# PURELY SONOROUS:
# THE RHETORIC OF SOUND
# IN TWENTIETH-CENTURY MUSIC

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## Abstract

This thesis investigates a common aesthetic-hermeneutic tendency in discussions of twentieth-century and contemporary music: that of legitimating particular repertoires as exceptionally sound-oriented or sound-based—in contrast with other, usually older music, which is figured as subordinating sound to musical language. In this thesis, I call this tendency 'sonicism'.

I analyse the rhetoric of sonicism on the level both of discourse and of compositional technique. The analysis is comparative: modernist concert music, electroacoustic/electronic music, and sound art are considered. These repertoires, although apparently disparate in their aesthetic and technical premises, imply a common conceptual and metaphorical framework, based on the distinction between 'sound material' and its 'organisation'—hence the rhetorical strategy of hypostatising sound to characterise an advocated approach, while abstracting quasi-linguistic entities and relationships *from* sound to characterise other music. I argue that beliefs regarding the priority of sound in a given repertoire are determined above all by assumptions about musical organisation. Moreover, in realising their sonic ideals, composers tend to adopt organisational signifiers that are also common to apparently disparate positions. These signifiers negate aspects of traditional musical grammar but tend gradually to be conventionalised in their turn.

These core arguments are presented in Chapter 1 and developed through the rest of the thesis. Chapters 2 and 3 are case studies focusing on the discourse, techniques, and reception of two composers associated with particular archetypes: that of the mutual independence of 'sounds themselves' (the early Morton Feldman), and that of the journey inside a three-dimensional sound (Giacinto Scelsi). The analysis then turns to electronic music and sound art, highlighting the continuity of both discourse and organisational signifiers. The thesis concludes with a discussion of the present-day situation, in which the emancipation of sound is regarded as a fait accompli, but the standardisation of signifiers is still not widely acknowledged.

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# INTRODUCTION

This study examines a common but rarely questioned tendency in discussions of twentieth- and twenty-first-century music: that of interpreting and privileging particular repertoires or approaches on grounds connected to their supposed exceptional rapport with sound itself. This tendency is especially prevalent in texts on modernist, experimental, and electronic music, as well as those on sound art, which is outside the domain of music. Interpretations of this kind rest on a variety of artistic and technical premises and imply different views of sound, several of which will be discussed below. What they have in common is an implied or explicitly stated contrast with a field of what can conveniently be called 'ordinary music', in which it is claimed that sound serves predominantly as the medium for the elaboration of musical discourses or texts, and sometimes for the communication of meaning (understood as definable separately from sound); in this field, even when there is an attempt to explore sound 'as sound', the results are regarded as being compromised by conceptual and technical limitations.

Typical claims of this type of discourse might be formulated as follows: a particular work or corpus is remarkable for exploring or foregrounding sound (sound quality, the physical reality and materiality of sound, sound production, the particularity of individual sounds, the meaning of site-specific sound, etc.); it treats sound as an end rather than a means, the entity presented to the listener rather than a medium; it is the fruit of unprecedented reflection on or objective analysis of sound; it allows the listener, in turn, to attend primarily to the sound in the finest detail, rather than focusing on syntax and rhetoric (as one supposedly would in 'ordinary music'); it renders traditional notions of composition, style, and analysis obsolete; it preserves something of sound's autonomy, anteriority and disinterestedness; or possibly it consists of 'sound alone'.[1]

For want of an agreed term, I shall refer to this interpretative tendency as 'selective sonicism' (I shall generally use the one word 'sonicism', in order to be concise). The term sonicism has been used by philosophers of music to label positions regarding the ontological status of sound in musical works and authentic performances.[2] What I am describing,

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[1] This formulation has been used by, for example, Katharine Norman. 'Stepping Outside for a Moment: Narrative Space in Two Works for Sound Alone', in *Music, Electronic Media and Culture*, ed. by Simon Emmerson (Aldershot & Burlington, Vermont: Ashgate, 2000), pp. 217-244.

[2] Jerrold Levinson, *Music, Art, and Metaphysics: Essays in Philosophical Aesthetics* (Ithaca, London: Cornell University Press, 1990), especially pp. 398-408; Stephen Davies, *Musical Works and Performances* (Oxford:

however, is not a view of musical ontology but a selective or discriminative aesthetic-hermeneutic model by which authors advocate certain musical (or non-musical) fields as superseding others. This is usually also a historiographic paradigm, in that authors posit a diachronic process by which sound is liberated from various constraints, becoming autonomous for the first time. The phrase 'liberation of sound' is especially associated with Edgard Varèse;[3] another exemplary formulation is John Cage's exhortation to 'find means to let sounds be themselves'.[4] This vocabulary recalls Schoenberg's emancipation of the dissonance and, before that, the eighteenth-century 'emancipation of music from language', i.e., the increased prestige of instrumental music (music without a sung text).[5] The latter parallel is especially apposite, since sonicism aspires to emancipate sound from, among other things, the conventionality of pre-existing *musical* language. Whereas the autonomist spoke of the 'purely musical', now we might speak of the 'purely sonorous'.

Sonicist interpretations typically originate with the composers concerned (or 'producers', 'artists', etc.) but just as typically become established as the standard critical and public view of the repertoire in question. This ready acceptance of particular claims stems from but also cumulatively reinforces a more general belief that the twentieth century occasioned a radical turn towards sound. This belief is easy to understand. It may appear self-evident that there has been such a turn, given the extraordinary explosion of innovation not only in sound sources and sound production—and thus in what is normally called 'sound material'—but also in formal strategies intended to foreground sound. In the light of these developments, it is difficult to doubt that in the twentieth century there emerged a new, exploratory attitude towards sound, or that, in many particular cases, an enhanced attention to the physical reality of sound on the listener's part is made irresistible: damagingly loud noise music is an extreme example. More problematic is the way in which these innovations are

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Clarendon, 2001); Julian Dodd, *Works of Music: An Essay in Ontology* (Oxford: Oxford University Press, 2007), and 'Confessions of an Unrepentant Timbral Sonicist', *British Journal of Aesthetics* 50/1 (2010), pp. 33-52. Levinson uses the term 'sonicism' to label a position that he criticises, i.e., that sound alone determines the instantiation (token) of a work (type). Levinson criticises this as neglecting the importance of tactile aspects of performance. Dodd, by contrast, holds that a realisation using a Perfect Timbral Synthesiser would be equivalent to performance on the proper instruments. The important difference with my own argument is that Dodd is not preferring one type of work over another. This debate focuses on Western art music not because such music is exceptionally sound-based or exceptionally *non*-sound-based but because it represents the paradigm of the concept of the *work*.

[3] Edgard Varèse, 'The Liberation of Sound', ed. by Chou Wen-Chung, *Perspectives of New Music* 5/1 (1966), pp. 11-19. The text is from the transcription of a lecture given at Princeton on September 4, 1959; first published in *Liberté* 59/1 (1959), pp. 276-283.

[4] John Cage, 'Experimental Music' (1957), in *Silence: Lectures and Writings* (London: Calder and Boyers, 1968), p. 10.

[5] See John Neubauer, *The Emancipation of Music from Language* (New Haven, London: Yale University Press, 1986).

used retrospectively to reinterpret more traditional repertories, and in particular pre-modernist Western classical music, as *not* privileging sound.

My intention in this dissertation, then, is not to dispute particular claims: that is to say, I do not deny that particular works or types of music were indeed conceived as 'sound-oriented', or that the associated discourse might correspond to certain listeners' experience in this regard. Above all, I do not mean to depreciate any of the composers or works discussed, dispute the independence of sound art from music, or argue for a *less* sound-oriented model of interpretation. I take the view that the modernist pursuit of sound 'as sound' has been an enormously productive attitude. Nonetheless, there are some problems with this way of thinking that are generally overlooked on account of the persuasiveness of particular technical arguments. My critique here concerns neither the impulse towards exploring sound nor the phenomenological plausibility of particular claims but, rather, the element of *selectivity* and the biases involved in the habit of adjudicating on who does and who does not realise such an impulse. It is not part of my project to advance a theoretical position—phenomenological, cognitivist, or otherwise—about the conditions of an enhanced consciousness of 'sound objects' or of 'qualitative' listening. (This is not because I am sceptical of such approaches, although I see the matter as intractably subjective and difficult to disentangle from values of the kind that I shall discuss.)

My first point concerns the striking consistency of sonicist rhetoric. Producers and interpreters are not only predisposed to find the ideal of a sound-oriented music realised (or closest to being realised) in the repertory that they advocate, but also prone to advance dissimilar and even mutually exclusive technical positions and arguments with recourse to the same pervasive themes, oppositions, and metaphors—above all, those of 'sound material' and 'musical language'. The concrete technical arguments thus appear to supervene on a looser, figurative conception of what it means for music to privilege sound. That such a conception is figurative is not the problem; I take it that this is inescapable. What I shall question here is, rather, the arbitrarily exclusive character of many claims to put such a conception into practice. I shall illustrate this by comparing texts that treat one or more of the following as *preconditions* of a pre-eminently sound-oriented or sound-based music: (1) the negation (with diverging views on how substantial) of conventional musical 'syntax' or, to use another Varèsian term, sound 'organisation'; (2) the discovery of new 'sound material' (which may be produced by means of traditional performing forces); (3) the elimination of the note; and (4) the use of technology to work 'directly' with sound in the studio.

Second, I shall argue that among these technical aspects, the indispensable one is that of organisation. Selective sonicism often insists on individualisation of sound material, but it *always* involves a critique of certain forms of organisation of sound, which are seen as constraints on sound, and therefore also advocates, if implicitly, *alternative organisation strategies*, which are seen as 'means to let sounds be themselves'. The negation of traditional principles leads sound-oriented composers to resort to certain strategies time and again. One is the extreme parataxis of Cage and early Morton Feldman;[6] this is associated with a vocabulary of 'sounds' or 'sounds themselves', in the plural. Another is the exact opposite, i.e., the extreme redundancy of drone or loop-based music. A third is the use of amorphous gestures in which pitch and durational relationships are obscured, as in the music of Giacinto Scelsi and the Polish sonorists; this is often associated with talk of 'sound itself' in the singular.

These strategies become familiarised over time and come to function as organisational *signs* of sonic particularity, autonomy, primacy, irreducibility, etc. The influence of what one might call the 'purely organisational' therefore proves to be inescapable. This is an awkward paradox for sound-oriented composers, as it reintroduces the interpretative possibility (usually ignored) of rethinking the emancipation of sound as a *substitution of language*. It is therefore unsurprising to find that a constant of sonicist discourse is to stress the *non-equivalence* of the new organisation and the supposedly obsolete language, even when they are both based on discrete notes, or are both atonal, or modal, or comparable in other ways. The rhetoric of a sonic turn can be regarded as a one-sided way of expressing innovation that is equally radical in respect of both sound material (or sound sources) *and* organisation. Sonicism can thus be seen as the empiricist face of modernism or experimentalism.

The 'rhetoric of sound' of my title refers, then, to two levels of persuasion: a verbal rhetoric advocating a particular approach to avowedly sound-oriented music, and a *compositional* rhetoric of sound implicated with the verbal one. The thesis aims to elucidate both and to analyse musical styles without relying on the metaphorical commonplaces of the verbal rhetoric.[7] Chapter 1 sets out a framework with regard to both of these levels. I give some preliminary examples of the verbal rhetoric and conclude with some hypotheses regarding the ideology behind sonicism.

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[6] On parataxis in the avant-garde, see James Wierzbicki, 'Inventive Listening: The Aesthetics of Parataxis', *International Review of the Aesthetics and Sociology of Music* 45/1 (June 2014), pp. 21-46.
[7] A notable precedent of a non-sonicist reading is Danuta Mirka, *The Sonoristic Structuralism of Krzysztof Penderecki* (Katowice: Akademia Muzyczna im. Karola Szymanowskiego, 1997).

Chapters 2 and 3 are more extended case studies focusing on composers of acoustic music who are emblematic of at least one of the strategies mentioned in Chapter 1: Morton Feldman and Giacinto Scelsi. Both composers are routinely interpreted as prioritising sound, in different ways, even though neither of them renounces classical instrumentation or the use of sounds of definite pitch. I focus on them, therefore, because they offer examples of stylistic conditions in which the use of fundamentally conventional sound material is believed to be justified. In his early work, Feldman used an anti-syntagmatic organisation (isolation of sound events, neutralisation of melodic and metrical relationships) and represented this, in his discourse, as an *absence* of system. Commentators have to some extent worked on this principle and have often been influenced by Feldman's use of unorthodox notation—in particular the 'graph' scores, which seem to imply that pitch is no longer essential. I argue that Feldman's rhetorical strategy incorporates an element of resistance to his primary anti-syntagmatic principle, even in this early period: he allows fragmentary syntagmatic connections. This ambiguity connotes non-dogmatism and, in particular, distinguishes his work from Cage's chance music; but it is also probably the result of general aesthetic discernment, independently of any prioritisation of sound. Much of the late work, by contrast, is explicitly pattern-based. Here Feldman's sonicism becomes precarious, and the reception of this late work relies on a previously established interpretation of his music as non-systematic.

In the music of Scelsi, which is in fact collaborative, the compositional intention, idiom and reception are based on the idea of a 'spherical', incommensurable sound with a 'depth' that classical music allegedly tends to lack. The signature idiom is one of extreme continuity and indivisibility: the primary organisational principles are unbroken sound, microtonal motion within a narrow pitch band, and constant inflection of intonation, timbre, etc. The main interpretative line for many years stressed the irreducibility of the music to notes. However, the style involves rhetorical aspects of pacing as well as tonal residues that are better explained as serving a more general compositional persuasiveness, especially because sometimes they contradict the avowed conception of sound.

In Chapters 4 and 5 I move into the fields of electronic music and then sound art. The aim is to highlight the ways in which both the discourse of sonicism and the network of compositional strategies introduced as typical of modernist performed music are taken up and amplified in these fields. In electronic music discourse, at least at its most polemical, instrumental music as a whole tends to become the 'ordinary' other; in sound art, music as whole serves the same function.

In Chapter 4 I look at how the themes of the technological materialisation of sound and heightened morphological control are common to proponents of stylistically disparate electronic music, on both sides of what could be called the research/popular divide—i.e., research-institution-funded electroacoustic music, on the one hand, and nominally popular genres such as ambient music, on the other. In research electroacoustic music, there is a strong tendency towards the maximum possible morphological flux and obliteration of pitch relations. Here it is curious to observe that the celebration of the liberation of sound sometimes gives way to a celebration of a hyper-differentiated and thus implicitly superior musical *language*; I suggest that this recuperation of the language metaphor is correlated with the elimination of modal-tonal and metrical relationships.

In Chapter 5 I move from the musical to the art sphere to investigate to what extent the interpretative model that I have outlined applies to sound art. The discussion turns on the idea of sound as art medium—an idea based mainly on the practical circumstances of the 'exhibition' of works, but one that seems to have tacit organisational conditions as well. This frequently goes hand in hand with an essentialisation of 'the musical' to the advantage of art. In both respects, the rhetoric of sound that I have already identified in modern music aesthetics and criticism becomes a way of defining (or at least characterising) the new artistic domain.

# CHAPTER 1

## SELECTIVE SONICISM

> Musicians once composed with only a few dots or points. Hence they called this counterpoint. They placed one against another as we now place one note against another. A dot represented a tone: just as a point is the beginning of a line as well as its end, a sound or tone marks the beginning and end of a melody and forms the consonance out of which counterpoint is made. Perhaps it would have been more reasonable to name this *countersound* rather than *counterpoint*, since one sound was placed against the other. Not to depart from popular usage, I have continued to call it counterpoint, by which we understand point against point or note against note.
> Gioseffo Zarlino, *Le istitutioni harmoniche*, Part 3, Chapter 2 (1558)[1]

In this chapter I set out my main arguments concerning selective sonicism. I begin with the technical grounds on which it is believed that particular works and styles are radically sound-oriented. I then show how a consistent metaphorical framework of interpretation is able to accommodate diverse technical and aesthetic positions. I illustrate this with examples of the self-exegesis of Varèse, Schaeffer, and Max Neuhaus. These examples prove nothing about the degree of pervasiveness of sonicist discourse and are only intended to illustrate the applicability of a common rhetoric of sound to such positions. I then discuss organisational strategies and principles, which will be explored further in the other chapters, and end with a discussion of sonicist ideology.

### 1.1 TECHNICAL GROUNDS OF SONICIST INTERPRETATION

As I have mentioned, sonicist interpretations of a particular work or corpus (such as the compositions of Feldman or electronic music) presuppose a general belief in the self-evidence of the twentieth-century sonic turn. I shall return later to the question of how self-evident this turn really is, but for the moment let us assume that it is, and consider the main grounds for thinking so. I shall develop four main, interconnected themes, which are

[1] Gioseffo Zarlino, *The Art of Counterpoint*, trans. by Guy A. Marco and Claude V. Palisca (New Haven, London: Yale University Press, 1968), p. 2.

pervasive in the discourse: *material* (unless specified otherwise, this will always refer to 'sound material'); *organisation* of sound; *morphology* (concerning the 'shaping' of sound units); and *technology*.

The clearest way to outline how these aspects are interconnected is to begin not with the most common genealogy of the liberation of sound (Russolo, Varèse, Cage, Schaeffer, and others) but with the negative model of 'ordinary music'. The paradigm here can safely be identified as Western classical music ('classical' in the broad, everyday sense). The various forms of sonicist critique of classical music will be discussed later but the basics can be summarised as follows. All the main constraints on sound converge. On the one hand, sound production is strictly governed by norms of instrument construction and instrumental and vocal performance, so that 'sound material' is intrinsically stereotyped, a given. On the other hand, there is an equally conventional musical grammar, which is regarded as unjustifiably independent of the physical reality of sound, and which is believed to predominate over or detract from the sound material in a perceptual or phenomenological sense.

Underlying and connecting both of these problems, the material and the formal, is the adherence to conservative morphological norms, above all, that of the discrete note. Classical music is a *Tonkunst* because the note constitutes the essential linguistic unit, and therefore conditions the sound sources, with the exception of unpitched percussion—which is for that reason relatively non-prestigious and often reserved for stage or descriptive music. Classical works are understood as consisting above all of note structures, which are governed by codified rules (melodic, intervallic, contrapuntal, harmonic) and generic conventions. They can be worked out on paper, without the physical production of any sound. These structures can also be abstracted from sound not only analytically (at various levels of abstraction, as Schenkerian analysis shows) but also perceptually. Classical syntax is concerned largely with the 'primary parameters' of pitch and duration;[2] other dimensions of sound, notably timbre, are 'secondary'.[3] Timbre confirms or colours an existing note structure, and the musical work is identified with this note structure. The fact that an arrangement is understood as a new version of an existing work, despite the change of sound material, illustrates this.

