see: this dissertation p. 334.

⁴² ['liées irréductiblement'.] *Ibid.*, p. 319 (in French) and p. 160 (in English). This is most probably a reference to Stockhausen's experiments in the early 1950s.

dissatisfaction with the (rather crude) technology available at that time.⁴³ It is noticeable that for almost a period of 20 years (from 1958 to 1977), he did not write an essay devoted to technology.⁴⁴ His brief utterances on the subject from that period testify to his disappointment with the new resources.⁴⁵

It is not until 1977 that Boulez would write another article, 'Recherche/Invention' (1977), dedicated to the issue of technology. This article articulates his dialectical conception of the relationship between technology and the composer, and includes several of the issues that would concern him over the next decade. Its year of publication is certainly not insignificant, as it marks the opening of the institution that set out to address many of the technological problems Boulez had faced. This institution is, of course, IRCAM.

IRCAM: A dialectical relationship between technology and the composer

IRCAM, the Institute de Recherche et de Co-ordination Acoustique-Musique, is an institution founded upon a distinctly dialectical conception of music and technology.⁴⁶ In 'Recherche/Invention' (1977), Boulez introduces the principle of this dialectic:

⁴³ In an interview with Sylvie de Nussac in 1980, Boulez reveals that he was working on *Poésie pour Pouvoir* (1958) again. This is because the new technology allowed him to realise his ideas more satisfactorily. See Boulez in: Boulez and Nussac, de (1980) p. 65 (in French).

⁴⁴ However, *Penser la musique aujourd'hui* (1963) was unquestionably written partly in response to the development of new technology and the need to classify and negotiate its hitherto uncharted universe.

⁴⁵ For example, Boulez argues that 'loudspeakers are used only for reproduction and not for the creation of different aspects of sound. All is reduced to *one* dimension, even with the best equipment. The loudspeaker for me is like a plastic imitation of stone or wood.' Boulez in: Boulez and Souster (1969) p. 473 (in English). Similarly, he complains about the awkward visual aspect to performances of taped music revealing that 'there is always an aspect of a 'crematorium kiln' – or should I say a 'crematorium ceremony' which makes me terribly embarrassed and I have found the lack of action a redhibitory vice.' ['Il y a toujours un aspect "four crématoire" – ou disons plutôt "cérémonie crématoire" – qui m'a terriblement gêné, et j'ai trouvé que le manque d'action était un vice rédhibitoire'.] (My modified translation.) Boulez (1974a) p. 191 (in French) and p. 201 (in English).

⁴⁶ I examine IRCAM in this section only from this perspective: as a dialectic between music and technology. For my consideration of IRCAM as an institution that promotes new music, see: this dissertation p. 361.

the reasoned extension of the material will inspire new modes of thought; between thought and material a very complex game of mirrors is set up, by which images are relayed continuously from one to another. A forceful, demanding idea tends to create its own material, and in the same way new material inevitably invokes a recasting of the idea.⁴⁷

He argues that musical instruments – part of the material at the composer's disposal – encourage particular types of usage which, following the law of entropy, eventually lead to 'degraded' clichés: in other words, the performance technology becomes sedimented.⁴⁸ Therefore, one should seek to expand the potential sound universe by inventing new means of performance. However, Boulez qualifies this idea by noting that, although the composer may begin writing a work through his previous knowledge of a given instrument, it is possible to supersede this knowledge through the dialectical process which reveals new unforeseen possibilities. He writes that:

Musical invention is certainly conditioned by the models furnished from day to day both by the capacity of interpreters and the possibilities of "tools" which they have at their disposition. The musical text is therefore strongly linked to the contingent, the imagination beginning with that which it can grasp in the immediate, and in which exists, in order to project itself towards that which does not exist yet and which sometimes surpasses the existing possibilities.⁴⁹

Recognising the dialectical relationship between the composer and his 'tools', Boulez argues that '[c]ollaboration between scientists and musicians [...] is therefore a necessity'.⁵⁰ If this collaboration is not established, the imagination

⁴⁷ Boulez (1977a) p. 492 (in English).

⁴⁸ The example he provides of an instrument encouraging a certain type of usage is a violin which, due to the way in which the strings are tuned, promotes 5ths. Boulez (1987) p. 162. My reference to the law of entropy and degradation alludes to a common theme in Boulez's writings I examined elsewhere. See: this dissertation p. 153.

⁴⁹ ['L'invention musicale est, certes, conditionnée par les modèles fournis au jour le jour à la fois par la capacité des interprètes et les possibilités des "outils" qu'ils ont à leur disposition. Le texte musicale est donc fortement lié au contingent, l'imagination partant de ce qu'elle peut saisir dans l'immédiat et dans ce qui existe pour se projeter dans ce qui n'existe pas encore et qui va quelquefois dépasser les possibilités existantes.'] (My translation.) Boulez (1989b) pp. 14-15.

⁵⁰ Boulez (1977a) p. 490 (in English).

cannot overcome the sedimented existing ‘tools’.⁵¹ The development of the computer, with its ability to process data, forces composers ‘to reflect on the mechanisms of composition’ [...] [and] ‘consequently to upset our habits, forged both by education and practice.’⁵² This attitude towards the computer recalls Cage’s statement from 1955 concerning magnetic tape, that ‘[i]t introduces the unknown with such sharp clarity that anyone has the opportunity of having his habits blown away like dust.’⁵³ Understood in this sense, new technology places all inherited ideas concerning timbre and orchestration in ‘doubt’. Returning to Boulez, he argues that whereas in the past music and science has always formed a relationship (primarily to standardise musical conditions), music today requires a strong and active relationship between ‘the vibrating body and tonal theory’.⁵⁴

He acknowledges that the relationship between scientists and musicians is difficult, as both share prejudices concerning each other’s discipline. For instance, one often associates ‘the most free imagination’ with musicians in opposition to ‘strict scientific control’.⁵⁵ However, both notions are misleading. ‘Writing music, playing, inventing or interpreting music supposes a precise knowledge of multiple codes with

⁵¹ The problem of remaining within existing means is articulated in an essay entitled ‘L’ordinateur musicien’. Boulez argues that ‘Certainly the imagination plays a primary role but, without constraint, without discipline, without knowledge, the imagination risks not having any field of application’. [‘Certes l’imagination joue un rôle primordial mais, sans le contrainte, sans la discipline, sans la connaissance, l’imagination risque de n’avoir aucun champ d’application’.] Boulez (1980c). p. 28.

⁵² [‘de réfléchir aux mécanismes mêmes de la composition’ [...] ce qui a pour conséquence de déranger nos habitudes, forgées à la fois par l’éducation et la pratique.’] (My translation.) Boulez (1981b) p. 46.

⁵³ Cage (1955) p. 16 (in English).

⁵⁴ [‘le corps vibrant [...] et la théorie de la tonalité’]. (My translation.) Boulez in: Boulez and Laurent (1983) page numbers unknown.

⁵⁵ [‘l’imagination la plus libre’ ‘un contrôle scientifique strict’.] (My translation.) Boulez (1980c) p. 28. Elsewhere, Boulez notes that many representatives of the scientific world ‘justify their apprehension [about the collaboration of science and music] by the fact that artistic creation is specifically the domain of intuition and the irrational, doubting that this utopian marriage of fire and water can produce anything valid.’ [‘justifiant leurs appréhensions par le fait que la création artistique est spécifiquement le domaine de l’intuition, de l’irrationnel, doutant que ce mariage utopique de l’eau et du feu soit en mesure de produire quoi que ce soit de valide.’] (My translation.) Boulez (1979c) p. 22. Likewise, Boulez writes that ‘[Musicians] sometimes refuse all direct contact with the scientific approach; they are only inserted with difficulty in a universe that seems to them inhospitable.’ [‘[Musiciens] vont parfois jusqu’à refuser tout contact direct avec la démarche scientifique; ils ne s’insèrent que difficilement dans un univers qui leur semble inhospitalier.’] (My translation.) Boulez in: Boulez and Clavé (1990) p. 10.

which a long education, sometimes painful, has made us familiar.’⁵⁶ I would also add Boulez’s insistence upon a rational, self-critical attitude to composition as further evidence to contradict the dominant stereotype of musicians. Similarly, he recognises that scientists require imagination in order to make hypotheses. He clarifies his conception of the similar approaches of science and art:

I believe that the great artists have always had great powers of deduction, and that the great scientists have always been great inventors, that is to say, they have always had great powers of deduction. What do they look at?: a model, furnished by nature from which they deduce an interpretation, which is a question of imagination. The logic of the scientist is an imaginative logic, very similar to the logic of the musician, without in any way suggesting that their different logics should be regarded as identical; these two categories are different.⁵⁷

In other words, both musicians and scientists share a dialectical relationship with the ‘material’ of their respective disciplines. This is the speculative model I considered in chapter III. IRCAM is the institutionalised embodiment of Boulez’s dialectical process, and consequently its framework manifests this dialectic.

There are two main sections in IRCAM: music and science.⁵⁸ Whilst the music section operates by means of inviting composers, the scientific team is largely permanent. In addition, a pedagogical cell provides mediation between the

⁵⁶ [‘Ecrire la musique, la jouer, l’inventer ou l’interpréter suppose une connaissance précise de codes multiples avec lesquels une longue éducation, parfois pénible, nous a rendus familiers.’] (My translation.) Boulez (1980c) p. 28.

⁵⁷ [‘Je crois que les grands artistes ont toujours été de grands déducteurs, et que les grands scientifiques ont toujours été de grands inventeurs, c’est-à-dire de grands déducteurs: qu’est-ce qu’ils regardent? un modèle, fourni par la nature, et ils en déduisent une interprétation, ce qui est une question d’imagination; la logique du scientifique est une logique imaginative, tout comme la logique du musicien, sans pour autant que leurs logiques soient identiques; leurs catégories sont différentes.’] (My translation.) Boulez in: Boulez and Tétaz (1985) p. 5.

⁵⁸ See: Boulez in: Boulez and Nussac, de (1980) p. 63 (in French). I would like to note that the earliest reference to an institution of this kind in Boulez’s writings appears in an article dating from 1966, the year that his proposals for the reform of the French musical life would be rejected by Malraux. Boulez writes that ‘My ambition would be to be able to construct a studio benefiting from the latest discoveries of science and using instruments specially conceived for the musical experience. [...] A team of composers [will be] [...] helped by a group of scientists and by specialised technicians.’ [‘Mon ambition serait de pouvoir faire construire un studio bénéficiant des dernières découvertes de la science et disposant d’instruments spécialement conçus pour l’expérience musicale [...] Une équipe de compositeurs [...] [seront] aidée par un groupe de scientifiques et par de vrais techniciens spécialisés.’] (My translation.) Boulez (1966f) p. 42.

composers and the scientists. At the outset of a compositional project, this cell helps to coordinate the specific project in response to its particular demands. This helps to ensure a certain degree of institutional flexibility and ‘mobility’.⁵⁹ The pedagogical cell also helps by introducing the visiting composers to the possibilities of the technology currently being developed. A recurring complaint Boulez makes concerning his experiences at IRCAM is that composers tend to remain closed in their own particular compositional problems which, although worthwhile, do not explore the possibilities of IRCAM.⁶⁰ He argues that ‘[i]t is necessary to have the time and help of a team in order to understand how to master the technology before being able to utilise it for a true experimentation and not simple sonorous games.’⁶¹ Consequently, invited composers typically have long residencies in order to gain a good grasp of the technological developments.⁶² Every composer ‘must have [...] knowledge of physical-mathematics so that he has the power to establish the relation between physical sound and musical sound’.⁶³ This is not unreasonable to ask as the composer typically already writes for acoustic instruments that he cannot build or play.⁶⁴ Boulez describes this knowledge as ‘virtual knowledge’⁶⁵ which enables the composer ‘to integrate his musical invention, before he even begins composition, with the vast resources that he inherits; that knowledge is part of his invention.’⁶⁶ At the same time, however, the technical team must also respond to the demands that the composer makes. He claims that ‘musical invention must essentially provoke the creation of the musical material of which it has need.’⁶⁷

⁵⁹ I allude to Boulez’s concept of mobility and its association with the second stage of the dialectic: doubt.

⁶⁰ For example, he expresses his disappointment at a lack of adventure by composers at IRCAM in an interview with de Nussac. See Boulez in: Boulez and Nussac, de (1980) p. 65 (in French).

⁶¹ [‘il faut du temps et l’aide d’une équipe pour apprendre à maîtriser la technologie avant de pouvoir l’utiliser pour une véritable expérimentation et non de simples jeux sonores.’] (My translation.) Boulez in: Boulez and Longchamp (1980) (page number unknown).

⁶² For example, composers such as Brian Ferneyhough, Hugues Dufourt and Luis de Pablo.

⁶³ [‘doit avoir [...] des connaissances physico-mathématiques afin de pouvoir lui-même établir la relation entre son physique et son musical’.] (My translation.) Boulez (1980c) p. 32.

⁶⁴ See: Boulez (1977a) p. 491 (in English).

⁶⁵ [‘la connaissance virtuelle’.] (My translation.) Boulez (1979c) p. 22.

⁶⁶ [‘lui permettra d’intégrer à son invention musicale, avant même qu’il compose réellement, les vastes ressources qu’il recèle; cette connaissance est part de son invention.’] (My translation.) *Ibid.*

This dialogue between scientists and composers is a primary concern at IRCAM. For the first time in history, Boulez argues, composers have to explain what they do so that it can be realised by a technician.⁶⁸ This means overcoming the pre-established 'ghettos'⁶⁹ of the two disciplines and finding a communal language,⁷⁰ similar to the relationship between architect and engineer. The collectivity of the creative process at IRCAM will be a hallmark of musical composition in the future, according to Boulez. He insists that no individual can solve 'all the problems posed by the present evolution of musical expression'⁷¹ and that composers must open up their preoccupations and transpose them to a more general, global view which can serve others. However, he acknowledges that this collective form of creation,⁷² which manifests itself in the form of the individual work, will continue to rely on the invention of the individual composer.⁷³

Conclusion

Boulez's ideas on performance technology, culminating in IRCAM, are clearly underpinned by his dialectical conception of music. New technology is viewed as the means of avoiding the sedimentation of inherited orchestral instruments that evolved in the period of tonality. In one sense, the development of new technology itself serves as a means of 'doubting' current performance practices. The dialectic of music and technology is at the core of IRCAM's institutional structure. The composer's conception, shaped by the current development of technology must also shape those technical means. Boulez's emphasis upon taking a collective view of

⁶⁷ ['l'invention musicale doit essentiellement provoquer la création du matériau musical don't elle estime avoir besoin'.] (My translation.) *Ibid.*

⁶⁸ See: Boulez and Gerzso (1988) p. 26 (in English).

⁶⁹ Boulez (1980b) p. 23 (in French). For my examination of Boulez's ideas on the theme of 'ghettos' see: this dissertation p. 370.

⁷⁰ The problem of establishing a communal language between science and music is a recurring theme in Boulez's texts and interviews from the 1970s onwards. For two examples, see: Boulez (1979c) p. 22 (in French) and Boulez (1983b) p. 11 (in French).

⁷¹ Boulez (1977a) p. 494 (in English). This idea also appears in several other texts including Boulez (1980b) p. 22 (in French).

⁷² I refer to Boulez's assertion that 'art will be collective or not at all'. ['l'art sera collectif ou ne sera pas'.] Boulez (1977a) p. 494 (in English). This phrase also appears in Boulez (1980b) p. 27 (in French).

problems today rather than focusing upon individual compositional problems is based on his advocacy of attempting to globalise one's conception of the inherited acquisitions. It also recalls his argument that general principles must be fertile: they must enable future unforeseen proliferations. Similarly, the composer must consider more global problems rather than become fixated on his own individual concerns. Despite this emphasis upon striving towards a collective synthesis of means, he notes that invention – the expression of the composer – is and will remain essentially individual.

In his advocacy of uniting science and art, Boulez's conception of IRCAM is most commonly compared to that of the Bauhaus. Whitford writes that the first aim of the Bauhaus, which appeared in the Bauhaus Manifesto in 1919, was to prevent the isolation of the artistic disciplines. The strategy of the Bauhaus was to reunite craftsmen and artists under the same roof.⁷⁴ This is a key idea at the core of IRCAM. In addition to the Bauhaus, the Groupe de Recherche d'Art Visuel (GRAV), founded in Paris in 1960 and disbanded in 1968, is another possible factor contributing to Boulez's conception of IRCAM. Based at the Centre de Recherche d'Art Visuel from which they took their name, the GRAV included artists such as Jean-Pierre Vasarely (b. 1934) and Horacio Garcia Rossi (b. 1929). They claimed that the notion of the individual artistic genius was outdated and advocated a collective approach to art in which scientists and artists would work together.⁷⁵ I consider the influences on Boulez's development of IRCAM elsewhere in this chapter in the section entitled 'Institution'.⁷⁶

Boulez's experiences with technology at IRCAM have led towards changes in his conception of technology and its potential. As I mentioned previously in this section,⁷⁷ his early conception of new technology was chiefly as a means of performing that which was unplayable by existing instruments. However, today's

⁷³ Boulez (1977a) p. 494 (in English).

⁷⁴ See: Whitford (1984) p. 11 (in English).

⁷⁵ See entry for 'Groupe de Recherche d'Art Visuel' in Bann (2000) (in English).

⁷⁶ See: this dissertation p. 361.

technology has impacted upon his thought in several different ways. The two ideas with which I conclude this section are (i) the use of computers as an intrinsic element in the compositional process and (ii) the reintroduction of 'real time' decision-making into performance.

Boulez's work with computers has led him to distinguish between two categories of composition. Composition without the 'intermediary' of technology proceeds by a succession of 'unique choices' made, so to speak, in the 'moment'. According to Boulez, in each of these choices there is 'a type of short-circuit which intuitively abandons all other options.'⁷⁸ This relates, of course, to the idea of 'intuition' that I considered in chapter III. In this type of writing, it is the 'continuity' between the unique choices, the 'global relation' that they suggest, that gives a meaning to the work.⁷⁹ On the other hand, composition with the intermediary of the computer involves feeding the computer with a given field from which the computer generates multiple choices.⁸⁰ This is, of course, a form of musical automatism that dates back to *Structure 1a* (1952).⁸¹ In order to be able to hear the transformations of these multiple choices, one needs an interval of time, a discontinuity, in which 'we are amazed by the momentary states of a latent continuity.'⁸² He writes that 'the brain [...] makes short-circuits that the machine, in general, cannot make'⁸³ and that these short-circuits (i.e. discontinuity) imply a hidden continuity.

One can easily see the continuing influence of Gestalt Theory in Boulez's ideas on this matter, that one perceives the world by connecting discontinuous stimuli through intuition into a global continuous whole. He suggests that the task of

⁷⁷ See: this dissertation p. 349.

⁷⁸ ['choix instantané' 'une sorte de court-circuit qui délaisse intuitivement toutes les autres options.'] (My translation.) Boulez (1981b) p. 46.

⁷⁹ ['la continuité' 'la relation globale'.] (My translation.) *Ibid.*

⁸⁰ See: Boulez (1981b) p. 46 (in English).

⁸¹ In an interview with myself, Boulez reveals that if computers of today's standard had been available in the early 1950s, he would have used a computer to generate the automatism of musical structures. See Boulez in: Boulez and Walters (2002) p. 409 (in English).

⁸² ['Nous surprenons des états momentanés d'une continuité latente.'] (My translation.) Boulez (1981b) p. 47.

⁸³ ['le cerveau [...] fait les courts-circuits que la machine, en général, ne peut pas faire.'] (My translation.) Boulez in: Boulez and Laurent (1983) (page numbers unknown).

creating new modes of composition that correspond to the enormous possibilities of integrating these two categories remains.⁸⁴

The other idea stimulated by Boulez's experiences with computers is his concern to introduce 'real time' decisions into performance. He asks himself why many electro-acoustic musicians wish to retain the immediacy of real time. He answers that in 'the "accident" of the performance, the last decision appears to me indispensable, even a determining element in the interest.'⁸⁵ In another article dating from the same year he writes that '[t]his notion of real time is very important for the musician as it permits him to include chance [le hasard], or rather chance [la chance] – in the best sense of the term – in performance.'⁸⁶ I would suggest that this is the consistent introduction of chance into all elements of the musical structure, from the starting material to the resulting form, in a manner comparable to that of the Third Piano Sonata.

⁸⁴ I paraphrase Boulez's statement that 'composers today lack a sufficiently strong conceptual thought to train the machine, to force it to create with new modes of composition corresponding to its enormous possibilities'. ['Au fond ce qui manque aux musiciens d'aujourd'hui, c'est une pensée conceptuelle suffisamment forte pour dompter la machine, pour l'obliger à créer avec de nouveaux modes de composition à ses énormes possibilités.'] (My translation.) Boulez in: Boulez and Longchamp (1980) page number unknown.

⁸⁵ ['l'"accident" de l'exécution, la décision dernière me paraît indispensable, me paraît même un élément déterminant dans l'intérêt.'] (My translation.) Boulez (1980b) p. 23.

⁸⁶ ['Cette notion de temps réel est une de celles auxquelles le musicien tient énormément, car elle lui permet d'inclure le hasard, ou plutôt la chance – dans le meilleur sens du terme – dans l'interprétation.'] (My translation.) Boulez (1980c) p. 32.

6. INSTITUTION

This section examines Boulez's conception of musical institutions. Throughout his career, he has been heavily involved in the promotion of new music. As Dufourt correctly points out, 'Boulez has always worked within an institutional framework, something he undertook, not without clashes, to reform the existing institution, or, failing that, to create from scratch.'¹ Despite his considerable work in promoting new music to wider audiences, Boulez has often been criticised for being an elitist composer. This criticism is primarily based on the pervasive image of Boulez as a highly rational composer who neglects the listener and the listening experience. Miller notes that 'Boulez, who has sometimes been accused of an ivory-tower stance and of an intense and one-sided structuralism, has not been clearly understood'.²

Although the most obvious example of Boulez's institutional work is IRCAM, I also include in this section his work in teaching and conducting. All share a common aim: to promote and, implicitly, to institutionalise a particular conception of music today. I shall begin by examining these three types of institutions in the way that Boulez identifies them,³ and briefly consider his work in each field.

(i) The teaching institution

The first type of institution Boulez defines is the teaching institution. His experience of this type of institution includes his teachings at the Darmstadt Summer School, Basel University, Harvard University and the College de France. He taught at Darmstadt in 1956, 1959, 1960, 1961 and 1965. During this time, he taught analysis and composition at Basel University (1960-63), analysing works such as Berg's

¹ Dufourt (1986) p. 53.

² Miller (1978) p. 57 (in English).

³ Boulez's categorisation and description of these three types of institution can be found in both Boulez (1983b) (in French) and Boulez and Clavé (1990) (in French). It should be noted that most of Boulez's writings on institutions that form the primary material for this section date from the 1980s and 1990s, a time when he could reflect on IRCAM.

Wozzeck (1914-22) and Stockhausen's *Gruppen* (1955-57). Unfortunately, none of the material from these courses has been published.⁴ In 1963, Boulez left Basel to accept an invitation to become Guest Professor at Harvard (1963). His Harvard lectures have been published in two parts as 'Nécessité d'une orientation esthétique' (1963) and 'Nécessité d'une orientation esthétique II' (1963).⁵ In 1976, he became a professor at the Collège de France. The considerable teaching material he produced between 1978-88 resulted in *Jalons (pour une décennie)* (1989). There is still substantial material written after 1989 that remains to be published.⁶

Boulez's main writing on the problems of teaching itself is 'Discipline et communication' (1961), supplemented by two interviews: one with de la Grange (1990) and the other with Clavé (1990).⁷ As with his writings on analysis, confusion can arise due to Boulez's tendency to revert to discuss composition implicitly whilst not stating this fact.

Boulez argues that it is impossible to teach composition *per se*, instead he prefers to offer his example and instil a sense of independent thinking in his students.⁸ He argues that the teacher can only be 'someone who launches something in you',⁹ providing 'an education that provokes'.¹⁰ In other words, the student can only become a true composer by developing his own independent thought; the teacher merely transmits his own ideas in order to instil in the student 'the desire to form his

⁴ Sketchy lecture notes of Boulez's teaching at Basel are held at the Paul Sacher Archive, Basel.

⁵ Boulez (1963d) and Boulez (1963e) respectively.

⁶ I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to two unpublished courses by Boulez entitled 'Mémoire et création I' (1989) and 'Le concept d'écriture I' (1991).

⁷ See: Boulez (1961c); Boulez and Grange, de la (1990); Boulez and Clavé (1990).

⁸ I refer to Boulez's statements that 'I prefer to teach by example rather than by words' and that 'composition probably cannot be taught at all.' ['je préférerais faire de la pédagogie par l'exemple plutôt que par les mots. [...] la composition ne pouvait probablement pas s'enseigner du tout.'] (My translation.) Boulez in: Boulez and Grange, de La (1990) p. 46.

⁹ ['quelqu'un qui déclenche quelque chose en vous.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 4.

¹⁰ ['un enseignement qui provoque'.] (My translation.) *Ibid.*, p. 5. In this respect, Boulez argues that he has only known one 'true teacher', Messiaen.

own personality'.¹¹ Whilst arguing that the teacher cannot teach students their own (the students) compositional practice, Boulez stresses that it is possible, indeed vital, to teach the essentials of analysis and practical matters concerning compositional writing.¹² It is only if the student does not respond with his own independent thought, that is to say if the teacher 'directs' the student's musical 'personality', that the student becomes a '*disciple*'.¹³ Jean-Claude Éloy, a student of Boulez's classes at Basel, appears to misunderstand this latter point. Éloy, who considers his former teacher's approach as 'unceasing harassment', argues that there is a contradiction between his assertions that the teacher cannot '*direct* a personality without making a *disciple*' and that 'technique [...] is an exalting mirror which the imagination forges for itself'.¹⁴ If the imagination of the individual composer 'forges for itself' an 'exalting mirror' which is 'technique' then, Éloy argues, technique *is* the imagination. Therefore, to teach a technique is to transmit the teacher's own ideas.¹⁵ Éloy misunderstands that it is whether the student responds independently to Boulez's own ideas that determines if he becomes a 'disciple'.

(ii) *The performing institution*

The second type of institution Boulez describes is the performing institution. This institution is concerned with the means of transmitting the musical heritage as well as that of contemporary practice.¹⁶ Performing institutions raise questions of communication and audiences in addition to the quality and organisation of musical

¹¹ ['le désir de s'en créer une [personnalité]']. Boulez (1961c) p. 387 (in French) and p. 125 (in English). It is interesting to note that this teaching through example is the antithesis of Klee's teaching, which Boulez lauds. Boulez writes that Klee 'never speaks of himself, but rather he studies before us and helps us to study with him.' ['[Klee] ne parle jamais de lui, mais il étudie devant nous et nous aide à étudier avec lui.'] (My translation.) Boulez (1989c) p. 9 (in French).

¹² See: Boulez (1983b) p. 9 (in French).

¹³ See: 'it is impossible to *direct* a personality without making a *disciple*.' ['Il est impossible de gouverner une personnalité, sans fabriquer un *disciple*.'] Boulez (1961c) p. 387 (in French) and p. 126 (in English).

¹⁴ ['technique' 'est ce miroir exaltant que l'imagination se forge']. Boulez (1963b) p. 167 (in French) and p. 143 (in English).

¹⁵ See: Éloy, Jean-Claude 'Dix ans après...' *Textuerre* no. 17-18 Montpellier 1979 p. XXV. Cited in Aguila (1992) p. 317 (in French).

¹⁶ See: Boulez (1983b) p. 6 (in French).

ensembles.¹⁷ Boulez has a wide experience of being in charge of the organisation of performing ensembles.

Although his first professional involvement within a performing institution was as musical director for the Compagnie Renaud-Barrault between 1946 and 1956, Boulez's first experience of managing a performing institution was with the *Domaine Musical*.

The *Domaine Musical* (initially called the *Petit Marigny*) was founded by Boulez in 1954 with funding from the Compagnie Renaud-Barrault.¹⁸ He would remain the director and main conductor until 1966. The *Domaine Musical* was (and remains) a performance ensemble committed to the promotion of new works. As Messiaen notes, the *Domaine Musical* aimed 'to get a whole group of contemporary composers accepted.'¹⁹ The contemporary composers who were able to establish themselves, despite the limited number of concerts over the first few seasons,²⁰ included Berio, Nono, Pousseur and Stockhausen. Boulez would experience first-hand the problems encountered by performers of new music and the need to adapt their virtuosity to the demands of new works.

Boulez ended his association with the *Domaine Musical*, and also with the Paris Opera and French orchestras, in protest against the rejection of his plans for reform of French musical life by the French Minister of Culture, André Malraux.²¹ In 1964, Malraux had set up a commission to report on the state of French music culture. Both Boulez and Marcel Landowski (who was, in Boulez's opinion, a 'failed' composer²²) submitted plans for reform. Malraux decided to reject Boulez's proposal and accept the plans of Landowski. Boulez responded with a vitriolic

¹⁷ See Boulez in: Boulez and Clavé (1990) p. 3 (in French).

¹⁸ After the first few seasons, the *Domaine Musical* concerts were subsequently financed by Suzanne Tézan. See: Born (1995) p. 78 (in English).

¹⁹ Messiaen and Samuel (1976) p. 120 (in English).

²⁰ Boulez states that in the first few seasons there were between 4 and 6 concerts per year. See: Boulez in: Boulez and Clavé p. 8 (in French).

²¹ See: Born (1995) p. 83 (in English).

²² ['compositeurs ratés'.] Boulez (1966d) p. 483 (in French) and p. 443 (in English).

article entitled ‘Pourquoi je dis “non” à Malraux’ (1966) published in *Le Nouvel Observateur* (25.5.1966) announcing that he was ‘on strike against the whole of French musical officialdom’.²³ This strike was short-lived, as he agreed in 1968 to reform the Paris Opera, but subsequently withdrew after de Gaulle asked him, amongst other leading intellectuals, to support his government.²⁴ Despite these setbacks, Boulez eventually established a lasting relationship with the French government in 1970, when Georges Pompidou invited him to design a new music centre, which would ultimately become IRCAM.

Whereas IRCAM would be the ‘incitement to creation’,²⁵ its performing offshoot, the *Ensemble InterContemporain*, would represent the ‘accomplishment of creation’.²⁶ The *Ensemble InterContemporain* was founded in 1977, the same year as IRCAM opened, and its role has always been to promote works created at IRCAM to a wider audience.

Boulez has not written extensively on issues pertaining to the performance of music, which is arguably indicative of his approach to music generally. However, one notes that he has argued consistently that the standardisation of the concert hall and opera house impedes creativity.²⁷ This is because the visual and acoustic aspects of a performance space necessarily shapes the composition of a new work.²⁸ He argues that the concert hall is the place of a rite, or a ‘Holy Mass’²⁹ arising from the nineteenth-century bourgeoisie:

²³ [‘Je fais donc grève en regard de tout ce qui est organisme officiel de la musique en France.’] Boulez (1966d) p. 483 (in French) and p. 443 (in English). Boulez’s italics.

²⁴ See: Born (1995) p. 83 (in English).

