Introduction

> What one emphasises when listening to music is in part dependent on what one has read about it. Musical perception, even of the most impartial kind, which in reality does not exist, is permeated with reminiscences of what one has read, with traces of literary memory. Even the endeavour to arrive at a 'purely musical' form of listening is conveyed by literature, either as the work of aesthetic awareness or as the fulfilment of a postulate which is hardly more than 150 years old.[1]

This book arose from the conviction that the role of theory in serial music of the so-called 'Darmstadt school' has been misunderstood, and that this misunderstanding has adversely affected the reception of this music and its position in critical discourse. This movement, which came to sudden prominence in the early 1950s, has continued to exert a defining influence on discussions of twentieth-century music, yet despite recent work aimed at reassessing serial music after several decades in which it fell out of critical favour, surprisingly few studies have addressed its cultural background; even fewer have explored serialism's place within theories of modern art as a whole. If the present book is different, it is because understanding the aesthetics and reception of serialism seemed to me a prerequisite for understanding critical response to new music as a whole.

The reception of serial theory

The starting point for this study was a type of reverse reception history. By relating misunderstandings of serial theory back to the aesthetic of serialism itself, and hence becoming aware of the enormous divide between how serialists and 'non'-serialists view music, it hoped to suggest a more appropriate framework for the study of serial music. This necessitated a close reading of the writings of serialists themselves, not to mention an understanding of the complex cultural climate which gave rise to them, for theory is writing, and writing employs language, with its metaphors and allusions, and these, so essential to the message conveyed, are always culturally defined.

The doctoral thesis on which this study was based focused on the journal *die Reihe: Information über serielle Musik*, which appeared in German

[1] Dahlhaus 1988: 5.

from 1955 to 1962. Edited by Herbert Eimert, a composer and theorist who became the first head of the pioneering electronic music studio of the Westdeutscher Rundfunk in Cologne, and by his colleague Karlheinz Stockhausen, one of the leading lights of the young generation of serialists, *die Reihe* became one of the most important mouthpieces for serial composers: it was dedicated specifically to their aesthetic and was published by Universal Edition, who also published the music of many serial composers at that time. The American edition published between 1958 and 1968 ensured that *die Reihe* became the most important source for information on serial and electronic music in Europe, much more so than the *Gravesaner Blätter* (linked to the electronic studio led by Heinrich Strobel in the Swiss town of Gravesano) or the Italian *Incontri musicali*. The American reception of developments in central Europe was strongly influenced by journals;[2] but for those living beyond the geographical limits of central Europe, the original context of many articles in *die Reihe* – the *Nachtprogramm* of late-evening new music broadcast by the WDR, directed by Eimert – was literally out of bounds; our understanding of new music in the 1950s would almost certainly benefit from more extensive research into the impact of these important broadcasts on the development of new music in Europe.

The specific context of *die Reihe* was not effectively represented by the subtitle to the English edition, *A periodical dedicated to developments in contemporary music*, and this may be one reason why American composers and critics in particular reacted against the journal, albeit with some positive repercussions. *Perspectives of New Music* was founded in 1962 because of the editors' displeasure with the neglect of American developments in European journals,[3] and the first volume included a scathing attack on the journal from the physicist John Backus, who concluded: 'If we boil down die Reihe to see what solid content it has, we find first that the amount of valid scientific material vaporizes immediately; next, the technical jargon boils off, taking quite a time to do so, since there is so much of it; and finally what remains is a microscopic residuum consisting of nothing more than a mystical belief in numerology as the fundamental basis for music'.[4]

And there we have the problem with the journal, and indeed with the reception of serialism generally. *die Reihe* has become almost a watchword for the discontent people felt with serial music and the way in which its creators discussed it. Faced with complex and lengthy analyses, baffling terminology

[2] See e.g. Lang 1960.

[3] See Berger & Boretz 1987: 592–594. I am grateful to Jerome Kohl, current general editor of *PNM*, for bringing this to my attention.