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[2] Leonard B. Meyer, *Style and Music: Theory, History, and Ideology* (Philadelphia: University of Philadelphia Press, 1989), pp. 14-16. Pierre Boulez, among others, also holds to these primary categories, e.g. *Boulez on Music Today*, trans. by Susan Bradshaw and Richard Rodney Bennett (London: Faber, 1975), p. 37.

[3] Sometimes also called 'carriers', as in Robert Erickson, *Sound Structure in Music* (Los Angeles, Berkeley: University of California Press, 1975), p. 12. *American Standard Acoustical Terminology* (New York: American Standards Association, 1960) defines timbre negatively as 'that attribute of sensation in terms of which a listener can judge that two sounds having the same loudness and pitch are dissimilar' (p. 45).

In short, according to the standard critique, all of this indicates a scant interest in sound as sound. Form and abstract musical discourse predominant both poietically, because they are the main object of the composer's actual work, and perceptually, in that one allegedly tends to listen to a note structure and a work *through* sound. Many authors also stress the normative and practical limitations arising from performance and notation. Advocates of electronic music in particular tend to find the character of ordinary music grounded in the fact that the classical composer does not work 'directly' with sound but merely plans and prescribes a note structure, possibly with broad indications regarding secondary parameters, leaving the realisation to interpreters.

The general traditionalism of this situation—in respect of sound material, performance practice, and musical structure—is not peculiar to classical music but is common to various musical cultures. It is above all the explicit codification of musical grammar and the anomalous importance of notation that cause Western art music to be treated as the paradigm of 'ordinary music', at least from the modernist perspective. I shall return later to the numerous presuppositions in this picture; for the moment let us observe that it resembles the modern critique of old-fashioned, exclusively philological interpretations of music, except that the music *itself* is found wanting rather than the interpretation.

Now we can take a more analytical look at the various dimensions of the liberation of sound. Why does it appear self-evident that there was a 'sonic turn'? Let us begin with perhaps the most obvious factor, that of innovation in sound *material*. This is what first comes to mind with regard to the 'liberation of sound'. The famous statement by Varèse refers in the same breath to his 'fight for the liberation of sound and for [his] right to use any sounds and all sounds'.[4] The same principle is often expressed as an expansion of the *field of sound*, that is, the range of sounds available and accepted as musical material (or non-musical but artistic sonic material). This line of argument refers above all to an experimental lineage that is often regarded as beginning in earnest with the Futurist 'art of noises' of the 1910s (above all Luigi Russolo's compositions for his own *intonarumori*) and as culminating, in a philosophical sense, with Cage's acceptance of all sound as musical, including unintended environmental sound; in a technical sense, it culminates in the emergence of electronic music, as I shall discuss in a moment. Material innovation also takes the form of the development of extended performance techniques on traditional instruments, such as those pioneered by Henry Cowell and later by composers such as Helmut Lachenmann and Salvatore Sciarrino;

[4] Varèse, 'The Liberation of Sound', p. 14.

the last two are usually regarded as falling in the (European) modernist tradition rather than the (United States) experimental one.

In all these cases, there is a direct appeal to the intrinsic salience and fascination of material that is either strikingly new or (since striking novelty becomes more and more difficult to achieve) at least highly individualised. The discourse may focus on the sound's provenance, timbre, morphology, diffusion in space, or other properties. The idea is that such materials seem to attest immediately, before one even considers how they are organised, to the primacy of sound with regard both to the composer's intentions and (it is assumed) to the listener's perceptual experience. This is in contrast with the sound material of 'ordinary' music, which is now regarded (or, in my view, pre-judged) as being stereotyped and for this reason intrinsically negligible.

In other cases, music is regarded as sound-oriented on the basis of *organisational* strategies that a composer has used to foreground sound. For the moment I am discussing strategies that do not in themselves imply substantial radicalism with regard to sound material. Most often these strategies involve either a reduction in melodic and harmonic information—as in Schoenberg's 'Farben'[5] or in Varèse—or, conversely, extreme unpredictability, as in Cage's chance music and Morton Feldman's early music (which I discuss in Chapter 2). In both tendencies, the principle is (ostensibly) to discourage the listener from focusing primarily on note relationships and to deflect attention towards aspects of sound itself: towards timbre, as in 'Farben'; towards the sheer power of sound, as in Varèse; or towards the imagined autonomy of the particular sound, as in Cage. Composers also use chromatic or microtonal cluster techniques to obstruct intervallic perception, as with the music of the Polish sonorists and of Giacinto Scelsi (who is the subject of Chapter 3). Here the note structure disguises itself, so to speak.

Another line of argument is that of spectral music, which emerged in the 1970s, and whose main protagonists include Gérard Grisey, Tristan Murail, Hugues Dufourt, and Horațiu Rădulescu. Here the claim to a special rapport with sound rests on the fact that musical configurations and aspects of the musical discourse are arrived at through a 'pre-compositional' analysis (often computer-aided) of given sound material.[6] The spectral composers are known for applying principles from electronic music, such as frequency modulation, in an instrumental context, as well as sometimes making direct use of live

[5] On *Klangfarbenmelodie*, see Arnold Schoenberg, *Harmonielehre* [1911], 7th edn., ed. by Josef Rufer (Vienna: Universal Edition, 1966), pp. 503-04.
[6] See, for example, Nicolas Donin, 'Preface: Creative Process and Objective Properties of Sound', *Contemporary Music Review* 30/5 (2011), pp. 321-26 (p. 321).

electronics. For my own purposes, spectral music is notable for the degree of lucidity that its participants showed about the fact that they were *modelling* their music *on* sound.[7] As Grisey said: 'We are musicians and our model is sound not literature, sound not mathematics, sound not theatre, visual arts, quantum physics, geology, astrology, or acupuncture!'[8]

At this point, we may pause to summarise the relationship of material and organisational arguments as follows: the materiality of sound (in semiotic terms, the materiality of the sign vehicle) is foregrounded, on the one hand, by virtue of the innate distinctiveness of the material used and, on the other, through the neutralisation of a language that, it is believed, would otherwise predominate. The two strategies are not mutually exclusive, of course. One recurring comparison is with the visual arts: the materiality of the physical art medium is foregrounded either because of its unconventionality (as in Alberto Burri or Antoni Tàpies) or by a radical simplification of form or elimination of the figure (e.g. monochrome paintings by Yves Klein or others)—or both. Another comparison is with the sound poetry of Kurt Schwitters and others, in which the elimination of grammar and meaning direct perception towards the sound quality of the words; in fact, this is just a modernist exaggeration of what happens in traditional poetry.

The concepts of material and organisation converge on that of *morphology*. This has become a key term in sound-oriented music aesthetics, especially because of the influence of the writings of Pierre Schaeffer. The key preoccupation here is with the question of the reducibility or irreducibility of sounds to notes. The main line of thought is that when music can no longer be heard as a structure of notes, there has been a more radical transcendence of grammaticality than could be achieved through the more reformist organisational strategies mentioned above. When the listener can no longer hear a note structure (even a highly redundant or unpredictable one) *through* sound, she is finally confronted *by* sound. As I mentioned above, composers writing for conventional instruments have used pitch proximity to block note perception. However, there is an extra prestige involved when the sound unit 'itself' is irreducible to the note (either because it is noise or because it is in some respect more complex than a note). The prestige lies in the idea that it is the material itself, rather than any organisational artifice, that causes the transcendence of the grammatical character of

[7] See, for example, Philippe Hurel, 'Le phénomène sonore, un modèle pour la composition', in *Le timbre, metaphore pour la composition*, ed. by Jean-Baptiste Barrière, Catherine Delaruelle, and Anne Grange (Paris: Bourgois/IRCAM, 1991), pp. 261-71.
[8] Gérard Grisey, 'La musique, le devenir des sons', in *Algorithmus, Klang, Natur: Abkehr vom Materialdenken? Die 31. Internationalen Ferienkurse für Neue Musik in Darmstadt*, ed. by Michael Marschall Bieberstein, Friedrich Hommel, et al (Mainz: Schott, 1984), p. 22.

conventional music. The subversion of the note has therefore always been an important component of the expansion of the field of sound.

Electronic music (in the broadest sense: everything from *musique concrète* to contemporary computer music) involves a cluster of interconnected claims. It takes the 'field of sound' argument further by liberating what is increasingly hypostatised as the 'sound object' not merely from cultural norms but also from various physical constraints. Because sounds can be repeated exactly, they are *in effect* 'preserved' or 'fixed',[9] and thus emancipated from time. Sound is increasingly liberated from space because there is no longer any need for a particular set-up of physical objects to produce them in the outside world, and because the spatial aspect of diffusion can be controlled through the use of loudspeakers. Constraints due to performance and notation are also eliminated. In short, the key idea is that of the *directness* with which the composer is now able to preserve, analyse, and manipulate sounds. This premise was common to Schaeffer's group and to their rivals, the Cologne *elektronische Musik* composers. Eimert and Stockhausen declared, for example, that because of the studio 'the relation to sound has never been as direct as it is today.'[10] As I discuss in Chapter 4, Brian Eno made the same argument thirty years later, from a very distant stylistic perspective. Technology appears to have eliminated the gap between 'the work' and its sonic realisation: the work is now not only sound-oriented as a matter of artistic priorities but is also physically 'fixed' as sound from the outset.

This figure of working directly with sound conveys the heightened *control* of sound that comes with music technology. This control of sound gives composers of electronic music an enhanced version of the other three lines of argument mentioned above. They have an unrivalled degree of control over *the individualisation of material*, including its *morphology*, down to an imperceptible degree of detail. It is telling that this degree of detail is nonetheless still commonly defined in relation to the note, i.e., as much smaller than the note, as in microsound.[11] This control in turn makes it possible, and normal, to create music in which discrete sound units can no longer be isolated, and in which the very idea of a macro-organisation separable from the internal organisation of sounds becomes problematic.

The rhetoric of sound cannot be reduced, of course, to these four technical aspects (material, organisation, morphology, technology). Particular positions are generally

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[9] See, for example, Michel Chion, *L'art des sons fixés ou la musique concrètement* (Fontaine: Metamkine/Nota Bene/Sono-Concept, 1991).
[10] Herbert Eimert and Karlheinz Stockhausen, 'Foreword', *die Riehe* 1; cited and discussed in M. J. Grant, *Serial Music, Serial Aesthetics: Compositional Theory in Post-war Europe* (Cambridge: Cambridge University Press, 2001), p. 88.
[11] Curtis Roads, *Microsound* (Cambridge, Mass. and London: MIT Press, 2001).

distinguished by some further aesthetic programme or line of argument, which might be philosophical, environmental, literary, esoteric, or of another kind. However, these programmes are customarily pursued by the technical means that I have just discussed. This can quickly be illustrated with reference to two such positions that have been particularly significant: Cage's aesthetics of non-intention and Pierre Schaeffer's acousmatic principle. (Later, I shall also consider how the technical arguments of musical sonicism recur in the discourse on sound art.)

Both positions involve an attempt to emancipate sound in a psychological-philosophical sense. Cage seeks to liberate sound from individual intention, taste, habit, and memory. 'Sound itself' (or more often 'sounds themselves', in the plural) can be defined by the exclusion of these things. He goes about this sometimes by advocating complete openness with regard to the selection of sound materials, refusing to 'distinguish intentional and non-intentional sounds',[12] but also through various subversive, anti-rhetorical strategies, including chance operations, in the combination of sounds. However problematic it may be from a psychological or epistemological point of view, Cage's position can be said to echo in the background of most subsequent aesthetics privileging sound. Take this quotation by Toru Takemitsu, for example, in which he subtly distinguishes himself from Cage: 'My own modes of musical thoughts follow the natural inclination of sounds. I have no precompositional assumptions. *It is not that I try to make sounds themselves the medium*. But when I make those sounds speak to me something happens in the act of composition: they change from something that merely exists to something dynamic.'[13]

Schaeffer's acousmatic approach, which drew on Husserl's phenomenology as well as on Schaeffer's own experience working in radio, in some respects complements Cage's position. The primary aim of the 'acousmatic' was to detach or liberate sounds from their physical causes, or rather to purify perception of the sound by bracketing out awareness of the causes. As he put it in his theoretical magnum opus, the *Traité des objets musicaux* (1966), he viewed sound as being 'itself', as being a 'sound object' (an object of perception), specifically when it was *not* heard in terms of its real-world cause, irrespective of whether that cause was a musical instrument or not.[14] He also, however, sought to eliminate 'musical meaning', i.e., apperception in terms of musical language. Therefore, instrumental notes were

[12] John Cage, 'Experimental Music: Doctrine', in *Silence*, pp. 13-17 (p. 14).
[13] Toru Takemitsu, 'Notes on *November Steps*', in *Confronting Silence. Selected Writings*, ed. and trans. by Yoshiko Kakudo and Glenn Glasow (Berkeley, CA: Fallen Leaf Press, 1995), p. 86. My italics.
[14] Pierre Schaeffer, *Treatise on Musical Objects: An Essay across Disciplines* [1966, rev. 1977], trans. by Christine North and John Dack (Berkeley, London: University of California Press, 2017), p. 8, n. 7.

doubly problematic (although they can be recognised even in Schaeffer's own music). His formulation of the acousmatic position includes the following passage:

> Deliberately forgetting all reference to instrumental causes or preexisting musical meanings, we seek to give ourselves over entirely and exclusively to *listening*, and so to come upon those instinctive pathways that lead from pure 'sound' to pure 'music' [*du pur 'sonore' au pur 'musical'*]. That is what acousmatics proposes: turning our backs on the instrument and musical conditioning, and *placing sound and its musical 'potential' squarely before us*.[15]

Enabling this refined or 'reduced listening' was a task for electronic music; this entailed a certain willing suspension of disbelief with regard to the new physical sound source, the loudspeaker.

### 1.2 POSITION-TAKING

Now I should like to consider these arguments more directly in terms of competitive 'position-taking', in Pierre Bourdieu's phrase.[16] While composers and interpreters might share a paradigm of 'ordinary music', it is clear that they differ in the relative weight they give to the various problems of such music, and in the severity of their solutions.

For some composers, notably Morton Feldman (the subject of Chapter 2), the fundamental thing is the neutralisation of syntax and rhetoric, rather than any substantial innovation in sound material, or the elimination of the note, or the technological materialisation of sound. In such cases, the decisive factor is an *organisational bias* against particular manifestations of grammaticality or determinism. In Feldman's case, as we shall see, this leads him in particular to position himself against his European post-Webernian rivals, such as Boulez and Stockhausen. He extends the field of 'ordinary music', on organisational grounds, to encompass contemporaneous styles allegedly more deterministic than his own.

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[15] Ibid., p. 69; italics in the original.
[16] Pierre Bourdieu, 'The Field of Cultural Production, or: The Economic World Reversed', trans. by Richard Nice, in *The Field of Cultural Production*, ed. by Randal Johnson (Cambridge: Polity Press, 1993), pp. 29-73 (p. 30). This model has been related to contemporary music in, notably, Charles Wilson, 'György Ligeti and the Rhetoric of Autonomy', *Twentieth-Century Music* 1/1 (2004), pp. 5-28 (p. 6).

Other authors display, *as well as* such an organisational bias, a strong *material bias* against a sound world that they regard as exhausted or intractably stereotyped; they tend to extend the field of the 'ordinary' on this basis. Russolo's manifesto 'The art of noises' (1913) is a well-known, early example of this. Russolo proposed the art of noises as the newest stage in the historical development of the art of sound, which he schematically traced from the primeval silence, through the ancient Greeks, who delimited the musical field with their mathematical, intervallic system, through the middle ages, in which there was a predominantly melodic, 'horizontal' approach, to his own period, in which the exploration of ever more adventurous harmony foreshadowed 'noise-sound' (*suono-rumore*), but in which the research was still limited to 'musical sound' in a limited range of instrumental timbres.[17] According to Russolo, the standard orchestra could no longer excite the ear, given the triumph of noise in modern life (including warfare), which, as a Futurist, he celebrated. It was necessary to 'continue to enlarge and enrich the field of sound ever more'.[18]

For reasons touched on above, the bias against familiar material often incorporates a third bias, the *morphological bias* against the note. As it happens, Russolo was not an extremist in this regard, and his conception was not to abolish pitch entirely: his six families of instruments would allow one to 'give pitches to these diverse noises, regulating them harmonically and rhythmically'—to control, in quartertones, the 'predominant general pitch' characteristic of each noise (which coexisted with the 'irregular vibrations' and distinctive rhythms of the noise).[19] Circumspection with regard to the note is understandable, given the conception outlined above, but sometimes hardens into the mental habit of regarding all *note*-based music (and especially equal tempered note-based music) as 'ordinary' and non-sound-oriented. Some authors even oppose 'sounds' and 'notes' as if the latter not only entailed conservatism but were not sounds at all. 'Sound' comes to mean 'sound other than note', and the use of non-notes therefore confirms that a work is 'sound-based'. This is made explicit in the writings of the composer Leigh Landy, such as the book *Understanding the Art of Sound Organisation*. Dissatisfied with the terms 'electroacoustic music' and 'sonic art' (Trevor Wishart's term), Landy refers to the work discussed in this book as 'sound-based music'. He defines this term, which the uninitiated might believe to be tautological, by opposition to 'note-based music'. Sound-based music 'typically designates the art form in which sound,

[17] Luigi Russolo, 'The Art of Noises' in *The Art of Noises*, trans. by Barclay Brown (New York: Pendragon 1986), pp. 23-24.
[18] Ibid., p. 28. In recent times perhaps the most prominent critique of the exhaustion of traditional sound material is that of Helmut Lachenmann.
[19] Russolo, 'The Art of Noises', pp. 27, 29.

that is, not the musical note, is the basic unit. A liberal view of sound-based artworks would indicate it to be a subset of music'.[20] This implies that 'note-based music' is the *other* subset of music. The definition does not make it clear whether the word 'note' denotes an abstract type corresponding to the written symbol or a class of sound corresponding to that type.

Landy rightly observes that 'sound-based' music is not co-extensive with electronic music, and I shall discuss note-based electronic music in Chapter 4. Very often, however, the morphological bias goes hand in hand with the *technologist bias* that it is electronic music that marks the decisive threshold in the treatment of sound as sound—that this is the field in which one can truly eliminate all the constraints on sound, and also the field in which one truly works *with* sound. I shall illustrate this shortly with reference to Pierre Schaeffer, and further in Chapter 4. Beyond this, there is also an *institutional bias* that represents music as a whole as 'ordinary' in relation to sound in contemporary *art*; I shall return to this later.