²⁵ I shall discuss IRCAM shortly.

²⁶ [‘L’IRCAM représente l’incitation à la création; l’E.I.C. représente l’accomplissement de la création.’] (My translation.) Boulez in: Boulez and Clavé (1990) p. 10.

²⁷ For example, see: Boulez (1958d) p. 424 (in French).

²⁸ Boulez writes that reconsideration of the music would need to happen if the place (of performance) was different. See: Boulez (1983a) p. 17 (in French).

²⁹ ‘We must get away from this Holy Mass which the concert is today.’ Boulez in: Boulez and Souster (1969) p. 473.

The concert-hall is [...] conceived as the ideal setting for a rite, the famous “Temple of Taste” as it might be... The form and the site of the ceremonial impose on music certain determining functions, which delimit very precisely musical taste.³⁰

It is the sedimented ritual and the predictability of the concert, and therefore of the resulting work and its reception,³¹ that leads Boulez to suggest polemically that all opera houses should be blown-up. Instead of the standard hall, there should be new types of buildings for the performance of music which would engender new ways of composing music.³² Boulez cites Wagner as someone who challenged the traditional opera house with his proposal for Bayreuth.³³ He also suggests that Japanese Noh theatre is more advanced than Western theatre in its consideration of the performance space,³⁴ although he regards recent developments in music theatre as ‘inestimable acquisitions’.³⁵

(iii) The research institution

The third type of institution Boulez describes is the research institution. IRCAM constitutes the primary example of this type of institution and the crowning achievement of his desire to institutionalise his conception of music. Many institutions have facilities dedicated to music research, but unlike IRCAM, they are not financially autonomous and not completely devoted to this area. Several of these institutions may have shaped Boulez’s vision of IRCAM. Certainly, his experiences of working at studios in Paris (the RTF³⁶) and Cologne (the Westdeutscher Rundfunk) must have provided him with valuable lessons from which he could

³⁰ [‘la salle de concert est [...] l’emplacement idéal d’un rite, ce fameux “Temple du Goût”, vraisemblablement... La forme et le lieu du cérémonial imposent à la musique certaines fonctions déterminantes, qui circonscrivent très précisément le goût musical’] (My translation.) Boulez (1961a) p. 515 (in French) and p. 51 (in English).

³¹ The institution of the concert hall, Boulez argues, has also contributed towards a ‘passive’ listening towards works which must be changed. [‘passive’.] (My translation.) Boulez (1983b) p. 8 (in French). I consider the idea of passive listening in the elsewhere in this chapter. See: this dissertation p. 327.

³² Boulez: Boulez and Souster (1969) p. 473 (in French).

³³ See: Boulez (1975a) pp. 201-202 (in French) and p. 225 (in English).

³⁴ See: Boulez (1983a) p. 17 (in French).

³⁵ [‘des acquis inestimables’.] (My translation.) *Ibid.*

³⁶ Later became the GRM.

draw. Another interesting possible influence on his conception of IRCAM is suggested by Born.³⁷ She perceptively notes that there are parallels between Boulez's institution and Wagner's vision of Bayreuth, both of which preoccupied Boulez in the 1970s.³⁸ These parallels are to be seen in their presumably shared ideal of the Gesamtkunstwerk, in which not only every aspect of the work is highly prescribed but also issues concerning performance venues are challenged. However, the most striking model for IRCAM, and, more specifically, the Centre Georges Pompidou, is the Bauhaus.³⁹ Boulez has spoken of this parallel whilst acknowledging that the artistic community and interdisciplinary approach established at the Bauhaus has not yet materialised at IRCAM.⁴⁰

Boulez's institutional work as his solution to problems of today

Boulez's readiness to become involved with various musical institutions seems upon initial consideration to contradict his general aesthetic position. Most noticeably, it appears opposed to his rejection of all forms of sedimentation. However, Boulez argues that 'the man of the institution is, fundamentally, in complicity with the creative artist.'⁴¹ By this, he means that every institution is an 'undeniable reality'⁴² and that one must acknowledge that 'independently of my own motivations, every individual, in every civilisation, is conditioned by his environment.'⁴³ Moreover, he claims that 'institutions are often only the reflection of a given society'.⁴⁴ In these

³⁷ Born's expansive book *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde* (1995) provides a chronical of her experiences, conversations and thoughts during her time as an observer at IRCAM. See: Born (1995).

³⁸ See: Born (1995) pp. 94-95 (in English).

³⁹ Heyworth makes the comparison of the Bauhaus with IRCAM whilst Born writes Bauhaus is the primary model for IRCAM. See Heyworth (1973) p. 34 (in English); Born (1995) p. 100 (in English).

⁴⁰ See Boulez in: Boulez and Duault (1995) p. 90 (in French).

⁴¹ ['l'homme de l'institution est, sur le fond, en complicité avec le créateur. [...] En revanche, indépendamment de motivations propres, tout individu, dans toute civilisation, est conditionné par son environnement. [...] Le piano, à travers son histoire, est déjà en soi une institution.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 1.

⁴² ['Cette institution, je ne la vis donc pas comme un obstacle à l'expression créatrice, mais avant tout comme une réalité indéniable, qu'il convient de maîtriser et de transformer en un outil de communication efficace.'] (My translation.) *Ibid.*

⁴³ ['l'homme de l'institution est, sur le fond, en complicité avec le créateur.'] (My translation.) *Ibid.*

⁴⁴ ['Les institutions ne sont souvent que le reflet d'une société donnée.'] (My translation.) *Ibid.*

statements, I suggest that he conceives the notion of the institution as part of the inherited material at the composer's disposal. This is confirmed in his unusual example of the piano as an institution that has shaped the course of music history.⁴⁵ This institutionalised material is unavoidable, as one cannot ignore the existing inherited forms of musical institutions. Therefore, like his response to the inherited musical material in composition, one must confront the institutional material with 'doubt' and create institutions that correspond better to contemporary demands.

All of Boulez's work to institutionalise modern music can be understood as his solution to three problems in music today. These problems, and his solutions, are recurring themes in his interviews from the 1980s and 1990s.

First, his involvement with institutions has served as a means of enabling and promoting the composition and performance of new music. This work is based on his recognition that new forms of music require the support of new institutional bases. He insists that IRCAM is his attempt to create an institution 'vital for the music of our time.'⁴⁶ Rather than merely accept the existing forms of institution which shape music today, one must actively become involved in developing new organisations.

Second, Born correctly notes that for Boulez 'autonomous music and related research involve, by definition, a negation of the interests of commercial success and of the mass audience.'⁴⁷ Boulez confirms this when he reveals that IRCAM developed partly in response to the faddish approaches of the 1960s. After that experience, he maintained that composers must be allowed to develop a more 'global thought'⁴⁸ (i.e. avoid partial speculations) and that this required experimentation. Sometimes their experiments will fail but this, he argues, is a necessary part of musical exploration: 'one must always have the opportunity to

⁴⁵ He claims that the 'piano, throughout its history, is in itself an institution.' ['Le piano, à travers son histoire, est déjà en soi une institution.'] (My translation.) *Ibid.*

⁴⁶ ['vitales pour la musique de notre temps.'] (My translation.) *Ibid.*

⁴⁷ See: Born (1995) p. 99 (in English).

fail.’⁴⁹ As this failure is not permitted when music is ‘too subject to social and commercial pressures’,⁵⁰ he designed IRCAM, an institution that enables music researchers to isolate themselves – i.e. to become autonomous from profit-driven organisations. Although modern music continues to retain its autonomy in relation to commercial pressures to a certain degree, Born notes that this has largely been achieved through becoming part of the academic establishment.⁵¹ She suggests that this has led to the loss of its subversive function.

Third, Boulez’s work with institutions, particularly performance ensembles, helps to remedy the lack of knowledge of contemporary music by the general public.⁵² He argues that it is vital to disseminate knowledge about modern works in order to be rid of the common fear that many people possess of contemporary music.⁵³ He writes, in terms echoing his conception of listening,⁵⁴ that ‘having learnt to reference the paths that the composers of today have followed [...] one will be capable of discovering with interest that which is current, and develop a critical judgement founded on value and not on prejudice.’⁵⁵ As I shall consider later in this section,⁵⁶ the desire to disseminate knowledge of music is not merely based on encouraging contemporary music. It is also founded on his claim that through exposure to a wide range of approaches, there is a greater likelihood of a chance encounter with something that reveals something important about ‘oneself to oneself’.

Born argues that there is a contradiction between Boulez’s desire to reach out to a larger audience and his loathing of large audiences, which Boulez associates with commercialism. Boulez’s assertion that music should not be easily understood (as it

⁴⁸ Boulez in: Boulez and Menger (1990) p. 15 (in English).

⁴⁹ *Ibid.*, p. 16 (in English).

⁵⁰ *Ibid.*

⁵¹ See: Born (1995) p. 4 (in English).

⁵² See: Boulez (1979d) (no page numbers) (in French).

⁵³ See: *ibid.*, (no page numbers).

⁵⁴ I refer to the idea of ‘referencing’. See: this dissertation p. 330.

⁵⁵ [‘Ayant appris à repérer les chemins qu’ont suivi les compositeurs d’aujourd’hui [...] on sera en mesure de découvrir avec intérêt ce qui est actuel, et de développer un jugement critique fondé sur la valeur et non sur le préjugé.’] (My translation.) Boulez (1979d) (no page numbers).

⁵⁶ See: this dissertation p. 373.

is complex) is predicated, according to Born, on a distinction between bourgeois art and popular art of the lower classes. Born writes:

Boulez's approach therefore embodies an elitist cultural "distinction", yet it is in tension with his professed desire to create a larger audience. This makes his commitment to pedagogy as a way to broaden the audience more understandable.⁵⁷

In a similar vein, Boretz criticises Boulez for imposing his 'authority' and 'mastery' on the public, the 'paying unwashed'.⁵⁸ I shall return to Boulez's attitude towards audiences shortly.

Problems of institutions: Ghettos, compartmentalisation and circuits

Having established that Boulez's work with institutions is founded on remedying specific faults he identifies in music and society today, these faults are nevertheless very much created by existing institutions. A major problem today is that different musics tend to make their own 'ghettos'.

There are many different ghettos in music – i.e. apparently distinct musical categories. Classical music, as divorced from other forms of music such as popular music or jazz, often finds itself in a ghetto.⁵⁹ Within the category of classical music there are various 'compartments', such as symphonic music, chamber music and baroque music.⁶⁰ This compartmentalisation has become 'entombed'⁶¹ by concert performances and, more recently, by recordings, which are subject to economic

⁵⁷ See: Born (1995) p. 99 (in English).

⁵⁸ Boretz (1987) p. 609 (in English). Boretz criticises both Boulez and Foucault on this matter, referring to their joint publication 'Messieurs Faites vos Jeux' (1985).

⁵⁹ See Boulez in: Boulez and Cott (1985) p. 142 (in French).

⁶⁰ See Boulez in: Boulez and Foucault (1985) page number unknown (in French).

⁶¹ The idea of being 'entombed' ['tombé'] first appears in Boulez's writings in 'Question d'oreille' (1966). See: Boulez (1966f) p. 42. It essentially constitutes a synonym for the concept of sedimentation within the context of society.

necessity.⁶² It has also been fostered by the necessity of specialisation: musicians must have high levels of quality and therefore specialise in specific fields. All these 'ghettos' reinforce certain established ideas concerning different types of music. For example, the performance and reproduction of Baroque music implies a constant instrumental group of period instruments played by specialist instrumentalists.⁶³ Even contemporary music installs a set of expectations including new instrumental techniques, new notations, and a focus upon new performance situations.⁶⁴

The various ghettos that exist in music today, Boulez argues, correspond to particular social groups in society. He describes these links between particular musics and their corresponding social groups as 'circuits'⁶⁵ and argues that this is a problem that even exists in contemporary music:

There is a tendency to form a social group of a certain size corresponding to each category of music, to establish a dangerously closed circuit between this group, its music and its performers. Contemporary music does not escape this condition; even if the codes of frequentation are proportionally weaker, it does not avoid the faults of musical society in general: it has its venues, its locations, its stars, its snobisms, its rivalries, its exclusives; just like the other society.⁶⁶

This conception of particular types of music and their social 'circuits' is based on his conception of music as a 'revelation of oneself to oneself'.⁶⁷ To reiterate this idea, one defines oneself through the choices one makes. The listener as much as the composer undertakes this decision-making. One can detect this sensitivity towards

⁶² See Boulez in: Boulez and Foucault (1985) page number unknown (in French).

⁶³ See: *Ibid.*

⁶⁴ See: *Ibid.*

⁶⁵ Note the connection between the idea of 'circuits' and the notion of 'discontinuity' I have examined elsewhere. See: this dissertation p. 210.

⁶⁶ ['il existe une tendance à voir se former une société plus ou moins grande correspondant à chaque catégorie de musique, à s'établir un circuit dangereusement fermé entre cette société, sa musique, ses interprètes. La musique contemporaine n'échappe pas à cette mise en condition; même si les chiffres de fréquentation sont proportionnellement faibles, elle n'échappe pas aux défauts de la société musicale en général: elle a ses lieux, ses rendez-vous, ses vedettes, ses snobismes, ses rivalités, ses exclusives; tout comme l'autre société'.] (My translation.) Boulez in: Boulez and Foucault (1985) page number unknown.

⁶⁷ See: this dissertation p. 196.

creating circuits that are too limiting, i.e. circuits that have become too 'entombed', in the following famous passage by Boulez on Tchaikovsky:

Every Tchaikovsky-lover at a Tchaikovsky concert is celebrating the cult of himself. He recognizes his own taste in that of the composer, congratulates himself on it, and when he applauds is applauding himself. Do we not do the same ourselves? We consider ourselves members of an elite whose tastes we share, and this complicity makes us applaud the same works.⁶⁸

In the last sentence, one detects a sense of quiet distaste that characterises much of Boulez's statements on the reception of music. This distaste is based on several factors which include his sensitivity towards entombed social circuits (compartmentalisation) as well as his desire to reject all communal means of expression (including economically influenced means of expression). I would now like to consider how Boulez claims one can overcome this tendency towards developing distinct circuits.

Whilst accepting that institutions are an inevitable part of the composer's material, Boulez stresses that they must not become entombed, i.e. sedimented, and instead must retain mobility.⁶⁹ He argues that 'compartmentalisation is the death of things. To attain a greater fluidity, everything must be interpenetrated.'⁷⁰ Therefore, institutions must not exclude the 'adventurous, hazardous, uncertain',⁷¹ in other words, one must keep applying the principle of 'doubt'. He claims that this doubt, or mobility, is the only way that IRCAM can survive in the future, writing that '[IRCAM] can only exist with unstable compromises, without ceasing

⁶⁸ ['Tout amateur de Tchaïkovsky se rend à la salle de concert où l'on joue son auteur préféré pour célébrer le culte de lui-même. Il reconnaît son goût dans le goût de l'auteur, s'en félicite et, en même temps qu'il l'applaudit, s'applaudit! Faisons-nous autre chose? Estimant faire partie d'une élite, nous partageons les goûts de cette élite, une complicité nous lie à applaudir les mêmes œuvres'.] Boulez (1961a) p. 511 (in French) and p. 48 (in English).

⁶⁹ This is clearly stated by Boulez: 'the institution, is only a frame, it is only some walls, it must be able to regenerate itself in another way.' ['l'institution, ce n'est qu'un cadre, ce n'est que des murs, elle doit pouvoir se régénérer d'une autre façon.'] (My translation.) Boulez in: Boulez and Clavé (1990) p. 4.

⁷⁰ ["Le cloisonnement est la mort des choses. Pour atteindre une plus grande fluidité, tout devrait s'interpénétrer."] (My translation.) *Ibid.*, p. 2.

questioning.⁷² In essence, the structure of IRCAM itself operates in a dialectical relationship to the needs of music today. He argues that this mobility should be encouraged in all musical institutions:

Musical life needs, more and more, organisations capable of adapting themselves to the multiple necessities of our époque, and modifying themselves following the circumstances where their action is required.⁷³

Despite this aspiration towards mobility, IRCAM has regularly been attacked as an institution shaped too heavily in the ideological mould of its overbearing creator.⁷⁴ Boulez insists that this is not the case and that he places a 'filter over [his] preferences'.⁷⁵ Consequently, the decisions concerning which composers are invited to IRCAM are undertaken by groups of people rather than only Boulez himself: '[m]y goal is not to form a homogeneous group, surrounding myself with composers who [...] would bear the house label.'⁷⁶ Likewise, collaborations with other institutions are very much encouraged in order to bring fresh perspectives.⁷⁷

Conclusion

Through the mobile structure of IRCAM, and the multidisciplinary nature of the Georges-Pompidou Centre in general, Boulez seeks to encourage the exposure of composers and audiences alike to new possibilities and new forms of expression. This is the key to understanding his dialectical approach to institutions. He

⁷¹ ['aventureux, hasardeux, incertain'.] (My translation.) Boulez (1985b) p. 11.

⁷² ['[IRCAM] ne peut exister que des compromis instables, sans cesse remis en question.'] (My translation.) Boulez and Clavé (1990) p. 10.

⁷³ ['La vie musicale a besoin, de plus en plus, d'organisations capables de s'adapter aux multiples nécessités de notre époque, de se modifier suivant les circonstances où leur action est requise.'] (My translation.) Boulez (1979d) (no page numbers).

⁷⁴ I would suggest that this is the primary argument in Born's study *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde* (1995). Interestingly, throughout Born insists on writing out the year 1984 fully in letters (i.e. 'nineteen eighty-four'). Is this a subliminal reference, or an 'in'-joke, to Orwell's novel: IRCAM being the equivalent to the highly totalitarian government and Boulez to 'Big Brother'?

⁷⁵ Boulez in: Boulez and Menger (1990) p. 16 (in English).

⁷⁶ *Ibid.*

⁷⁷ See Boulez in: Boulez and Longchamp (1980) page number unknown (in French).

acknowledges that all musical organisations are an inevitable part of composition and performance, but, simultaneously, rejects their tendency towards sedimentation and compartmentalisation. One must, instead, apply constantly the principle of doubt and ensure a hierarchical mobility in the institutional structure. For the composer, this means the possibility of shaping the institution in response to his own needs. At the same time, however, the possibilities that the institution opens up, e.g. the new technology at IRCAM, constitutes part of the material at the composer's disposal and shapes his thought. This is, of course, the dialectical relationship between composer and technology that I examined in the section entitled 'Technology'.⁷⁸ Most crucially, the institution forces the individual to encounter ideas he would probably have not pursued or conceived. These chance encounters are the stimuli for unforeseen developments in the composer's expressive development. In short, at its best, the institution provides the individual with the creative 'throw of the dice' required in order to 'reveal himself to himself'.

⁷⁸ See: this dissertation p. 345.

CHAPTER V: CONCLUSION

Introduction

This chapter consists of three parts. Part 1 brings together the key dialectical concepts from chapters III and IV and summarises Boulez's dialectical theory. Part 2 is a consideration of the dialectical principle itself – its possible sources and its manifestation in Boulez's writing style. Part 3 is an evaluation of Boulez's aesthetic conception of music and a discussion of its wider relevance for music today.

Part 1: A Summary of Boulez's dialectical approach

As I established in chapter III and explored in chapter IV, Boulez's aesthetic approach is distinctly dialectical. For the purposes of clarity, the dialectic can be sub-divided into three parts. It would be helpful to consider the three-part aspect of the dialectic in light of the concepts I set out in the two previous chapters.

1. First stage of the dialectic: The sedimented material

The first stage of Boulez's dialectical theory is founded upon the claim that one can only think through inherited concepts. This initial premise has important consequences for Boulez's approach, not least that analysis takes on a fundamental role in composition, as it constitutes the composer's first contact with the inherited material.

This claim leads to a conception of oneself as a 'blank slate' upon which one accumulates a 'being' through the inherited conceptual material. At the same time,

however, Boulez employs the concept of 'will' in terms of one's being which draws from the philosophy of Schopenhauer.

A major problem of the inherited conceptual material is its tendency to become 'sedimented'. The process of sedimentation, typically described in Boulez's writings through recourse to the 'law of entropy', results in concepts taking on the appearance of being natural and immediate. The notion of sedimented material is manifested in several different contexts in Boulez's writings.

Most obviously, the inherited musical material, as the inherited rationalised musical technique analogous to rationalised concepts, is the sedimentation of the music of one's predecessors. This sedimented musical material contains within it embedded historical conceptions of one's relationship to the material of sound. Boulez calls this aspect the 'speculation', in which one can identify the subcategories of the 'partial speculation', the 'transcription' and the 'phantasmagoria'. Tonality constitutes the most general category of sedimented musical material, a musical system that Boulez rejects on the grounds that its expressive power has become redundant. In the process of composition, the sedimented aspect of the musical material can lead to the situation in which the composer believes he is creating spontaneously whereas he is relying upon unconscious memories of past works.

The same problem occurs in the reception of works. The listener often accepts 'first degree' listening, that is, an immediate type of listening, which often rests on 'comfortable clichés'.¹ This type of listening relies on inherited sedimented musical meanings and consequently, the expressive power of the work is diminished.

Music history becomes sedimented through various means, most notably the oversimplification of history into schools and categories, the nostalgia for a golden age, the formation of the canon and the employment of aesthetic slogans. Sedimented aesthetic approaches which have been attacked by Boulez include

¹ Boulez (1979e) p. 297 (in English).

neoclassicism, particularly in his early writings, and postmodernism and the 'authenticity' movement in the later years. In all of these approaches, history becomes a means of protection, Boulez argues, against the real problems of today.

Analytical techniques can easily become sedimented into a passive, uncritical activity. Similarly, musical terminology used to describe music reinforces sedimented ways of conceiving music, something that has inevitable consequences for the composition and reception of new works.

Performance technology and music institutions both have a tendency towards sedimentation. In the former, Boulez cites the standardisation of the modern orchestra as a key problem. In the latter, one notes the highly sedimented concert rituals which serve to intensify, rather than break down, social and cultural 'ghettos'.

The problem with all these forms of sedimentation is that they remain exterior to one's own thought and restrict one's *freedom*. The sedimented material at one's disposal is the result of innumerable contingent (i.e. chance) events and could exist alternatively. The task of the artist is to find a way of overcoming the *chance* in the inherited material in order to be able to realise one's *freedom*.

Boulez's early aesthetic solution to this problem was to make every aspect become *necessary* through complete consistency. At the same time, one tries to eliminate all aspects that are inconsistent with one's conception of the material. This solution was, of course, exemplified in *Structure 1a*. However, he soon recognised that this way of overcoming the chance of the material was not artistically 'fertile'. Not only did chance persist by 'sneaking in through a thousand unfillable cracks'² but also he lost the *raison d'être* of his aesthetic position: the realisation of the *freedom* of the autonomous subject.

² ['s'introduit par mille issues impossibles à calfeutrer...'] (My slight alteration to the translation.) Boulez (1957a) p. 411 (in French) and p. 30 (in English).

In opposition to Boulez's attempt to achieve complete consistency, Cage proposed to dodge the problem of the chance aspect of the material through the use of chance procedures. These procedures were founded upon the belief that one can avoid applying conceptual thought to music through procedures which remove oneself from the material. However, as Boulez (and Igitur³) recognised, this is impossible.

Boulez's mature solution to the problem of material primarily developed between 1952 and 1957, between the 'pillars' of *Structure 1a* (1952) and the Third Piano Sonata (1957-) in his compositions, and 'Éventuellement' (1952) and 'Aléa' (1957) in his writings. This solution is the principle of the dialectic.

2. Second stage of the dialectic: doubt and speculation

Acknowledging that one cannot escape sedimented inherited concepts, Boulez advocates applying the Cartesian principle of doubt. This doubt appears in Boulez's writings under the guises of 'forgetting', 'renewal' and 'parentheses'. It involves a distancing between oneself and the inherited concept: in short, the adoption of a self-critical attitude, to which Boulez occasionally alludes through Artaud's notion of the 'double'. The process of doubt is not objective and involves an 'interaction of rationality and affectivity'. One dismantles inherited concepts into their individual components as a way of beginning to make them become *necessary* to one's thought and means of expression. Boulez describes this process as 'dissociation' or through the use of the French verb 'éclater'.

In Boulez's aesthetic approach, doubt is applied to all the forms of sedimentation I outlined above. In every area of music, doubt consists of a radical questioning of inherited concepts in order to break them down into their simple parts. Although most of these manifestations of doubt are self-evident (e.g. questioning musical concepts), there are other less obvious examples. These include the notion of 'active

³ I refer to the moment in *Igitur* (1869) in which the lead character considers blowing out the candle but recognises that *chance* is contained within his own breath.

listening', in which one constantly questions one's understanding of a given work, 'technical analysis', involving breaking the musical work into its simple elements, and the principle of 'constant renewal' of musical components (doubt reflected within the composition itself).

Having dismantled the inherited concepts by doubt, the next stage is to construct concepts that are necessary and functional to one's thought and means of expression. This constitutes what Boulez describes as a 'speculation' upon the material.

The notion of speculation concerns the attempt to bring the material into a consistent, conceptual framework. Every element of the work is made functional and *necessary*: in other words, the composer dominates the contingent material in order to make each element meaningful. This speculation is not, therefore, the application of arbitrary rules to a particular work but a means of bringing the elements into a conceptual, rational whole.

In order to achieve consistency – and the utopia of the 'pure work' or the 'original instrument' - Boulez insists that one must focus upon the material itself and not other aspects associated with it. In composition, this means focusing upon the material of sound. For the analyst and the listener, this involves focusing upon the structural and functional aspects of the work (i.e. the conceptual and therefore expressive aspects). Boulez stresses that this speculation is not natural but merely a provisional, historical understanding of the material.

This speculative aspect of the dialectical process can be considered as the principle of the dialectic itself. Boulez presents this dialectic in several different ways including 'technique-imagination', 'real-imaginary', 'material-invention' and 'rational-accident'.

The speculation is manifested in widely differing ways in Boulez's writings. The most obvious is the dialectical relationship between the composer and the work.

Boulez describes the listening process as constant speculation upon the function of the work. He also conceives an important dialectic between performance technology and the composer: this dialectic is central to his conception of IRCAM.

One of the important aspects of speculation and the attempt to make all the aspects become *necessary* is the idea of taking a 'global' view. This appears in Boulez's writings in various ways. In composition, the composer attempts to force the material into a consistent, global whole. This is based on taking a 'global view' of history, an idea that manifests itself in Boulez's advocacy of widening traditional music history to consider non-Western musics and non-musical art-forms. In performance technology, Boulez seeks to encourage a 'global', communal approach in which all the recent technical acquisitions are globalised: the primary example of this can be seen at IRCAM. *Penser la musique aujourd'hui* (1963) can similarly be understood as an attempt to globalise the terminology used to describe music into a more conceptually consistent whole. The other areas of music in which the idea of 'globality' appears indicate its probable source: Gestalt Theory.

Boulez argues that one should adopt an approach to analysis which draws from Gestalt Theory. He claims that one should primarily be concerned with the overall shape of a work and from that, consider the underlying functional relationships of structures. Likewise, he advocates a 'global' approach to listening in which one can only understand a work retrospectively. His appropriation of Gestalt Theory can also be seen in one of its key ideas, that of the discontinuous field, in his conception of music technique and listening.

The claim of Gestalt Theory that the world is perceived within the idea of the discontinuous field is manifested in both the creation and reception of musical structures in Boulez's theory. He conceives musical technique in terms of opening a field of possibility in which musical objects are placed. These objects are not isolated phenomena but imply a discontinuous field of discreet values. Boulez argues that one comprehends a work through completing the implied field by

‘referencing’ the musical objects. This is the moment at which one’s ‘intuition’ is involved.

Despite the emphasis upon taking a ‘global’ view, Boulez recognises that this is impossible to achieve completely. There is always a gap in one’s rational knowledge that is bridged by ‘intuition’. The ability to fill in the gaps with intuition – i.e. the ability to ‘see’ - is what distinguishes the great artist from others and justifies his role in society. It is the moment of discontinuity which is not based on causality. This moment of intuition constitutes the Existential ‘initial choice’ and inevitably involves some element of chance within it. Most importantly, this is the point at the autonomous subject overcomes the limitations of the *chance* material and realises its *freedom*. Freedom, in Boulez’s writings, is typically denoted by the terms of ‘imagination’ or the ‘imaginary’.

3. Third stage of the dialectic: synthesis and proliferation

The third stage of the dialectic is essentially the goal of the second stage: to arrive at an unforeseen ‘synthesis’ of general principles. Boulez emphasises that this concept of synthesis does not equate to a linear conception of progress; indeed, he compares ‘progress’ to a ‘virgin forest’.

The concept of synthesis permeates much of Boulez’s writings. For example, in his earlier writings, he promoted the idea of establishing a synthesis of the musical language (although this was later rejected due to its limiting tendency). In addition, his conception of music history is clearly based on a synthetic approach (drawn from Leibowitz), from modality to tonality and from tonality to serialism. Within his music technique, the idea of synthesis is reflected in his compositional device of superimposition or multiplication in which musical objects are superimposed to generate new objects.

The unforeseen aspect of the synthesis is a vital part of Boulez's dialectical conception of music.. Its appearance proves that the great artist has overcome the limitations of the inherited rational material. The unforeseen is celebrated in Boulez's writings not only in composition but also in analysis and listening, which, through the appearance of one's 'intuition', one discovers things that enable one to live one's life. Consequently, Boulez condemns musical works which eliminate the unforeseen or are too predictable. Each work should incorporate a complexity, mobility and fundamental ambiguity so that one's understanding of it changes over time. This particularly Symbolist conception of the artwork is most clearly presented in the mobile form of the Third Piano Sonata (1957).

Ensuing from his concept of the unforeseen is the idea of 'proliferation' (similar to 'deduction'). Proliferation refers to the unforeseeable possibilities that can be derived from 'fertile' general principles. This proliferation from general principles should be seen in tandem with its simultaneous but opposite process of the dissociation of the material into its simple elements.

Before moving on to part 2 and my discussion of the possible source of the dialectical principle itself in Boulez's writings, I would like to conclude this part by reconsidering the three primary concepts that I have highlighted throughout this dissertation: *chance*, *necessity* and *freedom*.

Chance-necessity-freedom

Chance is perhaps the most pressing problem in Boulez's writings. It concerns the contingency of the inherited sedimented material and is something which is exterior to one's conceptual thought. *Chance* can be considered as constituting the fundamental problem of the first stage of the dialectic. It is associated in Boulez's writings with terms such as history, automatism, material and sedimentation.

Necessity is arguably the most salient feature of the second stage of Boulez's dialectical conception of music. It involves the attempt to conceptualise the material and globalise it for one's own work. As each aspect becomes conceptualised, intentional and dominated, Boulez gets closer to his utopian vision of the 'pure work' in which every aspect is expressive. The notion of making the material become *necessary* is the primary characteristic of the second stage of the dialectic. The concept of *necessity* is associated in Boulez's writings with terms such as consistency, function, structure, rationality, fixity, idea, domination and globality.