[4] Backus 1962: 171. Backus was suggested to the editors by George Perle, who also wrote a scathing review of *die Reihe*; see Perle 1995 (1957).

and a total rejection of common paradigms of musical expression, many critics – not all conservative – found ample ammunition to back up their claims that serial music was a mere intellectual exercise which could not seriously be regarded as music at all. Moreover, the serialists' resort to ideas and vocabulary from the fields of psychoacoustics and information theory, both of which played a central role in the development of electronic music, was chastised even by those who approved in principle of a more consciously systematic approach to composition. Backus, for example, makes the following critique of an article on electronic music by Eimert:

> *He states that there are 52 pitch levels between A_4 (440.00 cycles/sec.) and B_4 (493.88 cycles/sec)* . . . Eimert is obviously ascribing a separate 'pitch' level to each unit increment of frequency – 441, 442 . . . etc., taking (for reasons unknown) B_4 as exactly 492 cycles/sec. This is absurd, as there is a continuum of frequencies between these two levels.[5] (my italics).

Compare this, however, to what Eimert actually said (the quote here is from the English translation, to show that it is, this time at least, not at fault):

> Every musician is familiar with the note a′ at 440 c.p.s. The next whole tone above is b′ (492 c.p.s.). Within this major second from a′ to b′, *we are able to generate 52 different pitch levels* of which, when ordered in a scale, at least each fourth level is heard as a different pitch level.[6] (my italics).

Now, between 'there is' and 'we are able to generate', we do not have to *generate* any great difference, it *is* simply there – in fact, the sine tone generator then in general use in Cologne could only be set for round-number frequencies.[7] But this example is typical of a tendency to misquote serialists out of context, and it is this context which defines the whole thrust of their writings. On closer analysis of the texts involved, and the music they represent, we find that a very different picture begins to emerge, and one which may help us reassess the aesthetics of this era in general as well as redefining serialism itself. The very use of 'jargon' from the fields of physics and communication science is one indication of serialism's common ground with a number of other aesthetic movements which emerged in central Europe around this time. The journal reflects this wider context, particularly in its later volumes where there are contributions from the realms of architecture, abstract film and literature. My research followed these signposts – indicators to developments in the visual arts, epistemology and the natural sciences which often appear as footnotes to the main text. The suggestions

[5] Backus 1962: 163.
[6] *dR*I(E), 3.
[7] See Morawska-Büngeler 1988.

I will make for the redefinition of serialism are influenced almost entirely by these external sources.

This study was thus conducted in a manner in keeping with the principles of hermeneutics, yet it is not entirely historical in nature. If we are to adopt the epistemological spirit of modern aesthetics, any attempt to stringently document cause, effects and historical precedence can be viewed with suspicion. For example, the rapport – or not, depending – between the journal's two editors is very obviously reflected in certain twists and turns taken between the volumes. But human relations are rarely as simple as a historical discourse would like them to be. During the course of the current research, the focus changed from the historical background to the more systematic issue of formulating an aesthetics of serialism, which goes some way towards addressing the call for a study of serial aesthetics which has been made in recent studies. The necessity of addressing serialism's significance in a manner which is not directly aimed at compositional theory itself (which has been the province of the majority of studies of serialism, latterly with some success) but at the wider artistic and philosophical context and, particularly, the role of the listener in this process, has meant that I have not based this study on extensive analyses of serial compositions – or rather, I have not necessarily presented the results of any analyses that have been made. This would have extended the study beyond the limits available, and could only have been pursued at the expense of other material.

The relationship between the present publication and the original thesis is direct, if fuzzy: *die Reihe* remains an essential component, but I have taken this opportunity to integrate writings published elsewhere and to place the focus less on the journal itself than on the larger trends and issues it represents. Though the canvas is broader than in many previous studies, drawing attention to leading serialists such as Henri Pousseur and Dieter Schnebel whose contributions have been only rarely discussed in Anglo-American musicology, the picture of serialism drawn here is in some ways a small one: certain central figures, particularly Luciano Berio, are absent. But, on the subject of Berio, his own description of his debt to serialism is a useful introduction to some important but neglected aspects of serial thought which will be central to this study:

> It was during those years that I became interested, at first intuitively, in expressing a continuity between different realities, even if they were very distant from each other and sometimes even trivial. As far as I was concerned, the serial experience never represented the utopia of a language, and so it could never be reduced to a norm or to a restricted combination of materials. What it meant for me above all was an objective management of musical

> means, the chance to control a larger musical terrain (such as the ethnic materials that I have often worked with) while respecting, indeed admiring, its premises.[8]

The course taken by serial theory, and the reception of this theory, demonstrates that the controversies stirred up were caused by fundamental challenges to musical theory and aesthetics. Analysing serial theory anew becomes the means by which musicology may challenge its own discipline to question its bases. The latter part of this book introduces a number of concepts which may provide a framework for discussing not only serial music, but other, quite different forms of new and experimental music. A full exploration of these implications is beyond the remit of this book, but will be explored in future publications.