Putting the matter this way may suggest a trajectory of gradual emancipation, first from grammatical, then instrumental-material and morphological norms, then from acoustic and all remaining structuring constraints, and finally from the bounds of 'music'. Indeed, this is usually how composers or artists near the end-point of this trajectory see things. However, as I illustrate in the next two chapters, it is also typical for composers and advocates of scored, note-based music for standard performing forces (sonicist *Tonkunst*, so to speak) to suggest that their music *also* projects sound forth in all its radical particularity and materiality, irreducible to the note, despite the visual evidence of notes on paper; and that the composer's care in judging the effect of sound is such that it is *as if* they, too, are working directly with sound. Are they deceiving themselves? It is difficult to sustain that they are, without subscribing to the biases mentioned above. This is because none of the four factors that I have mentioned offers an unequivocal threshold. Let us consider them in turn.

First of all, if novelty and individuality of sound material are to be taken literally, it is obvious that they are relative to the experience of the listener. In this respect, one has to acknowledge the almost inevitable familiarisation of sound materials over time. This is especially evident in the extended techniques of New Music on the festival circuit, but also in the use of the glitch, the sine tone, or water sounds, in electronic music. At some point, it becomes clear that the 'newness' and 'individualisation' of such materials have become semantic contents, and that 'new'/'old', 'exploration'/'non-exploration of sound' are

[20] Leigh Landy, *Understanding the Art of Sound Organisation* (Cambridge, Mass., London: MIT Press, 2007), p. 17.

conventionally marked as such in relation to a particular historical moment: the emergence, above all in the 1910s, of an avant-garde discourse of liberating sound.

Meanwhile, there is no absolute standard or threshold of grammaticality or schematism, let alone 'rhetoric'. Even in deliberately grammatical music, rules are notorious for being broken. Judgments about these things are subjective. It is the same with regard to morphology. Notwithstanding the undoubted psychological importance of the note, there is no stylistic point at which sound becomes *reducible* to notes in the extreme way typically implied, i.e., an absolute, involuntary note abstraction whereby sound shrivels up and morphs into the visual symbol. In such discourse, the 'note' is used as a metaphor for schematism and abstraction. The morphological bias neglects the fact that notes are still sounds, as Zarlino pointed out in the epigraph above by saying that perhaps it would have been 'more reasonable' to use the term 'countersound' instead of 'counterpoint'. (If Zarlino had insisted on this, he could have been the first modern sonicist.)

This subjectivity is unsurprising given that the categories of 'sound material' and 'organisation' both involve an act of abstraction from music as perceived. It may be useful for interpretative purposes to distinguish 'material' from 'organisation', but it is best to acknowledge at least that the two elements are reciprocal: material may condition organisation (e.g., by making the composer and sometimes the performer responsible for intervallic decisions) but organisation also influences the perception of the material, and may allow sound to be perceived in a new, vivid way. For my purposes it is important to emphasise that, in sonicist (and perhaps any) discourse, the term 'sound material' does not correspond in an entirely disinterested sense to a phenomenological object or essence, but also tends to be loaded according to particular aesthetic ideals and predispositions: hence the emphasis on the stereotyping of sound material, for example. It is always in this sense that I shall discuss it.

Finally, with regard to the 'materialisation' of sound, it is often overlooked that sound is physical (and 'malleable', e.g., in relation to temperature) irrespective of whether it is produced by electronic means. In electronic music discourse, the language of storage and malleability expresses the view that electronic mediation entails such an exceptional degree of control of sound that it does not count as mediation. However, there is no need to defer to this degree of control as a precondition of composing 'with sound', any more than one ought to defer to the advantages of writing (which is also a technology).

### 1.3 THE METAPHORICAL FRAMEWORK OF SONICIST INTERPRETATION

We can thus see that this whole discourse is inescapably figurative. First of all, it is based on a *hylomorphic* conception: that is, musical entities are conceived as the result of the imposition of form on matter—'sound matter' or 'sound material'. At least, this is how 'ordinary music' is represented. With regard to the advocated music, on the other hand, the message is usually that the *imposition* of form (which is now often called 'organisation') on material has been eliminated or neutralised, either because the composer has allegedly eliminated form and rhetoric altogether, or because the organisation is somehow native to or indistinguishable from the material—or some other variant of this idea.

Various ontological, spatial or biological metaphors, personification, and analogies with the plastic arts are used to reinforce the association of a given work or approach with the physical reality of the sound material. The conventionality of music, meanwhile, is commonly evoked with linguistic metaphors (grammar, syntax, rhetoric) and with negative forms of the same spatial metaphors (as in the charge that particular music is two-dimensional rather than three- or pluri-dimensional). These metaphors are extremely familiar in the history of writings on music[21] but have a particular sonicist value. In addition, there is the theme of emancipation, which I have already highlighted. The sonicist ideal can be provisionally formulated, then, as the emancipation of substance (sound) from linguistic form (musical grammar).

The term 'morphology', which has become widely used since Schaeffer, is especially interesting: morphology is where sound and organisation converge, but it is also where material and linguistic metaphors converge, because it can be used, on the one hand, to evoke a quasi-biological entity and, on the other, in a linguistic sense as the complement of syntax. Mario Baroni, for example, in theorising musical grammar, defines musical morphology as 'the identification of different categories of musical structures' and syntax as 'rules connecting morphological unities'.[22] He observes that the note is indeed the 'central morphological concept common to many musical cultures [...] because many musical concepts can be conceived as micro-categories that are necessary in order to define a note (as

[21] For example, Michael Spitzer, *Metaphor and Musical Thought* (Chicago: University of Chicago University Press, 2004). Spitzer focuses on painting, linguistic, and vital/biological metaphors in relation to Baroque, Classic, and Romantic music aesthetics.

[22] Mario Baroni, 'Musical Grammar and the Study of Cognitive Processes of Composition', *Musicae Scientiae* 3/1 (1999), p. 3. Given my subject matter, possibly I should emphasise that Baroni does not take sides for or against grammatical music.

traits of a note), while other concepts can be conceived as macro-units formed by a number of notes.'[23]

In pointing out that these expressions are metaphorical, I am not questioning their legitimacy. In relation to particular cases, it would often be pedantic to object to them. In electronic music, for example, 'storage' and 'malleability' of sound are literalised metaphors for practical purposes, and it would normally be artificial to avoid using them. It is also difficult to express the 'exploration' of the 'field of sound' or of new 'sound worlds' without using terrain metaphors. What I wish to emphasise is that it is in the nature of such language that it can be applied persuasively to seemingly incompatible technical claims. Rather than disapproving of such language, then, I am questioning interpretations that apply it *selectively*, to suggest that malleability of sound, the exploration of the inside of sound, etc. are peculiar to a certain approach and repertoire.

On this basis we can formulate a model of sonicist rhetoric as follows. On the one hand, there is a *selective* hypostatisation and particularisation of sound, in describing the advocated music; on the other, a *selective* abstraction of quasi-linguistic conventions and schemas *from* sound, together with a critical focus on those technical aspects that seem to make such schemas inevitable (the note, the instrument, notation, etc.), in describing the designated ordinary music.

That is, when discussing the advocated music, one highlights the physical reality or materiality of sound, its spatiality, its particularity, its existence as a percept and not a symbol, often its incommensurability, in some cases its natural basis, and its anteriority to and independence from considerations of genre and style; frequently one does so through personification of sound and/or association with the plastic arts; and one does so selectively, i.e., as if these were not *always* attributes of sound (possibly not 'integrated' into works) even in the most arid music imaginable. Meanwhile, one highlights ordinary music's dependence on *particular* formal or other conventions, usually taking advantage of the fact that these conventions are already understood as such; one disavows existing analytical categories or even the terms 'composition' or 'music'; and one does so again selectively, understating those *other* elements of abstraction or nascent conventionality in the advocated field.

Sound is opposed to conventionality, and treated as, among other things, a guarantee of originality. It is not only a matter of a tension between positively valued sound and negatively valued organisation, because each of these things can have a positive or negative

[23] Ibid., p. 5.

value. Some sounds are valued as outstandingly direct or materialised, others stigmatised as conventional, reducible to the note, etc. In the same way, organisation is often regarded as incriminating but can also be an asset, provided that it can be represented persuasively as indistinguishable from or radically determined by the material (as in soundscape composition or field recording), or at least geared towards foregrounding the sonorous.

## 1.4 LIBERATIONS OF SOUND

### 1.4.1 Edgard Varèse: liberation of sound, liberation of music

I shall now give a few preliminary examples of sonicist rhetoric at the level of language *about* music, beginning with Varèse. He did perhaps more than anyone else to establish the discursive strategy of evoking the materiality of sound with reference to one's own work, while decrying the formal constraints of other styles. He did so in a series of statements that appeared mainly in newspaper and journal articles and interviews. He was important in establishing a vocabulary of sound as a physical 'raw material'[24] and an ideal of the composer's activity as a form of manual labour, 'working with blocks of sound',[25] like a sculptor, and *not* like a writer. The electroacoustic composer Luc Ferrari, for one, regarded Varèse as the primary influence behind his own view of sound as a 'malleable substance'.[26] Sometimes Varèse compares sound to the granite landscape of his childhood, sometimes to crystal structures.[27] He uses a geometrical language of colliding 'sound masses' and 'volumes', and refers to the 'projection' of sound, both metaphorically and literally.[28] His formulation of music as the 'corporealisation of the intelligence that is in sounds' combines hypostatisation and personification.[29]

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[24] Varèse, *Écrits*, ed. by Louise Hirbour, trans. by Christiane Léaud (Paris: Bourgois, 1983), pp. 93, 125, 127.
[25] Ibid., p. 184.
[26] See, for example, Luc Ferrari: '[...] sound itself as a malleable substance interested me tremendously – and that was the Varèse influence.' Brigitte Robindoré and Luc Ferrari, 'Luc Ferrari: Interview with an Intimate Iconoclast', *Computer Music Journal* 22/3 (1998), pp. 8-16 (p.13).
[27] Varèse, *Écrits*, pp. 158-59.
[28] Ibid., e.g., p. 88. See also Varèse, 'Spatial Music' [lecture given at Sarah Lawrence College, 1959], in *Contemporary Composers on Contemporary Music*, ed. by Elliot Schwartz and Barney Childs (New York: Holt, Rinehart and Winston, 1967), pp. 204-207. Varèse regarded the 425-loudspeaker premiere of *Poème électronique* as his first experience of hearing his music 'literally projected into space' (p. 207).
[29] His version of J M Hoene-Wroński's definition ('the corporealisation of intelligence in sound') changes the original and attributes intelligence to sound, as observed by Anne Florence Parks, 'Freedom, Form and Process in Varèse', PhD dissertation University of Michigan 1974, p. 18, cited in John D. Anderson, 'Varèse and the Lyricism of the New Physics', *Musical Quarterly* 75/1, 1991, p. 33. This idea of the intelligence of sounds was taken up by Iannis Xenakis: see Makis Solomos, 'Xenakis—Varèse et la question de la filiation', in Timothée Horodyski and Philippe Lalitte, *Edgard Varèse. Du son organisé aux arts studio* (Paris: L'Harmattan, 2007), p. 161.

Conversely, he states that 'musical grammar' has been overemphasised,[30] and decries the acceptance of existing 'rules' (citing Debussy as a precedent in their dissolution),[31] the practice of composing from a 'system',[32] and habits of thought stemming from traditional notation: 'One must think in terms of sound and not in terms of notes on paper';[33] 'we need a new Guido d'Arezzo'.[34] He evokes non-representational painting as a model, not just for the foregrounding of material but because it has 'liberated itself from representation and academic rules'.[35] Although on one occasion he adopts the conceit that 'a work of art dictates its own rules',[36] elsewhere he concedes, quoting Busoni, that it is the artist who creates 'new laws'.[37] Indeed, Varèse has substituted new rules for existing, codified ones. It is therefore unsurprising that he was averse to explaining his own laws and to analysis, and that he used substitute terminology. For example, his 'sound mass' could also be described as a sustained, dissonant chord, but that would be to assimilate the phenomenon more directly into general music theory.[38] Terminological substitution of this kind is something he has in common with other modernists, including theorists ('simultaneity' for 'chord'). Varèse took such substitution further by coining the term 'organised sound' as an alternative to 'music', also referring to himself as a 'worker in intensities and frequencies'. He explained this as a short-term rhetorical tactic intended to pre-empt conservative audiences' rejection of his work as not constituting music,[39] but this particular substitution also has the longer-term function of reconfiguring more conventional music as less sound-based.

Another important topic in Varèse is that of the radical diversification of sound sources and sound materials, the opening of the field of sound. This is in the first instance what he has in mind by 'liberation of sound': his own 'liberty to use any sound and all sounds'. He also turns this metaphor around by stating that *he* refuses 'to submit to sounds already heard'.[40] He protests against the conservatism of prevailing norms of musical sound, and against the 'poverty' of 'our musical alphabet'.[41] His is a strikingly parametric conception: he emphasises the mechanical limitations that classical instruments impose on

[30] Varèse, *Écrits*, p. 102.
[31] Ibid., p. 166.
[32] Ibid., pp. 169-170.
[33] Ibid., p. 145.
[34] Ibid., p. 39.
[35] Ibid., pp. 174-175.
[36] Ibid., p. 90.
[37] Ibid., p. 168.
[38] See Anderson, 'Varèse and the Lyricism of the New Physics'.
[39] Varèse, *Écrits*, p. 108
[40] Ibid., p. 23.
[41] Ibid., pp. 23-24.

timbre, register, intensity, and frequency; following Busoni's *Entwurf einer neuen Ästhetik* (1906), he stresses the arbitrariness of equal temperament.[42] He calls for 'new means of expression', electronic 'instruments obedient to thought' that would give the composer real control over all parameters and eliminate the 'interpreter' and thus a 'distorting prism between composer and listener'.[43] He was thwarted for many years in his attempts to raise funding to develop electronic music, however. He used tape in *Déserts* (1950-54) and *Poème électronique* (1957-58) but, in the majority of his compositions, his main contribution to an enrichment of sound material was the expansion and foregrounding of the percussion section, particularly in *Ionisation* (1929-31).

Varèse was not dogmatic on the question of material. In a relatively late interview, he specified that enriching the field of sound did not require one to reject traditional instrumental sound, and also that 'organised sound' did not refer only to his tape music.[44] In Varèse it is possible to consider the liberation of sound material as one important component of a more general liberation of music. Demands for liberty for music or for the composer occur just as often in Varèse's writings as 'liberation of sound',[45] and if the latter phrase has become automatically associated with him, this is not least because of its use as the title of Chou Wen-Chung's famous selection of his texts, as well as in the titles of many other publications.[46] Varèse's position is above all one of anti-classicism both in material and form: 'classicism, new or old, was precisely what I tried to liberate myself from'.[47] And that also goes for neoclassicism: in 1934 he described Stravinsky as being 'dead'.[48]

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[42] Ibid., p. 39.
[43] Ibid., p. 124.
[44] Ibid., pp. 176-180.
[45] Ibid., pp. 100, 154, 174.
[46] Varèse, 'The Liberation of Sound'; reprinted as 'Die Befreiung des Klangs', *Musik-Konzepte* 6 (1978), pp. 11-24; also in Joseph Darby, Richard Kostelanetz, and Matthew Santa, *Classic Essays on Twentieth-century Music: a Continuing Symposium* (New York: Schirmer, 1996), pp. 47-53; also in Barney Childs, Elliott Schwartz, eds., *Contemporary Composers on Contemporary Music* (New York: Da Capo, 1998), pp. 195-208; also in Christoph Cox and Daniel Warner, eds., *Audio Culture* (New York: Continuum, 2004), pp. 17-21. See also *Edgard Varèse: Die Befreiung des Klangs: Symposium Edgard Varèse Hamburg 1991*, ed. by Helga de la Motte-Haber (Hofheim: Wolke, 1992); Jean-Claude Risset, 'The Liberation of Sound, Art-science, and the Digital Domain: Contacts with Edgard Varèse', *Contemporary Music Review* 23/2 (2004), pp. 27-54; Klaus Kropfinger, '"You Never Took the Simple Path": Varèse's Liberation of Sound and the Delimitation of the Arts', in Meyer, Felix and Heidy Zimmermann, eds., *Edgard Varèse: Composer, Sound Sculptor, Visionary* (Woodbridge, Suffolk: The Boydell Press, 2006), pp. 156-163; Julian Johnson, 'The Emancipation of Sound', in Andreas Haug and Andreas Dorschel, eds., *Vom Preis des Fortschritts: Gewinn und Verlust in der Musikgeschichte* (Vienna: Universal Edition, 2008), pp. 372-385 (partly about Varèse).
[47] Varèse, *Écrits*, p. 168. He admired Busoni for advocating non-tempered tuning but was disappointed by his neoclassicism.
[48] Ibid., p. 83.

### 1.4.2 Pierre Schaeffer: in search of the concrete

Now let us zoom out and consider similar discourse from the perspective of the producer of electronic music. By 'zooming out', I am referring to the common perception that electronic music supersedes acoustic music as a whole, for reasons I outlined above, so that the difference between a Varèse and a Stravinsky appears relatively trivial. Pierre Schaeffer invites close attention as a pre-eminent figure in the aesthetics of electronic music. He is also perhaps the most explicitly dualistic one, as is made obvious in Michel Chion's concise guide to the *Traité des objets musicaux*, which is organised largely around a sequence of Schaeffer's oppositions: abstract/concrete, natural/cultural, form/matter, duration/variation and so on.[49] The *Traité* was Schaeffer's theoretical magnum opus and in it he attempted to marshal intellectual currents of the day—notably the linguistics of Saussure and Jakobson, as well as Husserl's phenomenology—into his aesthetics of sound. I shall refer to the *Traité* in Chapter 4, but for now I shall focus on *À la recherche d'une musique concrète*, published in 1952. Schaeffer wrote this book, partly in journal form, while developing *musique concrète* and in it, although with characteristic reservations, he makes a case for *musique concrète* as offering a pre-eminently empirical approach towards sound, reconfiguring instrumental music as a whole as intrinsically aprioristic. Schaeffer's fundamental antithesis between abstract and concrete music is well known: in creating 'abstract' or 'ordinary' music, one proceeds from the abstract (a conception) to the concrete (a performance); in *musique concrète*, one proceeds from the concrete (recorded sound) to the abstract (a composition).[50] He does not claim that abstract music *remains* abstract, or that *musique concrète* remains concrete, but he does take the *initial* abstractness or concreteness as definitive.