Freedom is the underlying goal of Boulez's aesthetic position. His ambition is to realise a conception of the autonomous subject which triumphs over the limitations of the *chance* material. The successful realisation of one's *freedom* is confirmed in the unforeseen synthesis of the third stage of the dialectic, hence the phrase I have quoted throughout this dissertation that 'there is only creation in the unforeseeable becoming necessity.'⁴ The concept of *freedom* is associated in Boulez's writings with the terms intuition, mobility, imaginary, imagination, renewal, 'initial choice' and discontinuity.

Part 2: The dialectical principle: its origins and its ramifications

One of the key arguments in this dissertation is that between 1952 and 1957 Boulez formulated a consciously dialectical theory to music in order to overcome the aesthetic problems he encountered in *Structures* (1952). In chapter II, I suggested that this was primarily stimulated by the writings of Mallarmé but I did not, at that time, consider the possible sources of his explicitly dialectical conception of music. This is because I consider that a discussion of the source of Boulez's dialectical approach would only be helpful having already examined his theory (i.e. after

⁴ ['il n'y a de création que dans l'imprévisible devenant nécessité.'] (My translation.) Boulez (1952c) p. 288 (in French) and p. 133 (in English).

chapters III and IV). I would now like to begin my exploration of the origin of Boulez's dialectical conception with perhaps the most obvious figure: Hegel.

There was a resurgence of interest in Hegel in Paris of the 1930s which may have had repercussions for the post-war period. Although there were several factors involved in this resurgence, such as the centenary of Hegel's death in 1930,⁵ and new French translations available e.g. Hyppolyte's translation of the *Phänomenologie des Geistes*, the major catalyst was Alexandre Kojève. Kojève presented a series of lectures on Hegel between 1933 and 1939 at the École Pratique des Hautes Études which were later transcribed by Raymond Queneau and published as the *Introduction to the reading of Hegel* (1947).⁶ Boulez denies, however, that he was directly influenced by the writings of Hegel or Kojève⁷ and there is no evidence to contradict this claim. Nevertheless, Kojève's lectures were attended by several of the most influential figures in post-war French thought, including Merleau-Ponty and Breton,⁸ both of whom have influenced Boulez's thought. I would briefly like to consider these two writers.

Merleau-Ponty's Hegelianism was largely informed by Existentialism and Gestalt Theory, both of which have impacted on Boulez's aesthetic ideas. Merleau-Ponty's contributions to *Les Temps Modernes*, which Boulez read, display a strong interest in Hegelian philosophy. For example, in the article 'L'existentialisme chez Hegel' (1946), he claims that 'Hegel is the origin of all the great philosophies of the last century – for example Marxism, Nietzsche's philosophy, Phenomenology, German Existentialism, [and] psychoanalysis'.⁹ The claim that Existentialism was founded upon Hegelian philosophy can be observed in some of the terminology in

⁵ Kelly makes this suggestion. See: Kelly (1992) pp. 33-34 (in English).

⁶ Kojève (1947).

⁷ See Boulez in: Boulez and Walters (2002) p. 407 (in English).

⁸ Kelly (1992) pp. 34-35 (in English).

⁹ ['Hegel est à l'origine de tout ce qui s'est fait de grand en philosophie depuis un siècle, - par exemple du marxisme, de Nietzsche, de la phénoménologie et de l'existentialisme allemand, de la psychanalyse'.] (My translation.) Merleau-Ponty (1946) p. 1310.

Existentialist texts. Sartre, for example, employs terms such as ‘dialectic’, ‘synthesis’, ‘speculation’ and ‘partial speculation’.¹⁰

Breton was influenced by Hegel from the early 1930s onwards, to the extent that he came to distinguish between two periods in the surrealist movement. The first period, up to the early 1930s, he characterised by intuition, whereas the second period is based on reasoning¹¹ drawing, in some way, on Hegel’s dialectical principle. This Hegelianism was, quite explicitly, in the form of Marx’s ‘Dialectical Materialism’¹² and his advocacy of Communism.¹³ As I noted earlier,¹⁴ Heyworth suggests that Boulez was interested in Communism for a brief period in his youth and one can venture that Surrealism may have played a role in this interest.

I would argue that a much more profound source of Boulez’s Hegelianism is derived from the writings of Mallarmé. Indeed, it is crucial to consider Mallarmé’s Hegelian influence at this point, as this is the key to understanding much of Boulez’s ‘Hegelianism’.

The claim that Mallarmé was influenced by Hegel is still keenly debated. This debate began soon after Mallarmé’s death when Camille Mauclair, a supporter and friend of Mallarmé, wrote that ‘Mallarmé’s fundamental outlook proceeds from Hegel’s metaphysical esthetics, and it is correct to say that his work is the systematic application of Hegelianism to French letters.’¹⁵ Mauclair, responding to the criticisms of his assertion by many French critics of the time,¹⁶ claimed that he had, himself, discussed Hegel’s writings with Mallarmé, who apparently seemed well-informed with Hegel’s ideas.¹⁷

¹⁰ See: Sartre (1946) p. 1543 (in French).

¹¹ See: Breton (1934) p. 116 (in English).

¹² See: *Ibid.*, p. 117 (in English).

¹³ See: Breton (1930) p. 150 (in French).

¹⁴ See: this dissertation p. 44.

¹⁵ Mauclair *Princes de l’Esprit* (Paris: Ollendorf, 1920) (first published in 1901). Cited in Langan (1986) p. 1.

¹⁶ Criticisms which still persist today. For example, Cohn dismisses the impact of Hegel’s ideas on Mallarmé. See: Cohn (1981) p. 7 (in English).

¹⁷ See: Mauclair (1935) pp. 67-68 (in French).

What can be established is that Hegel's ideas were widely circulated in France in the second half of the nineteenth century. Initially, Victor Cousin helped to create interest in German philosophy in France in the first half of the nineteenth century with his courses at the Sorbonne between 1815 and 1820 which were later published (1836-1846).¹⁸ In the latter half of the nineteenth century, many of Cousin's students continued to promote German philosophy in France. It can be verified that Mallarmé read writings by at least three of Cousin's students, V. E. Michelet, Hyppolite Taine and E. Montégut, and possibly Edmund Schérer too. I would like to consider briefly the evidence for Mallarmé's knowledge of these four writers as I consider that this is important for this study of Boulez's dialectical approach.

First, Mallarmé's correspondence from November 1864 reveals that he had read Michelet's *Bible de Humanité*, which articulates a version of history as 'a struggle between Spirit and "Chance"'.¹⁹

Second, in 1865, Mallarmé received Taine's *La Littérature Anglaise* from Lefébure, a close friend who was himself heavily influenced by Hegel's thought. Taine's argument is paraphrased by Langan:

we live on the inverted side of reality's tapestry, where "le Hasard," Chance, rules. But behind this face "there are simple notions, atomic abstractions". Success comes from "La Méthode": starting from "le hasard, and "through gradual analytical work" ... 'the contemporary thinker must purify and complete Hegel's work'.²⁰

The writings of both Michelet and Taine manifest the preoccupation with *chance*, derived from Hegel's philosophy, which would soon become a feature of Mallarmé's writings (and later, those of Boulez). The above statement also suggests the idea of 'doubt' and the ambition of a completely *necessary* and 'pure' work, something that has become distinctive to Boulez's aesthetic conception.

¹⁸ See: Langan (1986) p. 19 (in English).

¹⁹ See: *ibid.*, pp. 23-24.

Third, Mallarmé reveals in a letter to Lefébure (May, 1867) that it was whilst reading an article by Montégut in *La Revue des Deux Mondes* that he first considered writing *Le Livre* (posthumous),²¹ a book that is important in terms of Boulez's Third Piano Sonata.

Fourth, Austin argues that as Mallarmé regularly read *La Revue des Deux Mondes*, he probably read Schérer's article 'Hegel et Hegelianism' which appeared in the journal in February 1861. Austin argues that this was an important source of Mallarmé's Hegelianism, due to the parallels that he finds between Schérer's article and Mallarmé's writings.²² To these four writers (Michelet, Taine, Montégut and Schérer) should be added two of Mallarmé's closest friends who were heavily influenced by Hegel: Lefébure, who has already been mentioned, and Villiers de l'Isle-Adam.

In summary, Mallarmé must have had some knowledge of Hegel's writings due to the popularity of Hegel's ideas, particularly between 1850 and 1870. Mallarmé's closest circle of friends included writers strongly influenced by Hegel, in particular, Villiers and Lefébure.²³ In addition, Cousin's students were spreading Hegel's ideas at that time, particularly in *La Revue des Deux Mondes*, a journal that Mallarmé regularly read. I would also add that although Mallarmé could not read the original German of Hegel's writings, there was a steady stream of French translations by Véra of important Hegelian texts between 1859 and 1869. These writings include *Philosophie de la Nature* (1865-66) and *Philosophie de l'Esprit* (1867-69). The primary issue is how much Hegel's philosophy impacted on Mallarmé's thought. I would propose that it is not a coincidence that Mallarmé's first text concerning *chance* was *Igitur*, written between 1867-69, a time when many texts on or by Hegel were first available to Mallarmé in French. Only two years before, in 1864,

²⁰ See: *ibid.*

²¹ See: *ibid.*, pp. 19-20.

²² See: Austin (1953) pp. 76-77 (in French).

Mallarmé met Villiers and Lefébure for the first time. Their knowledge of Hegel must have had some impact on Mallarmé. In consideration of these facts, there is no evidence to suggest, however, that he attempted to apply a strictly systematic Hegelian approach to his writing as Mauclair suggests. Instead, he probably used some of Hegel's ideas to stimulate his own thoughts about literature. Therefore, I would tend towards Austin's conclusion that 'Mallarmé was a poet before all; Hegel's philosophy was not the unique source of his grandiose dream'²⁴ and that for Mallarmé 'it was not a matter of precisely studying philosophical or scientific notions, but of supplying his personal vision [rêve] of new ideas'.²⁵

So far, I have established that Boulez's influences of Existentialism, Phenomenology (drawing from Gestalt Theory) and Surrealism have strong links with Hegelian thought. I have also proposed that whilst the direct Hegelian influence on Mallarmé is debatable, Mallarmé must have been influenced, at least indirectly, by Hegelian ideas filtered through his literary friends. However, I would argue that the most likely initial and primary source of Boulez's dialectical thought is that of his teacher, Leibowitz.²⁶

As I noted in the introduction to this dissertation, Boulez's aesthetic approach as articulated in his essays is remarkable for its consistency. The majority of Boulez's key concepts are present in his earliest texts, albeit lacking the overall cohesion of his later mature aesthetic outlook. At regular points throughout this study, I have noted that many of the important aesthetic concepts and recurring themes in

²³ One could also add Valéry, who has also been cited as being influenced by Hegel. See: Kelly (1992) p. 33 (in English).

²⁴ ['Mallarmé était poète avant tout; la philosophie de Hegel ne fut pas l'unique source de son rêve grandiose'.] (My translation.) Austin (1995) p. 66.

²⁵ ['Il s'agissait pour lui, non pas d'étudier avec précision des notions philosophiques ou scientifiques, mais d'alimenter sa rêverie personnelle d'idées nouvelles'.] (My translation.) Austin (1995) p. 73.

²⁶ Of course, Leibowitz himself is an intriguing case in this respect as it is difficult to discern from where his dialectical conception arose. The most obvious source is Adorno, a friend of Leibowitz. Certainly, Leibowitz's writings display a strong Adornian influence, a feature which probably accounts for the similarity of Boulez's aesthetic approach to that of Adorno. Leibowitz was also a friend of Sartre and Merleau-Ponty, both influential on the formation of Boulez's approach. Similarly, another friend Lévi-Strauss provided a theoretical platform on which Boulez would later write *Penser la musique aujourd'hui* (1963).

Boulez's writings are also present (or their near-equivalents) in those of Leibowitz. Identical shared concepts include 'renewal', 'intuition', 'consumption' (of the historical material) and, most significantly, the principle of the dialectic articulated in terms such as 'synthesis'. Leibowitz's 'quotation marks' becomes Boulez's 'parentheses', likewise 'radical skepticism' becomes 'doubt', 'propulsive force' (towards the historical material) becomes 'jet engine'. Both share a similar view of music history (understood as the achievements of great composers), both condemn aesthetic approaches founded upon a 'golden age' as 'impotent', both aim to make every aspect of the work *necessary*, both attack passive forms of listening and both stress the historical necessity of serialism.

I would propose that Leibowitz's influence on Boulez goes much further than providing him with a knowledge of serial music. The overwhelmingly striking similarity of their aesthetic approaches suggests to me that Leibowitz was the most important influence on Boulez's aesthetic theory. However, Leibowitz's approach remained rather 'monolithic' in his belief in progress and contained theoretical blindspots such as not granting rhythm a structural function. Boulez recognised the limitations of Leibowitz's ideas but overcame them through his interest in the writings of Mallarmé in the 1950s. It is tempting to consider that Boulez recognised the Hegelian ideas in Mallarmé's writings, ideas that Leibowitz had discussed only a few years previously. Mallarmé became the solution to the impasse of Leibowitz's rather one-dimensional aesthetic approach.

Having considered the most likely sources of Boulez's dialectical conception of music, I would like to highlight, briefly, how this principle is manifested within his writing style.

There are several stylistic features within Boulez's writings themselves that manifest his dialectical conception of music.

First, as Langan observes, Mallarmé adopts the Hegelianesque sequence of triads for several of his articles, e.g. Music-Letters-Poetry,²⁷ which implicitly suggests a three-part dialectical relationship. Similarly, Boulez uses this feature for several of his own titles including 'Son, verbe, synthèse' (1958)²⁸ and 'Poesie - centre et absence – musique' (1960).²⁹

Second, the form of Boulez's mature writings bear the mark of his dialectical theory. His early writings typically fall into one of three categories: the presentation of a particular theoretical position which would subsequently be exposed as flawed,³⁰ the discussion of an idea or a work/s, or the summary of music today. However, in his first distinctly dialectical text 'Aléa' (1957) he maps out the two extreme theoretical poles and then works by comparison and contradiction in order to develop his argument. In this particular text, he contrasts 'chance by inadvertence' with 'chance by automatism' and arrives at his solution of mobile form. This approach to writing can be witnessed in several other later texts, for example 'Matériau et invention' (1980).

Third, the literary device of ironic inversion can be considered as a manifestation of the dialectical principle. I have already considered two examples of this device in Boulez's writings earlier in this thesis. The first is the title of Boulez's notorious article 'Schoenberg is Dead' (1952) which suggests the next line of 'long live Schoenberg!'.³¹ The other example is Boulez's inversion of Rimbaud's statement concerning 'seeing'.³² I would add to these two examples a third involving the inversion of a line by Debussy's M. Croche. M. Croche asserts that 'discipline must be sought in freedom' which becomes inverted to 'freedom can only be found

²⁷ See: Langan (1986) p. 229 (in English).

²⁸ Also note the idea of synthesis.

²⁹ In addition, Boulez has also employed this triadic form for the title of the composition 'Figures-doubles-prismes' (1964/68).

³⁰ Usually the ideas of Leibowitz. For example, see: Boulez (1948a) p. 253 (in French) and p. 47 (in English).

³¹ See: this dissertation p. 69.

³² See: this dissertation p. 189.

through discipline!’.³³ In all three examples, this inversion does not nullify and reject the original claim: it adds to it and enlarges (i.e. ‘synthesises’) the meaning. Although the connection between this literary device and dialectical thought may not be instantly clear, Boulez makes this parallel explicit. During an essay dating from 1963, he momentarily deviates from his argument to remark upon his own contradictory style of writing. He writes that:

[E]very positive definition conceals a number of possible negations but thereby becomes correspondingly wider. An idea is seldom categorically “this” or “that” but is better described as “this, *but* that” – it contains within it irresolvable contradictions, which enrich the dialectic.³⁴

The fourth and final manifestation of the dialectical principle in Boulez’s writings is in his occasional adoption of a distinctly ‘stylised’ type of writing. The most striking example of this appears in the introduction to *Penser la musique aujourd’hui* (1963) entitled ‘De moi à moi’. The argumentative and light-hearted tone of this introduction deliberately invokes the whimsical character of Monsieur Croche; indeed, Boulez’s text contains several clear allusions to Debussy’s alter ego.³⁵ Debussy largely based his fictional character on M. Teste, a character penned by Valéry, who was associated with Debussy at the time.³⁶ As I have noted elsewhere,³⁷ Boulez has quoted from Valéry’s book *La soirée avec M. Teste* (1895). Both M. Croche and M. Teste are involved in solo conversations with themselves, in a gradual process of self-discovery. On Valéry’s work, Langham Smith argues that ‘there is really but one person, an alter ego: the process is one of self-discovery, a

³³ Boulez quotes both the original and the inversion: [“‘Il faut chercher la discipline dans la liberté’ ‘on ne peut trouver la liberté que par la discipline!’] Boulez (1963a) p. 9 (in French) and p. 15 (in English).

³⁴ [‘une définition positive recèle un certain nombre de négations possibles, mais qu’elle s’en élargit d’autant. Une notion est rarement: CECI, ou CELA, catégoriquement; elle se décrit plutôt comme: ceci, MAIS cela; elle porte en elle des contradictions à jamais non résolues, dont la dialectique l’enrichit.’] Boulez (1961a) p. 522 (in French) and p. 57 (in English).

³⁵ See: Boulez (1963a) pp. 7-9 (in French) and pp. 13-15 (in English).

³⁶ Lockspeiser (1962) and cited in Debussy (1977) p. x.

³⁷ For the exact reference of this quotation see my earlier consideration of this passage. See: this dissertation p. 192.

coming to terms with his own intellectual process.’³⁸ I would argue that ‘De moi à moi’ should be understood in this way, that is, as an introduction to his explication of his new, consciously dialectical, conception of musical technique.

Part 3: ‘Partial Conclusion’

Having considered Boulez’s aesthetic approach in its ‘globality’, I would argue that one can identify certain problems and contradictions.

The most obvious problems occur when Boulez applies his dialectical conception to listening. Whilst he insists that one cannot understand the world ‘immediately’, i.e. outside of inherited concepts,³⁹ his approach to listening seems to be founded upon this belief. At the very least, he seems to claim that it is possible to throw all of one’s inheritance into ‘doubt’ as one hears a work. He attempts to overcome this problem by arguing that one understands a work retrospectively and therefore one can begin to discern the function underlying the musical structures. An additional problem in listening concerns the aesthetic principle of renewal within his conception of musical technique. In serialism, this principle manifests itself in the constant renewal of the twelve semitones. This leads to a lack of fixed references, which are vital for the perception of form. Boulez recognises this problem and tempers (or sacrifices) his aesthetic principle for pragmatic compositional reasons.

Another apparent contradiction in Boulez’s writings is that despite his rejection of the claim that concepts are ‘natural’, he regularly makes appeals to nature in his terminology. This is particularly conspicuous in his incorporation of ‘organic’ metaphors, which depict his progressive and dynamic view of music.⁴⁰

³⁸ Smith (1977) p. xi (in English).

³⁹ One recalls his acknowledgement that the meaning, i.e. the function, of non-western musics is largely inaccessible to western listeners. See: this dissertation p. 247.

⁴⁰ For example Boulez writes ‘like our digestive organs, this gift [of musical talent] transforms into organic life the elements that it needs. The organism chooses what it needs as food, reacting more favorably to some foods than others.’ [‘à l’instar d’une fonction nutritive, il transforme en vie organique les éléments dont il a besoin. L’organisme choisit ce qu’il lui faut pour se nourrir, et il réagit plus favorablement à certaines sortes de nourriture.’] Boulez (1961c) p. 382 (in French) and p. 121 (in English).

Boulez's writings can easily be attacked for their incorporation of obscure and sometimes imprecise terminology. This is particularly apposite with regard to his appropriation of literary terms, particularly those that appear in *Penser la musique aujourd'hui* (1963). One senses that his instinct to cover his artistic and aesthetic tracks inhibits his own aim of clarification of the musical technique. Certainly later, by the first publication of *Jalons* (1989), he shows a capability and confidence to explain rather more complex ideas with greater precision than before.

Before finally considering Boulez's theory and his overall aesthetic goals, I would briefly like to tackle the accusation of elitism often made against Boulez.

Elitism and self-criticism

At the core of Boulez's aesthetic approach is the claim that 'great art' – art which overcomes the inherited material and reveals something new and unforeseen – is created through the privileged 'intuition' of the great artist. This gift of 'seeing', according to Boulez, distinguishes the artist from others and justifies his role in society. This gift excludes not only those who have not acquired some type of relevant artistic technique but anyone who has not been blessed with the power of 'seeing'. One can establish, clearly and unambiguously, therefore that Boulez's conception of artistic creation is founded upon an elitist notion of the creative 'genius'.

However, the accusations of elitism made against Boulez are usually targeted at the *reception* of his works, rather than their creation. Writers, such as Born, typically cite Boulez to represent an aesthetic snobbery that distinguishes between 'high' and 'low' art, and, implicitly, between the producers of art and the masses. Certainly, Boulez's works are 'difficult' for a listener with little knowledge of post-war art music. However, it does not follow from this, I would suggest, that his approach must therefore be elitist. Like the artistic parallel (or 'conjunction') of the

International Style in architecture, Boulez's aesthetic position rejects the inherited cultural and social categories (i.e. 'ghettos') for a (perhaps misguided) utopian vision of *freedom* to be able to supersede one's inherited cultural and social identities. This is achieved through the dream of pure *necessity*, exemplified by the 'pure work'. In this respect, Boulez's conception of music can be described as 'elitist' in the sense that science could be similarly be described. The frontiers of scientific exploration, like Boulez's music, are elitist in that they exclude a large proportion of society from being able to comprehend it. Nevertheless, science only excludes people on the basis of their knowledge rather than on their cultural and social background. I would suggest that the critiques of Boulez's approach, particularly through recourse to highly complex deconstructive discursive methodologies, which are far from popularist in tone, are more securely founded upon a high-low art distinction than Boulez's own writings. They forcibly create a distinction between their criticism and the focus of their study. This distinction, I would suggest, is rejected by Boulez.

Self-criticism is one of the most important aspects of Boulez's approach. It is a vital part of the dialectical process and involves the composer reflecting on his inherited material in order to make it *necessary* for his own thought and expression.

Boulez's advocacy of self-criticism is interesting in light of the fact that all of his main influences were not only radical self-critical artists but also eloquent, published writers on their art. Although he has acknowledged that his thought has been heavily stimulated by literature,⁴¹ I would claim that his influences draw from self-critical writers, painters and composers. The examples are numerous: Mallarmé, Breton, Klee, Schoenberg, Webern, Sartre, Mondrian, Butor, Artaud, Kandinsky, Wagner, Berlioz and, not least, Leibowitz, all of whom wrote extensively upon the aesthetic problems of their own practice. It is particularly with regard to surrealism that Boulez favoured those who wrote about their art (e.g. Breton and Klee) over those

⁴¹ Boulez writes that 'my present mode of thought derives from my reflections on literature rather than on music.' ['ma forme de pensée actuelle a pris naissance plus des réflexions sur la littérature que sur la musique.'] Boulez (1960a) p. 431 (in French) and p. 143 (in English).

who did not (e.g. Dali and Braque). One could suggest that this major source of Boulez's aesthetic formation was founded on the critical texts of his influences, perhaps even more than their art-works. Indeed, I would add that the importance granted to art criticism over art-works by Boulez is perhaps applicable to today's reception of Boulez himself and post-war art in general. Many art-works from the last 60 years are most typically remembered and discussed for the aesthetic and critical principles they are deemed to represent rather than their expressive power.

Throughout this dissertation, I have argued that Boulez's primary ambition is to realise a particular conception of *freedom* through taking the *chance* material and making it become *necessary*. I would now like to examine and evaluate this particular conception of music further.

Chance-necessity-freedom

I have already established that, for Boulez, the primary problem with inherited concepts is that they are based on *chance* and remain exterior to one's thought. Concepts could, therefore, be described as a negation of reality, as a means of fixing and 'killing' the inherent mobility of reality in order to make it conceptual and thinkable. We are unable to *know* a thing as it *is* and certainly not what it *will* be – we can only begin to describe what a thing *was*. In this sense, every concept 'kills', metaphorically, the thing it describes by fixing it, analysing it, devouring it and dominating it. This is, of course, the key problem of sedimentation and its consequent loss of expressive power.

Boulez's response to this problem is dialectical. Recognising that one cannot avoid inherited concepts, he focuses upon making every acquisition become *necessary* and functional within his own self-imposed conceptual framework. This is his utopia of the 'pure work', alternatively described as the 'original instrument'.

By conceptualising every aspect as much as possible, by imbuing each aspect with a function, the 'concepts' become so interconnected and ambiguous that their clear conceptual 'edges' and categories start to become fluid. The resistance to the 'rough edges' of the contingent concepts is lessened until thought achieves a *freedom* of movement. It is this conception of the 'pure work' that accounts for Boulez's hatred of merely juxtaposing different materials: the blocks of material remain intact, contingent and 'jagged', restricting one's thought to what they represent. Whereas the inherited rationalised (i.e. 'conceptual') material was composed of fixed dead elements, the new *necessary* work acquires a mobility, an ambiguity, and becomes, figuratively, an autonomous 'living' work.

On Boulez's aesthetics of music today

There are several reasons why I would argue that this study of Boulez's aesthetic theory is relevant to musical thought today.

First, I have highlighted several important influences on the formation of Boulez's aesthetic theory which have been neglected in Boulez scholarship. These include Surrealism (particularly the writings of Breton), Existentialism, Phenomenology and, the most fundamental of all, Leibowitz.

Second, the overall claim that Boulez's aesthetic conception of music becomes consciously dialectical between 1952 and 1957 after his experience of *Structures* (1952) has not, before this dissertation, been clearly articulated. Aguila comes closest to recognising this shift when he notes that Boulez's writings up to 1958 display a very sectarian view of art history which lacks a theoretical sophistication. He argues that Boulez's theory at that time 'presupposed an absolute clairvoyance'.⁴² I would identify this in terms of Boulez's early fixation with the idea of *necessity* through consistency in which he attempted to eliminate the unforeseen.

Third, I have provided the first examination of the ‘geometry’ of Boulez’s dialectical approach. I consider that this is helpful in that I have attempted to contextualise concepts such as *chance* and *necessity*, the former in particular being widely misunderstood.

Fourth, I have traced the concepts employed by Boulez in their various guises in his musical approach, from his conception of music history to that of musical institutions. In doing so, I hope I have provided some indication of the depth and consistency of Boulez’s aesthetic theory.

Fifth, this study seeks to redress certain inaccuracies in the reception of Boulez’s writings on music. Many of the misunderstandings concerning Boulez are based on undue weight given to his earliest articles- the articles that helped to make his name but which also betray an embryonic aesthetic theory.

Today, Boulez has come to represent the apotheosis of musical modernism. He favours a conception of music that is based on notions of consistency, unity and *necessity*, in an effort to realise an autonomous subject that is annihilated under every form of rationalisation. The similarity of his approach and that of science echoes Boulez’s modernist credentials. Nevertheless, his theory does not conform to the modernist stereotype often placed upon him. He recognises the impossibility of complete consistency, and even its undesirability. He shares with postmodern theorists a deep suspicion of meta-narratives applied to history and all forms of sedimentation. In addition, he strives to retain a mobility at the centre of his artistic work which reveals the artificial fixity of inherited conceptual thought.

Boulez’s thought maps out many of the key problems that have faced composers in the post-war period. Unlike his predecessors, who took them for granted, and composers of the following generation, who felt no need for them, Boulez has a

⁴² [‘Elle présupposait une clairvoyance absolue’.] (My translation.) Aguila (1992) p. 205.

clear understanding of Western aesthetic values and appreciates the implications of his artistic decisions. As a young man who lived in occupied Paris, experienced the Liberation and the post-war era, Boulez was at the crossroads of fundamental changes in Western musical thought. His generation of composers was the first to question radically the value assumptions implicit in music. Most importantly, the post-war composers were the first to attempt to create a new consistent musical language capable of expressing the musical ideas of today.

Whilst there are some obvious minor flaws in his elaboration of a dialectical approach to music, and arguably several major problems in his final ambitions, his overall aesthetic position is extremely impressive in terms of its rigour, subtlety and imaginative vision. Boulez deserves to be considered as an important writer on music of the last 60 years, if not the most illuminating aesthetic figure of our time. I hope that this dissertation can contribute towards the long-overdue research in the area of Boulez's aesthetic theory.

APPENDIX A: TRANSCRIPT OF AN INTERVIEW WITH PIERRE BOULEZ

Foreword

The following is a transcript of a conversation (in English) conducted between Pierre Boulez and myself at IRCAM on 13 March 2002. Whilst I have endeavoured to remain as 'faithful' as possible to what was recorded, I have considered it necessary to make several minor alterations. All of these changes concern sentence structure which inevitably during conversation do not always strictly conform to the rules of grammar.

There are a number of people to whom I would like to express my gratitude for making this meeting possible.

First, I would very much like to thank Pierre Boulez for granting me the time to ask him several questions pertaining to my PhD. I would also like to acknowledge the help that Astrid Schirmer and Klaus-Peter Altekruze gave me in arranging this interview. I would also like to thank the Department of Music for providing me with a substantial financial contribution towards visiting IRCAM. Finally, I would like to thank Prof. Max Paddison who generously offered his time to help me formulate several of the questions I put to Mr Boulez.

Interview

David Walters: One of the most striking influences in your writings is that of Mallarmé. You've acknowledged that your interest in him began around 1950. What were the key features that first attracted you to his writings?

Pierre Boulez: It was his formalist aspect. For me, he was very obsessed by formal questions. It was necessary for him to have his new ideas in a new form, even a new vocabulary, particularly a new use of the vocabulary. When you read, for instance, the sentences of Mallarmé in his prose poems you see that the order of the sentences is not at all the usual order in French. Therefore, one needs some time to enter this type of syntax. For me, it was this aspect that was very interesting. When the Idea is reflected in everything. Not only the Idea expressed as such by a balanced sentence but with a sentence that is absolutely appropriate for what he wants to say.

DW: In your writings, I note that you concentrated on three works in particular by Mallarmé, all of which focus on the issue of *le hasard*: *Igitur* (1869), 'Un coup de dès' (1897) and *Le Livre* (posthumous). This concept of *le hasard* is also an important aspect in your own writings and one that I would like to pursue. You refer to it frequently in your article 'Aléa' (1957) and you end with a quote:

In short where *le hasard* is involved in an action, it is always *le hasard* that fulfils its own Idea in affirming or negating itself. In the face of its existence, negation and affirmation both fail. It contains the Absurd – implies it, but in a latent state and preventing it from existence: which permits the Infinite to be.⁴³

I would like to know if you could expand upon what you mean by *le hasard*. To me it appears to be a complex concept...

⁴³ ['Bref dans un acte où le hasard est en jeu, c'est toujours le hasard qui accomplit sa propre Idée en s'affirmant ou se niant. Devant son existence la négation et l'affirmation viennent échouer. Il contient

PB: Yes...

DW:...something more than chance or a random aspect. In that statement [above] I understand it as something that is inconsistent with the writer's Idea, in that it always 'fulfils its own Idea' (not that of the writer). Would it be correct to understand *le hasard* as an inconsistency?