Terminology

The problems faced in talking about this music begin with the very words we use to define it. The phrase *serielle Musik* was adopted by Karlheinz Stockhausen to distinguish his music and that of his contemporaries from twelve-tone music: he used the French term '*sériel*' since that was the first language of many of his colleagues.[9] But in both English and French, the term 'serialism' can cover all music composed with rows, including twelve-tone music. The convention in English-language discussions has been to talk of 'total serialism', reflecting the extension of the original technique to parameters other than pitch; 'integral serialism' is favoured in some discussions. However, I am unwilling to adopt either of these terms, for several reasons. Firstly, the qualifier 'total', used not only to talk of 'total serialism' but applied in the sense of 'total control', paints a limited picture of the aesthetic impetus for this music: it implies lack of freedom, and, as Eimert himself pointed out, can be easily equated with 'totalitarianism' – a comparison which is particularly unfortunate given that serialism was shaped by the aftermath of the Third Reich. 'Integral serialism' fares a little better: the idea of integration is central to this movement but I am still hesitant about using this term, because of the added confusion of parallel developments in the States. Though serialism in America also extended the row technique on to other parameters, the similarity to the music written in Europe around this point ends there: in fact, European serialism had more in common with

[8] Berio 1985.

[9] Helmut Kirchmeyer has recently stated that the term was adopted not from the French but from the work of Le Corbusier: see Kirchmeyer 1998: 9. However Kirchmeyer & Schmidt 1970 publish a letter from Stockhausen – who was also influenced by Le Corbusier – in which he says the term was adopted from the French.

American experimentalists such as Cage than with the post-Schoenbergian serialists in the USA.

There are three further possibilities. The French term 'general serialism' is attractive for several reasons, not least of which is the fact that sub-species can thus be termed 'special' occasions of the larger phenomenon. Here, of course, we run into an almost too convenient comparison with general and special relativity. However, Pousseur talks of 'general serialism' in relation to the very first examples of the new technique, so that here too we are faced with a term which is itself specific rather than general. We could aim to reflect the 'general' idea of 'total' serialism by adopting the phrase 'universal serialism', the implications of which are slightly more life-affirming, but I wonder if this term is not too expansive for its own good. The term 'multiple serialism' appears in recent Belgian publications,[10] and is the least problematic of the three, as long as it is borne in mind that 'multiple' refers to the parameters organised and not to the presence of multiple rows.

In the present discussion, an uneasy compromise has been reached: I have simply used the word 'serial' and its derivatives, without additional qualification. Unless otherwise specified, 'serialism' in this discussion will refer exclusively to European developments, in the sense of the German *serielle Musik*. Given the problematic American reception of *die Reihe*, I should point out that this implies no precedence, historically or aesthetically, to developments in Europe. My aim is to discuss European serialism on its own terms; I would not wish to misrepresent other developments by a simple extension of these criteria.

There are further linguistic problems in dealing with *die Reihe*. The language of music theory, the language of any theory, cannot be reduced to its semantic components: the manner in which a verbal argument is structured carries a good deal of its meaning. The translations in the English edition vary from the generally acceptable to the downright appalling: the first volume in particular is often content to avoid, rather than understand, the more complex formulations and metaphors in the text. Consequently, I have worked almost purely with the German edition, and have translated all quotes anew; this also applies to most of the other texts cited, except where an English edition is cited in the bibliography. Though I am confident in having improved on the original translations in many cases, it has proved extremely difficult to find precise, and concise, translations for certain expressions which surface in the texts of certain theorists – this is especially true of Eimert, of Schnebel and of Klee. The normal translation for *punktuelle Musik*, 'pointillist music', is not entirely satisfactory, and wherever

[10] See e.g. Sabbe 1994.

possible I have talked of 'point music' instead. Some terms have not been translated. *Geist*, so central to German philosophical traditions, has almost always been left in German: many readers will already know some of the problems associated with translating this term, with its double implication of 'human spirit' and 'human intellect'; translating it as either one or the other depending on context, as some have done, seemed too problematic in this case. *Klang* is generally translated as sound, but this is not a direct correlate: *Klang* technically refers to sounds with a roughly periodic spectrum. On the occasions where this additional meaning is important, I have left *Klang* as it stands.