According to Schaeffer, the virtue of *musique concrète* is that one depends 'no longer on preconceived sound abstractions, but on sound fragments that exist in reality and that are considered as discrete and complete sound objects, even if and *above all when* they do not fit in with the elementary definitions of music theory'[51]—that is, 'above all when' they are not notes, or 'musical' sounds, as he frequently calls them. By the end of the book he will state that, in principle, future technical apparatus might solve 'the problem of obtaining any sound object, as predetermined in advance as is wanted'.[52] This undermines the original argument.

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[49] Michel Chion, *Guide des objets sonores: Pierre Schaeffer et la recherche musicale* (Paris: Buchet-Chastel, 1983).
[50] Pierre Schaeffer, *In Search of Concrete Music* [1952], trans. by Christine North and John Dack (Berkeley: University of California Press, 2012), p. 25.
[51] Ibid., p. 14, my italics.
[52] Ibid., p. 175.

However, for the moment, I wish to highlight the bias against materials compatible with a particular musical theory, which are, if not disqualified *a priori*, then at least difficult to regard as autonomous 'sound objects', even if they happened to exist in reality prior to the intention to compose.

Schaeffer acknowledges that in instrumental music from Wagner onwards 'the need is being clearly expressed to create music, not just in the form of a blueprint, but from within the context of the sounds themselves'.[53] However, such endeavours are irremediably limited by the use of notes and of instruments. All these composers can do is explore new modes and new note-systems, creating 'a syntax, which, for all its greater complexity and subtlety, does not any the less use the same words, or at least the same signs representing the same values, i.e., notes. [...] As long as we stay with ordinary instruments and the usual symbolism, the formal and material development of music will necessarily be limited to combinations of instruments and combinations of notes.' Schaeffer acknowledges a divergence between the Stravinskian exploration of 'matter' and the Schoenbergian pursuit of abstraction, but regards it as trivial in view of these basic limitations: 'like it or not, what the most ingenious and the boldest musicians will never be able to obtain is [...] that ears stop hearing the notes of the scale, whether or six or of twelve notes, from outside their listening habits'.[54]

Schaeffer takes up several other themes and images already mentioned. One is that of dimensionality. As did Varèse, Schaeffer considers three-dimensionality of sound in both literal and figurative senses, but more frequently the figurative, as a way of characterising sound types. Classical music is 'a one-dimensional music, for the dimension of pitch [...] dominates the West'; the music is 'mainly concerned with numerical values of pitched sounds'.[55] In another passage, he concedes that abstract music has the 'three classical *variables* of music, pitch, duration, and timbre' but suggests that these 'are at present insufficient to describe a more general music adequately. They are the three physical dimensions of sound', to which one ought to add 'the three *planes* on which these dimensions operate, not in order to characterize an element of a work, such as melody or harmony, but to characterize a fragment of sound, considered as a fixed object, before it is used for possible variations or developments'. The three planes are '*tessitura*, *dynamic*, and *spectrum*'.[56]

[53] Ibid., p. 117.
[54] Ibid., p. 119.
[55] Ibid., p. 182.
[56] Ibid., p. 174.

Confusingly, he also proposes the category of the ‘complex note’, ‘a sound element with three dimensions: frequency, duration and dynamic’.[57]

The complex note may indicate a certain ambivalence on Schaeffer's part. Pitched material presents him with a dilemma. He does not wish to be dogmatic, like his Cologne rivals, by excluding it altogether. He even expresses a curious interest in the ‘dominant’, and writes, presciently, that ‘there is nothing against making a tonal concrete music’, although he regards his own efforts in this direction as unsuccessful.[58] Although the overall thrust of the book is to contrast ‘the music of notes’ (classical music) with ‘the music of objects’ (concrete music), he considers the possibility of building a ‘bridge’ between them.[59]

In fact, Schaeffer finds himself having to avoid two types of sound: ‘musical’ sounds, likened to ‘words’ and ‘phrases’, but also noises of which the causes are too easily recognisable. In both cases there is an underlying concern with originality:

> My first step was to reject musical material, to acknowledge that my mistake had been going back to musical instruments, musical notation, musical thought patterns. Going back to noise would in fact have been the surest way to find solid, and at least unexplored, ground.
>
> [...] I needed to tear noise away from its dramatic context [i.e., its meaning, determined by its cause] and, in the same way, musical sound from the prison of notes, of the words and phrases of musical language.
>
> In other words, even if noise material guaranteed me a certain margin of originality compared to music, in both cases I was brought back to the same problem: tearing sound material away from any context, dramatic or musical, before giving it form. If I succeeded, there would be concrete music. If not, there would be nothing but stage and radio sound effects.[60]

Notice that Schaeffer’s more ‘concrete’ version of the emancipation metaphor is to ‘tear’ or ‘wrest’ (*arracher*): he also writes, for example, that in *musique concrète* one constructs ‘sound objects, no longer from the interplay of numbers and metronomically marked accents, but from pieces of time wrested from the cosmos’.[61]

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[57] Ibid., p. 108.
[58] Ibid., pp. 117 and 121.
[59] Ibid., pp. 142, 171.
[60] Ibid., p. 38.
[61] Ibid., p. 66.

The ‘sound object’, as I mentioned earlier, has a special phenomenological sense in Schaeffer, but also the more typical hypostatising usage, i.e., the idea of the materialisation of sound via technology, with the resulting ‘objectivity’. Sound is now in a ‘material medium with the same relationship to it as the book to literature’.[62] In the past, the sound object, being ephemeral, was ‘a human phenomenon much more than an objective fact’, whereas now we are able ‘to conserve, to reproduce, to make coincide indefinitely with itself a crystallized music’ on records or tapes that ‘contain the “musical object” in material form’.[63] He also uses the more general terms ‘matter’ and ‘form’ to the advantage of concrete music. By cutting up a given sound ‘form’, and performing ‘transmutations’ on it, he will ‘have power over the matter itself’, because the origins of the sounds will be made unrecognisable.[64] That is, instrumental music is restricted to working with ‘form’; ‘matter’, defined at a micro-level of perception, is the preserve of *musique concrète*. And, like Varèse and Feldman, he compares his own musical approach to non-representational painting, which provides a suitably hylomorphic model of ‘simplified form, beautiful matter’.[65] He wonders whether concrete music should have been called ‘plastic music [*musique plastique*] or sound plastic [*plastique sonore*]’.[66] (Piet Mondrian had, in fact, theorised almost precisely that – a neo-plasticist art of sounds, which anticipated several aspects of Cologne electronic music.)[67] Schaeffer frequently personifies the sound object: ‘It is perhaps the object that has something to say to us’;[68] ‘the miracle of concrete music [...] is that, in the course of experimentation, things begin to speak for themselves, as if they were bringing a message from a world unknown to us and outside us’;[69] ‘the object forces us to listen to it, not by reference, but just as it is, in all the reality of its substance’.[70]

Schaeffer is ambivalent about musical ‘language’ and does not wish to relinquish the concept entirely. He arrives at a neat way of discriminating between bad and good musical languages, by associating them with prose and poetry, that is, language (by extension, sound) as ‘sign and meaning’ and ‘as signal and substance. In one case it acts as a factor in a relationship; in the other it has full autonomy. In effect, the former use takes from the

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[62] Ibid., p. 107.
[63] Ibid., pp. 132, 134.
[64] Ibid., p. 41.
[65] Ibid., p. 94. It is likely that he had in mind European *matièrisme* of the period (Tapies, and so on). On this topic, see Gianmario Borio, *Musikalische Avantgarde um 1960: Entwurf einer Theorie der informellen Musik* (Lauber: Lauber, 1993).
[66] Schaeffer, *In Search of Concrete Music*, p. 105.
[67] See M. J. Grant, *Serial Music, Serial Aesthetics*, pp. 34-36.
[68] Schaeffer, *In Search of Concrete Music*, p. 61.
[69] Ibid., pp. 91-92.
[70] Ibid., p. 165.

substance of language the minimum necessary for its meaning to be transmitted; the other use involves the concrete aspect of language, i.e., all the psycho-sensorial elements contained in the phenomenon of language and all the potential for expression that it contains.'[71] He goes on to tie this metaphor in with the model of non-figurative painting (poetic), in contrast with figurative painting (prosaic).[72] Classical music is naturally 'a language used more as prose than as poetry'. The example he gives is that of a trumpet C, which is 'a sound that musicians are quite incapable of analyzing and using as such, and [...] a collection of abstract qualities, selected by a deliberate choice of the mind'. The trumpet C has a delimited meaning on two levels: that of 'the word "C" in an established dialogue' and that of 'trumpet' in an 'even more prosaic […] "language of things"', i.e. language of reference to physical causes.[73]

How do Schaeffer's organisational principles in his *musique concrète* relate to his aesthetic programme? One major principle is that of promoting a focus on the sound object 'in itself' by means of its exact repetition. Repeatability is what proves that sound has been stored and materialised. Schaeffer writes: 'I take an "extract" from the train [recording] and *demonstrate its existence* by repetition'.[74] This mechanised ostinato, which came about by the exploitation of the *sillon fermé* (closed groove) on the disc, is the precursor to the tape or digital loop. Indeed, the loops in Schaeffer's *Études de bruit* foreshadow some of the samples in minimal/dub techno by producers such as Sasu Ripatti (better known as Vladislav Delay) who elaborately create a fuzzy, lo-fi sound.

### 1.4.3 Max Neuhaus: from time to place

I shall now zoom out again and consider sound art (many authors prefer terms that seem less reifying, such as 'artistic practices with sound'). If electronic music represents the emancipation of sound from time and space, and from mediation, then sound art represents the logical end-point of sonicism: the liberation of sound from music. This is an end-point that composers, by definition, can never reach, unless they become sound artists.

I have highlighted the tendency of composers to represent themselves and to be represented as doing justice to sound as a material substance to an unprecedented extent; to claim to have genuinely materialised sound using electronic technology; to aspire to the materiality of painting, especially non-figurative painting; to use spatial metaphors to

[71] Ibid., p. 149.
[72] Ibid., p. 150.
[73] Ibid., p. 150.
[74] Ibid., p. 13.

emphasise the transcendence of the note (as organisational norm and sometimes as sound type); and to suggest that in their work they transcended structural norms so radically that they could hardly still be described as 'composing' or as producing 'music'. In sound art, all of these aspects of sonicist aesthetics are institutionalised—that is, built into the very definition of sound art as a newly established domain of artistic practice, confirmed as such by an art world. It is now an institutional fact that a work no longer merely aspires to the materiality of art but *is* art. It is officially no longer music, and *not composed*. Sound has been taken, or liberated, from the musical domain (conservatoire, university, concert hall, recording studio) and put in the art domain (art school, gallery, museum), where it is treated as an extension of the art materials or media 'with which' artists work. For example, Caleb Kelly defines sound art, somewhat casually, as follows: 'Rather than a movement or genre, "sound art" *simply* describes a medium, *much like* "oil painting".'[75] The artwork is exhibited or installed, or the equivalent, in an institutionally consecrated art space. Typically, the way the sound occupies or transforms this space (or, in field recording, the way sound evokes a real space) is part of the work's concept. Thus, a work's spatiality is no longer primarily metaphorical (as in pitch space or spectral space) but literal. We may add that this conception brackets out the spatiality of performed musical sound somewhat (not only that of the Venetian polychoral school, for example, but any musical performance).

This is the conception that I shall explore in Chapter 5. My main argument in respect of sound art is that the interpretative framework that I have summarised above ('selective hypostatisation *of* sound' versus 'selective abstraction *from* sound') now operates on the institutional level (and usually, in practice, also on the technological). That is, the idea that sound art does justice to the materiality, reality, and particularity of sound is built into the idea of sound as an *art material* or *medium* that one physically installs and that is indeed like oil painting. Meanwhile, 'music' is the domain in which sound is treated as a quasi-linguistic medium, a medium for communicating musical texts.

As a preliminary example, I shall quote Max Neuhaus (1939-2009), who, after a career as a noted percussionist, became one of the pioneers of sound installation. First:

> The important thing about this kind of work is that it's not music. It doesn't exist in time. I've taken sound out of time and made it into an *entity*.[76]

[75] Caleb Kelly (ed.), *Sound* (London: Whitechapel Gallery, and Cambridge, Mass: MIT Press, 2011), p. 14. My italics.
[76] Quoted in Christoph Cox, 'From Music to Sound: Being as Time in the Sonic Arts' (2006), in Kelly (ed.), *Sound*, p. 84. My italics.

Sound, then, is an 'entity' in sound art, but not in music. In music it *instead* 'exists in time'. But what does it mean to exist in time?

> Communion with sound has always been bound by time. Meaning in *speech and music* appears only as their sound events unfold *word by word, phrase by phrase*, from moment to moment. [My works] share a different fundamental idea—that of removing sound from time, and setting it, instead, in place.[77]

By 'time', then, he implies quasi-linguistic structuring and meaning, and 'place' stands not just for the location in which the art is installed but also for the elimination of this quasi-linguistic structuring (i.e., figuratively, as the contrary of time). For Neuhaus, the installation of sound in space and the attainment of a zero degree of rhetoric go hand in hand. This is normal in sound art. In most of his best-known work, as in that of many other artists, this elimination of 'time' was achieved by means of electronically generated drones. In his most famous installation, *Times Square* (1977-1992 and 2002-), a continuous sound emanates from ventilation tunnels under a pedestrian island in Times Square, New York City.[78]

The point, for the purposes of this study, is that Neuhaus had a stylistic preference for a zero degree of musical rhetoric, which he shared with experimental composers, and that his solution was to exaggerate an anti-syntactical strategy also common in experimental music: the hyper-sustained sound. What he rejects is not music as such but quasi-linguistic organisation of sound (which is admittedly orthodox in music). He identifies music with this kind of organisation and treats his own purist approach as characteristic of art. In this way he elides the organisational-stylistic question with the question of the physical diffusion of sound. Yet he is also reported to have said that similar drones installed in La Monte Young's Dream House constituted a 'very long piece of music'.[79]

Neuhaus is also representative of a certain ambivalence in sound art aesthetics, which is that, although works are defined by the physical installation of sound, sound is often avowedly used not as an end in itself but as a means to a conceptual end, or a perceptual end that is not exclusively sonorous but often involves space. According to Neuhaus, it is in

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[77] Ibid., p. 83. My italics.
[78] Neuhaus's exclusion of the 'musical' extended to trying to prevent buskers, from performing above *Times Square*. See Lynne Cooke, 'Locational listening', in *Max Neuhaus: Times Square, Time Piece Beacon*, ed. by Cooke and Karen Kelly (Dia Art Foundation, New York, published by New Haven and London: Yale University Press, 2009), pp. 29-39 (p. 36).
[79] Quoted in Liz Kotz, 'Max Neuhaus: Sound into Space', in *Max Neuhaus: Times Square, Time Piece Beacon*, ed. by Cooke and Kelly, pp. 92-111 (p. 103).

*music* that 'sound is the artwork'; in his own work, 'sound is used as a subtle tool to shape a new perception of space'.[80] In another interview, he states that his works

> differ in two principal ways from music. One is that they're not a succession of sound events in time, which is one of the basic definitions of music: a series of sound events that progress from one to the other, and that draws a line in time.
>
> The other difference is that the sound is not the work; the sound is the material that I make the place out of, that I transform the space into a place with.

He adds that 'recording this material is as silly as taking the paint off the canvas and thinking it's still the painting.'[81] The idea that the 'ordinary' repertoire is the one in which sound *is* the work makes quite a contrast with my previous examples. This is something that I shall explore further in Chapter 5.

## 1.5 Compositional rhetoric

### 1.5.1 The paradox of organisational bias

One could continue forever with other, similar examples, but this handful already demonstrates a striking linguistic uniformity, or at least a pattern of correspondences, in the sonicist interpretation of music or other sonic artefacts.

It may be objected, however, that surely not *all* music can plausibly be interpreted as exploring sound as material, and as non-grammatical—and that therefore this sort of discourse is not entirely arbitrary after all. But which music springs to mind as *not* interpretable in this way? Perhaps the late, speculative Bach, or integral serialism? This brings me to another of my main hypotheses: that any evaluation of music as self-evidently *non*-sound-oriented is made at least partly and often predominantly on organisational grounds, and never merely on the basis of the conservatism of the sound production or sound material. Any such judgment involves organisational presuppositions, and the success of

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[80] Neuhaus in *Max Neuhaus: La Collezione, The Collection* (Milan: Charta, in association with Castello di Rivoli, Museo d'Arte Contemporanea, 1997), p. 24. Quoted in Cooke, 'Locational Listening', p. 37.
[81] 'Conversation with Ulrich Loock', in *Max Neuhaus: Sound Works. Vol. 1 Inscription*, ed. by Gregory des Jardins (Ostfildern: Cantz, 1994), p. 124. Neuhaus explains elsewhere that the difference between 'space' and 'place' is that place has 'character': see Daniele Balit, 'From Ear to Site: On Discreet Sound', *Leonardo Music Journal* 23 (2013), p. 60.

sonicist discourse depends on how firmly these presuppositions are shared by the public addressed.

There is an important asymmetry regarding sound and organisation. Certain music with relatively traditional sound sources and sound material, such as that of Feldman, is nonetheless interpreted (if not unanimously) as radically sound-oriented. One can even find music for conventionally played piano that is interpreted in this way, even though the piano is the archetypal 'ordinary' instrument: Cage's *Music of Changes*,[82] for example, or certain spectral works.[83] In each case this reputation and interpretation rest on identifiable organisational features. It is very difficult, however, to find composers who value innovation in sound material but do not *also* position themselves in opposition to a stigmatised musical language. The grammatically traditional use of new sound materials (which would have to be pitched) has always been regarded as a faux pas—at least in 'art' music, which is the main concern of sonicist narratives. Varèse, for example, lamented the use of early electronic instruments such as the Theremin to play tonal melodies; he was echoed in this by Cage.[84] Wendy Carlos's *Switched-On Bach* (1968), while frequently mentioned in histories of music technology, is unlikely to be canonised in any sonicist narrative.[85] There are relatively recent works based on extended techniques, by composers such as Sciarrino, that include allusions to classical musical rhetoric, but in such cases there is generally a substantial distancing of the new work from the stylistic precedent.[86]

Sonicism is never neutral with regard to organisation. On the contrary, there is a consistent preoccupation with preconceived syntax. The very belief that timbre is inessential in conventional music *because syntax is not affected by it* reveals an engrained privileging of syntax. What varies is how radical the negation of conventional syntax is. When a sonic work transcends normal syntactical categories altogether—because it consists entirely of ocean sounds, for example—this negation is as extreme as it could be; but it is no less true or relevant for the reception of that work that there is such a negation. Indeed, the prestige of

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[82] Henry Cowell commented: Cage 'does not abandon his predilection for extraordinary sound, for at almost no point does the piano sound as one expects. Rather he seems now to be interested in discovering how nearly like a prepared piano he can make an unprepared piano sound, by means of special tone combinations, timbres, and dynamics.' 'Current Chronicle', *The Musical Quarterly* 38/1 (1952), pp. 123-136 (p. 127).