PB: Not inconsistency – but that even if you, let's say, take an artistic decision on a low or higher level, it is in function certainly of logic and at the same time this logic is in the middle quite a lot of chance operations. Your decision is influenced by the moment at which you take it: by the circumstances, by the context and finally if you think you are decisive your decision in the bigger context is always a product of chance.

Therefore, the sentence of Mallarmé 'jamais un coup de dès n'abolira le hasard' is exactly that – you take the dice, you have certain combinations of dice and once these combinations are there, there is no more chance but in the process there is a chance. And the chance is *frozen*, so to speak, for a moment.

DW: *Igitur* is widely understood as a confrontation between the writer and chance. You write that:

The deliberate aim of relearning, re-finding, rediscovering, resurrecting [...] goes beyond the maximum point of doubt which breaks-up inherited knowledge; it is the descent of *Igitur*...⁴⁴

That, to me, suggests that you understand *Igitur* as something more than concerned with chance but maybe concerned with all the problems of artistic creation?

l'Absurde – l'implique, mais à l'état latent et l'empêche d'exister: ce qui permet à l'Infini d'être.'] Boulez (1957a) p. 419 (in French) and p. 38 (in English).

⁴⁴ ['Le propos délibéré de réapprendre, retrouver, redécouvrir, renaître, enfin, passe par ce point maximum du doute qui fait éclater le savoir hérité ; c'est la descente d'*Igitur*...'] (My translation.) Boulez (1963e) p. 560.

PB: From the *destiny*, as a matter of fact. Not only in the sense [in this quotation] that you have a life and an artistic life but your artistic life is totally tied to your life and to what you discover in life. You have to put what you want to decide into doubt – that is already in the philosopher Descartes - doubt is fundamental; as long as you don't doubt you cannot find the truth or the temporary truth.

DW: You also made an intriguing statement on Mallarmé's attempt to establish his own syntax for his own expressive needs, which you mentioned a moment ago. You write that:

Mallarmé was obsessed by the idea of formal purity [...] He entirely rethinks French syntax in order to make it, quite literally, an "original" instrument.⁴⁵

I wondered if you could elaborate on what you meant by an original instrument?

PB: An instrument that is totally adapted to his own thinking. If other people are thinking differently they have to find their own syntax because Mallarmé's syntax does not apply to the other way of thinking. Therefore, if you applied the syntax of Mallarmé to what I say, for instance myself, when I just imitate it it would be wrong because it would be an imitation which does not fit. Because the way he thinks, the way he puts words one after another, the way he puts punctuation, the way he isolates something, the way he puts something before or after, is really according to the way of his thinking. Therefore, his syntax is totally tied to his way of thinking.

DW: So, the idea of the 'original instrument' is something...

PB: ... totally adapted to his own thought. 'Original' as in it goes to the origin of himself.

DW: So would you say that the idea of an original instrument is about Mallarmé trying to make the language, as you say, his own so that it can express exactly...

PB: ...not only *what* he is thinking, but the *way* he is thinking. He describes, at the same time, a very condensed process of thinking – his own thinking. Very often at the time when he was writing, say the 1880s, many people objected to his syntax which was like a kind of Latin syntax, that is was a kind of transcription of Latin syntax in French. That's true, sometimes he puts the words in a relationship that is very close to a Latin syntax.

DW: You often write about music expressing something. What do you believe music expresses? You've written that music expresses itself. What do you mean by that?

PB: Music expresses itself in the sense that you can make comparisons, you can gauge the equivalent, give some kind of translation, but that is always some kind of transcription around, that does not really describe the centre of the musical idea. If you were able to transcribe something by words then the music would not be necessary anymore. Therefore, there are so many translations of music. For instance if you write some music, or you read music or you hear some music, let's say some Beethoven, Debussy, and you can see that people translate in different terms and the composer very often does not tell anything about what he thinks. One of the most striking examples is Mahler who give titles in his first symphonies and did not want at all his titles to be known later because it was showing, maybe, the starting point for his musical invention that was much too restrictive. People were thinking that and they saw the music as a sort of illustration of some descriptive ideas and therefore he did not want that and he said it was much too small compared to what he had in mind. If you are oriented, or much too oriented, to a kind of descriptive intentions then you restrict the power of music and you can just give for instance an equivalent. For instance, you have some works of Debussy, you can think of some

⁴⁵ ['La syntax française, il la repense entièrement pour en faire un instrument original, au sens littéral de ce terme.'] Boulez (1970c) p. 486 (in French) and p. 175 (in English).

paintings of Monet, for instance. But if you say a landscape then it does not apply anymore.

DW: You seem to have drawn from other disciplines as a creative influence. Also, I recall that for Mallarmé the idea of ‘Music’ was very much an inspiration. Translations, as you have just described them, can be very productive...

PB: Yes.

DW: Klee was also inspired by his idea of music, of course. So, when you describe music as only expressing itself that is the *raison d'être* of music – to express itself. It can only express an idea that is musical in itself.

PB: Exactly.

DW: I raise this idea of expression because it strikes me that your essential aesthetic point of departure is the need for expression and from that you focus upon problems of the language. You are sometimes portrayed as a mathematical composer who neglects expression. I'd like to know how you felt about this gulf between your popular image and the actual reality that your concentration upon the problems language is based on the necessity of achieving an adequate means of expression.

PB: Yes. It is very difficult to explain music, if you explain really deeply into the composition, you have to describe it in terms of technique – there is no other way. If you explain the *Rite of Spring*, you can say that it is very strong rhythmically, but once you have said that then you must say why it is strong and how it is strong . Of course, when you have said that you are going deeper then you go still deeper then you cannot know suddenly why Stravinsky was discovering this kind of rhythmical language at this period. Therefore, there is an approach when you don't know anything and there is an approach where you know practically the construction, how it is made, and if you go deeper to the real source then you are also without

explanation again. Very often people will go from the very beginning to the central point but they do not go further and they say that's only mathematical because they are not making the last step which is the most important: the how. The how you cannot discover, you can give some intuitive reasons but you cannot give any explanation anymore.

DW: I wanted to ask you about the cultural climate in Paris when you first moved there in the 1940s. What, would you say, were the dominant literary and philosophical ideas that were around at that time?

PB: The big personality in literature, as a figure and a philosopher was Sartre. He was very major. He was born in 1904-5, when we came at 1944-45 he was really a strong personality. He has had some success in the theatre with two plays *Les Mouches* (1943) and *Huis Clos* (1944) so he was really a very prominent figure and also known as a philosopher. Also, all the people around him, Merleau-Ponty, Simone de Beauvoir, and so on.

Also, from 1945 on, there was a magazine *Les Temps Modernes* where all these new ideas were brought. In *Les Temps Modernes* there were sometimes musical pieces about music which were written by Leibowitz which were mainly about the Vienna School because Leibowitz was a very part of the Vienna School. That was the climate.

Immediately after the war you began to have very big painting expositions but Picasso and Matisse were really the main heroes of this time, very French (Picasso is Spanish but belonged to France for practically all his life). Kandinsky, Mondrian and Klee were then barely known at this time so there was a kind of desire, especially for a new generation, to discover something else. Because, before the war in France, music was Stravinsky, especially as we know at the very very top, and *Les Six* especially Honegger, Milhaud and Poulenc. And then, for my generation, the war was a real cut, there was a real difference between before the war and immediately

after the war. To the extent, I remember very well, we were visiting in 1947 an exhibition of Surrealist Art, the first Breton organised after he came back from the States. I remember, I went to this exhibition with some friends and one of my friends said ‘after Stalingrad and Auschwitz, it’s very difficult to look at this kind of exhibition because it’s so superficial.’ We did not know at all about Adorno at this time - that Adorno made the same reflections that ‘you cannot write poetry after Auschwitz’. That was our reaction also. This kind of artistic divertimento, who thought that they were really very provocative - it had absolutely no meaning for us at this time. So therefore, we were looking for something that was much beyond this period piece.

DW: So that was an exhibition of Surrealist painting...

PB: Surrealist environments, Surrealist happenings and so on.

DW: I note that many of the figures you cite in your early writings are surrealist writers...

PB: But the ones that had nothing to do with the kind of revival of the movement. It was Char, who dissociated himself from the Surrealist movement, Henri Michaux, who was always very independent and Artaud was a very tragic case. Those were the three people who were Surrealist in the 1920s or early 1930s but who after the war when they saw that were totally out of the movement.

DW: Did Breton’s writings interest you?

PB: Not any more because it was so ‘precious’, let’s say ‘mannered’. It sounded totally out of touch with the epoch, with the century that was. That kind of isolation from Europe in these very important years was, for them, very detrimental. They could not be incorporated again – that’s very strange for me. Breton never was at all

what he was before the war in the 1930s, never anymore. He published some books, he tried to revive the surrealist movement but it was just lost.

DW: Your writings often describe your own approach as dialectical. In the post war years, but particularly in the 1930s, there was a resurgence of interest in Hegel. This was, in part, stimulated by Kojève. Did you encounter this?

PB: Not at all. That I did not know. The only philosopher I met was much later was Foucault, Derrida and Deleuze. I met these much later. But the one of this generation, Kojève was especially before the war. That does not mean that he was outdated, it was such a difference of generation that they had no communication with him.

DW: So the idea of the dialectic is not written...

PB: ...with Hegel in mind? No.

DW: Someone you've already mentioned is Adorno, who based his approach on the Hegelian approach. I've always assumed that you first met Adorno at...

PB: Darmstadt.

DW: In 1952?

PB. 1952 very episodic. I knew him really from 1956. Because in 1952, I was in Darmstadt for the first time, I met a few people there but it was only for a few days – I was not living in Germany at this time. But from 1956, in 1958 especially, I was living in Germany and then I met him really and he came once to Baden-Baden and we spoke at length. He sent me his books and I began to be able to read German because most of the books were not translated in French at this time.

DW: So would that be the time when you first read the *Philosophy of New Music*?

PB: Yes. Although, Adorno even for Germans is not easy to read and for me at the beginning I had quite a lot of problems to read Adorno. It was very interesting for me to speak with him because when he was speaking he was less elaborate than when he was writing, of course.

DW: Your writings, particularly dating from 1957 and 1963, are characterised by the use of terms that can be associated with a dialectical approach – such as making a speculation and the idea of synthesis. Just before this period in 1956–1957 you were writing your third piano sonata which, of course, was influenced by Mallarmé. Mallarmé read Hegelian-influenced writers – it's not certain whether he encountered Hegel's writings directly. I wonder whether that dialecticism that manifests in your writings from that time may have been indirectly, in part, from your reflections on Mallarmé?

PB: Yes, certainly. It's very strange as well, when we speak of Mallarmé and my Third Piano Sonata. I knew well *Igitur* and 'Coup de dès'. Then I wrote my Third Sonata and I spoke to somebody about my idea and I showed them what I was writing and he told that there is something very interesting in *Le Livre* and I discovered *Le Livre* after this time. For me it was the proof that I was on the right track because my train of consequences of *Igitur* and 'Le coup de dès' was going backing to the origin of it. I said 'yes, now I am sure of what I am doing'.

DW: ...The deliberate introduction of mobility into the form?

PB: Exactly.

DW: I'd like to ask you about *Structures*, specifically the first book which I analysed some years ago *Structure 1c*. For me, the first book of *Structures*, particularly *Structures 1a*, seems to stand out in your compositional career. It seems

to be something more than a work of art but perhaps an aesthetic exploration or even an aesthetic declaration. In your conversations with Célestin Deliège you describe *Structures* as ‘one of the fundamental experiences in my life as a composer.’⁴⁶ I would like to know if 1952 was a pivotal moment, if it was the moment where you tried to bring back the idea of the unforeseen element back into the work of art and maybe this pushed you towards a consciously dialectical approach where the unforeseen is very much a product of that approach?

PB: Yes. For me, the important thing was to achieve anonymity. The elements chosen were not by me, the elements were taken by Messiaen so I did not have any influence over the material – the material was already there. I then I began to have this material develop as much by itself. I interfered with it in the least possible way, or interfering in a way, for instance, in a kind of mechanical way. For instance, density 1 to 6, which is the easiest thing, with all the combinations possible between the two instruments. Also, the fact that I used the pianos because there was no instrumental problem, you can hit each pitch as you want, there is no mechanical or instrumental problem of any kind. So therefore, you can have the material play by itself and interfere with itself and at first this kind of how far can I go with having the material be independent from me, independent at the source and independent from the result. Therefore, this kind of research of anonymous composition. If I had been thirty years younger, I would have tried that with a computer, just keep the datas and then have some process and then see the result. Only then I had no idea of computers, but that was a kind of computer experience as a matter of fact.

DW: You’re talking there specifically on *Structure 1a* because when I analysed *1c*, I was really struck that your attitude to the material is very different in those three pieces. You’ve made statements where you’ve described them before:

⁴⁶ [‘c’est [...] une des expériences fondamentales dans ma vie de compositeur.’] (My translation.) Boulez in: Boulez and Deliège (1975) p. 71-72.

(i) the first piece is [...] purely automatic', the second piece is no longer completely automatic and the third piece 'has a direction'.⁴⁷

(ii) In summary, I left progressively from the fact that it is the material that is proposed to me, and finally the things are themselves transformed: at the end of the second piece, it is truly me that proposes to the material of doing something with it.⁴⁸

PB: Yes, exactly. The first piece, that is true, is automatic as I say in a kind of computer experience. Then the third piece was composed second, that's not clear here [*points to the quotations above*], and already took some direction and the second piece, which was composed as third, that is totally oriented. I did not put them in this order because of the length, the first and the third are shorter and the second is much longer. The order of the composition is 1, 3, 2. You can see that the second is much more complex, much more organised. In the third one you have moments of direction, in some thing where you don't know where you are sometimes and then the second one is totally oriented.

DW: I was going to ask that in both of these descriptions, you stress the automatism of the relationship to the material that you deliberately selected from the *Mode de valeurs* in which you had as little to do with it as possible. It struck me that when you describe them in this sense that whether you intended the three parts of *Structures* as the three parts of a dialectic, as taking the immediate material and then transforming it in the dialectic.

PB: What I explained very clearly here [the second quotation above] that in the first [piece], let's say, the material is stronger than the composer, then the material is in equality with the composer, and third the composer is stronger than the material.

⁴⁷ ['La première pièce est [...] purement automatique', 'la troisième pièce a une direction'.])My translation.) *Ibid.*, p. 71.

⁴⁸ ['En somme, je suis parti progressivement du fait que c'est le matériau qui s'est proposé à moi, et finalement les choses se sont transformées : à la fin de la deuxième pièce, c'est vraiment moi qui propose au matériau de faire quelque chose avec lui.'] *Ibid.*

DW: I wanted to ask you about the quotations that you've selected from the correspondence of Rimbaud. You place them at the end of your 1960 Darmstadt course, so clearly they are important. I wanted to know why you picked these to conclude your course, and also the way you understood them and what did you intend to mean when you inverted them.

PB: Generally, this sentence by Rimbaud, '*dérèglement de tous les sens*' was taken as by all kinds of means – alcohol, drugs – which was very much trendy at this time. You are practically blowing-up your head. I said, on the contrary, when you want to arrive – it was kind of Mallarmé – if you are really entering a very strong discipline of all kinds then you will reach really the unknown.

DW: In this quotation you mention the idea of 'seeing'. It is an idea that you have referred to on a number of occasions: Valéry's '*Je me voyais me voir*', and also '*Centre et absence*' which refers to the idea of seeing although you don't refer to it the short text refers to that 'Eureka' moment. It seems to be an important idea and I'd like to know how you understood it...

PB: Seer, that's *voyant*, *Hellseher* in German, the voyant are those people that have the intuition of the future. That's not seeing, that's foreseeing. Voyants are like people that a crystal ball and who look at that and see the future. Voyants, like priests in the antiquities who could foresee the future. That's not 'voyant' in this case, that's not simply open your eyes that's really having the kind of power and the gift of seeing the future.

DW: In its entirety? In the sense of in music, you've written elsewhere about the idea of the phantasmagoria. In a sense that's like a partial seeing into the future...

PB: Yes.

DW: So when you are talking about seeing do you mean...

PB: Imagining. The power of imagination can project oneself into the future.

DW: Doesn't that ability of being able to see, to foresee the future eliminate that idea of the unforeseen?

PB: Yes therefore, what other people cannot foresee, you are able to foresee. Like in Ancient Greece, when people were entranced and then were telling you the future. That's what he means by that.

DW: But in terms of your own approach?

PB: That's a comparison also. When you are projecting yourself into the future, into your own future, that's not just being in a trance but on the contrary being persistent with organising, organising, organising and the more you organise, the more you leave behind you the present and the more you are projecting yourself into the future.

Miscellaneous questions

DW: On a factual point, when did you first encounter Messiaen's *Mode de valeurs*?

PB: When he wrote it in 1949.

DW: So you read the score?

PB: Yes. I think he wrote it in 1949 and it was printed in 1950, something like that. I can tell you that I wrote *Ia* in one night because I was so obsessed with making this experience because I was so, not obsessed, interested in this mechanical device. I did not want to invent the object myself so when I found it 'I said that's exactly that'. Messiaen, in a very funny way, did not like his own piece. He thought it was much

too much influential compared to what else he has done. That's very strange. He was in a way irritated by the fact that this piece at this time was considered so important compared to what else he has done.

DW: Pascal Decroupet has proposed that *Structures* and the move towards what is sometimes called 'total serialism' was suggested on the one hand by Messiaen's teachings of rhythm and on the other hand Leibowitz's pitch serialisation. So would you, in broad terms, see it as a resolution of those two developments?

PB: Yes, that's true. And at the same time the rhythm of Messiaen was totally static. I took only one line, not the three lines, [from Messiaen's *Mode de valeurs et d'intensités*]. As a matter of fact the first plan was to take a set of structure after each line in a kind of consequence but that was useless. Then, what I wanted to show also that instead of being static like Messiaen you can have the rhythms generally be deduced from one figure and not even have the same one in a different order like Messiaen's notes which are not always in the same order. Each E flat is tied with the same duration, each A is with the same duration in this register and so on. For me, what is important if you have one hierarchy and one other hierarchy they must play together and not be constantly tied rigidly together. An the second thing, in the analysis of Leibowitz, was always the series transposed chromatically – there was no hierarchy. For me, what was important that what I was deducing that was the twelve tone that gave birth to the transposition according to the degrees and the rhythm which were in it. For instance, you have first E flat, then D then A and so on. The second twelve tone begins on D, the third one on A. You establish a hierarchy which is closer to the original one and how far you go [away?], on the contrary. That is the kind of relationship that interested me. To put a hierarchy into this transposition and not considering them and already Schoenberg and Webern did this, of course. In Webern, for instance, in the opus 24 or opus 21 the series is really based on three notes and these three notes are transposed. Then there are some transpositions which just give the same result but in a different order. I started there but to generalise this

point of view and not only to have 2, or 3 or 4 transpositions privileged but to have the full system with changing privileges.

APPENDIX B: CHRONOLOGY OF BOULEZ'S MUSICAL CAREER

This is a detailed year by year account of Boulez's writings and musical compositions. I have included details of musical compositions to help the reader to compare the chronology of his musical compositions with his writings and place them in context. For the same reason, I have also added brief biographical notes. This approach therefore differs from my primary source of bibliographical and biographical information on Boulez, Häusler (1995), which groups bibliography, biography and a list of musical compositions under separate headings. Häusler's bibliography is the most recent and most comprehensive, superseding the previous major bibliography on Boulez, and, to my knowledge, the first, Fink (1972). I have also drawn information from Goléa (1958a), Heyworth (1973), Jameux (1984), Stacey (1987), Hopkins (1986) and also from footnotes found in Boulez (1991a) and Boulez (1986a).

In this appendix, I have sought to provide much needed clarification on Boulez's writing career. In particular, confusion can arise when attempting to establish which articles are composed of entirely new material, which articles draw partially from already published articles, and which articles have already been published completely. This confusion is primarily due to Boulez's articles being published under different titles, usually after translation into English (although not always). I have also attempted to correct mistakes of a factual nature that have appeared in print.

Under each year, biographical context appears first, followed by details of Boulez's writings and finally details of Boulez's compositions. Boulez's writings are distinguished in this appendix by underlined titles.

1925

Born 26 March in Montbrison, Loire.
Studies at schools in Montbrison and later Saint-Etienne.

1941

Attends classes for 'Mathématiques spéciales' at Lyon as preparation for the 'École Polytechnique'.

1942

Finally decides upon becoming a musician. Settles in Paris.

1943

Enters the Paris Conservatoire aged 17.

1944

Enters Messiaen's Harmony Class at the Paris Conservatoire.
Studies counterpoint with Andrée Vaurabourg-Honegger.

1945

Hears Leibowitz's concert of Schoenberg's *Wind Quintet* op.26.
Receives first prize in harmony.
Studies analysis with Olivier Messiaen and twelve-tone technique with René Leibowitz.
Leaves the Paris Conservatoire.

<i>Notations</i>	Instrumentation: Piano. Premiere: 12. 2. 1945 Paris (performer: Yvette Grimaud). Publisher: Universal Edition Vienna.
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<i>Three Psalmodies</i>	Instrumentation: Piano. Premiere: 12. 2. 1945 Paris (performer: Yvette Grimaud). Unpublished and withdrawn.
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<i>Variations</i>	Instrumentation: Piano left hand. Unperformed. Unpublished.
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1946

Appointed Director of Stage Music for the Compagnie Renaud-Barrault.

<i>Quatour pour 4 Ondes Martenot</i>	Instrumentation: Ondes Martenot. Unperformed. Unpublished. Comments: Composed 1945-46. Recomposed as <i>Sonata for two pianos</i> (1948).
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<i>Sonatine</i>	Instrumentation: Flute and Piano. Premiere: 1947 Brussels (performers: Jan van Boterdael, Marcelle Mercenier). Publisher: Amphion Paris.
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First Piano Sonata Instrumentation: Piano.
 Premiere: 1946 Paris (performer: Yvette Grimaud).
 Publisher: Amphion Paris.

1947

Leibowitz's book *Schoenberg et son école* is published (in French).
 Attends one of Artaud's public readings at the Galerie Loeb in Paris in July 1947.

Le Visage Nuptial
 (first version) Instrumentation: Soprano, alto, 2 ondes martenots, piano and percussion.
 Premiere (two movements): 1947 Paris.
 Unpublished.
 Comments: Text by René Char. Composed between 1946-47. Also see
 2nd version (1951-52) and 3rd version (1985-89).

Symphonie Concertante Instrumentation: Piano and Orchestra.
 Unperformed.
 Unpublished.
 Comments: The manuscript was lost on a journey in 1954.

1948

'Propositions' First Published: *Polyphonie*, 2, Paris (1948) pp. 65-72.
 French: Boulez (1995) pp. 253-262.
 English: 'Proposals' in Boulez (1991a) pp. 47-54.

'Incidences actuelles de Berg' First Published: *Polyphonie*, 2, Paris (1948) pp. 104-108.
 French: Boulez (1995) pp. 37-42.
 English: 'The Current Impact of Berg' in Boulez (1991a) pp. 183-187.
 Comments: Written for the Fortnight of Austrian Music in Paris.

Sonata for two pianos Instrumentation: Two pianos.
 Unperformed.
 Unpublished.
 Comments: Recomposed version of *Quatour pour 4 Ondes Martenot* (1946).

Le Soleil des Eaux Instrumentation: Voice and orchestra.
 Premiere: 4. 1948 Paris (performers: ORTF).
 Unpublished.
 Comments: This first version was written for a radio play. Based on a
 text by Réne Char. See also 2nd version (1950), 3rd version
 (1958) and 4th version (1965).

Livre pour quatour Instrumentation: String Quartet.
 Premiere of parts Ia, Ib, II: 15. 10. 1955 Donaueschingen (performers:
 Marschner-Quartet).
 Premiere of parts V, VI: 9. 9. 1961 Darmstadt (performers: Hamann-
 Quartett).
 Premiere of parts IIIa, IIIb, IIIc: 1962 Darmstadt (performers: Quatour
 Parrenin).
 Publisher: Heugel Paris (part IV unpublished).
 Comments: Composed 1948-49.

1949

First meets John Cage.

Messiaen composes *Mode de valeurs et d'intensités*.

'Trajectoires: Ravel,
Stravinsky,
Schoenberg'

First publication: *Contrepoint*, no. 6, Paris (1949) pp. 122-142.

French: Boulez (1995) pp. 43-63.

English: 'Trajectories: Ravel, Stravinsky, Schoenberg' in Boulez (1991a) pp. 188-208.

Comments: Written between July and November 1949 concerning a concert conducted by René Leibowitz in July 1949 with the soloists of the Orchestre National.

1950

Second Piano Sonata

Instrumentation: Piano.

Premiere: 29. 4. 1950 Paris (performer: Yvette Grimaud).

Publisher: Heugel Paris.

Comments: Composed 1946-48.

1951

'Moment de Jean-
Sébastien Bach'

First publication: *Contrepoint*, no. 7, Paris (1951) pp. 72-86.

French: Boulez (1995) pp. 65-79.

English: 'A Time for Johan Sebastian Bach' in Boulez (1991a) pp. 3-14.

Comments: Written between 11 January and May 1950. Boulez mentions this article in a letter to John Cage dated 11. 1. 1950.

'Le Système mis à nu'

First publication: The second of two letters was published in English without a title by John Cage. See Boulez, Pierre; Cage, John; Feldman, Morton and Wolff, Christian (1952) pp. 168-172.

French: Both letters published in Boulez (1981a) pp. 127-140.

English: 'The System Exposed' in Boulez (1986a) pp. 129-142. Also published in French in Boulez, Pierre and Cage, John (1991) and in English Boulez, Pierre and Cage, John (1993).

Comments: Two letters written to John Cage (originally in French) dated 1951. The subject of this letter is *Polyphonie X* and *Structures*.

Soleil des Eaux

Instrumentation: Soprano, tenor, bass and chamber orchestra.

Premiere: 18. 7. 1950 Paris (performers: Irène Joachim, Pierre Mollet, Joseph Peyron, Orchestre National and conducted by Roger Désormière).

Unpublished and withdrawn.

Comments: This is the second version of *Soleil des Eaux* but the first version intended for the concert hall. Based on a text by René Char.

Polyphonie X

Instrumentation: 18 instruments.

Premiere: 6. 10. 1951 Donaueschingen (performers: SWF Symphony Orchestra Baden-Baden and conducted by Hans Rosbaud).

Unpublished and withdrawn.

Comments: Composed 1950-51.

Deux Etudes

Instrumentation: Tape.
Unperformed.
Unpublished.
Comments: Created as part of the Groupe de Recherche de Musique Concrète. Composed 1951-52.

1952

Attends the Darmstadt Summer School for the first time.

Meets Adorno.

Visits New York at the request of John Cage.

Meets De Kooning and Pollack in New York.

'Schoenberg is dead'

First publication: *The Score*, London (2. 2. 1952) pp. 18-22.
French: 'Schoenberg est mort' in Boulez (1995) pp. 145-151.
English: 'Schoenberg is Dead' in Boulez (1991a) pp.209-214.
Comments: Written before December 1951 (and after Schoenberg's death in 13.7.1951).

'Chien Flasque (Satie)'

First publication: *Revue musicale*, no. 214, Paris (1952) pp. 153-154.
French: Boulez (1981a) pp. 285-286.
English: 'Satie: Chien flasque' in Boulez (1986a) pp. 323-324.
Comments: The title refers to three piano pieces by Satie entitled 'Trois Préludes flasques' (1912) one of which is for 'un petit chien écrasé'.

'Éventuellement'

First Publication: *Revue musicale*, no. 212, Paris (5. 1952) pp. 117-148.
French: Boulez (1995) pp. 263-295.
English: 'Possibly' in Boulez (1991a) pp. 111-140.

'Incipit (Anton Webern)'

First Publication: Under the title 'Note On Tonight's Concert: Webern's Work Analysed' *New York Herald Tribune*, section 4 (28. 12. 1952) p. 4 (in English).
French: Boulez (1995) pp. 153-154.
English: Boulez (1991a) pp.215-216.

Structures for Two Pianos (first book)

Instrumentation: 2 pianos.
Premiere of only 1a: 4. 5. 1952 Paris (performers: Olivier Messiaen, Pierre Boulez).
Premiere (complete): 13. 11. 1953 Cologne (performers: Yvette Grimaud, Yvonne Loriod).
Publisher: Universal Edition Vienna.
Comments: Composed 1951-52.

Oubli Signal Lapidé

Instrumentation: 12 voices.
Premiere: 3. 10. 1952 Cologne (performers: Ensemble vocal Marcel Couraud).
Unpublished.
Comments: Based on a text by Armand Gatti. Composed in 1952.

1953

'Stravinsky Demeure'

First publication: *Musique Russe*, vol. I, Paris (1953) pp. 151-224.
French: 'Stravinsky demeure' in Boulez (1995) pp. 81-143.
English: 'Stravinsky Remains' in Boulez (1991a) pp. 55-110.
Comments: Written in 1951.

'Tendances de la
musique récente'

First Publication: *Revue musicale*, no. 236, Paris (1957) pp. 28-35.
French: Boulez (1995) pp. 165-172.
English: 'Tendencies in Recent Music' in Boulez (1991a) pp. 173-179.
Comments: Paper presented as part of the 'Première Décade de Musique
Expérimentale', Paris (8-18. 7. 1953).

1954

Founds the *Concerts du Petit-Marigny* under the patronage of the Compagnie Renaud-Barrault.

'Auprès et au loin'

First publication: *Cahiers Renaud-Barrault*, no. 3, Paris (1954) pp. 7-24.
French: Boulez (1995) pp. 297-314.
English: '...Near and Far' in Boulez (1991a) pp. 141-157.
Comments: 'Auprès et au loin' is the last phrase of the article 'A propos
d'un retard' by Pierre Souvtchinsky which concludes the above
Cahiers Renaud-Barrault (see Boulez (1991a) p. 150).

'Probabilités critiques
du compositeur'

First publication: *Domaine Musical I, International Bulletin of
Contemporary Music*, no. 1, Paris (1954) pp. 1-11.
French: Boulez (1995) pp. 27-34.
English: 'The Composer as Critic' in Boulez (1986a) pp. 106-112.

'Recherches
maintenant'

First publication: *La Nouvelle Revue Française*, no. 23, Paris (11. 1954)
pp. 898-903.
French: Boulez (1995) pp. 331-335.
English: 'Current Investigations' in Boulez (1991a) pp. 15-19.
Comments: First article for *La Nouvelle Revue Française* in a
collaboration lasting four years. This is Boulez's first article
written for a wider audience, reaching beyond specialised
musicians.

'Présentation de
Déserts d'Edgard
Varèse'

(1954, unpublished)
Comments: Introduction to *Déserts* by Varèse on Radio RTF performed
at the Théâtre des Champs Elysées on 2. 12. 54 conducted by Hermann
Scherchen. I am grateful to the Paul Sacher Archive in Basel,
Switzerland for granting me access to this unpublished material.

1955

Concerts du Petit-Marigny renamed *Domaine Musical*.
Teaches analysis at the Darmstadt Summer School.