PART I

1 European culture in the post-war years

1.1 *Hour Zero*? Post-war culture and its historiography

> And I kept saying to myself, it's all over, it's all over. It's all over: everything's beginning.[1]

It seems natural to begin this investigation after the cultural caesura of World War II, particularly since the bulk of serial composers came to maturity during or immediately after the war. But the decision to adopt 1945 as a starting point is not unproblematic.[2] This irrefutable date may be a convenient stopping-off point for historians, but may also serve to inflate the claims of composers whose musical output began shortly thereafter, in a manner which self-consciously aimed to negate the previous tradition. Recent histories, not entirely uninfluenced by the rejection of the modernist claim to originality, have challenged the division of our musical century into two halves, pre- and post-World War II.

Such debates have not been limited to musicology. In writing about literature and culture of this period, there have been two opposing tendencies. Whether we choose to view the post-war years as representing construction or reconstruction reveals to a great extent where our critical priorities and prejudices lie. It is not irrelevant that a juxtaposition of this kind – between 'progress' and 'reconstruction' – lies at the heart of Theodor W. Adorno's *Philosophy of New Music*, first published in 1949.[3] However, such polarisation is rarely as simple as it seems – Adorno's philosophy is itself a case in point. The debate on construction versus reconstruction is not merely a product of cultural history but influenced events in the culture of the time as much as it reflected them.[4]

1.1.1 The 'young generation'

History tends to emphasise quantifiable facts at the expense of the troublesome factor of human emotions. *World War II ended in 1945*: this much

[1] De Beauvoir 1968: 11.

[2] The quotation above relates to the end of the German occupation of Paris, in 1944; De Beauvoir states that the actual end of the war was something of an anti-climax for the French: even by that point, the hopes of left-wing intellectuals were starting to flounder.

[3] Adorno 1958 (1949).

[4] Hermand 1986: 9–15.

can be accepted as fact; but the question of what happened next, of how Europeans approached life in the aftermath, is harder to answer. Dates, places and events, at least when separated from their consequences, are relatively easy to quantify; aesthetic attitudes, emotional states are, however, not only created of subjectivity but are almost dependent on it for their interpretation. It is this very subjectivity which makes discussion difficult, particularly for writers who are fortunate to have no first-hand experience of such a horrific conflict, and who can only hope that they never will.

The extreme conditions of the war fostered the extremity of conditions and emotions experienced in its aftermath. The poverty and devastation which resulted continued long after the conflict had ended; furthermore, it was only in this period that the full scale of the Nazi atrocities came to light. The art of Giacometti, who was obsessed with reducing his utterly fragile sculptures to even smaller proportions, is often presented as an apt metaphor for the great material need and spiritual hunger of the time. On the other hand, a new optimism was apparent. Europe lay in ruins, but so did the fascist ideology which had almost completely destroyed it; the need for renewal at every level of society, together with the rehabilitation of artists and intellectuals kept silent by the Nazis, created an exhilarating hunger for the new as great as the material hunger also experienced at this time. This feverish state particularly affected the younger generation, who found themselves at the start of their lives just as the culture around them was itself in need of rebirth. As Simone de Beauvoir described, 'To be twenty or twenty-five in September of '44 seemed the most fantastic piece of luck: all roads lay open. Journalists, writers, budding film-makers, were all arguing, planning, passionately deciding, as if their future depended on no one but themselves'.[5] The idea of the 'young generation' became central, and was one element in the general change which occurred between modernism in this period and the modernism of an earlier generation, which was however still the focus for much debate: this was particularly true in Germany, where modernist art had been effectively removed from the cultural arena for over a decade.

While certain issues from before the war resurfaced in its aftermath, including discussion on the relative merits of figurative and abstract painting, such dichotomies were not necessarily accepted by younger artists, who saw them as belonging to a world far removed from the pressing needs of the late 1940s. In France, isolation from the 'mainstream' – a mainstream which others still regarded as unacceptably avant-garde – was viewed, in some circles at least, as a sign of existential authenticity.[6] But accompanying this

[5] De Beauvoir 1968: 17.

[6] See Frances Morris, 'Introduction', in Morris 1993: 15–24; Michael Kelly, Elizabeth Fallaize & Anna Ridehalgh, 'Crises of Modernization', in Forbes & Kelly 1995: 99–139.