[83] See Marilyn Nonken, *The Spectral Piano: From Liszt, Scriabin, and Debussy, to the Digital Age* (New York: Cambridge University Press, 2014).

[84] Varèse, *Écrits*, p. 89; Cage, 'The Future of Music: Credo' [1937], in *Silence*, pp. 3-6 (p. 4). This early Cage essay paraphrases a number of Varèse's main arguments.

[85] Christoph Cox, for example, in his book on sound art aesthetics, describes *Switched-On Bach* as 'something of an extended advertisement for Moog's synthesiser'. *Sonic Flux: Sound, Art, and Metaphysics* (Chicago: University of Chicago Press, 2018), p. 97.

[86] For example, the pitch content of the arpeggiation in the *Sei caprici* (1976) for violin. Mieko Kanno, 'Prescriptive Notation: Limits and Challenges', *Contemporary Music Review* 26/2, pp. 231-254 (pp. 241-243).

such material derives at least in part from the fact that the organisation of sound is entirely foreign to what would normally be labelled as syntax.

The conviction that one is involved primarily in the purely sonorous, whether in shakuhachi music or ambient, is always among other things a product of organisational traits. One can view this as a consequence of the reciprocal relationship of sound and organisation. In any case, the inescapability of the influence of the purely organisational is a troubling paradox for the sound-oriented composer, because it reintroduces the interpretative possibility (usually ignored) of subsuming the liberation of sound 'as sound' into modernism, experimentalism, or perhaps postmodernism (but not usually neoclassicism). This creates a practical, stylistic problem for the composer (or producer, or artist): how to convey *organisationally* that sound is treated 'as sound' (because there is no escaping having to do so) without *re*-imposing form on sound? More problematic still is the conventionalisation not only of material, which I mentioned above, but also of organisational figures.[87] These become *signs* of the presence, priority, autonomy, particularity of sound; at least, they connote these qualities. I shall now discuss some of these.

### 1.5.2 Sonicist conventions

It would be implausible to claim to offer an exhaustive inventory of such conventions, given the individualism involved, but some common musical traits that are routinely interpreted as signs of 'sound as sound' can be set out by considering the ways in which composers negate (1) 'ordinary' sound material, especially the unit of the note, and (2) 'ordinary' musical 'syntax'. In the following chapters I shall look at ways in which composers use these traits in complex rhetorical strategies that are not as one-sided, i.e., not as exclusively sound-oriented and anti-syntagmatic, as they may appear.

I shall begin with the ('classical') note. The note is not negated in the sense of being substituted by its opposite; instead, the note can be seen in most respects as a moderate value lying between two extremes, which can often be labelled 'maximal' and 'minimal'.[88] Both extremes tend to favour a sonicist interpretation. To begin with, there is duration: the note is generally (with exceptions, such as the pedal points in Sibelius) not too short, not too long, occupying the psychological present. Accordingly, in sound-oriented music we often find

[87] This, too, is predicted in semiotics. See Pierre Guiraud, *Semiology*, trans. by George Gross (London, Boston: Routledge & K. Paul, 1975), pp. 41-43.
[88] As Joanna Demers does in Chapters 3 and 4 of *Listening Through the Noise: The Aesthetics of Experimental Electronic Music* (Oxford: Oxford University Press, 2010).

extremes of elongation (connoting timelessness and incommensurability, as in drone music), and fragmentation (as in microsound, which represents the discovery of the ultimate 'particles' of sound).

Similarly, amplitude: the classical note is neither dangerously loud nor barely audible. Sure enough, both of these extremes have a well-known pedigree in sound-oriented music, the former in noise music by artists such as Masami Akita (better known as Merzbow, the name of his noise project starting in 1979), and the latter not only in Cage's *4'33"* (which, as is well known, is not conceived as inaudible) but also in microsound music by producers such as Richard Chartier.[89]

The defining trait of the note, however, is spectral: it has a locatable fundamental (or second partial in some cases), with implicit harmonics. It is thus of intermediate complexity, between the extremes of white noise (connoting transgression, violence, etc.) and the sine tone (inhuman perfection), which are again both sonicist conventions. The electronic music composer Ryoji Ikeda, for example, is particularly well known for using these extremes (together with clicks) almost exclusively. Composers are also keen to explore other alternative spectral types to the classical note: spectral music, for example, commonly features fundamentals with a 'halo' of audible or simulated harmonics or bell-like inharmonic spectra (as in Grisey's *Partiels*). Some of these options entail an element of 'vertical' organisation.

As regards morphology or micro-organisation, the note is sometimes represented as a point but, in more sophisticated discourses, is acknowledged to have a relatively simple internal morphology, mainly consisting of attack and decay. By contrast, sound-oriented composers often cultivate the most 'complex' sounds possible,[90] in which every parameter of sound is in constant flux—but also the opposite extreme: uncannily pure sounds with instantaneous onsets and offsets, as in Karel Goeyvaerts's electronic pieces of the 1950s. In instrumental music, dynamics are often used to simulate alternative 'morphologies', for example the *da niente-a niente* shape typical of Sciarrino, which often occasions an

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[89] See Chapter 4.

[90] One famous statement regarding complex sounds is the spectral composer Tristan Murail's article 'The Revolution of Complex Sounds', trans. by Joshua Cody, *Contemporary Music Review* 24/2-3 (2005), pp. 121-135. This is in itself another excellent example of sonicism. I shall quote the opening (p. 121): 'The most sudden and important revolution to affect the musical world during the recent past was based not on some type of reflection upon musical grammar (serial or other), but rather—more deeply—upon the world of sounds themselves: in other words, in the sonic universe that summons the composer. [...] any attempt to integrate these new sounds that are above all, as we shall see, sounds of a 'complex' character, necessitates a profound revision of traditional compositional techniques (by 'traditional' I include serialism, aleatoric composition, stochastic composition, etc.: techniques that continue to use antiquated grids of parameters) and of our very conception of the compositional act.' Murail is able to illustrate most of his points using staff notation, however.

interpretation highlighting the boundary between sound and silence, or the exaggeration of the classical note: an explosive attack and a long, drawn-out decay. This and the reverse (the *da niente* crescendo) are both clichés of New Music.

Now I shall move on to the negation of 'syntax'. For the sake of argument, we can distinguish between local, sound-to-sound connections at the level of the gesture (here we are concerned, above all, with melodic and harmonic *intervals*) and larger-scale rhetorical or quasi-narrative structures (which, in 'ordinary' music, involve conventional structures that can be analysed in terms of 'formal functions': initiating, continuation, cadential and other 'functions').[91]

The main options for anti-syntax at the level of the gesture tend once again towards extremes: on the one hand, pointillist discontinuity, on the other, amorphousness (an excess of continuity)—or to a combination of both extremes. Examples of these are discussed in the next two chapters. Feldman's *Projection 1* for cello (1950), one of his most pointillist works, exemplifies discontinuity: any sense of melody is obliterated by temporal disjunction (sounds are articulated by silence), intervallic-registral disjunction, and heterogeneity of timbre. This style is emblematic of an archetype of 'sounds themselves', in the plural. The opposite extreme is well represented by the signature style of Giacinto Scelsi, which is discussed in Chapter 3: here the strategy is to obscure the interval by blurring the notes together through unbroken sound, glissando, gradual quartertone motion and glissando, and especially the accumulation of quartertone clusters.

At a higher level, that of the 'phrase' (or the equivalent temporal level, since phrases are often avoided), we can find an analogous opposition, which I mentioned earlier: the opposition between, on the one hand, the non-patterned and unpredictable (most famously represented by Cage and early Feldman) and, on the other, the static or redundant (as in drone music and loop-based music). But these opposites can be combined in many ways. I shall mention just a few here. Much of Feldman's later music (also discussed in the next chapter) unfolds as unpredictable chains of variants on patterns: the underlying repetition is clearly audible, but the detail is unknowable. Cage's late 'number pieces' consist of unpredictable sequences of extremely long sounds; they thus combine the unpredictable and the static. In electronica one frequently finds unpredictable glitches and samples of various kinds superposed over a more obviously repeating chord pattern or bass line; often the seemingly erratic material is also looped, but in such a way as to confound metrical expectations.

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[91] William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York, Oxford: Oxford University Press, 1998).

Examples can be found in the work of Tim Hecker and Sasu Ripatti.[92] In 'Ranta' from Ripatti's *Multila* (2000), for example, the synth chord pattern consists of an A minor chord with the E intermittently shifting to an upper neighbour F; this serves as a background over which layers of disjointed material (pitched and unpitched) gradually build up.

### 1.5.3 Stylistic predispositions

The negation of 'ordinary music' allows for a number of stylistic and ideological predispositions among producers and commentators. There is the modernist, atonal-chromatic predisposition, as in Varèse and Feldman. Then there is a predisposition towards what may be called 'morphological radicalism', i.e., the dissolution of note-relationships altogether; this is prevalent in post-Schaefferian electroacoustic music in research institutions. There is also a modal, minimalist predisposition, as in Eno (who will be discussed in Chapter 4). Philip Glass, as quoted by Wim Mertens, also comes to mind: 'The listener will […] need a different approach to listening, without the traditional concepts of recollection and anticipation. Music must be listened to as a pure sound-event, an act without any dramatic structure.'[93] In this formulation, the idea of the attainment of a 'pure sound-event' once again goes hand in hand with the neutralisation of a linguistic element, that of conventional 'dramatic' or teleological-hierarchical organisation. For Glass, unlike most of the composers I have mentioned previously, this clearly does not require the elimination of modal configurations on the local, note-to-note level.[94]

What these stylistic positions have in common is that they are substantially 'beyond' the major-minor system and pre-modernist phrase and thematic construction. Composers and other authors have succeeded, by setting the terms of the discourse, in forming a canon of sound-oriented music (and art) marked by a certain degree of modernism or experimentalism. There are only a few, already assigned places for precursors, above all Debussy. Other composers expressing similar values on a less modernist basis are little noticed. Consider

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[92] Both of these artists have liberated themselves from the constraint of the beat. Hecker's electronic music career began with a straight techno phase under the name Jetone. Ripatti has several aliases but his main techno identity is Luomo, and he is best known for experimental minimal dub techno with a reduced beat under the name of Vladislav Delay. He has pursued both styles concurrently, however.

[93] Quoted in Wim Mertens, *American Minimal Music: La Monte Young, Terry Riley, Steve Reich, Philip Glass*, trans. by J. Jautekiet (London: Kahn & Averill; White Plains, NY: Pro/Am Music Resources, 1983), p. 88.

[94] A particular technical argument in Glass concerns the listener's awareness of psychoacoustic side-effects of the patterns. On this basis, Mertens asserts that Glass 'does not use additive processes as a formal scheme, but in order to create psycho-acoustic effects' (*American Minimal Music*, p. 71). However, Glass evidently uses these processes formally *as well*. In a similar vein, he states that '[i]n process music, structure is secondary to sound; the two coincide only in so far as the process determines both the sound and the overall form' (p. 88). But this logically applies also to non-minimalist, non-algorithmic compositional processes.

Federico Mompou, for example. His interpretation of his own music corresponds to much of what I have described above. He emphasises the priority of sonority, again as if he were unusual in appreciating it; he discusses the importance of transcending notes, and going 'in between' the notes; he expresses an aversion for Viennese classicism but also the avant-garde, which for him is the contemporary antagonist.[95] Like more modernist composers, he presents his material in a pared-down, redundant style, notably in his willingness to repeat material exactly. However, he does not feature in the main accounts of the liberation of sound.

It is possible to identify numerous competing, sometimes overlapping sonicist genealogies, with their own institutional and sometimes geographical/linguistic as well as stylistic prejudices. It has frequently been observed that authors writing about electronic music focus exclusively either on research-institution-based or commercially released electronic music, ignoring the existence of the other. There is also a specifically French genealogy running from Debussy through Varèse and Schaeffer, to the spectral school; a North American genealogy covering both experimental music and sound art; and so on. The situation of non-Western modernist composers such as Takemitsu is especially intriguing. Takemitsu drew on a non-Western tradition widely viewed as less tainted with grammatical 'thinking in terms of notes'—but he also chose to draw substantially on a modernist Western tradition reacting against a Western 'ordinary music'. This ordinary music was not entirely extraneous to him, since it was incorporated into a nationalist style against which he also reacted.

Institutional factors undoubtedly play a part in the depreciation of other syntaxes and styles as sound-neglecting. In the field of twentieth-century 'art' music, the approaches most commonly depreciated are (neo-)classicism and serial composition. This is logical enough, since both approaches are highly schematised and codified. However, it is noticeable that the intensity of the antagonism towards these particular approaches tends to vary according to their institutional dominance. Varèse, for example, came of age before twelve-tone thinking was institutionalised, and was relatively conciliatory towards it. In a letter to Dallapiccola, he rejects the 'intellectualism of the interval' (and then tries to be diplomatic by exempting Dallapiccola, along with Schoenberg and Webern, from this intellectualism).[96] *Silence* makes it clear that Cage, by contrast, saw neoclassicism and serialism as the twin institutional

[95] See Roger Prevel, *La Musique et Federico Mompou* (Geneva: Ariana, 1976), pp. 64, 96, 118, and 136; and Antonio Iglesias, *Federico Mompou: Su Obra para Piano* (Madrid: Alpuerto), p. 18.
[96] Varèse, *Écrits*, p. 125.

approaches between which one was expected to choose, and as such equally to be rejected.[97] From the 1950s onwards, as neoclassicism lost prestige, the target shifted more firmly towards serialism. This was noticeable especially in France, where serialism achieved particular institutional hegemony (although the same preoccupation with Boulez can be found in the writings of Cage and Feldman). It was natural for the Schaeffer school and the *Itinéraire* group (the spectral composers) to position themselves against serialism, attacking its structuralism.[98] In the *Traité*, Schaeffer identifies serial music as the archetype of '*a priori* musics', the main concern of which being 'intellectual rigor and the total ascendancy of abstract intelligence over both the authors' subjectivity and the sound material.'[99] He opposed such music to 'experimental' or empirical music. Today, it is safe to say that sonicist thinking has indeed largely supplanted serial or 'combinatory' principles, and so it has unsurprisingly become more customary to emphasise, for example, that Boulez's music is not only structuralist but also typically French in its ravishing sonority.[100]

The irony here is that the post-Webernians were also concerned with sound itself. M. J. Grant has discussed this especially in connection with their electronic music: the exploration of the internal features of isolated tones, the relationship between timbre and other parameters, the idea of a 'sound universe specific to each work'.[101] It was in somewhat sonicist terms that Boulez proposed Webern as representing 'the threshold' for new music: the latter had rehabilitated 'the power of sound against all inherited rhetoric'; only Debussy had previously had 'a like tendency to destroy the idea of pre-existing formal organization for a work, a like recourse to the beauty of sound for its own sake, a like elliptical pulverization of the language'.[102] Also in *Die Reihe*, Hans Rudolf Zeller discussed a modernist 'delinguification' of music, which he related back to Mallarmé's 'musicalisation of poetic language'.[103]

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[97] For example, Cage, *Silence*, p. 63, n. 7, p. 64, n. 8.
[98] See Claudy Malherbe, 'L'enjeu spectral', *Entretemps* 8 (1989), pp. 47-53. See also Eric Drott on Hugues Dufourt's critique of serialism: 'Spectralism, politics and the post-industrial imagination', in Björn Heile, *The Modernist Legacy: Essays on New Music* (Farnham: Ashgate, 2009), pp. 39-61.
[99] Schaeffer, *Traité*, pp. 20-1.
[100] See, for example, Tom Service, 'A Guide to Pierre Boulez's Music', *The Guardian*, Monday, 16 July, 2012.
[101] Boulez, 'An der Grenze des Fruchtlandes', *Die Reihe* 1 (1955), pp. 47-56 (p. 49). Cited in Grant, *Serial Music, Serial Aesthetics*, p. 79.
[102] Pierre Boulez, 'Incipit', in *Notes of an Apprenticeship*, trans. by Herbert Weinstock (New York: A. A. Knopf, 1968), pp. 277-78. He goes on to emphasise Webern's 'counterpoint of sound and silence', comparing it not to Cage (perhaps the most obvious musical comparison) but to Mallarmé.
[103] Hans Rudolf Zeller, 'Mallarmé und das serielle Denken', *Die Reihe* 6 (1960), pp. 5-29 (p. 6).

## 1.6 SONICIST IDEOLOGY

The idea of a move from 'already heard' to unique sounds, from point-like note to complex sound, from the prison of written notes to a direct rapport with sound, from music to sound art—none of these ideas is meaningless, but there are a number of questionable assumptions involved in attempts to delimit their applicability.

The first thing to consider, however, is the very assumption, often taken entirely for granted (a 'covert value', in Janet Levy's phrase[104]), that sound-oriented music is to be preferred—and the further phonocentric bias that anything too closely associated with a particular notation compromises this orientation. This view is easy to understand, given the appeal of empiricism as opposed to formalism and academicism, as well as the obvious positive valency of emancipation. It is easy to forget that the opposite view, that sound might be the conduit to something more important, is also available and might even come from an authoritative source. Ives, for example, is a composer who cannot be accused of sonic conservatism, yet in *Essays Before a Sonata*, the 'substance' he values (opposed to 'manner') is not a sound substance but a content, or 'truth'. In his epilogue, Ives declaims: 'My God! What has sound got to do with music! [...] Why can't music go out in the same way it comes in to a man, without having to crawl over a fence of sound, thoraxes, catguts, wire, wood, and brass?'[105]

### 1.6.1 The sonic turn and the materiality of sound

Next there is the overall historical narrative of a twentieth-century sonic turn. Surely there is a good deal of truth in the idea of a liberation of sound, at least on the level of technique. The usual mistake is that of caricaturing the sensibilities of previous epochs on this basis, i.e., from a modernist point of view, so that the polemical discourse of the liberation of sound is treated as confirming itself. Perhaps it is natural in any age to have an undue bias towards the contemporary perspective and to be predisposed to find evidence that previous generations were wrapped up in abstractions. In this respect, twentieth-century sonicism continues a long history of critiques of the excessive abstraction of one's predecessors and contemporaries that

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[104] See Janet Levy, 'Covert and Casual Values in Recent Writings about Music', *Journal of Musicology* 5/1 (1987), pp. 3-27.