'À la limite du pays
fertile (Paul Klee)'

First Publication: Under the title 'An der Grenze des Fruchtländes' *Die
Reihe*, booklet 1, Vienna (1955) (in German).
French: Boulez (1995) pp. 315-330.
English: 'At the Edge of Fertile Land' (Paul Klee) in Boulez (1991a)
pp. 158-172.

'Expérience, autruches
et musique'

First Publication: *La Nouvelle Revue Française*, no. 36, Paris (12. 1955),
p. 1, pp. 174-176.
French: Boulez (1981a) pp. 466-468.
English: 'Experiment, Ostriches and Music' in Boulez (1986a) pp. 430-
431.

'Première et seconde audition' First Publication: *Cahiers Renaud-Barrault*, no. 13, Paris (1955) pp. 122-124.
 French: Boulez (1981a) pp. 461-463.
 English: 'First and Second Hearings' in Boulez (1986a) pp. 427-429.

'Für Anton Webern' First Publication: *Die Reihe*, Booklet 2, Vienna (1955) (in German).

'Docteur Faustus, chapitre XXII' First Publication: *Hommage de la France à Thomas Mann l'occasion de son quatre-vingtième anniversaire*, Paris (1955).

Le Marteau sans maître Instrumentation: Alto and 6 instrumentalists.
 Premiere: 18. 6. 1955 Baden-Baden (performers: Sybilla Plate, Mitglieder des SWF Baden-Baden Symphony Orchestra and conducted by Hans Rosbaud).
 Publisher: Universal Edition Vienna.
 Comments: Based on a text by René Char. Composed 1953-55.

L'Orestie Instrumentation: Voices and instrumental ensemble.
 Premiere: 1955 Bordeaux (performers: Compagnie Renaud-Barrault).
 Unpublished.
 Comments: Stage music on the Trilogy of Aischylos.

La Symphonie Mécanique Instrumentation: Tape.
 Unpublished.
 Comments: Music written for the film of Jean Mitry.

1956

Teaches analysis at the Darmstadt Summer School.

'Arthur Honegger' First Publication: *Cahiers Renaud-Barrault*, no. 15, Paris (1956).
 French: See above.
 English: None.
 Comments: Written in response to Honegger's death in 1955. Not in any collected writings.

'La Corruption dans les encensoirs' First Publication: *Melos*, vol. XXIII no. 10, Mainz (10. 1956) pp. 216-219 (in French and German) (according to Häusler (1995) p. 67); *La Nouvelle Revue Française*, no. 48, (12. 1956) pp. 1078-1084 (according to Piencikowski (1991b) p. 20).
 French: Boulez (1995) pp. 155-160.
 English: 'Corruption in the Censors' in Boulez (1991a) pp. 20-25.

1957

'Aléa' First Publication: *La Nouvelle Revue Française*, no. 59, Paris (11. 1957) pp. 839-857.
 French: Boulez (1995) pp. 407-420.
 English: 'Alea' in Boulez (1991a) pp. 26-38.

'La Conjonction Stravinsky-Webern' First Publication: Text on record *Véga* C30 A 120.
 French: *Points de Repère* (1981a).
 English: 'The Stravinsky-Webern Conjunction' in Boulez (1986a) pp. 364-369.

- 'Petit Éditorial'** First Publication: *Programme of Domaine Musical Concerts* Paris (14. 12. 1957).
French: Boulez (1981a) pp. 464-465.
English: 'Mini-Editorial' in Boulez (1986a) pp. 432-433.
- Third Piano Sonata*** Instrumentation: Piano.
Premiere (provisional version): 25. 9. 1957 Darmstadt (performer: Pierre Boulez).
Publisher: Universal Edition Vienna (*Trope* and *Constellation-Miroir* only).
Comments: Composed 1955-57-.
- Le Crépuscule de Yang Kouei-Fei*** Premiere: 5. 7. 1957 Paris (performers: Atelier de Création radiophonique RTF; Monique Mélinand, Roger Blin, Ginette Guillaumat).
Unpublished.
Comments: Music written for a radio play by Louise Fauré.
- Strophes*** Instrumentation: Flute.
Unperformed.
Unpublished.
- Le Visage Nuptial*** Instrumentation: Soprano, alto, women's choir and large orchestra.
Premiere: 4. 12. 1957 Cologne (performers: Ilona Steingruber, Eva Bornemann, Cologne Radio Choir, Cologne Radio Symphony Orchestra and conducted by Boulez).
Publisher: Heugel Paris.
Comments: Based on a text by René Char. This is the second version of *Le Visage Nuptial*.
- 1958**
- 'Accord',
'Chromatisme',
Concrète (musique)',
'Countrepoint'** First Publication: *Encyclopédie de la musique (Fasquelle)*, vol. A-E, Paris (1958): 'accord' p. 245, 'chromaticisme' pp. 545-546, 'concrète (musique)' p. 577, 'contrepoint' pp. 584-587.
French: 'Accord', 'Chromaticism', *Concrète (Musique)*, 'Contrepoint' in Boulez (1995) pp. 339-352.
English: 'Chord', 'Chromaticism', 'Concrète (Musique)', 'Counterpoint' in Boulez (1991a) pp. 223-234.
- 'Atonalité', 'John
Cage'** First Publication: *Encyclopédie de la musique (Fasquelle)*, vol. A-E, Paris (1958).
French: ('Atonalité' only) in Boulez (1995) pp. 339-340.
- 'Béla Bartók',
'Alban Berg', 'Claude
Debussy'** First Publication: *Encyclopédie de la musique (Fasquelle)*, vol. A-E, Paris (1958): 'Bartók' pp. 347-350, 'Berg' pp. 390-396, 'Debussy' pp. 629-640.
French: 'Béla Bartók', 'Alban Berg' and 'Claude Debussy' in Boulez (1995) pp. 177-221.
English: 'Bela Bartók', 'Alban Berg' and 'Claude Debussy' in Boulez (1991a) pp. 223-277.

- 'D'une conjonction – en trois éclats'** First Publication: *Avec Stravinsky*, by Robert Craft (Monaco: Éditions du Rocher, 1958) pp. 97-99.
French: Boulez (1995) pp. 161-163.
English: 'A Conjunction – in three fragments' fragments' in Boulez (1991a) pp. 217-219.
Comments: According to Piencikowski (1991a) p. 217, part of this text appeared earlier on the record sleeve of Stravinsky's *Canticum Sacrum*, VEGA C30 A 120, conducted by Boulez (1957).
- 'Olivier Messiaen: Une classe et ses chimères'** First Publication: *Melos*, Mainz (12. 1958) (in German).
French: Boulez (1981a) p. 552.
English: 'Oliver Messiaen: A Class and Its Fantasies' in Boulez (1986a) p. 404.
Comments: Written for Messiaen's 50th birthday. In the programme of the Domaine musical concert 15. 4. 1959.
- 'Son et verbe'** First Publication: *Cahiers Renaud-Barrault*, no. 22/23, Paris (5. 1958) pp. 119-125.
French: Boulez (1995) pp. 425-430.
English: 'Sound and Word' in Boulez (1991a) pp. 39-43.
Comments: Boulez added 'Fluidité dans le devenir sonore' (1958) and two paragraphs at the beginning to 'Son et verbe' to make 'Son, verbe, synthèse' (1958). The edition of *Cahiers Renaud-Barrault* cited above was devoted to articles on Antonin Artaud.
- 'Fluidité dans le devenir sonore'** First Publication: *United States Lines Paris Review*, Paris (1958).
French: Boulez (1995) pp. 421-424.
English: See below.
Comments: Written in 1958, probably for *The Paris Review*. Boulez joined this text, with the addition of two paragraphs at the beginning to 'Son et verbe' (1958) to make the article 'Son, verbe, synthèse' (1958).
- 'Son, verbe, synthèse'** First Publication: Under the title 'Ton, Wort, Synthese' *Melos*, vol. 25 no. 10, Mainz (10. 1958) (in French and German) pp. 310-313.
French: Boulez (1981a) pp. 164-170.
English: 'Sound, Word, Synthesis' in Boulez (1986a) pp. 177-182.
Comments: This is a fuller version of 'Son et verbe' (1958), joined with 'Fluidité dans le devenir sonore' (1958) and two paragraphs at the beginning. Published by *Melos* as a commentary on the first and only performance of *Poésie pour Pouvoir*.
- 'Liminaire'** First Publication: 'Livre d'or' in the *Encyclopédie de la musique (Fasquelle)* in vol. I, Paris (1958). Unpaginated.
French: Boulez (1995) p. 175.
English: None.
Comments: Transcription, by Sophie Galaise, of an untitled letter by Boulez.
- L'œuvre pour piano de Schoenberg'** First Publication: Text on a record of Paul Jacobs, Ducretet-Thomson 320 C 125. (1958)
French: *Relevés d'Apprenti* (1966)
English: 'Schoenberg's Piano Works' in *Stocktakings from an Apprenticeship* (1991a).

- Doubles**
Instrumentation: Large orchestra.
Premiere: 16. 3. 1958 Paris (performers: Orchestre Lamoureux. Conducted by Pierre Boulez).
Unpublished.
Comments: Composed 1957-58. Inserted into *Figures-Doubles-Prismes* (1964).
- Pli Selon Pli: portrait de Mallarmé**
I. *Don*. (version for soprano and piano): see 1960; (version for soprano and orchestra) see 1962; (new version) see 1989.
II. *Improvisation I sur Mallarmé* (version for soprano, harp, vibraphone, glockenspiel and percussion): see 1958; (version for soprano and orchestra) see 1962.
III. *Improvisation II sur Mallarmé* (for soprano and 9 instruments): see 1958.
IV. *Improvisation III sur Mallarmé* (version for soprano and orchestra): see 1960; (revised and expanded version for soprano and orchestra): see 1984.
V. *Tombeau*. (incomplete fragment for soprano and orchestra): see 1959; (complete version) see 1960.
Publisher: All versions of the 5 movements are published by Universal Edition Vienna except I. *Don* (1960 version for soprano and piano) and IV. *Improvisation III sur Mallarmé* which are unpublished.
Comments: Composed 1957/1989.
- Pli selon pli: II. Improvisation I sur Mallarmé**
Premiere (of version for soprano, harp, vibraphone, glockenspiel and percussion): 13. 1. 1958 Hamburg (performers: Ilse Hollweg, members of the symphony orchestras of North German Radio Hamburg and conducted by Hans Rosbaud).
Publisher: Universal Edition Vienna.
- Pli selon pli: III. Improvisation II sur Mallarmé**
Instrumentation: Soprano and 9 instruments.
Premiere: 13. 1. 1958 Hamburg (performers: Ilse Hollweg, members of the symphony orchestras of North German Radio Hamburg and conducted by Hans Rosbaud).
Publisher: Universal Edition Vienna.
- Poésie pour Pouvoir (based on a text by Henri Michaux)**
Instrumentation: Tape and 3 orchestras.
Premiere: 19. 10. 1958 Donaueschingen (performers: SWF-Symphony Orchestra Baden-Baden and conducted by Hans Rosbaud and Pierre Boulez).
Unpublished and withdrawn.
- Le Soleil des Eaux (text by René Char). 3^d version.**
Instrumentation: Soprano, tenor, bass, three part mixed choir and orchestra.
Premiere: 9. 9. 1958 Darmstadt (performers: Josephine Nendick, Helmut Krebs, Heinz Rehfuss, choir and symphony orchestra of Hessischen Radio and conducted by Ernest Bour).
Publisher: Heugel Paris.

1959

Settles in Baden-Baden after an invitation by Heinrich Strobel to pursue work on *Poésie pour Pouvoir* at the Sudwestfunk (Strobel was the head of music at the Südwestfunk in Baden-Baden).

Teaches analysis at the Darmstadt Summer School.

***Pli selon pli: V.
Tombeau*** (fragment) Instrumentation: Soprano and orchestra.
 Premiere: 17. 10. 1959 Donaueschingen (performers: Eva Maria Rogner,
 Ensemble Domaine Musical Paris and conducted by Pierre
 Boulez).
 Comments: See 1960 for complete premiere.

1960

Teaches analysis and composition at Basel (1960-63). Comprised analyses of Berg's *Wozzeck*,
 Stockhausen's *Gruppen*, Webern's *Second Cantata* and one movement from Boulez's own
Pli selon pli.

Teaches analysis at the Darmstadt Summer School. The bulk of this material was to form Boulez
 (1963b).

**'Sonate – "que me
veux-tu"'** First Publication: Under the title 'Zu meiner dritten Klaviersonate',
Darmstädter Beiträge zur Neuen Musik, vol. III, Mainz (1960)
 pp. 27-40 (in German).
 French: Boulez (1995) pp. 431-443.
 English: Boulez (1986s) pp. 143-154.
 Comments: Reworked version of a Darmstadt talk in 1959 presented
 before a performance of Boulez's *Third Sonata*. The title is
 attributed to Bernard Le Bovier de Fontenelle (1657-1757)
 according to Nattiez (1986b) p. 143.

**'Considérations
Générales'** First publication: Boulez (1963b) pp. 11-33.
 French: See above.
 English: 'General Considerations' in Boulez (1971a) pp. 16-34.
 Comments: Lecture presented at the Darmstadt course 1960.

'Technique musicale' First Publication: Boulez (1963b).
 English: 'Musical Technique' in Boulez (1971a) pp. 35-143.
 Comments: Based on a lecture presented at the Darmstadt course 1960.

'Forme' First Publication: Boulez (1995) pp. 359-366.
 French: See above.
 English: 'Form' in Boulez (1986a) pp. 90-96.
 Comments: Lecture presented at the Darmstadt course 13. 7. 1960.
 Originally intended, according to Nattiez (see Nattiez (1986a)
 p. 13) to have formed the basis of an additional chapter three of
 Boulez (1963b).

**'Temps, notation et
code'** First Publication: Boulez (1995) pp. 367-373.
 French: See above.
 English: 'Time, Notation and Coding' in Boulez (1986a) pp. 84-89.
 Comments: Lecture given at the Darmstadt course 14. 7. 1960.
 Originally intended, according to Nattiez (see *Orientations* p.
 13), to have formed the basis of chapter five of Boulez (1963b).

'Conclusion Partielle' First Publication: Boulez (1995) pp. 375-377.
 French: See above.
 English: 'Towards a Conclusion' in Boulez (1986a) pp. 97-99.
 Comments: Lecture given at the Darmstadt course 16. 7. 1960 under the
 title 'Synthèse et avenir'. Intended as the conclusion to Boulez
 (1963b).

- 'Varèse: Hyperprisme, Octandre, Intégrales'** First Publication: Text on the record *Véga C 30 A 120* (according to Häusler) *Véga C 30 A 271* (according to Nattiez (1986b) p. 370).
French: Boulez (1981a) p. 365-367.
English: (With the same title) in Boulez (1986a) pp. 370-371.
- Pli selon pli: I. Don*** Instrumentation: Version for soprano and piano.
Premiere: 13. 6. 1960 Cologne (performers: Eva Maria Rogner, Maria Bergmann).
Unpublished.
- Pli selon pli: IV. Improvisation III sur Mallarmé*** Instrumentation: Version for soprano and orchestra.
Premiere: 13. 6. 1960 Cologne (performers: Eva Maria Rogner, Maria Bergmann).
Unpublished.
- Pli selon pli: V. Tombeau*** Instrumentation: Soprano and orchestra.
Premiere: 13. 6. 1960 Cologne (performers: Eva Maria Rogner, SWF-Symphony Orchestra Baden-Baden and conducted by Boulez).
Publisher: Universal Edition Vienna.
Comments: This is the complete version (also see 1959).

1961

Teaches analysis at the Darmstadt Summer School.

- 'Construire une improvisation'** First Publication: *Melos*, Mainz (10. 1961) pp. 301-308 (in German).
French: Boulez (1995) pp. 445-466.
English: 'Constructing an Improvisation' in Boulez (1986a) pp. 155-173.
Comments: Presented at a conference at Strasbourg (1961) on Boulez's *Second Improvisation sur Mallarmé*.
- 'Discipline et communication'** First Publication: *Darmstädter Beiträge zur Neuen Musik*, no. IV, Mainz (1962) pp. 25-37 (in German).
French: Boulez (1995) pp. 379-390.
English: 'The Teacher's Task' in Boulez (1986a) pp. 119-128.
Comments: Lecture given at the Darmstadt course 1961. Also published with the title 'A bas les disciples!' against Boulez's will in *Les Lettres Nouvelles* (2-3. 1964) pp. 63-79.
- 'Le Goût et la fonction'** First Publication: *Tel Quel*, booklet 14 and 15, Paris (1963) pp. 32-38 and pp. 82-94.
French: Boulez (1995) pp. 507-528.
English: 'Taste: "The Spectacles Worn by Reason"?' in Boulez (1986a) pp. 44-62.
Comments: Lecture presented at the Darmstadt course 1961.
- 'Arnold Schoenberg. Anton Webern'** First Publication: *Encyclopédie de la musique (Fasquelle)*, vol. L-Z, Paris (1961): 'Schoenberg' pp. 661-665, 'Webern' pp. 907-912.
French: Boulez (1995) pp. 223-250.
English: Boulez (1991a) pp. 278-303.
- 'Série'** First Publication: *Encyclopédie de la musique (Fasquelle)*, vol. L-Z, Paris (1961).
French: Boulez (1995) pp. 353-355.
English: Boulez (1991a) pp. 234-236.

***Structures pour deux
pianos (book 2)***

Instrumentation: 2 pianos.
Premiere: 21. 10. 1961 Donaueschingen (performers: Yvonne Loriod and Boulez).
Publisher: Universal Edition Vienna.
Comments: Composed between 1956-61.

1962

**'L'Esthétiques et les
fétiches'**

First Published in: Samuel, Claude (editor) *Panorama de l'Art Musical Contemporain* (Paris: Éditions Gallimard, 1962) pp. 401-415.
French: 'L'esthétiques et les fétiches' in Boulez (1995) pp. 491-505.
English: 'Aesthetics and the Fetishists' Boulez (1986a) pp. 31-43.
Comments: Revised text of a lecture given at a conference at Strasbourg, Théâtre de la Comédie, on 5. 2. 1961.

**'Poésie – centre et
absence – musique'**

First Publication: *Melos*, vol. 30 no. 2. Mainz (2. 1963) pp. 33-40 (in German).
French: Boulez (1995) pp. 467-484.
English: 'Poetry – Centre and Absence – music' in Boulez (1986a) pp. 183-198.
Comments: Lecture on *Poésie pour pouvoir* (according to Häusler), on *Pli selon pli* (according to Boulez (1995) p. 467) at the Donaueschingen Music festival 1962.

**'Note sur le
Sprechgesang'**

First Publication: Text on record of Schoenberg's *Pierrot Lunaire*. Adès 14006 (according to Häusler (1995) p. 68) ADES MA 30 LA 524 (1962) (according to Piencikowski (1991b) p. 188).
French: Boulez (1995) pp. 61-63.
English: 'A Note on Sprechgesang' in Boulez (1991a) pp. 206-208.
Comments: Published with a text by André Schaeffner on the record sleeve cited above.

**'Programme of the
Domaine Musical
concerts'**

First Publication: (31. 10. 1962) Paris.

**'Wolfgang Steinecke (I
– L'accident)'**

First Publication: *Melos*, Mainz (2. 1963) (in French) according to Häusler (1995) p. 68; *Darmstädter Beiträge zur neuen Musik*, no. 5 (1962) p. 6 (in German) according to Nattiez (1986b) p. 495.
French: in *Points de Repère* (1981a).
English: 'Wolfgang Steinecke: Accidental' in Boulez (1986a) pp. 495-496.
Comments: This text was spoken by Boulez at Steinecke's funeral.

**'Wolfgang Steinecke
(II – Dans la distance)'**

First Publication: Boulez (1981a) pp. 534-535.
French: See above.
English: 'Wolfgang Steinecke: From the distance' in Boulez (1986a) p. 496.

Pli selon pli: I. Don

Instrumentation: Version for soprano and orchestra.
Premiere: 5. 7. 1962 Amsterdam (performers: Eva Maria Rogner, SWF-Symphony Orchestra Baden-Baden and conducted by Boulez).
Publisher: Universal Edition Vienna.

***Pli selon pli:II.
Improvisation I sur
Mallarmé***

Instrumentation: Version for soprano and orchestra.
Premiere: 20. 10. 1962 Donaueschingen (performers: Eva Maria Rogner, SWF-Symphony Orchestra Baden-Baden and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.

1963

Guest Professor at Harvard University. These lectures are published as 'Nécessité d'une orientation esthétique' and 'Nécessité d'une orientation esthétique II'.

'De moi à moi'

First Publication: As foreword to Boulez (1963b) pp. 5-10.
French: See above.
English: 'Interior duologue' in Boulez (1971a) pp. 11-15.

***Penser la Musique
Aujourd'hui***

(Paris: Editions Gonthier, 1963)
English: *Boulez on Music Today* trans. Susan Bradshaw and Richard Rodney Bennett (London: Faber & Faber, 1971).
Comments: First and only planned book by Boulez (rather than collections of essays). It consists of two chapters preceded by an introduction entitled 'de moi à moi', although, originally, Boulez intended to have six chapters. The final four chapters were to be written using 'Temps, notation et code' (1960), 'Forme' (1960) and 'Conclusion partielle' (1960) as the basis for further elaboration.

'Dire, jouer, chanter'

First Publication: *Cahiers Renaud-Barrault: La Musique et ses Problèmes contemporains 1953/1963*, no. 41, Paris (1963) pp. 300-321.
French: Boulez (1981a) pp. 381-387.
English: 'Speaking, Playing, Singing' in Boulez (1986a) pp. 330-343.

'Dix ans après'

First Publication: *Cahiers Renaud-Barrault: La Musique et ses Problèmes contemporains 1953/1963*, no. 41, Paris (12. 1963) pp. 360-369.
French: Boulez (1981a) pp. 469-476.
English: 'Ten Years On' in Boulez (1986a) pp. 434-440.

**'Nécessité d'une
orientation esthétique'**

First Publication: *Mercure de France*, no. 4 and 5, Paris (4-5. 1964) pp. 623-639 and pp. 110-122.
French: Boulez (1995) pp. 529-552.
English: 'Putting the Phantoms to Flight' in Boulez (1986a) pp. 63-83.
Comments: Together with 'Nécessité d'une orientation esthétique II', this is a revised version of the 'Appleton Lectures' lectures presented at Harvard University in 1963.

**'Nécessité d'une
orientation esthétique
II'**

First Publication: 'Über die Notwendigkeit einer ästhetischen Orientierung II' *Musikdenken heute 2*, Darmstädter Beiträge zur Neuen Musik, Band VI, Mainz, 1985, B. Schott's Söhne (in German).
French: Boulez (1995) pp. 552-579.
English: None.
Comments: See 'Nécessité d'une orientation esthétique'.

'Situation et
Interprétation de
Wozzeck'

First Publication: Text on Recording cassette of Berg's *Wozzeck*, 1963, CBS SET 3003.

French: Boulez (1981a) pp. 403-409.

English: 'Wozzeck and its Interpretation' in Boulez (1986a) pp. 374-379.

Comments: On the occasion of the first French production of Berg's *Wozzeck*, 1963 at the Paris Opéra 1963.

'Glückwünsche an
Ludwig Strecker'

First Publication: *Melos*, 1, Mainz (1963) (in German).

'Une Écurie pour
Jarry'

First Publication: *L'Express*, Paris (2. 1963).

French: Boulez (1995) pp. 393-39.

English: Boulez (1971a) pp. 19-24 (starting from 'Deep in the creation of a work' and ending 'We should need the toothpick of Jarry to clean out that miniature stable.')

1964

'Entretien avec Pierre
Boulez'

Interview with Jacques Rivette and François Weyergans.

First Publication: *Les Cahiers du Cinéma*, booklet 152, Paris 2. 1964.

*Figures-Doubles-
Prismes* (fragment)

Instrumentation: Large orchestra.

Premiere: 10. 1. 1964 Basel (performers: SWF Symphony Orchestra Baden-Baden and conducted by Boulez).

Unpublished.

Comments: See 1968 for expanded version.

Marges

Instrumentation: Percussion ensemble.

Unperformed.

Unpublished.

Comments: Only sketches available. Composed between 1962/1964.

1965

Presents a conducting course at Basel.

Teaches analysis at the Darmstadt Summer School.

'Alternatives'

First Publication: Boulez (1981a) pp. 111-113.

English: 'Demythologising the composer' in Boulez (1986a) pp. 113-115.

Comments: Opening statement for the Basel courses, 1960.

'Périforme'

First Publication: *Lettres françaises*, Paris (16. 6. 1966).

French: Boulez (1995) pp. 397-403.

English: 'Periform' in Boulez (1986a) pp. 100-105.

Comments: Lecture presented at the Darmstadt summer course, 1965 as part of a congress on 'Form in contemporary music'. The other texts from this congress consisting of texts by Adorno, Brown, Dahlhaus, Haubenstock-Ramati, Kagel and Ligeti were published in *Darmstädter Beiträge zur neuen Musik* no. 10 (1966) with a note announcing the forthcoming publication of Boulez's text in a later edition. Boulez's text was never published in a later *Darmstädter Beiträge zur neuen Musik*, first appearing in *Lettres françaises* as cited above.

'Hans Rosbaud (I – Le chef d'orchestre et son modèle)'

First Publication: *Anhaltspunkte* (1975) (in German).
French: Boulez (1981a) pp. 539-540.
English: 'The Conductor and his Model' in Boulez (1986a) pp. 513-515.
Comments: Broadcast given on the Südwestfunk (Baden-Baden) on the 70th anniversary of Rosbaud's birth (in 1965).

'Hans Rosbaud (II – "...to cut me off before night")'

First Publication: Boulez (1981a) pp. 541-542.
English: "...to cut me off before night" in Boulez (1986a) pp. 515-516.

'Arcanes Varèse'

First Publication: *Le Nouvel Observateur*, Paris (17. 11. 1965) (according to Häusler (1995) p. 69).
French: Boulez (1981a) pp. 536-537.
English: 'Edgard Varèse' in Boulez (1986a) pp. 497-498.
Comments: According to Boulez (1986a) p. 497, published on the occasion of Varèse's death in the programme of the Domaine musical concert on 24. 11. 1965.

Éclats

Instrumentation: 15 instruments.
Premiere: 26. 3. 1965 Los Angeles (performers: members of the Los Angeles Philharmonic Orchestra and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.

Le Soleil des Eaux

Instrumentation: Soprano, 4 part mixed choir and orchestra.
Premiere: 4. 10. 1965 Berlin (performers: Catherine Gayer, Berlin Philharmonic Choir, Berlin Philharmonic Orchestra and conducted by Pierre Boulez).
Publisher: Heugel Paris.
Comments: Based on a text by René Char. This is the 4th version of *Le Soleil des Eaux*.

1966

Conducts *Parsifal* at Bayreuth.

Conducts *Tristan and Isolde* in Japan.

Argument with Andre Malraux over plans to reform French musical life.

Relevés d'Apprenti

Collected and edited by Paule Thévenin (Paris: Éditions du Seuil, 1966).
English: *Notes of an Apprenticeship* translated by Herbert Weinstock (New York: Alfred A. Knopf, 1968).
New English version: *Stocktakings of an Apprenticeship* translated by Stephen Walsh (Oxford: Clarendon Press, 1991).

'J'ai horreur du souvenir'

First Publication: Mayer, D. and Souvtchinsky, P. (editors) *Roger Désormière et son temps*, (Monaco: Éditions du Rocher, 1966) pp. 134-158.
French: Boulez (1981a) pp. 388-402.
English: 'Roger Désormière: "I Hate Remembering!"' in Boulez (1986a) pp. 500-512.

- 'Parsifal: La Première rencontre'** First Publication: Programme booklet of *Parsifal* for the Bayreuth Festival (in French, English and German) (1973) pp. 48-51.
French: Boulez (1981a) pp. 410-412.
English: 'Parsifal: The First Encounter' in Boulez (1986a) pp. 237-239.
Comments: Letter to Wieland Wagner, 24. 7. 1966. Boulez conducted *Parsifal* in this 1973 Bayreuth Festival.
- 'Wieland Wagner: Der Raum wird hier zur Zeit'** First Publication: *Les Lettres françaises*, Paris (20. 10. 1966).
French: Boulez (1981a) pp. 413-418.
English: 'Wieland Wagner: "Here Space Becomes Time"' in Boulez (1986a) pp. 240-244.
Comments: Wieland Wagner died three days previously (17. 10. 1966). Boulez had conducted Wieland Wagner's production of Berg's *Wozzeck* earlier in the year (1966) at Frankfurt.
- 'Pourquoi je dis "non" à Malraux'** First Publication: *Le Nouvel Observateur*, no. 80, Paris (25. 5. 1966).
French: Boulez (1981a) pp. 481-484.
English: 'Why I say "No" to Malraux' in Boulez (1986a) pp. 441-444.
- 'Olivier Messiaen: Rétrospective'** First Publication: *L'artiste musicien de Paris*, no. 14, Paris (1966).
French: Boulez (1981a) pp. 553-555.
English: 'Olivier Messiaen: In Retrospective' in Boulez (1986a) pp. 405-406.
- 'Le Parallèle Schoenberg-Kandinsky'** First Publication: *Xxe Siècle* no. 27, Paris (12. 1966) (under the title of "Parallèles") p. 98.
French: 'Parallèles' in *Contrechamps*, no. 2, (4.1984) pp. 154-155.
English: 'Kandinsky and Schoenberg' in Boulez (1986a) pp. 344-345.
Comments: This edition of *Xxe Siècle* was a special number 'Hommage à Wassily Kandinsky'.
- 'Question d'oreille'** First Publication: *Nouvel Observateur*, Paris (23. 11. 1966) pp. 41-42.
French: See above.
English: None.
- 'Hommage à Hermann Scherchen'** First Publication: *Lettre françaises*, Paris (16.6.1966).
French: See above
English: None.
- 'Hermann Scherchen: Un Patriarche Aventureux'** First Publication: *Nouvel Observateur*, Paris (22. 6. 1966).
French: Boulez (1981a) p. 538.
English: 'Hermann Scherchen: The Adventurous Patriarch' in Boulez (1986a) p. 499.

1967

Becomes regular conductor of the Cleveland Orchestra (1967-72).
Hands over conducting of the *Domaine Musical* to Gilbert Amy.

'Musique traditionnelle – un paradis perdu?'

First Publication: *The World of Music*, Vol. IX, Wilhelmshaven 1967 (in French, English and German).
French: See above.
English: 'Oriental Music: A Lost Paradise' in Boulez (1986a) pp. 421-424.
Comments: From an interview with Martine Cadieu.

1968

- 'Où est-on?'** First Publication: *Revue Musicale*, Paris August (1971) (according to Häusler (1995) p. 69); (in part) *Le Monde de la musique*, no. 2, (7-8. 1978) pp. 20-22 (according to Nattiez (1986) p. 445.
French: Boulez (1981a) pp. 485-507.
English: 'Where Are We Now?' in Boulez (1986a) pp. 445-463.
Comments: Talk given on 13. 5. 1968 in Saint-Étienne.
- 'Mahler: Das Klagende Lied'** First Publication: Text on recording Cassette CBS 577233.
French: Boulez (1981a) pp. 343-345.
English: Under the same title in Boulez (1986a) pp. 304-305.
- 'Stravinsky: Le sacre de printemps'** First Publication: Text on Record CBS MS 7293 (in English). Translated by Felix Aprahamian.
French: Unpublished.
English: 'Stravinsky: *The Rite Of Spring*' in Boulez (1986a) pp. 362-363.
- 'Stravinsky: l'oiseau de feu'** First Publication: Text on Record Columbia 7206.
French: Boulez (1981a) pp. 353-354.
English: 'Stravinsky: *The Fire Bird*' in Boulez (1986a) pp. 362-363.
- 'Bartók: Musique pour cordes, percussion et célesta'** First Publication: Text on Record Columbia 7206.
French: Boulez (1981a) pp. 368-370.
English: '*Music for strings, percussion and celeste*' in Boulez (1986a) pp. 346-348.
- Livre pour cordes*** Instrumentation: String Quartet.
Premiere: 1. 12. 1968 London (performers: New Philharmonia Orchestra and conducted by Boulez).
Publisher: Heugel Paris.
Comments: Extended string orchestra version of parts Ia and Ib of the Livre Pour Quatuor. See 1988 for the new version in one movement.
- Figures-doubles-prismes* (complete)** Instrumentation: Large orchestra.
Premiere: 3. 3. 1968 The Hague (performers: Resident Orchestra and conducted by Pierre Boulez).
Unpublished.
Comments: See 1964 for first performance of fragment.
- Domaines*** Instrumentation: Solo clarinet.
Premiere: 20. 9. 1968 Ulm (performer: Hans Denzer).
Publisher: Universal Edition Vienna.
- Domaines*** Instrumentation: Clarinet and 21 instruments.
Premiere: 20. 12. 1968 Brussels (performers: Walter Boeykens, Belgian Radio Symphony Orchestra and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.
Comments: Composed 1961/1968.

1969

Appointed chief conductor of the BBC Symphony Orchestra (1969-75)
First guest conductor of the New York Philharmonic and the Los Angeles Orchestra.

Appointed conductor of the New York Philharmonic, taking over from Leonard Bernstein. Begins fully in 1971 (1969-77).
Presented a further conducting course at Basel.
Conducted Debussy's *Pelléas et Mélisande* at Covent Garden Theatre, London.

**'L'Imaginaire chez
Berlioz'**

First Publication: *High Fidelity – Musical America*, Vol. 19, New York (6. 3. 1969) pp. 43-46. Translated into English by David Noakes.
French: Boulez (1981a) pp. 227-235.
English: 'Berlioz and the Realm of the Imaginary' in Boulez (1986a) pp. 212-219.

**'Miroirs pour Pelléas
et Mélisande'**

First Publication: Text on Record Cassette CBS 77324 (in French, German and English) according to Häusler, Columbia M3 30119, (1970) according to *Orientations* p. 306.
French: Boulez (1981a) pp. 419-235.
English: 'Reflections on Pelléas et Mélisande' in Boulez (1986a) pp. 306-317.
Comments: On the occasion of the 1969 performance of *Pelléas et Mélisande* at Covent Garden, conducted by Boulez.

**'Th. W. Adorno: En
marge de la, d'une
disparition'**

First Publication: *Melos*, Mainz September 1969, Melos-Verlag (in French and German) pp. 85-86
French: Boulez (1981a) pp. 543-544.
English: 'T. W. Adorno' in Boulez (1986a) pp. 517-518.

**'Berlioz: Symphonie
Fantastique et Léo'**

First Publication: Text in Record cassette CBS 32 B1 0010 (in English).
French: Boulez (1981a) pp. 339-342.
English: 'Berlioz: *Symphonie Fantastique* and *Léo*' in Boulez (1986a) pp. 220-222.

Pour le Dr. Kalmus

Instrumentation: Flute, clarinet, viola, cello and piano.
Premiere: 1969 London.
Unperformed.

1970

Takes over the planning and building of IRCAM, on the request of Georges Pompidou.

'Chemins vers Parsifal'

First Publication: The *Parsifal* programme at the Bayreuth Festival (1970) (in French, English and German) pp. 2-14 and pp. 63-68.
French: Boulez (1981a) pp. 257-273.
English: 'Approaches to *Parsifal*' in Boulez (1986a) pp. 245-259.
Comments: Boulez conducted Wagner's *Parsifal* this year (1970).

**'Le Modèle du
Bauhaus'**

First Publication: Under the title of 'Pierre Boulez interrogé' in *Cahiers Canadiens de Musique*, Montreal (Spring/Summer 1971) pp. 31-48. New version by the author in 1980 which first appeared in *Points de Repère*.
French: Boulez (1981a) pp. 508-510.
English: 'The Bauhaus Model' in Boulez (1986a) pp. 464-466
Comments: Interview with Maryvonne Kendergi on 19. 3. 1970.

- 'Orchestre, salle, répertoire, public' First Publication: Under the title of "Pierre Boulez interrogé" in *Cahiers Canadiens de Musique*, Montreal (Spring/Summer 1971): New version by the author in 1980 which first appeared in *Points de Repère*.
French: Boulez (1981a) pp. 511-514.
English: 'Orchestras, Concert halls, Repertory, Audiences' in Boulez (1986a) pp. 267-470.
Comments: Interview with Maryvonne Kendergi on 19. 3. 1970.
- 'Tell me' First Publication: *Die Welt*, Hamburg (12. 12. 1970) (in German).
French: Boulez (1981a) pp. 219-226.
English: 'Beethoven: Tell Me' in Boulez (1986a) pp. 205-211.
Comments: On the 200th birthday of Beethoven.
- 'Visage de l'amitié' First publication: *Melos*, Mainz (10. 1970) pp. 368, 388.
French: Boulez (1981a) p. 545.
English: 'Heinrich Strobel: The Friend' in Boulez (1986a) pp. 519-520.
Comments: This text was spoken at Strobel's funeral on 20. 8. 1970.
- 'Boulez: Pli selon pli' First Publication: Text on record CBS 75770 (in English) (1970).
French: Boulez (1995) pp. 485-487.
English: Boulez (1986a) pp. 174-176.
- 'L'Express va plus loin avec Pierre Boulez' First Publication: *L'Express*, Paris (13-19. 4. 1970).
Comments: Interview with Michèle Cotta and Sylvie de Nussac.
- Cummings ist der Dichter* Instrumentation: 16 solo instruments and 24 instruments.
Premiere: 25. 9. 1970 Stuttgart (performers: Schola Cantorum Stuttgart, Südfunk-Symphony Orchestra and conducted by Clytus Gottwald and Pierre Boulez).
Publisher: Universal Edition Vienna.
Comments: See 1986 for the new version.
- Eclat-Multiples* Instrumentation: 27 instruments.
Premiere: 21. 10. 1970 London (performers: BBC Symphony Orchestra and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.
Comments: Composed 1966+.
- 1971
- Boulez on Music Today* First Publication: Translation from the French of *Penser la Musique Aujourd'hui* (1963) by Susan Bradshaw and Richard Rodney Bennett (London: Faber & Faber, 1971).
- 'Style ou idée? (Éloge de l'amnésie)' First Publication: *Saturday Review*, New York (29. 5. 1971) (in English).
Also published in *Musique en jeu*, no. 4 pp. 4-14 (1971) (in French).
French: Boulez (1981a) pp. 312-323.
English: 'Stravinsky: Style or Idea? (In Praise of Amnesia)' in Boulez (1986a) pp. 349-359.

- 'Question d'Héritage'** First Publication: Under the title of "Pierre Boulez interrogé" in *Cahiers Canadiens de Musique*, Montreal (Spring/Summer 1971) pp. 31-48; New version by the author in 1980 which first appeared in *Points de Repère*.
French: See above.
English: 'On Musical Analysis' in Boulez (1986a) pp. 116-118.
Comments: Conversation with Maryvonne Kendergi, 19. 3. 1970. Discussion on musical analysis.
- 'Debussy: L'œuvre pour orchestre'** First Publication: Text on Record cassette Columbia D 3M-32988.
French: Boulez (1981a) pp. 346-352.
English: 'Debussy: The Orchestral Works' in Boulez (1986a) pp. 318-322.
- 'L'Intermédiaire'** First Publication: Broadcast 30. 3. 1971 on Südwestfunk (Baden-Baden) in memory of Heinrich Strobel. First published in *Anhaltspunkte* (1975).
French: Boulez (1981a) p. 546-549.
English: 'Heinrich Strobel: The Intermediary' in Boulez (1986a) p520-522.
- ...Explosante-fixe... (model)** Instrumentation: Variable (model for individual working-out).
Publisher: Universal Edition Vienna.
Comments: Also see 1973, 1985 (*Mémoriale*), 1986, 1991 (*Anthèmes*) and 1993.

1972

- Werkstatt-Texte** Translated from the French into German by Josef Häusler (Stuttgart: Belser Verlag, 1975). This consists of many essays by Boulez published in Boulez (1963b), although there are some differences.
- 'Libérer la musique'** First Publication: *Preuves*, 2. Trimester, Paris (1972) pp. 133-138.
French: Boulez (1981a) pp. 527-532.
English: 'Freeing Music' in Boulez (1986a) pp. 481-485.
- 'Pour Éveiller la curiosité de la nouvelle musique'** First Publication: *New York Times*, (6. 8. 1972) (in English).
French: Boulez (1981a) pp. 515-521.
English: 'Arousing Interest in New Music' in Boulez (1986a) pp. 471-476.
Comments: Conversation with Maryvonne Kendergi.

1973

- 'Messiaen: Vision et révolution'** First Publication: *Anhaltspunkte*, (1975) (in German)
French: Boulez (1981a) pp. 324-330.
English: 'Messiaen: Vision and Revolution' in Boulez (1986a) pp. 406-411.
Comments: Radio programme on the BBC on 13. 5. 1973.

**'Bruno Maderna –
Esquisse d'un portrait'**

First Publication: Under the original title "Salut à Bruno Maderna"
Nouvel Observateur Paris (26. 11. 1973) (according to Häusler
(1995) p. 70); (26. 9. 1973) according to Nattiez (1986b) p. 523.
French: Boulez (1981a) p. 550-551.
English: 'Bruno Maderna: A Portrait Sketch' in Boulez (1986a) pp. 523-
524.
Comments: On the occasion of Maderna's death.

...Explosante-fixe...

Instrumentation: Realisation for flute, clarinet, trumpet, harp,
vibraphone, violin, viola, cello and live-electronics.
Premiere: 5. 1. 1973. New York (performers: Lincoln Chamber Society,
Experimental Studio of Heinrich-Strobel Archive of
Südwestfunks and conducted by Pierre Boulez).
Unpublished.
Comments: This is an extended version. Also see 1971, 1985
(*Mémoriale*), 1986, 1991 (*Anthèmes*) and 1993.

1974

Japanese tour with the New York Philharmonic Orchestra.
Receives an honorary doctorate from Leeds University.

**'Entretien sur
polyphonie X., les
Structures pour deux
pianos et poésie pour
pouvoir'**

First Publication: *Musique en jeu*, no. 16, Paris (11. 1974) pp. 33-35.
French: Boulez (1981a) pp. 189-193.
English: 'An Interview with Dominique Jameux' in Boulez (1986a) pp.
199-202.
Comments: Interview with Dominique Jameux.

**'Schoenberg, le mal-
aimé?'**

First Publication: *Die Welt*, Hamburg (7. 9. 1974) (in German).
French: Boulez (1981a) pp. 287-292.
English: 'Schoenberg, the Unloved?' in Boulez (1986a) pp. 325-329.

**'Rien n'est plus
important pour moi
que la création'**

First Publication: *Le Monde*, Paris (10. 1. 1974).
Comments: Interview with Jacques Longchamp.

**Ainsi Parla
Zarathoustra**

Instrumentation: Voices and instrumental ensemble.
Premiere: 10. 1974 Paris (performers: Compagnie Renaud-Barrault).
Unpublished.
Comments: Stage music.

1975

Founds the *Ensemble InterContemporain*.
Japanese tour with the BBC Symphony Orchestra and European tour with the New York
Philharmonic.

Anhaltspunkte

First Publication: Translated from the French by Josef Häusler.
(Stuttgart: Belser Verlag, 1975).
Comments: Collection of writings found in Boulez (1986a).

- Par Volonté et par Hasard** First Publication: (Paris: Éditions du Seuil, 1975).
 French: See above.
 English: *Conversations with Célestin Deliège*. (London: Eulenberg, 1976).
 Comments: Discussions with Celestin Deliège (1972/1974).
- ‘Divergences: de l’être à l’œuvre’** First Publication: Foreword to the book: *Wagner. Sein Leben, sein Werk und seine Welt in zeitgenössischen Bildern und Texten*, Vienna 1975, Universal Edition (in German).
 French: Boulez (1981a) pp. 199-208.
 English: ‘Richard Wagner: The Man and the Works’ in Boulez (1986a) pp. 223-230.
- ‘Donc on remet en question’** First Publication: *La musique en projet*, (Paris: Éditions Gallimard, 1975).
- ‘Perspective – Prospective’** First Publication: *La musique en projet*, (Paris: Éditions Gallimard, 1975).
- Rituel in Memoriam Maderna*** Instrumentation: Orchestra in 8 parts.
 Premiere: 2. 4. 1975 London (performers: BBC Symphony Orchestra and conducted by Pierre Boulez).
 Publisher: Universal Edition Vienna.
 Comments: Composed 1974/1975.

1976

Conducts Wagner *Ring* at Bayreuth, on the invitation of Wolfgang Wagner (between 1976-80).
 Appointed Professor at the Collège de France.
 Conducts the first French Performance of Schoenberg’s *Jacob’s Ladder*.

- ‘Le temps re-cherché’** First Publication: Programme of *Das Rheingold* at the Bayreuth Festival (1976) (in French, English and German) pp. 1-17 and pp. 76-80.
 French: Boulez (1981a) pp. 236-256.
 English: ‘Time re-explored’ in Boulez (1986a) pp. 260-277.
 Comments: Boulez conducted the *Ring* at Bayreuth this year (1976) in the new production by Patrice Chéreau.
- ‘Mahler actuel?’** First Publication: Foreword to the book by Bruno Walter *Gustav Mahler und Wien* (Stuttgart: Belser Verlag, 1976) (in German).
 French: Boulez (1981a) pp. 274-284.
 English: ‘Mahler: Our contemporary?’ in Boulez (1986a) pp. 295-303.
- ‘Quoi de nouveau?’** First Publication: *Celebration of Contemporary Music*. Programme for the week of contemporary music (5-13. 3. 1976) in the Juilliard School of Music, New York (in English).
 French: Boulez (1981a) pp. 522-526.
 English: ‘What’s New?’ in Boulez (1986a) pp. 477-480.

1977

Opening of IRCAM.
 End of conducting the New York Philharmonic Orchestra.

- 'Invention/recherche'** First Publication: *Passage du Xxe Siècle*, (Paris: Centre Georges Pompidou, 1977).
French: See above.
English: 'Technology and the Composer' in Boulez (1986a) pp. 486-494.
- 'Le Tétralogie: Commentaire de l'expérience'** First Publication: Programme of *Siegfried* at the Bayreuth Festival (1977) pp.1-16 (in French, English and German).
French: Boulez (1981a) pp. 433-448.
English: 'A Performer's Notebook' in Boulez (1986a) pp. 278-291.
Comments: Original title was 'Commentaire sur Mythologie et Idéologie'. This article was written in response to an interview in the 1976 programme book for *Das Rheingold* with which Boulez and Patrice Chéreau were not happy.
- 'Le journal de Cosima Wagner: "Richard travaille"'** First Publication: *Le Monde*, Paris (15. 12. 1977).
French: Boulez (1981a) pp. 209-215.
English: 'Cosima Wagner's Diary: "R. is working"' in Boulez (1986a) pp. 231-236.
- 'Berg: Le Kammerkonzert'** First Publication: Text on Record DG 2531007 (1977).
French: Boulez (1981a) pp. 362-364.
English: 'Berg: The *Chamber Concerto*' in Boulez (1986a) pp. 372-373.
- 'Through Schoenberg to the Future'** First Publication: *The Journal of the Arnold Schoenberg Institute* (shortened version: Lawrence Morton), vol. I, no. 3, Los Angeles (6. 1977) pp. 121-125 (in English).
French: None.
English: See above.
Comments: On the official opening of the Schoenberg Institute in Los Angeles on 20. 2. 1977.
- 'Mobile-Musique'** First Publication: *Cahiers Renaud-Barrault* 87 (1977) pp. 36-37.
- Speech** First Publication: Stiftung F. V. S. to Hamburg: Strasbourg Prize and Strasbourg Gold medal (1977).
French: See above.
English: None.
Comments: On the acceptance of the Strasbourg Gold medal of the Stiftung F. V. S. at Hamburg, 1. 10. 1977.
- Messagesquise*** Instrumentation: Cello solo and 6 cellos.
Premiere: 3. 7. 1977 La Rochelle (performers: Lluis Claret and Jury-members of Rostropowitsch-Wettbewerb).
Publisher: Universal Edition Vienna.

1978

- 'Messiaen: Le temps de l'utopie'** First publication: Boulez (1981a) pp. 331-337.
French: See above.
English: 'Messiaen: The Utopian Years' in Boulez (1986a) pp. 411-417.
Comments: Text to a radio programme on Südwestfunks (Baden-Baden) on 7. 12. 1978 (according to Häusler (1995) p. 71), or October 1978 (according to Nattiez (1986b) p. 411).

'Messiaen: La toute-puissance de l'exemple'

First Publication: Boulez (1981a) pp. 555-557.

French: See above.

English: Messiaen: The Power of Example' in Boulez (1986a) pp. 418-420.

Comments: Speech to the Paris Opera on 10. 12. 1978 on Messiaen's 70th birthday.

1979

Conducts Berg's *Lulu* at the Grand Opéra, Paris.

Receives the Siemens Prize.

'Géometrie courbe de l'utopie'

First Publication: Under the title "Ich will meine Revolution auch träumen" *Süddeutsche Zeitung*, Munich (23. 4. 1979).

French: Boulez (1981a) pp. 561-563.

English: 'The Elliptical Geometry of Utopia' in Boulez (1986a) pp. 525-527.

Comments: Acceptance speech for the Siemens Prize, 20. 4. 1979.

'La Biographie, pourquoi?'

First Publication: Foreword to the book *Mahler* by Henry-Louis de La Grange, vol. 1, (Paris: Fayard, 1979) pp. 2-3.

French: Boulez (1981a) pp. 216-218.

English: 'Gustav Mahler: Why Biography?' in Boulez (1986a) pp. 292-294.

'Lulu: le second opéra'

First Publication: *Alban Berg: Lulu*, Vol. II, (Paris: Éditions Jean Claude Lattès, 1979) pp. 13-37.

French: Boulez (1981a) pp. 293-311.

English: 'Lulu, the Second opera' in Boulez (1986a) pp. 380-403.

Comments: Reply to critical remarks of Patrice Chéreau's production made by Dominique Jameux at a public forum at IRCAM. This was at the time of the first performance of the complete version conducted by Boulez at the Paris Opéra, 1979. This text was broken down to form the following articles: 'Lulu: questions d'interprétation' in Boulez (1981a) pp. 449-451 and published in English as 'Lulu: Questions of Interpretation' in Boulez (1986a) pp. 395-397; 'Lulu: court post-scriptum sur la fidélité' in Boulez (1981a) pp. 452-458 and published in English as 'À Short Postscript On Fidelity' in Boulez (1986a) pp. 398-403.

'L'apprentissage de la Science'

First Publication: *Nouvelles littéraires*, 55, 2569 (1979) p. 22.

French: See above.

English: See below.

Comments: This is an extract of the introduction from 'Invention/Recherche' (1977).

Presentation of the Ensemble InterContemporain

First Publication: (4. 1979).

Comments: Held at the Paul Sacher Archive, Basel.

'Rapport de
l'informatique et de la
musique'

First Publication: Internal publication of Ministeriums, part-published as 'L'Ordinateur Musicien' in the *Courrier der Unesco*, Paris (1980).

French: See above.

English: None.

Comments: Speech for a colloquium 'Informatique et Société' of the Ministère de l'industrie, 26. 9. 1979.

'Gaëtan Picon: Ascèse
de l'action'

First Publication: *Catalogue of the Gaëtan Picon Exhibition* at the Centre Georges Pompidou, Paris (4. 1979).

French: Boulez (1981a) p. 558-559.

1980

Receives honorary doctorates from Basel University and Cambridge University.

'À partir du présent, le
passé'

First Publication: *Histoire d'un "Ring"*, Paris (1980).

French: See above.

English: None.

Comments: On Wagner's *Ring*.

'Existe-t-il un conflit
entre la pensée
européenne et non-
européenne?'

First Publication: *Forum musicologicum. Basler Beiträge zur Musikgeschichte IV*, (Winter 1984).

French: See above.

English: None.

Comments: Speech at the Musikwissenschaftlichen Institute at the University of Basel, 13. 2. 1980.

'Les nouvelles
orientations de
l'Ircam'

First Publication: *Le Monde*, Paris (20. 5. 1980).

French: See above.

English: None.

Comments: Interview with Jacques Longchamp.

'Boulez: la machine à
créer'

First Publication: *L'Express* (20/5/1980) p. 61, p. 63, p. 65.

French: See above.

English: None.

Comments: Interview with Sylvie de Nussac on the fifth anniversary of the opening of IRCAM.

'L'Ordinateur
Musicien'

Le Courier de l'UNESCO (4. 1980) pp. 28-33, 38.

French: See above.

English: None.

'Boulez: la musique
au futur'

Le matin (1-2. 12. 1980) pp. 22-23 (Dec. 1st), p. 27 (Dec. 2nd).

French: See above.

English: None.

'Material et invention'

Unpublished.

French: See below.

English: None.

Comments: Presentation at the Theatre d'Orsay April 1980 as part of a series of concerts. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

Notations

Instrumentation: Large orchestra.

Premiere: 18. 6. 1980 Paris (performers: Orchestra de Paris and conducted by Daniel Barenboim).

Publisher: Universal Edition Vienna.

Comments: Extended new composition for piano. So far consists of 5 movements. Composed 1980+.

1981

Boulez Retrospective at the Autumn Festival, Paris.

Points de Repère

First Publication: Collected and edited by Jean-Jacques Nattiez (Paris: Éditions du Seuil, 1981).

French: See above.

English: *Orientations* translated by Martin Cooper (Cambridge (Mass.): Harvard University Press, 1986).

Comments: This is the first edition of *Points de Repère* (Boulez 1981a).

'L'écriture du musicien: Le regard du sourd?'

First Publication: *Critique*, no. 408, Paris, (5. 1981).

French: Boulez (1989a) pp. 293-315.

English: None.

'L'in(dé)fini et l'instant'

First Publication: *Le compositeur et l'ordinateur*, Paris (1981) IRCAM pp. 96-105.

French: See above.

English: None.

Répons

Instrumentation: 6 soloists, chamber ensemble, computer sounds and live-electronics.

Premiere: 18. 10. 1981 Donaueschingen (performers: Michel Cerutti, Vincent Bauer, Daniel Ciampolini, Pierre-Laurent Aimard, Alain Neveux, Marie-Claire Jamet, Ensemble InterContemporain, members of IRCAM, Experimental Studio of Heintich Strobel archive of Südwestfunks and conducted by Pierre Boulez).

Publisher: Universal Edition Vienna.

Comments: See 1982 and 1984 for different versions.

1982

'Un bilan?'

First Publication: *Stravinsky, études et témoignages*, (Paris: Éditions Jean Claude Lattès, 1982).

French: See above.

English: None.

'Anton Webern'

First Publication: Programme booklet of the Festival d'Automne, (1991).

French: See above.

English: None.

'Le statut de l'amateur'

First Publication: *Critique*, Paris, (7. 1982).

French: See above.

English: None.

***Répons* (extended version)**

Instrumentation: With a partially different ensemble.

Premiere: 6. 9. 1982 London.

1983

- 'L'opéra malade en lieu'** First Publication: *Le Monde*, Paris (30. 6. 1983).
French: See above.
English: None.
- 'Le Transcription et ses Chimères'** First Publication: Programme booklet of the season of the Orchestre de Paris (1983-84).
French: See above.
English: None.
Comments: On *Notations*.
- 'Problèmes artistiques de l'institution musical'** First Publication: *ENA – École Nationale d'Administration*, Paris (6. 1983).
French: See above.
English: None.
Comments: From a conference on the 28.9.1982.
- 'Les compositeurs réagiraient d'une façon sceptique...'** First Publication: *International Congress of Acoustiques* Lyon-Toulouse 22.7.1983 pp. 213-216.
- 'Si je pense à René Char'** First Publication: *Liberation*, Paris (20. 6. 1983).
French: See above.
English: None.
- 'Recherche/ création'** First Publication: *Le Monde de la Musique*, Paris, (3. 1983).
French: See above.
English: None
Comments: Speech at the IRCAM seminar "Le Concept de Recherche en Musique", 14. 2. 1983. Original title: 'Quoi? Quand? Comment?'.
Comments: Interview with Michel Foucault.
- 'Le Musique Contemporaine et le Public'** First Publication: *CNAC magazine*, Paris (5. 1983).
Comments: Interview with Michel Foucault.
- 'Le Pomme de Newton'** First Publication: *L'Ane Magazine Freudian*, Paris (5-6. 1983).
French: See above.
English: None.
Comments: Interview with E. Laurent, F. Regnault and J. Miller.
- 'Messiaen'** First Publication: *Revue mensuelle de l'Opéra de Paris*, (11.1983).
French: See above.
English: None.
- Foreword** First Publication: Foreword in the book *Stravinsky-Brunnen Paris*, (Bern: Benteli Verlag, 1983).
- Éditorial** First Publication: *Télécom – Journal de l'École Nationale Supérieure de la Télécommunication*, Paris (29. 9. 1983).
French: See above.
English: None.

1984

Guest conductor for four weeks at the Los Angeles Philharmonic Orchestra.
Receives an honorary doctorate from the University of Southern California.

- 'Parallèles'** First Publication: *Contrechamps*, no. 2, (4. 1984) pp. 154-155.
French: See above.
English: None.
- 'Une Ouverture Européenne'** First Publication: *Euroscopie*, no. 1, 1. Term (1984).
French: See above.
English: None.
Comments: Interview with Christian Biet and Giorgio Luka.
- Répons*** (another extended version) Premiere: 22. 9. 1984 Turin.
- Pli selon pli: IV. Improvisation III sur Mallarmé*** Instrumentation: Revised and extended version for soprano and orchestra.
Premiere: 23. 2. 1984 London (performers: Phyllis Bryn-Julson, BBC Symphony Orchestra and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.

1985

Receives the Sonning Prize

- 'L'informulé'** First Publication: *La Revue Esthétique*, Nouvelle Série no. 8, Toulouse (1985) pp. 25-29.
French: See above.
English: None.
Comments: Special edition on Adorno.
- Préface** First Publication: Foreword to the book *La Musique au Quotidien* by Philippe Olivier (Paris: Éditions Balland, 1985).
French: See above.
English: None.
- 'La Célébration'** First Publication: *Almanach Internationales Musikfest*, Stuttgart (14-22. 9. 1985) pp. 23-28 (in French and German).
French: See above.
English: None.
- 'Timbre and composition – timbre and language'** First Publication: (In English) translated by R. Robertson in *Contemporary Music Review*, vol. 2, London (8. 1987) pp. 161-171.
French: None.
English: See above.
Comments: Speech (in French) at the Colloquium 'Le Timbre et ses Contextes', April 1985.
- 'Tradition et Modernité'** First Publication: *Le Monde de la Musique*, Paris (11. 1985).
French: See above.
English: None.
Comments: On Alban Berg. Talk given for Belgian television.

'Larry Beaugard' First Publication: Programme for a concert in memory of Larry Beaugard, Nanterre (29. 11. 1985).
 French: See above.
 English: None.

'Paris, le 19 Décembre 1985' First Publication: Catalogue of the exhibition 'Komponisten des 20. Jahrhunderts in der Paul Sacher Stiftung', Basel 1986.
 French: See above.
 English: None.

Dérive I Instrumentation: Chamber ensemble.
 Premiere: 31. 1. 1998 London (performers: London Symphonietta and conducted by Oliver Knussen).
 Publisher: Universal Edition Vienna.
 Comments: Composed 1984.

Dialogue de l'ombre double Instrumentation: Clarinet and tape.
 Premiere: 28. 10. 1985 Florence (clarinetist: Alain Damiens).
 Publisher: Universal Edition Vienna.

Mémorial (...explosante-fixe...Originel) Instrumentation: Solo flute and 8 instruments.
 Premiere: 29. 11. 1985 Paris (performers: Sophie Cherrier, Ensemble InterContemporain and conducted by Boulez).
 Publisher: Universal Edition Vienna.
 Comments: Also see 1971, 1973, 1986, 1991 (Anthèmes) and 1993.

1986

American tour with the Ensemble Intercontemporain.
 Guest conductor in New York, Boston, Cleveland and with the BBC Symphony Orchestra.

'Musique Française' First Publication: *L'Image de la musique française du Xxe siècle*, Paris (1986) SACEM.
 French: See above.
 English: None.
 Comments: Interview with Jean-Pierre Derrien.

'Passe, impasse et manque' First Publication: Catalogue of the 'Vienna' Exhibition at the Centre National d'Art Contemporain, Paris (1986).
 French: See above.
 English: None.

'Le Système et l'idée' First Publication: *Inharmoniques I*, Paris (1986).
 French: Boulez (1989a) pp. 316-390.
 English: None.

'Le quatuor à cordes' First Publication: Foreword to the book *Quatuors du Xxe siècle* by Stéphane Goldet, (Paris: Éditions Papiers, 1986).
 French: See above.
 English: None.

Speech First Publication: *Basler Zeitung*, (4. 1986) (in German).
 French: None.
 English: None.
 Comments: On the 80th birthday of Paul Sacher.

'Composition et technologie' Unpublished.
 French: See below.
 English: None.
 Comments: Talk given at a Colloquium at the Collège de Philosophie, (10. 1986). I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.

'Bernard Saby' First Publication: Catalogue of the Bernard Saby Collection at the Musée d'Art Moderne de la Ville de Paris (1986).
 French: None.
 English: None.

Éclats/Boulez Edited and introduced by Claude Samuel (Paris: Centre Pompidou, 1986).

Cummings ist der Dichter Instrumentation: 16 solo instruments and 24 instruments.
 Premiere: 23. 9. 1986 Strasburg (performers: Stockholm Chamber Choir, Ensemble InterContemporain and conducted by Pierre Boulez).
 Publisher: Universal Edition Wien.

...Explosante-fixe... Instrumentation: Vibraphone and Live-electronics.
 Premiere: 2. 9. 1986 Basel (performers: Jean-Claude Forestier, Experimental studio of Heinrich Strobel Archive of Südwestfunks).
 Unpublished.