[105] Ives, *Essays Before a Sonata: And Other Writings*, ed. by Howard Boatwright (New York: Norton, 1961), p. 84. This makes it interesting to notice the title of Gianfranco Vinay's book *Charles Ives et l'utopie sonore américaine* (Paris: Michael de Maule, 2010). Vinay acknowledges Ives's philosophical and expressive position but still puts him in a trio with Varèse and Cowell in the context of an 'American sound'.

stretches back, through eighteenth-century music aesthetics, to Aristoxenus, to whom Varèse indeed refers.[106]

In particular, it is questionable to assume that the standardisation of sound materials in earlier eras indicated that sound was inessential, or that there was negligible concern with sound as sound. Peter Niklas Wilson has pointed out that in earlier periods instrumental sound was standardised precisely because a collectively cultivated colour was essential to the music; he refers to Friedrich Blume's remarks about 'specific colour'.[107] In twentieth-century music sound is highly individualised but does not for that reason *become* essential. The assumption that individualisation implies importance is the fruit of an individualist-progressivist world-view typical of the nineteenth and twentieth centuries, which has also been analysed by (among others) Leonard Meyer in *Style and Music*.

In short, it is hard to doubt that sonicism is at least reciprocal with progressivism: that sound-oriented music is valued also *because* it seems to supersede other music, and not only because sound is good for us. As I have suggested, the idea of the sonic turn can be regarded as a one-sided way of expressing what is really an innovatory attitude towards *both* material *and* (often especially) organisation, i.e., an empiricist spin on modernism-experimentalism.

According to Umberto Eco, the exploration of the materiality of the sign vehicle (in this case, sound) is characteristic not just of modernism but of 'aesthetic' sign production in general. In Eco's semiotic theory, which in this respect is based on that of Louis Hjelmslev, both the 'expression-plane' (the plane of the signifier) and the 'content-plane' (that of the signified) are characterised by the 'forming' or 'segmentation' of 'continua', yielding particular 'substances'.[108] For example, in spoken/written language, the perceptible sign vehicle—an audible utterance or written message—is an expression-substance produced by the forming of a vocal or graphic continuum according to a system of phonemes or graphemes, and correlated with a semantic *content*-substance, which is similarly the result of the segmentation of a content-continuum.

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[106] Varèse, *Écrits*, p. 145.

[107] Peter Niklas Wilson, '"Was wir in den Noten fixieren, ist nicht mehr als ein Gerippe": Notizen zur Emanzipation des Klangs in der Musik des 20. Jahrhunderts', *Neue Zeitschrift für Musik* 158/5 (1997), pp. 10-13.

[108] Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976), pp. 48-53. This model is based on that of Louis Hjelmslev: see *Prolegomena to a Theory of Language* [1943], trans. by Francis J. Whitfield (Madison: University of Wisconsin Press, 1961), pp. 47-60. I am using Eco's 'continuum' in preference to Hjelmslev's *mening* (normally translated as 'purport') not least because a few authors discussed later refer to 'continua'. The Hjelmslevian aspect of sonicist aesthetics is ironic, given Hjelmslev's formalism: he regarded expression-*form* and content-*form* as the core of the sign function.

This corresponds to the hylomorphic conception of sonicist aesthetics, especially as regards the critique of 'ordinary music': an intrinsically limited field of instrumental sound (expression-continuum) is filtered through a system that only allows equal-tempered notes (expression-form), and this is why the music (expression-substance) is constrained and linguistic in character. And sonicist claims typically involve the discovery of new continua, ever more fine-grained ways of segmenting them (as in electroacoustic music)—and, less plausibly, the elimination of form and system (as in Cage and Feldman).

According to Eco, however, the novel segmentation of continua (sometimes of new continua) is a feature of the 'aesthetic text as invention'.[109] He underlines once again the inseparability of material and organisational innovation:

> The clue is given by artists themselves when they tell us that they examine the very veining of material, the texture of the wood, canvas, iron or sounds and noises, trying to find in them relationships, forms, new visual or auditory paths. The artist discovers at the deeper level of the expression-continuum a *new system of relations* that the preceding segmentation of that continuum, giving rise to an expression form, has never made pertinent. These new pertinent features, *along with their mode of organization*, are so detectable and recognizable, that one becomes able to isolate the work of a given artist, and thus to distinguish, for instance, Fautrier from Pollock or Boulez from Berio.[110]

To whom we may add: Feldman from Cage, or Neuhaus from Young. This process of invention is evidently most dramatic in modernist 'aesthetic texts' (as in the examples mentioned by Eco) but it is not unique to them. The twentieth-century exploration of the materiality of the sign vehicle can be regarded as a manifestation of a sonic turn—but it can also be seen as a fundamentally normal pursuit of the 'poetic function', albeit in a particular historical context of unprecedented technical possibilities.

### 1.6.2 Composer, performer, listener

Now let us leave aside the belief in an overall liberation of sound and consider the more particular aesthetic positions and technical claims advanced by composers and commentators.

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[109] Eco, *A Theory of Semiotics*, p. 261.
[110] Ibid., p. 244. My italics.

It is striking how many authors expect and elicit substantial consensus about these positions. In this respect, we can recognise another familiar slant of music discourse, that of willingly interpreting music from the composer's perspective. This normally means treating primacy of sound as a property inscribed in *works*, and assuming that a 'correct' listening response will be unanimous. It means ignoring the possibility, by no means far-fetched, that some listeners of today might, for example, experience a sixteenth-century motet as overwhelmingly sonorous, ignoring the construction, while they might be distracted *from* the sound material of an aleatoric or spectral composition *by* the language.

The producer- or composer-centred attitude can also be observed in the assumption of the value or desirability of the composer's unmediated rapport with sound—of working directly with sound. In electronic music, the idea of such a rapport is treated as a plain matter of fact on the basis that electronic mediation does not count as mediation. In performed music, the same image is used to evoke composers' exceptional care and sensitivity in *planning* sound events, but conceals the fact that performers are the real 'producers' of the sound and are the ones who 'work with' the materialised sound, if anybody does. The sound production of the performer is rejected in the former situation and concealed in the latter. Of course, this underestimation of performers is not peculiar to sonicism.

With regard to 'the listener', I have already conceded that in some cases a heightened awareness of sound quality or of the physical reality of sound is all but irresistible, and that any interpretation that neglected this would be absurd. The audience at one of the notoriously loud noise concerts by Masami Akita can vouch for this. I do not doubt that there are many other, less extreme cases in which many listeners will have a special phenomenological involvement in sound quality or will contemplate individual sounds in an unusual way, for example. As I have stated in my Introduction, it is not part of this study to attempt to theorise the conditions for this. Indeed, I do not see how firm predictions can be made. My main point is that it is dubious to rule out such a consciousness in musical fields other than one's own. No stylistic or technical approach has a monopoly on the fostering of a radically sound-oriented listening attitude. Such an attitude depends on listeners' experience, including their knowledge of discourse about music (including sonicist discourse), on the character of the performance (when there is one), and on acoustic and other circumstances.

Varèse himself illustrates this with his well-known anecdote about an experience of listening to Beethoven's Seventh Symphony in the Salle Pleyel. On that occasion, the acoustics in the hall defamiliarised the piece in such a way that he felt 'the music detach itself from itself and project itself in space to such a point that [he] became conscious of a fourth

dimension in music.'[111] He thus experienced, *unexpectedly*, the 'projection' of sound, which he then attempted to integrate into his own works. The point is that Beethoven's idiom is not intrinsically incompatible with this experience. If the work needed to be defamiliarised in this way for Varèse, this had to do with his prior knowledge of the idiom and of the work, and his avant-garde orientation. Other listeners might well receive such an impression of projection in Beethoven's music as a matter of course.

The stigmatising of the note is problematic for the same reason: the implied listener tends to be a very extreme version of what Nicholas Cook has called the 'musicological' listener[112]—one whose consciousness of note schemas is so overwhelming as to effectively rob the sound of any 'depth'. It is not essential for my purposes to determine whether such an extreme case exists. I merely claim that this is not the common predicament that many sonicist authors would have one believe—and that, even if it were, it would still be difficult to justify any assertions about which types of sound structure do and do not provide a 'cure'.

### 1.6.3 Purely sonorous and purely musical

There is a clear analogy between twentieth-century sonicism and the autonomy aesthetics of the nineteenth century. The 'purely musical' was defined, circularly, by the exclusion of the extra-musical (sung texts, extrinsic reference). This was connected to the idea of music's autonomy in relation to social function. As we have seen, sonicism involves an analogous ideal of 'sound itself', or the 'purely sonorous', which is also defined negatively by the exclusion of other things, extraneous entities imposed on sound: norms and limits of various kinds (as in Varèse), physical cause (Schaeffer), individual intention (Cage), the mediation of performance and/or writing, and, in all cases, some conception of aprioristic musical language. The exclusion of social function generally goes without saying, with some exceptions, notably in popular electronica. We can therefore describe intention, language, etc. as the 'extra-sonorous' by analogy with the extra-musical. In both cases the idea of the thing in itself ('music itself', 'sound itself') is an aesthetic ideal, and not only a phrase used intermittently for emphasis.

This analogy is sometimes made explicit in the discourses in question, for example, by Schaeffer when he refers to the move 'from the purely "sonorous" to the purely "musical"'.[113] Varèse also connects the two ideologies when he says: 'I would like to affirm

[111] Varèse, *Écrits*, pp. 126-27.
[112] See Nicholas Cook, *Music, Imagination, and Culture* (Oxford: Clarendon, 1990), p. 152.
[113] See also *Revue Musicale* 303-5 (1977), which is entitled 'De la musique concrète à la musique même'.

two facts, which, despite being evident, are too generally ignored: sound is the raw material of music, and any material that is *not purely musical* has no place in a new work'.[114] Indeed, the extra-musical remains an important sub-category of the extra-sonorous. Varèse criticised the Futurists for their descriptive use of noise, and stressed that there is 'nothing imitative, descriptive, or futurist' in his own works.[115] In a similar vein, the Cologne electronic composers looked down on the mimetic or, as Boulez put it, 'anecdotal' aspects of the output of their Parisian rivals.[116] Admittedly, there are pieces that seem to reconcile sonicist aesthetics and extrinsic reference, such as Hugues Dufourt's spectral compositions that also evoke specific art works,[117] but, even here, there is a nineteenth-century precedent: programme music was often argued to adhere to the spirit of absolute music.[118]

Where sonicist discourse goes further is in seeking to exclude not only the extra-musical but also the extra-sonorous, and notably the linguistic and 'formal' aspects of music. The move from the pursuit of the purely musical to that of the purely sonorous (the reverse of Schaeffer's formulation) is one of ever-greater purification, refinement, and exclusivity. Having excluded the extra-musical, one excluded that which is purely musical but extra-sonorous, in order to reach the goal: the purely sonorous. As another example of this, I quote Morton Feldman:

> This is my generation as well as Boulez's and Babbitt's, and I, too, want things to be 'what they are'. [...] I, too, like Boulez, wanted *music* to be an autonomous object.
>
> [...] The closer I came, on my own terms, to a really autonomous situation, the more I felt the first warning that a new dichotomy was about to take place. The form this warning took was a strange resistance of the *sounds themselves* to taking on an instrumental identity. It was as though, having had a taste of freedom, they now wanted to be really free.[119]

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[114] Varèse, *Écrits*, p. 127 (radio interview from 1953). On Varèse's formalism, see Nattiez, *Music as Discourse: Toward a Semiology of Music*, trans. by Carolyn Abbate (Princeton, NJ: Princeton University Press, 1991), pp. 51-53, 108.
[115] Varèse, *Écrits*, pp. 23, 24, 127.
[116] H. H. Stuckenschmidt, 'The Third Stage: Some Observations on the Aesthetics of Electronic Music', *Die Reihe* 1 (1958), p. 11. See also Boulez, in *Boulez on Music Today*, p. 22.
[117] See Jann Pasler, 'Hugues Dufourt's "Manifesto of the Music of our Times": Narratives Without History in *L'Afrique* and *L'Asie d'après Tiepolo*', *Perspectives of New Music* 19/2 (2011), pp. 98-131.
[118] See Carl Dahlhaus, *The Idea of Absolute Music*, trans. by Roger Lustig (Chicago, London: Chicago University Press, 1989), pp. 137-140.
[119] Morton Feldman, *Give My Regards to Eighth Street: Collected Writings of Morton Feldman*, ed. B. H. Friedman (Boston: Exact Change, 2000), pp. 110-11. My italics.

The continuity between nineteenth-century and sonicist discourses can be confirmed by looking back at the original texts of the aesthetics of musical autonomy. The idea of sound itself was already at the heart of nineteenth-century aesthetics. One can find 'proto-sonicist' statements in Hanslick, for instance: 'music does not only speak *by means of sounds*, it speaks nothing but *sound*'.[120] If we substitute 'music' for 'sound', we can imagine a nineteenth-century ancestor of the spectral composer Gérard Grisey who states: 'We are musicians and our model is [music] not literature, [music] not mathematics, [music] not theatre, visual arts, quantum physics, geology, astrology or acupuncture.' And perhaps also a formalist Cage who recommends freeing one's mind of *extrinsic reference* (rather than music) and letting *music* (rather than sound) be itself; the abstention from providing a 'vehicle' for 'human sentiment' would be the same.

All of this helps to account for the ideological power of sonicist discourse: in addition to its empiricist appeal, it combines the modernist rejection of inherited language with nineteenth-century autonomy aesthetics. However, as we shall see in Chapter 5, this also provides interpreters of sound art with a discursive key for consigning sonicist music in the Varèse-Cage-Schaeffer lineage back into the realm of 'music' writ large.

[120] Eduard Hanslick, *The Beautiful in Music*, 7th edn. [1885], trans. by Gustav Cohen (New York: Da Capo, 1974), p. 163. There is also the dictum that the 'essence of music is sound and motion' (p. 67).

# CHAPTER 2

## BETWEEN SONICISM AND MODERNISM: THE RHETORIC OF MORTON FELDMAN

In this chapter I shall examine Morton Feldman's verbal and musical discourses, using the framework set out in Chapter 1, and consider the influence of his self-representation on his reception. The main focus will be on his early style, developed in the 1950s and 1960s—a non-teleological, paratactical style in which sounds were not organised into phrases or motives but seemed to 'just' or 'simply' occur, one after the other.[1] As I mentioned in Chapter 1, this style is emblematic of a notion of 'sounds themselves', in the plural. On the musical level, this is expressed by a rhetoric of disjunction, articulation of sound by silence, unpredictability, and absence of pattern—and on the verbal level, by imagery of mutually indifferent sounds floating in space and observed from a distance (in contrast with the more immersive experience of 'sound itself' in the singular). Later and more briefly, I shall consider his turn to a form of post-minimalism in works based on the repetition and subtle permutation of short patterns.

Feldman frequently emphasised that his work was motivated by a special concern with sound. To give just a few examples: he stated that what the New York circle of composers had in common was that 'sound was the impetus and basis of our work';[2] that 'there was a deity in my life, and that was sound. Everything else was after the fact';[3] and that 'for me at least sound was the hero, and it still is. [...] I listen to my sounds, and I do what *they* tell me, not what I tell them'.[4] This, together with his affinity for abstract art, has been the dominant interpretative frame ever since.

Given the flavour of these remarks, and especially the personification of sound in the Cage mould, it is easy to see why he was so often associated with Cage's aesthetics of non-intention, to his irritation. It is now understood that Feldman's reliance on his own ear and sensibility was far removed from Cage's anti-subjectivism. Indeed, Feldman implied that he

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[1] Such adverbs are a common way of suggesting the independence of the sounds and the impossibility of explaining them. See, for example, the Jonathan Kramer quotation, n. 37 below.
[2] Jolyon Laycock and David Charlton, 'An Interview with Morton Feldman' (May 1966), *Opus* 2, 1/6 (1967), 18-20, reprinted in Morton Feldman, *Morton Feldman Says: Selected Interviews and Lectures 1964-1987*, ed. by Chris Villars (London: Hyphen Press, 2006), pp. 15-28 (p. 28).
[3] Robert Ashley, 'Part of an Interview with Morton Feldman (August 1964), Kulchur (1965), pp. 20-24. Reprinted in Feldman, *Morton Feldman Says*, pp. 14-17 (p. 15).
[4] Morton Feldman, 'Conversation with Walter Zimmermann', in *Morton Feldman Essays*, ed. by Walter Zimmermann (Wasserberg: Beginner Press, 1985), p. 237.

was superseding Cage, remarking at different times that Cage relied on 'ideas'[5] and even that chance was the 'most academic procedure yet arrived at'.[6] Nonetheless, they did have in common, in the 1950s and 1960s at least, an underlying philosophy that Leonard Meyer, at different times, called 'radical empiricism' and 'transcendental particularism'.[7] That is, they both aspired to privilege the particularity and immediacy of individual sounds ('themselves') by negating musical relationships of implication, hierarchy, and meaning—i.e. all those relationships customarily labelled with linguistic metaphors (musical syntax, rhetoric, semantics, etc.).

Feldman's position has an affirmative and a negative side. He articulated the affirmative side—his sonic and musical ideal—above all through analogies with visual art. The art analogy is the distinctive form that the hypostatisation of sound takes in his discourse. He refers, for example, to the 'surface' of his music[8] and to his 'discovery that sound *in itself* can be a totally plastic phenomenon'.[9] Initially these analogies were with the work of abstract painters, especially the abstract expressionists; later, in the years of the pattern-based music, he would frequently refer to the traditional textiles of the Middle East. These analogies, along with Feldman's well-known personal immersion in the New York art scene, have been the object of much scholarly attention[10] and have had an incalculable influence on the way concert-goers experience the music.

The negative side of his position is more specifically musical. This is his repudiation of, somewhat interchangeably, 'rhetoric', 'system', and 'ideas'. In this respect he tends to slip between the procedural logic of the composition process and the intersubjective effect of music. He rejected the 'cause and effect continuity' and 'antecedent and consequent

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[5] May 1971 interview: Martine Cadieu, 'Morton Feldman: l'attente', *À l'écoute des compositeurs* (Paris: Minerve, 1992), pp. 202-205; reprinted in Feldman, *Morton Feldman Says*, pp. 38-40 (p. 40): 'Webern first had a conception, then he chose the sounds. Xenakis also first has a conception. Varèse no. Then me, I'm the legitimate son of Varèse and Xenakis is the illegitimate... Varèse first possessed the sound. Me too. And poetry. In fact, I have no need for ideas (in that I differ from Cage; he agrees on our differences).'