1987

Receives an honorary doctorate from Oxford University.
 Receives the Austrian Prize for art and science.

'Vers dix autres années' First Publication: *CNAC magazine*, Paris (1. 1987).
 French: See above.
 English: None.
 Comments: On the tenth anniversary of the founding of the Centre National d'Art Contemporain.

'Dix années et bien autres' First Publication: Information on IRCAM, Paris (1987).

'Le Devoir et la joie' First Publication: Programme for a concert for the tenth anniversary of the founding of the *Ensemble InterContemporain*, (26. 1. 1987).
 French: See above.
 English: None.

'Ircam' First Publication: *Le Matin*, Paris (2. 2. 1987).
 French: See above.
 English: None.
 Comments: Interview with Claude Samuel.

'D'Aujourd'hui à Demain' First Publication: Festschrift of the twentieth anniversary of the founding of the Orchestre de Paris, Paris (1987) Éditions Hachette/Francis van de Velde.
 French: See above.
 English: None.

- Introduction** First Publication: Introduction speech to *Ensemble InterContemporain* concert, (12. 5. 1987).
 French: See above.
 English: None.
 Comments: Concert featured works by Ligeti, Berio and Boulez.
- Initiale*** Instrumentation: 7 brass instruments.
 Premiere: 4. 6. 1987 Houston, Texas.
 Publisher: Universal Edition Vienna.
- 1988**
- Australian and New Zealand tour with the *Ensemble InterContemporain*.
 Extensive presentation and conducting course at the Avignon Festival.
 Receives honorary doctorate from Brussels University.
- 'Entre Ordre et Chaos'** First Publication: *Inharmoniques 3*, Paris (1988).
 French: Boulez (1989a) pp. 391-434.
 English: None.
- Quelle rédemption?'** Unpublished.
 French: See below.
 English: None.
 I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.
- 'Le vestale et le voleur de feu'** First Publication: *Inharmoniques 4*, Paris (1988).
 French: Boulez (1989a) pp. 437-441.
 English: 'The Vestal Virgin and the Fire-stealer: memory, creation and authenticity' translated by Susan Bradshaw in *Early Music* (8. 1990) pp. 355-358.
 First Publication: Boulez (1989a) pp. 437-440.
 Comments: This is the final chapter of Boulez (1989a).
- 'Kafka da Silva'** First Publication: Catalogue of the Vieira da Silva Collection, Lissabon/Paris/Rio de Janeiro (1988-89).
 French: See above.
 English: None.
- 'Computers in Music'** First Publication: *Scientific American*, New York (4. 1988).
 French: None.
 English: See above.
 Comments: Written by Boulez and Andrew Gerzso.
- 'Du Domaine Musical à Ircam'** First Publication: *Débat*, no. 50, Paris (5-8. 1988).
 French: See above.
 English: None.
 Comments: Interview with Pierre Michel Menger.
- 'Préface-Berg-Schoenberg'** Unpublished.
 French: See below.
 English: None.
 Comments: Text to an intended record by Harmonia Mundi 'Correspondances Berg/Schoenberg'.

- 'Sur les musiques françaises et allemandes'** First Publication: Interview with Martin Kaltenecker for the Goethe Institute, Paris (12. 1988).
- 'Ich will nicht der Leichenredner dieser Epoche sein'** First Publication: *Die Welt*, Hamburg (1. 8. 1988).
French: None.
English: None.
Comments: Interview with Felix Schmidt.
- 'The Composer and Creativity'** First Publication: *Journal of the Arnold Schoenberg Institute*, Vol. XI no. 2, Los Angeles (11. 1988).
- 'Olivier Messiaen'** First Publication: Programme booklet of concerts for the eightieth birthday of Olivier Messiaen at the Théâtre des Champs-Élysées, Paris (1988).
- 'Ich biege ein Stück Holz und plötzlich bricht es'** First Publication: *Österreichische Musikzeitschrift*, Vienna (12. 1988).
Comments: Interview with Josef Häusler on the occasion of modern Vienna Festivals.
- 1989
- Boulez Festival in London.
Receives the Premium Imperial Award of the Japan Arts Association.
- Jalons (pour une décennie)** Collected and edited by Jean-Jacques Nattiez, with foreword by Michel Foucault (Paris: Christian Bourgois Éditeur, 1989).
French: See above.
English: None.
Comments: Consists of courses given by Boulez at the Collège de France between 1978-88.
- 'Mémoire et création'** Unpublished.
French: See below.
English: None.
Comments: Course presented at the Collège de France, 1989. Consists of nine lessons between 3.2.89 and 3.3.89. I am grateful to the Paul Sacher Archive in Basel, Switzerland for granting me access to this unpublished material.
- Le Pays Fertile – Paul Klee** First Publication: Collected and edited by Paule Thévenin (Paris: Éditions Gallimard, 1989).
French: See above.
English: None.
Comments: This book combines three talks by Boulez on Klee.
- Conversations de Pierre Boulez sur la Direction d'orchestra avec Jean Vermeil** (Paris: Éditions Plume, 1989).
French: See above.
English: None.
- 'Mahler et la France'** First Publication: *Revue Musicale*, Paris (1. 1989).
French: See above.
English: None.
Comments: Interview with Henry-Louis de La Grange.

- 'La Bastille: populaire ou culinaire'** First Publication: *Le Monde*, Paris (1. 2. 1989).
French: See above.
English: None.
- 'Musique en création'** First Publication: *Genf/Paris* (1989) Éditions Contrechamps/Festivals d'Automne de Paris.
French: See above.
English: None.
- Le Visage Nuptial***
(Third version) Instrumentation: Soprano, mezzo soprano, choir and orchestra.
Premiere: 16. 11. 1989 Metz (performers: Phyllis Bryn-Julson, Elizabeth Laurence. BBC Singers, BBC Symphony Orchestra and conducted by Pierre Boulez).
Publisher: Heugel Paris.
Comments: Text by René Char. This is the premiere of the third and definitive version of *Le Visage Nuptial*. Composed 1985-89.
- Livre pour cordes*** (new version) Instrumentation: String Orchestra.
Premiere: 5. 1989 Los Angeles (performers: Los Angeles Philharmonic Orchestra and conducted by Pierre Boulez).
Publisher: Heugel Paris.
Comments: New one movement version. Composed 1988.
- 1990
- Concert in Moscow with the Ensemble InterContemporain.
Guest conductor at Chicago, Cleveland and Los Angeles.
- Correspondance Pierre Boulez/John Cage** Collected and annotated by Jean-Jacques Nattiez (Winterthur: Amadeus Verlag, 1990). Second edition: (Paris: Christian Bourgois Éditeur, 1991). Later published in English as *The Boulez-Cage Correspondence* collected, edited, introduced by Jean-Jacques Nattiez, translated by Robert Samuels (Cambridge: Cambridge University Press, 1993).
French: See above.
English: None.
- 'Les Grenouilles et le soliveau'** First Publication: *Le Monde*, Paris (3. 2. 1990).
French: See above.
English: None.
- 'Qui en veut à Pierre Boulez?'** First Publication: *Diapason*, Paris (4. 1990).
French: See above.
English: None.
Comments: Interview with Henry-Louis de La Grange.
- 'Texte'** First Publication: *Le Livre Blanc de la Bibliothèque de France*, Paris (4. 1990).
French: See above.
English: None.
- 'Michel Guy'** First Publication: *Paris Match*, (1. 8. 1990).
French: See above.
English: None.

'La Culture en
sarcophage'

First Publication: *Le Monde*, Paris (27. 10. 1990).
French: See above.
English: None.

Dérive II

Instrumentation: 11 performers.
Premiere: 21. 6. 1990 Milan (performers: Ensemble InterContemporain
and conducted by Pierre Boulez).
Publisher: Universal Edition Vienna.
Comments: Composed 1988+.

Pli selon pli: I. Don
(new version)

Premiere: 18. 4. 1990 Helsinki (performers: Tuula-Maria Tuomela,
Radio Symphony Orchestra and conducted by Peter Eötvös).
Publisher: Universal Edition Vienna.

1991

Receives honorary doctorate from the University of Frankfurt/Main.

*Stocktakings of an
Apprenticeship*

First Publication: Translated by Stephen Walsh (Oxford: Clarendon
Press, 1991).

'Le concept
d'écriture I'

Unpublished.
French: See below.
English: None.
Comments: Course presented at the College de France, 1990-91.
Consists of eight lessons between 30.11.90 – 29.1.91. I am
grateful to the Paul Sacher Archive in Basel, Switzerland for
granting me access to this unpublished material.

'Le Regard Français'

First Publication: Catalogue to the collection 'Die Symbolisten und
Richard Wagner', Berlin/Brussels (8. 1991).
Comments: Subtitled 'Plus Wagner est légendaire, plus je le trouve
humain' (Proust).

'Paul Claudel,
Intolérant et Révolté'

First Publication: *Pro Musica*, Isles-lès-Villenoy (1991).

Anthèmes

Instrumentation: Solo Violin.
Premiere: 18. 11. 1991. Vienna (performer: Irvine Arditti).
Publisher: Universal Edition Vienna.
Composed 1991-.

1992

Conducts Debussy's *Pelléas et Mélisande* as part of Peter Stein's production at the Welsh National
Opera, Cardiff.
Extensive involvement at the Salzburg Festival.

'Messiaen: Profil
Perdu'

First Publication: *L'Avant-Scène Opéra*, Paris (8. 1992) (in French and
German).
French: See above.
English: None.

**'Poetry and Music':
A Roundtable
discussion'**

First Publication: (All authors) Boulez, Pierre; Loselle, Andrea; Caws, Mary Ann; Perloff, Nancy Caws *Paroles Gelées XI*, Los Angeles (1993) pp. 1-16 (in English).

French: None.

English: See above.

Comments: Statement for a round table discussion at the French Department University of California (Autumn 1992).

1993

Concert with the Berlin Philharmonic Orchestra, European tour with the London Symphony Orchestra and American tour with the Ensemble InterContemporain.

**'Le Texte et son Pré-
texte'**

First Publication: *Genesis 4*, Paris (1993).

French: See above.

English: None.

Comments: Interview with Peter Szendy.

**'Conducting, Métier,
Mystery or What?'**

First Publication: Under the title 'Dirigieren: Metier, Magie oder was?' in *Wanderer zwischen Musik, Politik und Recht – Festschrift für Reinhold Kreile zu seinem 65. Geburtstag*, Baden-Baden (1994) Nomos (in German).

French: See above.

English: None.

Comments: Speech presented 5. 12. 1993 at the Arts Institute of Chicago.

...Explosante-fixe...

Instrumentation: MIDI-flute, chamber ensemble and "Station informatique musicale".

Composed: 1991+.

Comments: These three pieces are the third part of the definitive version.

1. *Transitoire VII*.

Premiere: 13. 9. 1993 Turin (performers: Pierre-André Valade, Ensemble *InterContemporain*, electronics from IRCAM and conducted by David Robertson).

Publisher: Universal Vienna.

2. *Transitoire V*.

Premiere: 11. 11. 1993 New York (performers: Pierre-André Valade, Ensemble *InterContemporain*, electronics from IRCAM and conducted by Pierre Boulez).

Publisher: Universal Vienna.

3. (*Mémoriale*) *Originel*. Extended version of *Mémoriale* (1985).

Premiere: 11. 11. 1993 New York (performers: Pierre-André Valade, Ensemble *InterContemporain*, Electronics from IRCAM and conducted by Pierre Boulez).

Publisher: Universal Vienna.

Comments: Extended version of *Mémoriale* (1985).

1994

Receives three Grammy Awards with the Chicago Symphony Orchestra and the Cleveland Orchestra.

Guest appearance with the Ensemble InterContemporain at the Edinburgh Festival.

'Une Trinité Éclatée'

First Publication: Under the title 'Explosive Trinität' in the programme booklet to the festival concert 'Kunst und Kultur der 20er Jahre' on 8. 10. 1994, Ludwigshafen/Rhein (in German).

1995

Collaborates with Gérard Mortier and Hans Landesmann in a longstanding working relationship with the Salzburg Festival.

Announces start of Cité de la Musique in Paris.

Concerts with the Ensemble InterContemporain and the London Symphony Orchestra in Chicago, New York, Vienna, Tokyo, Paris, London and at the Schleswig-Holstein Music Festival.

**Points de repère I:
imaginer**

First Publication: Collected by Jean-Jacques Nattiez and Sophie Galaise, introduced by Jean-Jacques Nattiez, musical examples identified by Robert Piencikowski (Paris: Christian Bourgeois Editeur, 1995)

French: See above.

English: Consists of essays already published in English in Boulez (1986a) and Boulez (1991a).

Incises

Instrumentation: Piano.

Performance: (1995).

Publisher: Universal Edition Vienna.

Comments: Composed 1993-94.

1996

"Esprit, es-tu là?"

Unpublished.

French: See below.

English: None.

Comments: Written text (29. 1. 96) for the 50th anniversary of the "Ferienkurse Darmstadt" (8. 96).

'L'instant et l'étendue'

Unpublished.

French: See below.

English: None.

Comments: Round table of the frame of the imagination of IRCAM, Extension II. (21. 6. 96).

1999

**'Une salle de concert
digné du XXI^e siècle'**

Le Monde (25. 3. 1999) p. 18.

French: See above.

English: None.

2000

**'A nice guy in a world
full of monsters'**

First Publication: *The Sunday Times: Culture magazine* (9.1.2000).

French: None.

English: See above.

Comments: Interview with Hugh Canning.

**'What is driving
Boulez?'**

First Publication: *The Daily Telegraph* (24.1.2000) p. 17.

French: None.

English: See above.

Comments: Interview with John Whitley.

BIBLIOGRAPHY

To enable the reader to find references as quickly and easily as possible, I have grouped all references together in alphabetical order. Texts by the same author are distinguished first by year and second, if there are several texts from the same year, by letter. Interviews and writing collaborations (including published correspondence) involving Boulez are also ordered alphabetically.

The year given at the beginning of each bibliographical entry is, in the majority of cases, the year in which the text was first published. For all writings written by Boulez, I have provided the original title under which the text in question was first published (usually in French). Many articles have subsequently been translated into English and therefore I have decided to provide page references for both versions. For all texts by writers other than Boulez, I have cited the version of the text that I have used. All texts marked with a star (*) are unpublished texts held at the Paul Sacher Archive in Basel, Switzerland. I would like to express my gratitude to the Paul Sacher Archive for granting me access to this unpublished material.

Adorno, Theodor W.

- 1949 *The Philosophy of Modern Music* translated by Anne G. Mitchell and Wesley V. Blomster (London: Seabury Press, 1973)
- 1956 'Music and Language: A Fragment' in Adorno (1963) pp. 1-6
- 1961 'Vers une musique informelle' in Adorno (1963) pp. 269-322
- 1963 *Quasi una Fantasia* translated by Rodney Livingstone (London: Verso, 1998)
- 1982 'On the Problem of Musical Analysis' introduced and translated by Max Paddison in *Musical Analysis* (1. 2. 1982) pp. 169-181

Aguila, Jesus

- 1992 *Le Domaine Musical: Pierre Boulez et vingt ans de création contemporaine* (Paris: Fayard, 1992)

Artaud, Antonin

- 1938 *The Theatre and Its Double* translated by Victor Corti (London: John Calder, 1977)

Austin, Lloyd James

- 1953 'Mallarmé et le rêve du "Livre"' in Bowie (1995) pp. 66-91
1995 'Mallarmé et le réel' in Bowie (1995) pp. 212-222

Bann, Stephen

- 2000 Entry on 'Groupe de Recherche d'Art Visuel' in *From Expressionism to Post-Modernism: Styles and Movements in 20th-century Western Art* edited by Jane Turner (London: Macmillan Reference Limited, 2000)

Baudelaire, Charles

- 1857a 'Correspondances' in Baudelaire (1957b) pp. 62-63
1857b *Les Fleurs du Mal* (Paris: Flammarion, 1991)

Beauvoir, Simone de

- 1945 'L'existentialisme et la sagesse des nations' in *Les Temps Modernes* no. 3, December 1945 pp. 385-404
1946 'Littérature et métaphysique' in *Les Temps Modernes* no. 7, April 1946 pp. 1153-1163
1947a 'Pour une morale de l'ambiguïté (III)' in *Les Temps Modernes* no. 16, January 1957 pp. 638-664
1947b *Pour une morale de l'ambiguïté* (Paris: Gallimard, 1947)

Bennett, Gerald

- 1986 'The Early Works' in Glock (1986) pp. 41-84

Blaustein, Susan

- 1989 'The Survival of Aesthetics: Books by Boulez, DeLio, Rochberg' in *Perspectives of New Music*, vol. 27 no. 1, (Winter 1989) pp. 272-303

Bonnet, Antoine

- 1987 'Ecriture and perception: on *Messagesquise* by Pierre Boulez' trans from the French by L. Jones in *Contemporary Music Review*, vol. 2 (1987) pp. 173-209

Bonniot, Edmond

- 1900 'Preface to *Igitur*' in *Mallarmé Œuvres Complete* (Paris: Gallimard, 1945) pp. 423-432

Boretz, Benjamin

- 1987 'Thoughts in Reply to Boulez/Foucault: "Contemporary Music and the Public"' in *Perspectives of New Music* vol. 25 No. 1 and 2 (Winter 1987 Summer 1987) pp. 608-611

Born, Georgina

- 1995 *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde* (Berkeley: University of California Press, 1995)

Boulez, Pierre

- 1948a 'Propositions' in Boulez (1995) pp. 253-262 and published in English as 'Proposals' in Boulez (1991a) pp. 47-54
1948b 'Incidences actuelles de Berg' in Boulez (1995) pp. 37-42 and published in English as 'The Current Impact of Berg' in Boulez (1991a) pp. 183-187
1949 'Trajectoires: Ravel, Stravinsky, Schoenberg' in Boulez (1995) pp. 43-63 and published in English as 'Trajectories: Ravel, Stravinsky, Schoenberg' in Boulez (1991a) pp. 188-208
1951a 'Moment de Jean-Sébastien Bach' in Boulez (1995) pp. 65-79 and published in English as 'Bach's Moment' in Boulez (1991a) pp. 1-14
1951b 'Le Système mis à nu' in Boulez (1981a) pp. 127-140 and published in English as 'The System Exposed' in Boulez (1986a) pp. 129-142
1951c Letter from Boulez to John Cage 12. 1951 in Boulez and Cage pp. 112-127

- 1952a 'Schoenberg est mort' in Boulez (1995) pp. 145-151 and published in English as 'Schoenberg is Dead' in Boulez (1991a) pp. 209-214
- 1952b 'Satie: Chien flasque' in Boulez (1981a) pp. 285-286 and published in English under the same title in Boulez (1986a) pp. 323-324
- 1952c 'Éventuellement' in Boulez (1995) pp. 263-295 and published in English as 'Possibly...' in Boulez (1991a) pp. 111-140
- 1952d 'Incipit' in Boulez (1995) pp. 153-154 and published in English under the same title in Boulez (1991a) pp. 215-216
- 1953a 'Stravinsky demeure' in Boulez (1995) pp. 81-143 and published in English as 'Stravinsky Remains' in Boulez (1991a) pp. 55-110
- 1953b 'Tendances de la musique récente' in Boulez (1995) pp. 165-172 and published in English as 'Tendencies in Recent Music' in Boulez (1991a) pp. 173-179
- 1953c Letter to Stockhausen dated in November before 20. 11. 53 (no page numbers) (unpublished*)
- 1954a '...Auprès et au loin' in Boulez (1995) pp. 297-314 and published in English as '...Near and Far' in Boulez (1991a) pp. 141-157
- 1954b 'Probabilités critiques du compositeur' in Boulez (1995) pp. 27-34 and published in English as 'The Composer as Critic' in Boulez (1986a) pp. 106-112
- 1954c 'Recherches maintenant' in Boulez (1995) pp. 331-336 and published in English as 'Current Investigations' in Boulez (1991a) pp. 15-19
- 1955a 'A la limite du pays fertile' in Boulez (1995) pp. 315-330 and published in English as 'At the Edge of Fertile Land' (Paul Klee) in Boulez (1991a) pp. 158-172
- 1955b 'Expérience, autruches et musique' in Boulez (1981a) pp. 466-468 and published in English as 'Experiment, Ostriches and Music' in Boulez (1986a) pp. 430-431
- 1955c 'Première et seconde audition' in Boulez (1981a) pp. 461-463 and published in English as 'First and Second Hearings' in Boulez (1986a) pp. 427-429
- 1956a 'Arthur Honegger' in *Cahiers Renaud-Barrault* no. 15, Paris (1956)
- 1956b 'La corruption dans les encensoirs' in Boulez (1995) pp. 155-160 and published in English as 'Corruption in the Censors' in Boulez (1991a) pp. 20-25
- 1957a 'Aléa' in Boulez (1995) pp. 407-420 and published in English as 'Alea' in Boulez (1991a) pp. 26-38
- 1957b 'La conjonction Stravinsky-Webern' in Boulez (1981a) pp. 355-360 and published in English as 'The Stravinsky-Webern Conjunction' in Boulez (1986a) pp. 364-369
- 1958a 'notices pour une encyclopédie': 'Accord', 'Chromaticism', 'Concrète (Musique)', 'Contrepoint', 'Série' in Boulez (1995) pp. 339-355; 'Béla Bartok', 'Alban Berg', 'Claude Debussy', 'Arnold Schoenberg', '*L'œuvre pour piano de Schönberg*', 'Anton Webern' in Boulez (1995) pp. 177-250 and all entries published in English as 'Entries for a Musical Encyclopedia': 'Chord', 'Chromaticism', 'Concrète (Musique)', 'Counterpoint, Series', 'Bela Bartok', 'Alban Berg', 'Claude Debussy', 'Arnold Schoenberg', 'Schoenberg's Music for Piano', 'Anton Webern' in Boulez (1991a) pp. 223-303
- 1958b 'D'une conjonction – en trois éclats' in Boulez (1995) pp. 161-163 and published in English as 'A Conjunction – in three fragments' in Boulez (1991a) pp. 217-219
- 1958c 'Son et verbe' in Boulez (1995) pp. 425-430 and published in English as 'Sound and Word' in Boulez (1991a) pp. 39-43
- 1958d 'Fluidité dans le devenir sonore' in Boulez (1995) pp. 421-424 (in French)
- 1958e 'Son, verbe, synthèse' in Boulez (1981a) pp. 164-170 and published in English as 'Sound, Word, Synthesis' in Boulez (1986a) pp. 177-182
- 1958f 'Cage' article for the *Encyclopédie Fasquelle* in Boulez and Cage (1993) p. 152 (in English)
- 1960a 'Sonate – "que me veux-tu"' in Boulez (1995) pp. 431-443 and published in English with the same title in Boulez (1986s) pp. 143-154.
- 1960b 'Considérations générales' in Boulez (1963b) pp. 11-33 and published in English as 'General Considerations' in Boulez (1971a) pp. 16-34
- 1960c 'Technique musicale' in Boulez (1963b) pp. 35-167 and published in English as 'Musical Technique' in Boulez (1971a) pp. 35-143

- 1960d 'Forme' in Boulez (1995) pp. 359-366 and published in English as 'Form' in Boulez (1986a) pp. 90-96
- 1960e 'Temps, notation et code' in Boulez (1995) pp. 367-373 and published in English as 'Time, Notation and Coding' Boulez (1986a) pp. 84-89
- 1960f 'Conclusion partielle' in Boulez (1995) pp. 375-377 and published in English as 'Towards a Conclusion' in Boulez (1986a) pp. 97-99
- 1960g 'Alternatives' in Boulez (1981a) pp. 111-113 and published in English as 'Demythologising the composer' in Boulez (1986a) pp. 113-115
- 1961a 'Le goût et la fonction' in Boulez (1995) pp. 507-528 and published in English as 'Taste: "The Spectacles Worn by Reason"' in Boulez (1986a) pp. 44-62
- 1961b 'Construire une improvisation' in Boulez (1995) pp. 445-466 and published in English as 'Constructing an improvisation' in Boulez (1986a) pp. 155-173
- 1961c 'Discipline et communication' in Boulez (1995) pp. 379-390 and published in English as 'The Teacher's Task' in Boulez (1986a) pp. 119-128
- 1961d 'L'esthétiques et les fétiches' in Boulez (1995) pp. 491-505 and published in English as 'Aesthetics and the Fetishists' Boulez (1986a) pp. 31-43
- 1962 'Poésie – centre et absence – musique' in Boulez (1995) pp. 467-484 and published in English as 'Poetry – Centre and Absence – music' in Boulez (1986a) pp. 183-198
- 1963a 'De moi à moi' foreword to Boulez (1963b) pp. 5-10 and published in English as 'Interior duologue' in Boulez (1971a) pp. 11-15
- 1963b *Penser la musique aujourd'hui* (Paris: Éditions Gonthier, 1963) and published in English as Boulez (1971a)
- 1963c 'Dire, jouer, chanter' in Boulez (1981a) pp. 371-387 and published in English as 'Speaking, Playing, Singing' in Boulez (1986a) pp. 330-343
- 1963d 'Nécessité d'une orientation esthétique' in Boulez (1995) pp. 529-552 and published in English as 'Putting the Phantoms to Flight' in Boulez (1986a) pp. 63-83
- 1963e 'Nécessité d'une orientation esthétique II' in Boulez (1995) pp. 552-579
- 1965 'Périmforme' in Boulez (1995) pp. 397-403 and published in English as 'Periform' in Boulez (1986a) pp. 100-105
- 1966a *Relevés d'Apprenti* collected and edited by Paule Thévenin (Paris: Éditions du Seuil, 1966) and published in English as Boulez (1991a)
- 1966b 'J'ai horreur du souvenir' in Boulez (1981a) pp. 388-402 and published in English as 'Roger Désormière: "I Hate Remembering!"' in Boulez (1986a) pp. 500-512
- 1966c 'Der Raum wird hier zur Zeit' and published in French under the same title in Boulez (1981a) pp. 413-418 and published in English as 'Wieland Wagner: "Here Space Becomes Time"' in Boulez (1986a) pp. 240-244
- 1966d 'Pourquoi je dis "non" à Malraux' in Boulez (1981a) pp. 481-484 and published in English as 'Why I say "No" to Malraux' in Boulez (1986a) pp. 441-444
- 1966e 'Le parallèle Schoenberg-Kandinsky' in Boulez (1984) pp. 154-155 and published in English as 'Kandinsky and Schoenberg' in Boulez (1986a) pp. 344-345
- 1966f 'Question d'oreille' in *Nouvel observateur* 1966 Nov. 23 pp. 41-42
- 1967 'Musique traditionnelle – un paradis perdu?' published in English as 'Oriental Music: A Lost Paradise' in Boulez (1986a) pp. 421-424
- 1968a *Notes of an Apprenticeship* translated by Herbert Weinstock (New York: Alfred A. Knopf, 1968)
- 1968b 'Où est-on?' in Boulez (1981a) pp. 485-507 and published in English as 'Where Are We Now?' in Boulez (1986a) pp. 445-463
- 1968c 'Mahler: *Das Klagende Lied*' in Boulez (1981a) pp. 343-345 and published in English under the same title in Boulez (1986a) pp. 304-305
- 1969 'L'imaginaire chez Berlioz' in Boulez (1981a) pp. 227-235 and published in English as 'Berlioz and the Realm of the Imaginary' in Boulez (1986a) pp. 212-219
- 1970a 'Chemins vers *Parsifal*' in Boulez (1981a) pp. 257-273 and published in English as 'Approaches to *Parsifal*' in Boulez (1986a) pp. 245-259
- 1970b 'Tell me' in Boulez (1981a) pp. 219-226 and published in English as 'Beethoven: Tell Me' in Boulez (1986a) pp. 205-211

- 1970c 'Pli selon pli' in Boulez (1995) pp. 485-487 and published in English under the same title in Boulez (1986a) pp. 174-176
- 1971a *Boulez on Music Today* translated by Susan Bradshaw and Richard Rodney Bennett (London: Faber & Faber, 1971)
- 1971b 'Style ou idée? – éloge de l'amnésie' in Boulez (1981a) pp. 312-323 and published in English as 'Stravinsky: Style or Idea? (In Praise of Amnesia)' in Boulez (1986a) pp. 349-359
- 1971c 'Question d'héritage' and published in English as 'On Musical Analysis' in Boulez (1986a) pp. 116-118
- 1974a 'Entretien sur *Polyphonie X*, les *Structures pour deux pianos* et *Poésie pour pouvoir*' in Boulez (1981a) pp. 189-193 and published in English as 'An Interview with Dominique Jameux' in Boulez (1986a) pp. 199-202
- 1974b 'Schoenberg, le mal-aimé?' in Boulez (1981a) pp. 287-292 and published in English as 'Schoenberg, the Unloved?' in Boulez (1986a) pp. 325-329
- 1975a 'Divergences: de l'être à l'œuvre' in Boulez (1981a) pp. 199-208 and published in English as 'Richard Wagner: The Man and the Works' in Boulez (1986a) pp. 223-230
- 1975b 'Perspective – Prospective' in *Recherche et création: vers de nouveaux territoires* (Paris: IRCAM, 1992) pp. 125-132
- 1976a 'Le Temps re-cherché' in Boulez (1981a) pp. 236-256 and published in English as 'Time re-explored' in Boulez (1986a) pp. 260-277
- 1976b 'Mahler actuel?' in Boulez (1981a) pp. 274-284 and published in English as 'Mahler: Our contemporary?' in Boulez (1986a) pp. 295-303
- 1977a 'Invention/Recherche' published in English as 'Technology and the Composer' in Boulez (1986a) pp. 486-494
- 1977b 'La Tétralogie: commentaire d'expérience' in Boulez (1981a) pp. 433-448 and published in English as 'A Performer's Notebook' in Boulez (1986a) pp. 278-291
- 1977c 'Le Journal de Cosima Wagner: "Richard travaille"' in Boulez (1981a) pp. 209-215 and published in English as 'Cosima Wagner's Diary: "R. is working"' in Boulez (1986a) pp. 231-236
- 1977d 'Through Schoenberg to the Future' in *Journal of the Arnold Schoenberg Institute* 1 (1977) 3, pp. 121-125
- 1979a 'Géométrie courbe de l'utopie' in Boulez (1981a) pp. 561-563 and published in English as 'The Elliptical Geometry of Utopia' in Boulez (1986a) pp. 525-527
- 1979b '*Lulu*: court post-scriptum sur la fidélité' in Boulez (1981a) pp. 452-458 and published in English as 'A Short Postscript On Fidelity' in Boulez (1986a) pp. 398-403
- 1979c 'L'apprentissage de la Science' in *nouvelles littéraires* 55 (1979) 2569 p. 22
- 1979d Presentation of the *Ensemble Intercontemporain*, (25. 4. 1979) (no page numbers)
- 1979e 'Mahler actuel' in Boulez (1981a) pp. 274-284 and published in English as 'Mahler: Our Contemporary?' in Boulez (1986a) pp. 295-303
- 1980a 'Existe-t-il un conflit entre la pensée européenne et non-européenne?' *Europäische Musik zwischen Nationsmus and Exotik* hrsg.v. Hand Oesch, Wulf Arlf and Max Haas (Winterthur: Amadeus, 1984) pp. 131-145
- 1980b 'Boulez: la musique au futur' in *Le matin* (1-2. 12. 1980) pp. 22-23 (Dec. 1st), p. 27 (Dec. 2nd)
- 1980c 'L'Ordinateur Musicien' in the *Courrier de l'Unesco*, Paris (4. 1980) pp. 28-33, p. 38
- 1980d 'L'Esprit et la main' text for *Meilleurs Ouvriers de France* 24. 2. 80. Written 10. 2. 1980 (unpublished*)
- 1980e 'Materiau et invention' Presentation at the Theatre d'Orsay (4. 1980) as part of a series of concerts (unpublished*)
- 1981a *Points de repère* collected and edited by Jean-Jacques Nattiez (Paris: Éditions du Seuil, 1981) and published in English as Boulez (1986a)
- 1981b 'L'In(de)fini et l'Instant' in *The composer and the computer* IRCAM (1981) pp. 46-47
- 1982 'Un Bilan?' *Stravinsky* (Paris: Claude Lattès, 1982) pp. 55-65
- 1983a 'L'opéra malade du lieu' in *Le Monde* (30. 6. 1983) pp. 16-17
- 1983b 'Problèmes artistiques de l'institution musical' *ENA – École Nationale d'Administration*, Paris June 1983 pp. 6-11

- 1985a 'L'informulé' in *Revue d'esthétique* series no. 8 (1985) pp. 25-29
- 1985b Preface to Olivier (1985) pp. 7-12
- 1986a *Orientations* introduced by Jean-Jacques Nattiez, translated by Martin Cooper (London: Faber and Faber, 1986)
- 1988 'Quelle rédemption?' 29. 1. 88 unpublished* in French, only in German 10.2.88 "Pandoras Büchse ist offen-jetzt helfy euch!"
- 1989a *Jalons (pour une décennie)* collected and edited by Jean-Jacques Nattiez, with foreword by Michel Foucault (Paris: Christian Bourgois Éditeur, 1989)
- 1989b 'Mémoire et création I' 3. 2. 1989 – 3. 3. 1989 (9 lectures) (unpublished*)
- 1989c *Le pays fertile: Paul Klee* text prepared and presented by Paule Thévenin (Paris: Gallimard, 1989)
- 1990 'The Vestal Virgin and the Fire-stealer: memory, creation and authenticity' translated into English by Susan Bradshaw in *Early Music* August 1990 pp. 355-358
- 1991a *Stocktakings of an Apprenticeship* translated by Stephen Walsh (Oxford: Clarendon Press, 1991)
- 1991b 'Le concept d'écriture I' 30.11.90 – 29.1.91 (8 unpublished lectures*)
- 1992 'Messiaen: profil perdu' (in French and German) in *Salzburger Festspiele 1992* (Paris, *L'avant-scène opéra*, 1992) pp. 3-7
- 1995 *Points de repère I: imaginer* collected by Jean-Jacques Nattiez and Sophie Galaise, introduced by Jean-Jacques Nattiez, musical examples identified by Robert Piencikowski (Paris: Christian Bourgois Editeur, 1995)
- 1996 'L'instant et l'étendue' round table of the frame of the imagination of IRCAM, Extension II. 21.6.96 (unpublished*)
- 1998 'La célébration' in *Internationale Musikfest Stuttgart* (14-22. 9. 1998) pp. 23-28

Boulez, Pierre and Billaz, André (interview)

- 1983 'Entretien avec Pierre Boulez' *Revue des Sciences Humaines* vol. LX No. 189 Jan-Mar 1983 pp. 111-116 (special edition on the problems of reception)

Boulez, Pierre and Cage, John (correspondence)

- 1991 *Correspondance Pierre Boulez / John Cage* edited by Jean-Jacques Nattiez (Christian Bourgois Éditeur, 1991). Published in English as Boulez, Pierre and John Cage (1993)
- 1993 *Boulez-Cage Correspondence* collected, edited, introduced by Jean-Jacques Nattiez, translated by Robert Samuels (Cambridge: Cambridge University Press, 1993)

Boulez, Pierre; Cage, John; Feldman, Morton and Wolff, Christian (collaboration)

- 1952 '4 musicians at work' *Transformations* Vol. 1 No. 3 (1952) pp. 168-172

Boulez, Pierre and Clavé, Antoni (interview)

- 1990 'Imagination ou bureaucratie' *Inharmoniques* No. 6 pp. 31-50

Boulez, Pierre and Cott, Jonathan (interview)

- 1985 'Sur l'Etat de la musique aujourd'hui' Extract from *Débat* no. 33 (1. 1985) pp. 140-151

Boulez, Pierre and Coutaz, Bernard (interview)

- 1968- [Untitled] 1968-70 pp. 1333-1334 (unpublished*)
70

Boulez, Pierre and Deliège, Célestin (interview)

- 1975 *Par volonté et par hasard: Entretiens avec Célestin Deliège* (Paris: Éditions du Seuil, 1975)

Boulez, Pierre and Di Pietro, Rocco (interview)

- 2001 *Dialogues with Boulez* (Lanham, Maryland: Scarecrow Press, 2001)

Boulez, Pierre and Dusault, Nicole (interview)

1995 'Pierre Boulez de vive voix' in *Beaux-Arts* (1995) 130 pp. 90-93

Boulez, Pierre and Foucault, Michel (discussion)

1985 'Messieurs Faites vos Jeux' *CNAC* magazine of Georges Pompidou Centre, may/June 1985, page numbers unknown and published in English in *Perspectives of New Music* Aut/Win 1985

Boulez, Pierre and Gable, David (interview)

1985- 'Ramifying Connections: An Interview with Pierre Boulez' *Journal of Musicology*, vol. 4, 86 (1985-86), pp. 105-113. 3. 6. 1984 (date of interview)

Boulez, Pierre and Gazier, Michele (interview)

1990 'A la Lumier de René Char' in *Télérama* 2113 11/7 (1990) p. 18

Boulez, Pierre and Gerzso, Andrew (collaboration)

1988 'Computers in Music' in *Scientific American* vol. 258 no. 4 (4. 1988) pp. 26-32

Boulez, Pierre and Grange, Henry-Louis de la (interview)

1989 'Questions à Pierre Boulez' in *Musical* (1989) no. on Mahler, pp. 81-89

1990 'Qui en veut à Pierre Boulez?' in *Diapason Harmonie*, 359 (1990) April, pp. 40-47

Boulez, Pierre and Jameux Dominique (interview)

1984 'Repons de Pierre Boulez: genese d'une œuvre' *CNAC* magazine, no. 23, (10. 1984) pp. 15-17

Boulez, Pierre and Laurent, E (interview)

1983 'La Pomme de Newton' in *L'Ane* (May/June 1983) (page numbers unknown)

Boulez, Pierre and Lompech, Alain (interview)

1990 'Furia française' *Le Monde*, (13. 9. 1990) pp. 22-23

Boulez, Pierre and Longchamp, Jacques (interview)

1980 'Un Entretien avec Pierre Boulez: Les nouvelles orientations de L'Ircam' *Le Monde* (20. 5. 1980) page number unknown

Boulez, Pierre; Loselle, Andrea; Caws, Mary Ann; Perloff, Nancy

1992 'Poetry and Music: A Roundtable discussion' *Paroles gelées* (1993) 9. Pp. 1-16

Boulez, Pierre and McCallum, Peter (interview)

1989 'An Interview with Pierre Boulez' in *Musical Times*, 130, (1989) pp. 8-10

Boulez, Pierre and Menger, Pierre-Michel (interview)

1990 'From the Domain Musical to IRCAM: Pierre Boulez in conversation with Pierre-Michel Menger' *Perspectives of New Music*, vol. 28 no.1 (Winter 1990) pp. 6-19

Boulez, Pierre and Nattiez, Jean-Jacques (interview)

1982 Boulez, P.; Tate, Jeffrey; Nattiez, J-J. 'De Wagner à Boulez' From *Entretiens Sur la Tetralogie du Centenaire* (Music Faculty, University of Montréal, no.8, 1982) Groupe de recherches en semiologie musical Publication internem, (conversations held in 1980)

Boulez, Pierre and Nussac, Sylvie de (interview)

1980 'Boulez: la machine à créer' in *L'Express* (20. 5. 1980) p. 61, p. 63, p. 65

Boulez, Pierre and Pesko, Zoltan (interview)

1974 'Entretien avec Boulez' *Musique en jeu* no. 14 (1974) pp. 95-103

Boulez, Pierre and Samuel, Claude (interview)

1984-85 'Un entretien avec Pierre Boulez' *Le Monde Special* (1984-85) pp. 1, 4

1986 *Éclats/Boulez* (Paris: Centre Pompidou, 1986) edited and introduced by Claude Samuel

Boulez, Pierre and Souster, Tim (interview)

1969 'The Second Viennese School: Pierre Boulez talks to Tim Souster' *Musical Times* 110 (1969) pp. 473-476

Boulez, Pierre and Szaersnovicz, Patrick (interview)

1992 'Webern: "Une œuvre clé du 20th siècle"' in *Le monde de la musique* 1992, 157, pp. 42-47

Boulez, Pierre and Szendy, Peter (interview)

1993 'Le texte et son pré-texte' in *Genesis 4: Manuscrits. Recherche. Invention*. 4/93 Revue internationale de critique génétique, Paris, published by IRCAM, pp.135-148

Boulez, Pierre and Tétaz, Olivier (interview)

1985 'L'Auditoire avec Pierre Boulez' from *L'auditoire*, no. 19 (8. 1985) p. 5

Boulez, Pierre and Vermeil, Jean (interview)

1989 *Conversations de Pierre Boulez sur la direction d'orchestre avec Jean Vermeil* (Paris: Éditions Plume, 1989)

Boulez, Pierre and Walters, David (interview)

2002 'Interview with Pierre Boulez' This dissertation, appendix A pp. 400-415

Bowie, Malcolm (editor)

1995 *Essais sur Mallarmé* (Manchester: Manchester University Press, 1995)

Bradshaw, Susan

1986 'The instrumental and vocal music' in *Glock* (1986) pp. 127-229

Bradshaw, Susan and Bennett, Richard Rodney (translators)

1963 Footnotes in Boulez (1963b)

Breatnach, Mary

1996 *Boulez and Mallarmé* (Aldershot, England: Scolar Press, 1996)

Breton, André

1924 Manifeste du Surréalisme in Breton (1972) pp. 13- 55

1930 'Second manifeste du Surréalisme' (1930) in Breton (1972) pp. 127-195

1934 'What is Surrealism?' in *What is Surrealism?: Selected Writings* edited and introduced by Franklin Rosemont (London: Pluto Press, 1978) pp. 112-141

1946 'Hommage à Antonin Artaud' in Breton (1999) pp. 736-739

1947 'Ode à Charles Fourier' in Breton (1999) pp. 351-363

1949 *Nadja* (Paris: Gallimard, 1949)

1951 'Alfred Jarry initiateur et éclaircur' in Breton (1999) pp. 914-925

1972 *Manifestes du surréalisme* (Paris: Jean-Jacques Pauvert, 1972)

1999 *Breton Œuvres Complete* Vol. 3 (Paris: Gallimard, 1999)

Brunel, Pierre

1995 *Butor L'Emploi du temps: Le texte et le labyrint* (Paris: Presses Universitaires de France, 1995)

Brunner, Raphael

1990 'Au-delà de la stérilité' in *La Revue Musicale de Suisse romande*, 43 (1990) pp. 81-87

Butor, Michel

- 1961a *Histoire extraordinaire: essai sur un rêve de Baudelaire* (Paris: Gallimard, 1961)
1961b 'Mallarmé selon Boulez' in *Melos*, no. 28 (1961) pp. 356-359 (In German)

Cage, John

- 1937 'The Future of Music: Credo' in Cage (1968) pp. 3-6
1949 'Forerunners of Modern Music' in Cage (1968) pp. 62-66
1955 'Experimental Music: Doctrine' in Cage (1968) pp. 13-17
1957 'Experimental Music' (1957) in Cage (1968) pp. 7-12
1958a 'Composition as Process: III. Communication' in Cage (1968) pp. 41-56
1958b 'Erik Satie' in Cage (1968) pp. 76-82
1968 *Silence* (London: Calder and Boyers, Ltd., 1968)

Char, René

- 1934 *Le Marteau sans maître* (Paris: Corti, 1945)

Charles, Daniel

- 1965 'Entr'acte: "Formal" or "informal" Music?' in *Musical Quarterly* no. 51 1965 pp. 144-165

Claudel, Paul

- 1926 'La Catastrophe d'Igitur' *Nouvelle Revue française* 1. 11. 1926 p. 531
1929 *Le Soulier de Satin* (Paris: Gallimard, 1929)
1980 'A Propos du Soulier de Satin' in *L'Intégrale du Soulier de Satin* from Cahiers Renaud Barrault (Gallimard, 1980)

Cohn, Robert Greer

- 1981 *Mallarmé: Igitur* (Berkeley: California Press, 1981)

Cooper, David E.

- 1990 *Existentialism* (Oxford: Blackwell, 1990)

Craft, Robert

- 1958 'Boulez and Stockhausen' in *The Score* no. 24 (1958) pp. 54-62

Debussy, Claude

- 1977 *Debussy on Music* collected and introduced by François Lesure (London: Secker and Warburg, 1977) translated and edited by Richard Langham Smith. Originally published in French as *Monsieur Croche et autres écrits* (Paris: Editions Gallimard, 1971)

Decroupet, Pascal

- 1994 *Developments et ramifications de la pensée sériale: Pierre Boulez, Henri Pousseur, Karlheinz Stockhausen 1951-1958* Doctoral thesis: Université de Tours, Paris 1994

Delaere, Mark

- 1996 'Karel Goeyvaerts: A Belgian Pioneer of Serial, Electronic and Minimal Music' in *Tempo*, no. 195 (1. 1996) pp. 2-5

Deliège, Célestin

- 1981 'Pierre Boulez entrevu' in *L'Avant Scene Opera* Sept./Oct. 1981 no. 36, pp. 166-197
1986 'The Convergence of Two Poetic Systems' in *Glock* (1986) pp. 99-125
1988 'Moment de Pierre Boulez sur l'introduction orchestrale de *Répons*' in *Inharmoniques* no. 4. Mémoire et création pp. 181-202
1989 'On form as actually experienced' in *Contemporary Music Review* 1989 Vol. 4 Harwood Academic Publishers UK, pp. 101-114

Derrien, Jean-Pierre

1970 'Pierre Boulez' in *Musique en jeu* no. 1 (1970) pp. 103-128

Dufourt, Hugues

1986 'Pierre Boulez, musicien de l'ère industrielle' *Inharmoniques* No. 1 Le temps des institutions pp. 50-61

Dupont, Jacques (editor)

1991 Endnote to Baudelaire's 'Correspondances' in Baudelaire (1857b) pp. 263-264

Fink, Michael

1972 'Pierre Boulez: A Selective Bibliography' in *Current Musicology* no. 13 (1972) pp. 135-151

Glock, William (editor)

1986 *Pierre Boulez: A Symposium* (London: Eulenburg Books, 1986)

Goléa, Antoine

1958a *Rencontres avec Pierre Boulez* (Paris: Slatkine, 1982)

1958b 'Pierre Boulez et la révolution de la jeune musique depuis 1955' in *Carré rouge* no 7 Summer 1958 pp. 15-25

Grant, Marian A.

1973 *Butor: L'Emploi du temps* (Camelot Press Ltd: London and Southampton, 1973)

Greene, Judith

1975 *Thinking and Language* (London: Methuen & Co Ltd, 1975)

Griffiths, Paul

1978a *Boulez* (London: Oxford University Press, 1978)

1978b *Modern Music: A concise history from Debussy to Boulez* (London: Thames and Hudson, 1978)

Grohmann, Will

1954 *Paul Klee* (London: Thames and Hudson, 1987)

Hanslick, Eduard

1891 *The Beautiful in Music* translated by Gustav Cohen (London: Novello, 1891)

Häusler, Josef

1995 *Profil Pierre Boulez* (Salzburg: Salzburg Festival Bookshop, 1995)

Hegel, G. W. F.

1807 *Phänomenologie des Geistes* introduced by Johannes Hoffmeister (Berlin: Fritzsche & Ludwig KG) and published in English as *Phenomenology of Spirit* translated by A. V. Miller (Oxford: Clarendon Press, 1977)

Heidegger, Martin

1927 *Being and Time* translated by John Macquarrie and Edward Robinson (Oxford: Blackwell, 1962)

Heyworth, Peter

1973 'The First Fifty Years' in Glock (1986) pp. 3-39

Hirsbrunner, Theo

1985 *Pierre Boulez und sein Werk* (Laaber: Laaber-Verlag, 1985)

Hopkins, G. W.

1986 *The New Grove Twentieth-Century French Masters* preface by Jean-Michel Nectoux (London: Macmillan, 1986). Section on Boulez: pp. 251-282

Jameux, Dominique

1984 'Boulez and the "machine": Some thoughts on the composer's use of various electro-acoustic media' translated into English by Nigel Osborne in *Contemporary Music Review* no. 1 (1984) pp. 11-22

1991 *Pierre Boulez* translated by Susan Bradshaw (London: Faber and Faber Ltd., 1991)

Jarry, Alfred

1911 *Exploits and Opinions of Doctor Faustroll, Pataphysician* Book II 'Elements of Pataphysics' published in English (excerpt only) in Shattuck and Taylor (1965) pp. 192-194 (first publication posthumous)

Kapp, Reinhard

1988 'Shades of the Double's Original: René Leibowitz's dispute with Boulez' in *Tempo* 165 (1988) pp. 2-16

Kelly, Michael

1992 *Hegel in France* (Birmingham: Birmingham Modern Language Publication, 1992)

Klee, Paul

1956 *The Thinking Eye: The Notebooks of Paul Klee* edited by Jurg Spiller, translated by Ralph Manheim with assistance from Charlotte Weidler and Jorce Wittenborn (Lund: Wittenborn, 1961)

Koblyakov, Lev

1990 *Pierre Boulez: A World of Harmony* (London: Harwood Academic Publishers, 1990)

Kojève, Alexandre,

1947 *Introduction to the Reading of Hegel: Lectures on the Phenomenology of Spirit* collected by Raymond Queneau, edited by Allan Bloom, translated by James H. Nichols, Jr. (New York: Basic Books Inc., 1969). Original French edition published as *Introduction à la Lecture de Hegel* (Paris: Gallimard, 1947)

Langan, Janine D.

1986 *Hegel and Mallarmé* (London: University Press of America, 1986)

Lawler, James R.

1978 *René Char: The Myth and the Poem* (Guildford Surrey/Princeton, New Jersey: Princeton University Press, 1978)

Lee, Jonathan Scott

(1986-7) 'Mimesis and Beyond: Mallarmé, Boulez, and Cage (1986-87) in Kostelanetz (1993) pp. 180-212

Leibowitz, René

1945a 'Prolégomènes à la musique contemporaine (I)' in *Les Temps Modernes* no. 2 November 1945 pp. 269-290

1945b 'Prolégomènes à la musique contemporaine (II)' in *Les Temps Modernes* no. 3 December 1945 pp. 420-441

1947 *Schoenberg and His School: The contemporary stage of the language of music* translated from the French by Dika Newlin (New York: Philosophical Library, 1949)

Ligeti, György

1958 'Pierre Boulez: Structure and Automatism in *Structure 1a*' in *Die Reihe* no. 4 (1958)

Lockspeiser, Edward

1962 *Debussy: His life and mind* (London: Cassell and Company Ltd., 1962)

Maconie, Robin

1976 *The Works of Karlheinz Stockhausen* Foreword by Stockhausen (London: Oxford University Press, 1976)

Mallarmé, Stéphane

1869 *Igitur* in Mallarmé (1945) pp. 433-451

1897a 'Un coup de dès' in Mallarmé (1945) pp. 453-477 (in French)

1897b 'Un coup de dès' in Mallarmé (1994) pp. 124-145 (in English)

1897c 'Crise de vers' in Mallarmé (1945) pp. 360-368

Posthumous *Le Livre* in Scherer (1957)

1945 *Mallarmé Œuvres Complete* (Paris: Gallimard, 1945)

1994 *Collected Poems* translated and with commentary by Henry Weinfield (Berkeley: University of California, 1994)

Matthews, P. H.

1997 *The Concise Oxford Dictionary of Linguistics* (Oxford: Oxford University Press, 1997)

Maclair, C.

1935 *Mallarmé chez lui* (Paris: Grasset, 1935)

McAdams, Stephen

1988 'Psychological constraints on form' in McAdams, Stephen and Deliège, Irène (1988) pp. 181-198

McAdams, Stephen and Deliège, Irène (ed.s)

1988 *Contemporary Music Review* (proceedings from the 'Symposium on Music and the Cognitive Sciences' 14-18 March 1988 at the Centre National d'Art et de Culture 'Georges Pompidou') 1989, Vol. 4 Harwood Academic Publishers (1989)

McCalla, James Wesley

1976 *Between Its Human Accessories: The Art of Stéphane Mallarmé and Pierre Boulez* (Ph.D. University of California, Berkeley, 1976)

Merleau-Ponty, Maurice

1945 *The Phenomenology of Perception* translated by Colin Smith (London: Routledge and Kegan Paul, 1962)

1946 'L'existentialisme chez Hegel' in *Les Temps Modernes* no. 7 April 1946 pp. 1311-1319

Messiaen, Olivier and Samuel, Claude

1976 *Conversations with Olivier Messiaen* translated by Felix Aprahamian (London: Stainer and Bell, 1976)

Metzger, Heinz-Klaus

1961 'Abortive Concepts in the Theory and Criticism of Music' in *Die Reihe* no. 5 *Reports/Analyses* Bryn Mawr (1961)

Michaux, Henri

1938a 'Entre centre et absence' in Michaux (1938b) pp. 9-37

1938b *Plume précédé de Lointain Interieur* (Paris: Librairie Gallimard, 1938)

Miller, Roger L.

1978 *Pli selon pli: Pierre Boulez and the "New Lyricism"* Ph.D. Case Western Reserve University 1978 (UMI Dissertation Services)

Mulhall, Stephen

1996 *Heidegger and Being and Time* (London: Routledge, 1996)

Nattiez, Jean-Jacques

1986a Introduction to Boulez (1986a) pp. 11-28 (this is a different introduction from Boulez (1995))

1986b Footnotes to Boulez (1986a)

1987 'Répons et la crise de la "communication" musicale contemporaine' in *Inharmoniques* No. 2. Musiques, Identités pp. 193-210 and also in *Répons/Boulez* (Paris: IRCAM and la fondation Louis Vuitton pour l'opéra et la musique, 1988) pp. 23-69

1993 Introduction to Boulez and Cage (1993) pp. 3-24

1995 Introduction to *Points de repère I: imaginer* (Paris: Christian Bourgeois Editeur, 1995) pp. 11-24

Olivier, Philippe

1985 *La musique au quotidien* (Paris: Balland, 1985)

Outhwaite, William and Bottomore, Tom (eds)

1993 *The Blackwell Dictionary of Twentieth-Century Social Thought* (Oxford: Blackwell Publishers Ltd 1993, 1994)

Paddison, Max

1993 *Adorno's Aesthetics of Music* (Cambridge: Cambridge University Press, 1993)

Padilla, Alfonso

1995 *Dialectica y Musica: Espacio sonoro y tiempo musical en la obra de Pierre Boulez* (Helsinki: Suomen musiikkiteollinen seura (Sociedad Musicológica de Finlandia) Acta Musicologica Fennica 20, 1995)

Palombini, Carlos

1993 *Pierre Schaeffer's Typo-morphology of Sonic Objects* (Ph.D. University of Durham, 1993)

Peyser, Joan

1976 *Boulez: composer, conductor, enigma* (London: Schirmer, 1976)

Philippot, Michel P.

1966 'Pierre Boulez Today' translated by David Hamilton [review of *Penser la musique aujourd'hui*] in *Perspectives of New Music* no. 5 (1966) pp. 153-160

Piencikowski, Robert

1980 *René Char et Pierre Boulez: Analyse du Marteau sans Maître* (Bern/Stuttgart: Paul Haupt, Schweizer Beiträge zur Musikwissenschaft Band 4, 1980)

1986 'Fonction relative du timbre dans la musique contemporaine: Messiaen, Carter, Boulez, Stockhausen' in *Analyse musicale* no. 3 (1986) pp. 51-53

1991a Introduction to Boulez (1991a) pp. Xiii-xxix

1991b Footnotes in Boulez (1991a)

1995 'Pierre Boulez' in *Ars musica* (1995) pp. 14-15

Piston, Walter

1955 *Orchestration* (London: Victor Gollancz Ltd, 1994)

Rice, Philip and Waugh, Patricia (ed.s)

1989 *Modern Literary Theory: A Reader* 2nd Edition (London: Edward Arnold (Hodder and Stoughton), 1989)

Rimbaud, Arthur

1871a Letter from Rimbaud to Georges Izambard 13.5.1871 in Rimbaud (1972) pp. 248-249

1871b Letter from Rimbaud to Paul Demeny 15.5.1871 in Rimbaud (1972) pp. 249-254

1873 *Une saison en enfer* in Rimbaud (1972) pp. 91-117

1972 *Œuvres complètes* edited, presented and annotated by Antoine Adam (Paris: Gallimard, 1972)

Robbe-Grillet, Alain

1959 *In the Labyrinth* translated by Richard Howard (New York: Grove Press, Inc., 1960)

Rosemont, Franklin

1978 *Andre Breton and the First Principles of Surrealism* (London: Pluto Press Limited, 1978)

Rosen, Charles

1986 'The Piano Music' in Glock (1986) pp. 85-97

Rostand, Claude

1956 'La musique de scène de Pierre Boulez pour "L'Orestie" d'Eschyle' in *Schweizerische Musikzeitung* 96 (1956) pp. 11-13

Sartre, Jean-Paul

1943 *Being and Nothingness* translated by Hazel E. Barnes and introduced by Mary Warnock (London: Routledge, 1958)

1946 'Matérialisme et révolution' in *Les Temps Modernes* no. 9 June 1946 pp. 1537-1563

Schaeffer, Pierre

1959 'Situation actuelle de la musique expérimentale' in *Experiences Musicales* (Paris: Editions Richard-Masse, 1959) pp. 10-17

1966 *Traité des objets musicaux* (Paris: Éditions du Seuil, 1966)

Scherer, Jacques

1947 *Expression littéraire dans l'œuvre de Mallarmé* (Nizet, 1947)

1957 *Le Livre de Mallarmé* (Paris: Librairie Gallimard, 1957)

Schloezer, Boris de

1947 *Introduction à J. S. Bach* (Paris: Gallimard, 1947)

Schoenberg, Arnold

1909 'About Music Criticism' in Schoenberg (1975) pp. 191-197

1912 'The Relationship to the Text' in Schoenberg (1975) pp. 141-145

1941 'Composition with Twelve Tones (1)' in Schoenberg (1975) pp. 214-245

1946 'New Music, Outmoded Music, Style and Idea' in Schoenberg (1975) pp. 113-124

1975 *Style and Idea: selected Writings of Arnold Schoenberg* edited by Leonard Stein and translated by Leo Black (London: Faber and Faber, 1975)

Schopenhauer, Arthur

1819 *The World as Will and Representation* translated by E. F. J. Payne in two volumes (New York: Dover Publications Inc., 1969)

Scruton, Roger

1994 *Modern Philosophy: A Survey* (London: Sinclair-Stevenson, 1994)

Shattuck, Roger and Taylor, Simon Watson (editors)

1965 *Selected Works of Alfred Jarry* (London: Methuen & Co. Ltd., 1965)

Shono, Susumu

1987-8 'Adorno selon Cage, Cage selon Adorno' translated from the Japanese into French by Akiko Koana, in *Revue D'esthétique* new series no. 13, 14, 15 1987-88. Published with National Centre for scientific research, and National Centre of letters pp. 441-447

Siegele, Ulrich

1979 *Zwei Kommentare zum "Marteau sans maître" von Pierre Boulez* (Neuhausen-Stuttgart: Hänssler-Verlag, 1979)

Simpson, David (ed. and introduced by)

1984 *German aesthetic and literary criticism: Kant, Fichte, Schelling, Schopenhauer, Hegel* (Cambridge: Cambridge University Press, 1984)

Singleton, Brian

1998 *Artaud: Le Théâtre et son Double* (London: Grant and Cutler Ltd., 1998)

Smith, Richard Langham

1977 Foreword to Debussy (1977)

Stacey, Peter

1987 *Boulez and the Modern Concept* (England: Scholar Press, 1987)

Stahnke, Manfred

1979 *Struktur und Ästhetik bei Boulez* (Hamburg: Karl Dieter Wagner, 1979)

Stockhausen, Karlheinz

1953a Letter to Boulez dated in November before 20. 11. 53 (no page numbers) (unpublished*)

1953b Letter to Boulez dated 20. 11. 53 (no page numbers) (unpublished*)

Stoianowa, Iwanka

1974 'la Troisième Sonate de Boulez et le projet mallarméen du Livre' in *Musique en jeu* no. 16 (1974) pp. 9-28

Toop, Richard

1974 'Messiaen/Goeyvaerts, Fano/Stockhausen, Boulez' in *Perspectives of New Music* (Fall-Winter 1974) pp. 141-169

Valéry, Paul

1928 'La Création Artistique' in Valéry (1948) pp. 285-309 (first published in *Société de Philosophie*, 1928)

1934a 'La Conquête de L'Ubiquité' in Valéry (1934c) pp. 103-105

1934b 'Propos sur le progrès' in Valéry (1934c) pp. 216-217

1934c *Pièces sur L'Art* (Paris: Gallimard, 1934)

1944a 'L'Imprévisible' in Valéry (1948) pp. 39-44 (first published in *Revue économique contemporaine* (March 1944))

1944b 'Mallarmé' in Valéry (1948) pp. 183-186 (first published in *Le Point* 1944)

1948 *Vues* (Paris: Table ronde, 1948)

Walsh, Steven

1991a Translators introduction to Boulez (1991a)

1991b Footnotes to Boulez (1991a)

Watkins, Glenn

- 1988a 'Boulez' in Watkins (1988c) pp. 509-517
1988b 'Cage vis à vis Boulez and Stockhausen' in Watkins (1988c) pp. 561-565
1988c *Soundings* (New York: Schirmer, 1988)

Webern, Anton

- 1960 *The Path to the New Music* preface by Willi Reich, translated by Leo Black.
(Pennsylvania: Theodore Presser Co., 1963) (original German edition published in 1960)

Whitford, Frank

- 1984 *Bauhaus* (London: Thames and Hudson, 1984)

Whittall, Arnold

- 1967 'After Webern, Wagner: Reflections on the past and future of Pierre Boulez' in *Music Review* no. 28 (1967) pp. 135-138

Worton, Michael J.

- 1981 'Archipel et labyrinthe: l'importance de la poésie de René Char pour la musique de Pierre Boulez' in *Interferences*, no. 13 (1-6. 1981) pp. 56-69