[6] Feldman, 'Sound, Noise, Varèse, Boulez', in *Give My Regards to Eighth Street: collected writings of Morton Feldman*, ed. by B. H. Friedman (Cambridge, Mass.: Exact Change, 2000), p. 1.

[7] Leonard Meyer, *Music, the Arts, and Ideas: Patterns and Predictions in Twentieth-Century Culture* (Chicago: Chicago University Press, 1967), pp. 77 and 158-59.

[8] Feldman, *Give My Regards to Eighth Street*, p. 88. Unlike a Schenkerian 'surface', Feldman's suggests nothing 'beneath'.

[9] Feldman, *Give my Regards to Eighth Street*, p. 19.

[10] See especially Steven Johnson, ed., *The New York Schools of Music and Visual Arts: John Cage, Morton Feldman, Edgard Varèse, Willem de Kooning, Jasper Johns, Robert Rauschenberg* (New York: Routledge, 2002); Marco Lenzi, *L'estetica musicale di Morton Feldman* (Milan: Ricordi, Lucca: LIM, 2009).

relationships' of traditional composition,[11] but also frequently criticised his immediate rivals, the post-Webernian European composers, and occasionally Cage.

Feldman's attitude towards sound production, compared to that of Varèse and Cage, was relatively traditional. He made it explicit on at least one occasion that he was not interested in creating 'new' sounds.[12] He eschewed neither instrumental performance nor definite pitch; on the contrary, his preference was for the purest instrumental 'tone' possible (i.e., pitched sound). Following an early experience in creating a composition for tape, he claimed not to care for electronic instruments, finding them 'too undimensional' (perhaps meaning 'one-dimensional'), 'too psychological',[13] and even as producing 'dead sound'.[14] Electronic sound was like 'neon lights, like plastic paint, it's right on top, whereas I like the paint to seep in a bit.'[15] Traditional instrumental sound was not exhausted at all. On the contrary, the problem was that music had (until Feldman, perhaps) 'never had its Matisse'; composers had lacked 'a natural rightness for color'.[16]

Feldman's selection of sounds was certainly not indifferent. On the contrary, his music is recognisable for a distinctive prevalence of quiet sound, typically with a subdued attack and leisurely decay—hence the slow tempi and floating effect of his most characteristic pieces, whether they are scored for unusual instrumental combinations or traditional ones (such as string quartet). Usually, these sounds are not elongated as much as they are in the music of Scelsi, for example, but enough for the decay to be appreciated, enough to encourage a focus on sound quality. It is as often if the fermata or ritenuto were used as the norm rather than to mark structurally important points. This primary gesture, the sustained, soft sound, may be said to connote the meditative and inward (as in Schubert's slow movements); in Feldman's own terms it acts as an analogue of the brushstroke. There is also the non-sonicist and less charitable interpretation attributed to Virgil Thomson: 'I don't

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[11] Feldman, 'I am Interested in the Commitment', Conservation with Frits Lagerwerff, 4 July, 1987, in Raoul Mörchen (ed.), *Morton Feldman in Middelburg*, Volume 2 (Köln: Edition MusikTexte, 2008) p. 786; Bálint András Varga, *Three Questions for Sixty-Five Composers* (Rochester, NY: University of Rochester Press, 2011) p. 77, quoted in David Cline, *The Graph Music of Morton Feldman* (Cambridge: Cambridge University Press, 2016) p. 125.
[12] Laycock and Charlton, 'An Interview with Morton Feldman', *Opus* 2, vol. 1 no 6 (1967), 18-20, reprinted in Feldman, *Morton Feldman Says*, pp. 25-28 (p. 27).
[13] Ibid.
[14] Tom Johnson, 'Remembrance' (notes taken during or after lessons with Feldman), in Feldman, *Morton Feldman Says*, pp.35-36 (p. 35).
[15] Paul Griffiths, 'Morton Feldman Talks to Paul Griffiths', *Musical Times* 113/1554 (August 1972), pp. 758-759 (p. 758).
[16] Feldman, 'XXX Anecdotes and Drawings', in *Essays*, pp. 144-180 (p. 177). Transcripts of seminars given in Frankfurt, 1984.

want to hear how much of a genius he thinks he is with every note he writes.'[17] Either way, here we have an example of the fact that the nature of the individual sound gesture can condition the semantic aspects of a piece even before any larger organisational decisions are made.

The fact remains that Feldman's approach to the 'field of sound' was one of refinement and focus, rather than innovation or expansion, and his characteristic sound world is not unlike what can be found in passages of works by composers such as Dallapiccola, who are interpreted very differently. On a technical level, then (and bracketing out his skilful self-representation), Feldman's claim to a special status with regard to sound seems to rest mainly on his organisational strategies, which I shall summarise in a moment. One might expect this to make him vulnerable to having his claim dismissed as a matter of modernist linguistic innovation. For example, this criticism might be expected to come from the perspective of the post-Russolo 'materialist' avant-garde (materialist in focusing on unfamiliarity of sound material). Instead, Feldman's musical and verbal discourses are so persuasive that he is largely immune to this notion, and his special rapport with sound tends to be accepted. He is even referred to with approval in the discourse on sound art, no doubt in part because of his association with the art world, but also because of his music's undramatic, non-hierarchical character.

This verbal and musical persuasiveness is the focus of this chapter. How is Feldman able to persuade listeners/readers that his musical configurations are in no sense equivalent to the 'systematic', 'rhetorical' ones from which he has supposedly liberated sound?

It may be useful to give a preliminary example of how Feldman's discourse influences commentaries. Writing about Feldman's stage work *Neither*, to a text by Samuel Beckett, Catherine Laws writes: 'As in most of Feldman's output, lyricism without melody, *the unmediated contemplation of sound*, and the avoidance of dramaticism through the use of understated dynamics are all evident'.[18] This statement is perhaps hermeneutically legitimate, provided that 'unmediated contemplation of sound' refers to musical meaning rather than to a technical fact. On that basis, it may be unnecessary to ask who is contemplating sound (Feldman and/or the listener) or what the absent mediation might have been. The other telling thing about this example is the way 'the unmediated contemplation of sound' is sandwiched

[17] Feldman, 'Johannesburg Lecture 2: Feldman on Feldman, August 1983', in *Morton Feldman Says*, pp. 175-179 (p. 177).
[18] Catherine Laws, 'Morton Feldman's *Neither*', *Samuel Beckett and Music*, ed. by Mary Bryden (Oxford: Clarendon, 1998), pp. 62. My italics.

between two of the technical correlates of this semantic aspect: an aspect of sound material (the use of quiet dynamics) and an organisational aspect (the suppression of melody). My general contention with regard to reception of Feldman (as well as Scelsi and other twentieth-century sonicists) is that this semantic character tends to be confused with the technical means, under the influence of the composer's own self-representation. In this respect, the idea of an 'unmediated contemplation of sound' is equally problematic in relation to both the early, paratactical and the late, pattern-based styles.

### 2.1 Gesture and texture

I shall begin by summarising (in terms of active decision-making rather than of negation and avoidance) how Feldman went about negating 'relationships' in his early music of the 1950s and 1960s. Then I discuss the two main complications in the interpretation of his work: his use of quasi-indeterminate notation and especially of graph scores; and his turn towards a type of post-minimalism in his last decade.

Feldman's creation of the impression of free-floating sounds can be explained largely in terms of certain fundamentals of gesture and texture, which are to some extent independent of pitch choice and also independent of notation. The primary musical gesture in the early Feldman can be regarded as a single note or chord (often sustained, as I mentioned above), rather than a configuration of notes. There are variants on this basic unit: for example, notes and chords are sometimes given grace-notes (occasionally one finds isolated grace-notes—in conventional terms a paradoxical gesture, especially in metrically unmeasured scores, but one that in performance can be expected to translate into a certain lightness of touch). These minimal units can be perceived as self-sufficient gestures first of all because they are often either isolated, i.e., articulated by silence, or allowed to overlap; in the piano music, the sustain pedal is used to secure this overlapping. Even when sound events are neither isolated nor overlapped, Feldman works against melodic perception and the perception of voice-leading by making disjunct motion the norm and by varying the density of chords. This ensures that the concept of melodic motion is often meaningful only with regard to the highest and possibly lowest notes in the texture, if at all.

With regard to pitch, Feldman's orientation was modernist and firmly chromatic, in the lineage of Varèse and Webern, as well as his main teachers Wallingford Riegger and Stefan Wolpe. In this respect he is not so distant from the post-Webernians. He tended to eschew sequence, response phrases, or any such syntagmatic structures, and to limit diatonic

configurations to a few notes at a time. Chords typically include at least one interval class 1, and in fuller chords his signature harmonic formation is to use one or two chromatic clusters and octave-displace at least one note; it is generally agreed that he was able to judge these chords exquisitely. He seems to have regarded the use of the chromatic aggregate as semantically neutral. For example, discussing his Second Quartet in seminars given in 1984, he presents it as self-evident that, when working with a chromatic subset, 'we have to use the other notes'.[19] It has been observed that he frequently played on the contrast between the total chromatic aggregate and segments of it.[20]

The interpretation of the early music is complicated by Feldman's use of quasi-indeterminate notation. He had two main approaches, neither of which interferes with the gestural and textural framework that I have just described. The more subversive approach was that of the 'graph' pieces, so called partly because they were sketched on graph paper but also because they retained an analogous grid format when copied out for publication (several of them copied by Cage). In these scores, sounds are represented by squares or rectangles in an implied grid, as in *Projection 1* for cello of 1950 (see Fig. 1), or by numbers and other symbols in an explicit, fully drawn grid (as in the *Intersections*). As in staff notation, the horizontal axis represents time, divided into time units, for which Feldman used the term 'ictus'—another example of Varèsian terminological substitution (like 'organised sound' for 'music'). On the vertical axis, that of pitch, Feldman limited himself to indicating register, by dividing the grid into three rows: high, middle, low. Thus, the duration or at least approximate timing of each sound was indicated, within a given time ictus or across 'icti', but exact pitch was left to performers to decide.

**Fig. 1. Morton Feldman, *Projection 1* for cello (1950), p. 1 of score**

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[19] Feldman, 'XXX Anecdotes and Drawings', in *Essays*, p. 169.
[20] E.g., Alistair Noble, *Composing Ambiguity: The Early Music of Morton Feldman* (Farnham: Ashgate, 2013), pp. 47-48, 178-179.

**Fig. 2. Feldman, *Last Pieces* for piano (1959), no. 3**

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His other experimental approach to notation, beginning with *Piece for Four Pianos* (1957) was to use staff notation with stemless note-heads, so that pitch was specified but not timing—as in Fig. 2, the third piece from *Last Pieces* (1959). The real experimental implications of this notation are realised in ensemble works, such as the *Durations* series, in which instrumental parts are unsynchronised: in this situation every pitch is specified but after the opening sonority harmony becomes unpredictable. Overlapping of the kind mentioned above is guaranteed but not controlled by the composer. As David Behrman noted, it is implicit that in a 'good performance' the players will 'reach a broad understanding concerning their overall rate of movement' so as to achieve consistency and avoid a lengthy

solo passage at the end;[21] Cage characteristically broke this implicit rule in a performance of *Piece for Four Pianos*. In other scores, such as *De Kooning* for ensemble (1963), the stemless note-heads are connected with dotted lines, and the order of events, if not the timing, is thus controlled.

These two approaches were complementary: in each he relinquished some control over one of the two main dimensions of 'ordinary music', pitch and duration, without ever making both entirely indeterminate at the same time (as they were in numerous works by Earle Brown, for example). The graph scores imply that pitch is no longer essential and the note-head scores imply that harmonic coordination of pitch is no longer essential. For this reason, Feldman's eventual consolidation of a more conventional notation practice in the 1970s has occasioned much discussion. His return to what he called 'precision' seems to be an implicit admission of intervallic and rhythmic preferences, and thus an admission that the independence of sounds was an illusion that he felt he was able to create more persuasively than performers. Cage captured this in his ambiguous quip that 'Feldman's conventionally notated music is himself playing his graph music'.[22] We may add that late works such as *Coptic Light* (1985), in which many layers of sustained sounds overlap irregularly, might be said to represent Feldman (or an ensemble of Feldmans) playing the unsynchronised note-head music, and optimising the temporal independence of layers.

There is a second complicating factor in the interpretation of Feldman's music: in later years he substantially moderated his particularism. An early sign of this was his reintroduction of melodic figures, especially during the 1970s. The best-known examples are the viola figures in the *The Viola in my Life* pieces, and in *Rothko Chapel*, where they intersect with isolated chordal gestures (thus taking on the character of 'figures' as in 'figure and ground').[23] A more far-reaching transformation of his style followed in the late 1970s with his turn to a musical discourse based on the repetition and varied repetition (often varied with minute rhythmical shifts) of short motives, usually of two to four notes. Sebastian Claren regards *Neither* (1977) as the major turning point in this respect.[24] By the end of his career, Feldman had thus moved from a maximally unpredictable style in which relationships

[21] David Behrman, 'What Indeterminate Notation Determines', *Perspectives of New Music* 3/2 (1965), pp. 58-73 (p. 61).
[22] Frank O'Hara, 'New Directions in Music: Morton Feldman', liner notes, New Directions in Music 2 Columbia Records ML5403/MS6090 (1959), reprinted in Feldman, *Give My Regards to Eighth Street*, pp. 211-17 (p. 216).
[23] In 1980, Feldman suggested that these pieces had been influenced by Robert Rauschenberg's montages, but that he subsequently believed this technique did not work in music in the same way: Caras and Gagne, 'Morton Feldman', in Soundpieces: Interviews with American Composers (Metuchen, NJ: Scarecrow Press), pp. 163-177, reprinted in Feldman, *Morton Feldman Says*, pp. 87-94 (p. 91).
[24] Sebastian Claren, *Neither. Die Musik Morton Feldmans* (Hofheim: Wolke, 2000), p. 9.

between sound events were largely disavowed to a highly redundant one in which pitch relationships were explicit or even foregrounded. He also tended to be more forthcoming about pitch relationships in his verbal self-exegesis during this period.[25] This raises the question: in this late music, what remains of Feldman's special status with regard to sound, which had previously rested on his extreme particularism?

In the remainder of this chapter I shall first show how Feldman's discourse fits into the framework outlined in Chapter 1, and then look in more detail at two early works, as well as previous analyses of them. My starting-point is that, although Feldman repudiated musical rhetoric, even an anti-rhetoric is a rhetoric. I will suggest ways in which Feldman plays the anti-syntagmatic off against the covertly syntagmatic. With regard to the graph scores, I question the assumption that the notation calls for an atypically 'statistical' analysis. I regard the notation both as a genuine affordance of creative co-participation[26] (by considering two recordings of *Projection 1*) and as a visual *declaration* of the emancipation of sounds themselves. Because the late work invites mystification less than the early work does, and has been thoroughly analysed, notably by Sebastian Claren, I look more briefly at the implications of this more overt organisation for Feldman's sonicist claim, and ask under what conditions a pattern is not stigmatised as syntactical.

### 2.2 Feldman's self-representation

The following passage, from a text written in 1967 for a sleeve note, is frequently quoted but worth revisiting, as it not only exemplifies Feldman's self-representation but also distils a number of themes and problems of sonicism. Feldman is describing his early music: first the graph music (the *Projections* series of 1950-51) and then the scores with non-specified durations (the *Durations* of 1960-61). As the passage begins, he has been describing his immersion in the New York art scene, which he often treats as an alternative to academic composition training.

> The new painting made me desirous of a sound world more direct, more immediate, more physical than anything that had existed heretofore. Varèse

[25] See, for example, 'XXX Anecdotes and drawings' and 'Crippled symmetry'.
[26] See Clemens Gresser, '(Re-)Defining the Relationships between Composer, Performer and Listener: Earle Brown, John Cage, Morton Feldman and Christian Wolff', PhD dissertation, University of Southampton, 2004; and Nicholas Cook, *Beyond the Score: Music as Performance* (New York: Oxford University Press, 2013), pp. 274-276.

had elements of this. But he was too ‘Varèse’. Webern had glimpses of it. But his work was too involved with the disciplines of the twelve-tone system. The new structure required a concentration more demanding than if the technique were that of still photography, which for me is what precise notation has come to imply.

*Projection II* [1951] for flute, trumpet, violin and cello – one of the first graph pieces – was my first experience with this thought. My desire here was not to ‘compose’, but to project sounds into time, free from a compositional rhetoric that had no place here. In order not to involve the performer (i.e., myself) in memory (relationships), and because the sounds no longer had any inherent symbolic shape, I allowed for indeterminacies in regard to pitch. [...]

After several years of writing graph music I began to discover its most important flaw. I was not only allowing the sounds to be free – I was also liberating the performer. I had never thought of the graph as an act of improvisation, but more as a totally abstract sonic adventure. This realization was important because I now understood that if the performers sounded bad it was less because of their lapses of taste than because I was still involved with passages and continuity that allowed their presence to be felt.

Between 1953 and 1958 the graph was abandoned. [...] However, notational precision did not work for me either. It was too one-dimensional. It was like painting a picture where at some point there is always a horizon. Working precisely, one always had to *generate* the movement – there was still not enough plasticity for me. I returned to the graph with two orchestral works [...], using now a more vertical structure where soloistic passages would be at a minimum.

[...] In *Durations* [1960-1961] I arrive at a more complex style where each instrument is living out its own individual life in its own sound world.

In each piece the instruments begin simultaneously, and are then free to choose their own durations within a given general tempo. The sounds themselves [i.e., pitches] are designated.

[...] In *Durations I* [1960, for alto flute, piano, violin and cello] the quality of the particular instruments together suggested a closely written kaleidoscope of sound. To achieve this I wrote each voice individually,

> choosing intervals that seem to erase or cancel out each sound as soon as we hear the next. [...] Through thinning and thickening my sounds I kept the image intact.[27]

This passage makes an excellent example of sonicist discourse. First, it is explicitly competitive: Feldman wishes to supersede in immediacy, physicality, directness, and plasticity all previous sound worlds, including those of Varèse and Webern, esteemed predecessors who nonetheless fell short. Second, he suggests that he can free sound not only from 'system', 'relationships', and 'rhetoric'—indeed, from 'composing' as usually understood—but also from the influence of notation, or at least 'precise notation'; from the 'symbolic shape' normally assigned to sound, i.e., as a note (although the music will be realised in pitched sounds); and from the mediation of the performers, who are mysteriously absorbed into 'myself' and not even credited with spoiling the music independently with their 'lapses of taste', even though they are required to choose the notes. Third, there is an ideal of painterly materiality and plasticity (sound as material that one thins and thickens) as, in effect, an *alternative* to system. Feldman is suggesting that he has arrived at or is approaching the degree zero of musical rhetoric.

What makes the rhetorical operation so conspicuous in Feldman's case is his relatively traditional sound material. Because he retains pitch, there is no disguising that he has devised a *new* 'compositional rhetoric', a new 'system' of 'relationships', and a new notational practice; moreover, his music carries a personal stamp just as unmistakable as that of Varèse's, although more ascetic. He has not abolished any of these things altogether, but only as they appear in other styles. He even gives clues as to nature of his own rhetorical strategies: first the adoption of a more vertical structure, i.e. one with greater superposition of sounds, to eliminate residual melodic implication; and second, with reference to the *Durations* series, the selection of 'intervals that seem to erase or cancel out each sound'.[28] He therefore must have had some at least semi-explicit intervallic principles, which, in the graph pieces, the performers were tacitly expected to intuit and follow. Stephen Johnson makes this syntactical condition explicit while retaining the flavour of Feldman's prose: 'When played with atonal materials, as Feldman intended, the scores produce abstract fields of quiet, slow-

[27] Feldman, 'Autobiography: Morton Feldman (1926)' (1967), in *Essays*, p. 38.
[28] The element of illusion involved is made explicit in the words 'seem to'. This illusion is discussed in Catherine Costello Hirata, 'The Sounds of the Sound Themselves: Analysing the Early Music of Morton Feldman', *Perspectives of New Music* 34/1 (1996), pp. 6-27.

moving events, floating free of metric emphasis and purified of reference to the past'.[29] I shall return to the question of implicit pitch norms later.

One strategy that Feldman used to discourage any comparison of his own musical configurations and those of his rivals was to emphasise, on the one hand, the practical and psychological aspects of his own composing activity and refer, on the other, to the systematic origins and outcomes of the composing of others. He stressed his own concern with 'nerve', 'character',[30] 'concentration', refusal to make the 'lazy move'.[31] He emphasised sheer 'talent'. He gave vignettes about the importance of pens and paper, and the fact that he was able to gauge the concentration he had had when writing a given page.[32] We even know what was on the menu when he was inspired to create the graph pieces (wild rice).[33] In contrast, he would caricature the post-Webernians in particular as system-obsessed and academic.[34] In doing so, he took advantage of the self-image that they themselves had established.

Feldman's self-identification with artists had some slightly anomalous implications. One was that the term 'abstract', as in 'abstract sonic adventure', was positively valorised. This was naturally with reference to non-figurative art. Another was that he described his music using metaphors of two-dimensionality and flatness: the musical object as a 'flat surface'. This is seemingly in contrast with the more typical insistence on the importance of *superseding* two dimensions. In Feldman's case, this idea is again connected to the aesthetics of abstract expressionism and the valorisation, especially by Clement Greenberg, of a 'flat picture plane' without the illusion of depth. Feldman's positive two-dimensionality is therefore quite different from the disparaging caricature of 'ordinary music', since he is also evoking the materiality of the visual artwork—in reality not a two-dimensional entity but a tangible, three-dimensional one that happens to be very thin. Nonetheless, it is striking that Feldman took this line.

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[29] Stephen Johnson, 'Morton Feldman', *The New Grove Dictionary of Music and Musicians* (London: MacMillan, 2001), vol. 8, pp. 649-653 (p. 650).
[30] Alan Beckett, interview in *International Times* 3 (14-27 November 1966), reprinted in Feldman, *Feldman Says*, pp. 30-33 (p. 33).
[31] Caras and Gagne, 'Morton Feldman', p. 92.
[32] Feldman, 'XXX Anecdotes and Drawings', in *Essays*, pp. 148-149.
[33] Jan Williams, 'An Interview with Morton Feldman' (22 April 1983), in Percussive Notes (September 1983), pp. 4-14, reprinted in *Morton Feldman Says*, pp. 151-159 (p. 153).
[34] For example, there are a few anecdotes representing Stockhausen as trying to divine Feldman's secret. In one, Feldman advises him not to 'push the sounds'. Stockhausen allegedly 'leaned over me and he said, "Not even a little bit?"' (Charlton and Laycock, 'An Interview with Morton Feldman', p. 28). There are also frequent signs of anti-European resentment, for example when he complains that 'some jerk in Budapest' is treated as a professional while Americans are not ('XXX Anecdotes and Drawings', in *Essays*, p. 157).

For example, Alistair Noble and David Cline both highlight an extract (c. 1950) from Feldman's sketchbooks housed at the Paul Sacher Foundation, in which Feldman has sketched a landscape-format rectangle, like a canvas, annotating it with 'TIME STRUCTURE' along the x axis and 'TAM. [i.e., timbre] STRUCTURE' for the y axis. This is accompanied by one of Feldman's less coherent statements, to the effect that he is conceiving musical structure in this way in the hope of arriving at a 'sound experience divorced from harmony as well as counterpoint'.[35] Noble mentions that in another diagram Feldman associates the timbre axis with the register of the piano, thus suggesting that he is taking the view of timbre as incorporating pitch.[36] If he was, this is likely to have been under the influence of Schoenberg's *Harmonielehre*.

As we have seen, another quirk in Feldman's version of the dimensional metaphor was that he not only limited the metaphorical space to two dimensions but also preferred the 'vertical' over the 'horizontal', insofar as the horizontal represented musical 'continuity' or relational coherence. Jonathan Kramer, in his book *The Time of Music*, also categorised non-teleological music, including that of Feldman, as being 'cast in vertical time' and as transcending 'sequential logic'. He suggested that such music was incompatible with analysis, at least conventional analysis, for reasons paralleling Meyer's perspective: on the basis that the music lacks 'tonal, rhythmic and metric hierarchies; contrast; closure; development'.[37] Although it may lack these things, I shall argue that it still manifests rhetorical (i.e., deliberately persuasive, non-indifferent) organisation that can be analysed.

Nonetheless, as I observed above, Feldman had no interest in eliminating identifiable pitch in his work. He dealt with the stigma of pitch by subordinating it to registral colour:[38]

> Timbre and range are the same problem, and both are more important than pitches. When one knows exactly the sound he wants, there are only a few notes in any instrument that will suffice. Choosing actual pitches then becomes almost like editing, filling in detail, finishing it off. Isn't it curious

[35] Alistair Noble, *Composing Ambiguity: The Early Music of Morton Feldman* (Farnham: Ashgate, 2013), p. 4; Cline, *The Graph Music of Morton Feldman*, p. 115.
[36] Noble, *Composing Ambiguity*, p. 5.
[37] Jonathan Kramer, *The Time of Music: New Temporalities, New Listening Strategies* (New York, London: Schirmer, 1988), pp. 386-8. 'The composer whose music perhaps best epitomised vertical time was Morton Feldman. While Cage has remained concerned with the compositional process, which can be linear even when the resulting music is not, Feldman simply put down one beautiful sound after another. Feldman's aesthetic had nothing to do with teleology'; and he quotes Feldman: 'I make one sound and then I move on to the next'.
[38] Ertuğrul Sevsay, *The Cambridge Guide to Orchestration* (New York: Cambridge University Press, 2013), p. 71. Timbre is the quality peculiar to the instrument; registral colour varies within that timbre.

> that in the classical period the selection of range and timbre, i.e., orchestration, was the secondary finishing-off thing. Just the opposite.[39]

This evidently understates the extent to which intervallic choice will come into play during the 'editing process', but it is not entirely unrealistic as regards registral colour. This conception is consistent with the decision to specify register only, in the graph music, as well as his practice of sketching works in graph form and then converting them into notation. It is also consistent with the habit, in the fully notated scores, of circling around within a chromatic cluster in a given register (such as the oboe/trumpet figure in the ensemble piece *Routine Investigations* (1976) and the chromatic figure that begins ten minutes into *Neither*). This view of things leads Feldman to valorise orchestration, which in turn reinforces his practical self-image. 'For me composition is orchestration, and so what leads me to begin a new composition is a weight, and orchestration, which is new for me.' He goes on to connect this to the dimensional metaphor: 'my composition impetus is in terms of the vertical quality, and not what happens in terms of the horizontal scheme.'[40]

Feldman was ambivalent with regard to instrumental performance. As I mentioned above, he preferred instrumental to electronic sound. This appears to have been connected to his approach to time: 'The extremely fast psychological time in Stockhausen's music […] is a result of electronic music. Working with dead sound creates this tendency to keep speeding up. Simple sustained sound is not effective the way it is in instrumental music.'[41] Feldman also appreciated musicians' 'touch' (which again correlates with the touch of the painter) insofar as this helped sound to come alive and transcend the symbol. Madame Press, his felicitously-named childhood piano teacher, served as an emblem of this capacity. But at the same time, he had a quasi-acousmatic attitude, wanting sound to be 'sourceless'.[42] The following passage resembles Schaeffer so much that it is worth quoting in full:

> I am not particularly interested in instruments […] I'm interested in sound […]. The instrument is merely the vehicle, the stencil of the sound and in some ways we have to guard against the instrument in order to hear the sound or find situations in order for the sound to speak naturally. For example, an oboe: I

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[39] Quoted in Tom Johnson, 'Remembrance', p. 36.
[40] Paul Griffiths, 'Morton Feldman Talks to Paul Griffiths', p. 759.
[41] Johnson, 'Remembrance', p. 35
[42] Peter Dickinson, 'Feldman Explains Himself', *Music and Musicians*, July 1966, 22-23, reprinted in Feldman, *Morton Feldman Says*, pp. 19-22 (p. 21). See also Griffiths, 'Morton Feldman Talks to Paul Griffiths'.

> can't think of any composer in his right mind being involved with the sound of the oboe. Again, there is a dichotomy here—what is sound, and what is the sound of the instrument? What much of indeterminate music has done, I think, is to break down this whole business of that instrumental identity. For example, John Cage can do things, in a sense, which have completely changed the nature of sound, in order to get rid of that instrumental identity, or that instrumental association. I on the other hand [N.B., and not the performer] might produce a sound so naturally, so much without attack; but because it is done so naturally and because it is without attack, I've had professional musicians think that a violin was a high tuba. In other words, it is as though we don't know the instruments any more when presented without their more vulgar aspects of performance.[43]

The difference is that, unlike Schaeffer, Feldman does not abandon the instrument: on the contrary, in his view it was in *electronic* music, not instrumental, that sound was 'too identifiable'.[44]

Feldman's approach to notation also manifests an interesting ambivalence. As we have seen, his early experiments reflected his unease regarding the fixity of 'precise' notation and his feeling that it compromised plasticity of sound. But at the same time, his alternative forms of notation have an obvious aesthetic value of their own and are visually allusive (e.g., the grid in modernist art and architecture)[45], and not just because of the freedom they allow the interpreter. Being acquainted with the appearance of the scores surely conditions one's hearing of the music. Feldman maintained the same idiosyncratic visual sense in the later, 'precise' scores, in particular evoking the grid by dividing the page into regularly-spaced bars (often nine per system) irrespective of changes of metre, and indeed in some pieces giving aligned bars conflicting metres in different parts (so that parts again do not align vertically). Since much of the later music progresses on the basis of rhythmic displacement and permutation, it seems that Feldman embraced 'precision' and turned it to his advantage.

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**43** Charlton and Laycock, 'An Interview with Morton Feldman', p. 27
44 Griffiths, 'Morton Feldman Talks to Paul Griffiths', p. 759.
45 Noble, *Composing Ambiguity*, pp. 168-170.

## 2.3 THE INTERPRETATION OF THE EARLY NON-GRAPH PIECES

We have seen that Feldman's early musical discourse hinges on the question of 'horizontal' relationships, and that in his own self-exegesis he presented the matter as an opposition between relationships and their *absence*. He also conveyed this by taking up the image used (according to Cage) by Henry Cowell with regard to the New York School: that they were 'getting rid of the glue' connecting sounds.[46] This image obscures the possibility that an alternative form of continuity has been found.[47] Feldman's anti-syntagmatic claims have set the tone for many commentaries, even analytical ones. I mentioned Kramer's view that Feldman's early music was not amenable to analysis; in practice, however, the difficulties often arise when it *is* possible to find syntagmatic elements. A number of writers have interpreted such elements in a way that avoids demystifying the music, preferring to evoke a magical apparition of horizontal connections out of a radically systemless context.

Let us consider, for example, Thomas DeLio's study of *Last Pieces* no. 3 (Fig. 2 above). The main thrust of DeLio's paper is an exhaustive analysis of intervallic relationships. Perhaps because he is adopting a pitch-class set perspective, he somewhat underestimates changes of register, stating that 'with regard to register, one encounters very little movement; almost all activity seems to be spread evenly over the entire range of the instrument'.[48] It is true that activity is spread over the entire range, but this involves constant movement. Nonetheless, he finds a sophisticated musical argument involving the fluctuating prevalence of interval class 3 and the transfer of this interval class from the vertical to the horizontal dimension. It is thus striking when, in his conclusions, he backs down and begins to adopt Feldman's vocabulary and premises. Observing that Feldman does little to signal most of these intervallic connections to the listener, through rhythmic articulation or in other ways, he concludes that such 'connections exist, but must be extracted by the listener himself without the aid of surface relationships.' He continues:

> The composer's goal, then, *seems* to be to create a music free of all rhetoric. To this end he tends to avoid all procedures which might reveal his own presence consciously shaping the surface of the music for the listener. […]

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[46] Cage, 'History of Experimental Music', in *Silence*, p. 71. See also David Nichols, 'Getting Rid of the Glue: The Music of the New York School', *Journal of American Studies*, 27/3, American Art and Music (December 1993), pp. 335-353.
[47] Cline also points this out in his chapter on 'Ideology', *The Graph Music of Morton Feldman*, p. 126.
[48] Thomas DeLio, '*Last Pieces* #3 (1959)', in *The Music of Morton Feldman*, ed. by DeLio (New York: Excelsior, 1995), p. 66.

> Feldman's musical impulse, then, *seems* to involve the creation of a sound world which *appears* to exist in some primal state, untouched as it were, by either a composer or any compositional act. […]
>
> Feldman's music is a music in which there is no *apparent* structuring of sound prior to its actual unfolding in time. Relationships *appear* to emerge at the very moment sound is first perceived by the listener and never, in any sense, prior to that moment. Thus, he creates structures in which order never *seems* imposed by the will of the composer, but rather, evolves within the perceiver's own awakening consciousness.'[49]

He concludes: 'The triumph of Feldman's art lies in the fact that, as relationships proliferate and connections emerge, they never *appear* to do so through any compositional artifice. Rather, they do so through the act of perception itself.'[50] However, if relationships emerge, it *must* be through the act of perception, and it is precisely the sign of good compositional artifice that relationships do not appear to emerge through it. What is needed is a clearer explanation of the artifice.

Catherine Hirata Costello suggests the form such an explanation might take in her more phenomenological interpretation. She focuses precisely on the tension between 'the sounds themselves' and their relationships—and on the question of how to put this matter into words. Although aware that it is the anti-syntagmatic succession of sounds that confers on them an apparent quality of being radically 'themselves', she seems reluctant to relinquish the possibility that this 'quality' might be genuinely something they have 'themselves'. Although she adopts an informal, first-person approach (repeatedly evoking Madame Press), she cannot avoid explaining the special warmth or floating quality of particular sounds in relational terms. For example, with reference to the same piece studied by DeLio, she mentions how the G5 in sonority 12 'now seems somehow less tied down to the E, as if it's floating up there', and explains this as a result of 'a behind-the-scenes voice-leading situation', i.e., as a result of the pitch proximity of the top voice of sonority 11 in relation to the lower voice of 12.[51] She is right, although the perceptual ambiguity is not mysterious at all. Students of counterpoint are advised against simultaneous wide leaps in similar motion because of this very effect. Feldman is doing the opposite of the traditional practice, although

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[49] Ibid., p. 66-67. My italics.
[50] Ibid., p. 66-68.
[51] Hirata, 'The Sounds of the Sounds Themselves', p. 14.

voices do not overlap in this instance. By slowing events down, he encourages a focused reflection on the perceptual result, and at the same time discourages an explicit contrapuntal interpretation. Another important observation that Hirata makes, this time in her dissertation, is that in an anti-syntagmatic context, the repetition of a note comes as a slight surprise, and can therefore be used to sustain an impression of freshness in a variety of subtle ways: for example, common tones can heighten the effect of a change in vertical density.[52]

On the technical level, then, the enigma of this style has been exaggerated. Feldman is making a network of compositional decisions in which the options are, to put it in psychological terms, between favouring and blocking auditory stream integration: at the level of sound-to-sound succession, for example, between conjunct and disjunct motion.[53] The correlate of this is an overall semantic opposition between 'continuity' (and thus 'syntax') and 'discontinuity' (and thus 'sounds themselves'). In this sense, Feldman's conjuring up of the independence of sounds is no more mysterious or illusory than the opposite, that is, than the impression of causality in more traditional music. The latter is merely the norm and goes unnoticed. Instead of a choice between relationships and their absence or neutralisation, it would be simpler and more accurate to distinguish between two different types of successive relationship, with a context-dependent middle ground (e.g. motion by a moderate leap). The composer is responsible equally for both types of relationship, and moreover can play one off against the other in ways such as those mentioned by Hirata.

In a composition like *Last Pieces* no. 3, the relationship between continuity and discontinuity is weighted towards the anti-syntagmatic. It would be reasonable to describe events such as immediate common tones as 'marked', and a leap of a compound tritone as 'unmarked'. Anti-syntagmatic discontinuity constitutes a primary rhetorical strategy, motivated by a sonicist philosophy, while momentary syntagmatic connections respond to a reflexive, second-order strategy, which mediates the first in terms of a more general, inherited sense of compositional discretion that is not specifically sonicist. The primary strategy is that of 'cancelling out' each sound as the next one appears. The second-order one is intermittently to allow relationships that one would avoid entirely if it were really essential to eliminate 'cause-and-effect continuity'. These might be: a common tone between successive chords, especially in the top voice; chords or intervals amenable to a tonal

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[52] Catherine Costello Hirata, 'Analyzing the Music of Morton Feldman', PhD Dissertation, Columbia University, 2003, pp. 76-77.

[53] On the relationship between auditory scene analysis and the rules of counterpoint, see David Huron, 'Tone and Voice: A Derivation of the Rules of Voice-leading from Perceptual Principles', *Music Perception* 19/1 (2001), pp. 1-64.

interpretation; any figure within a narrow range, especially in the top voice, and especially if diatonic; a temporary sense of voice-leading resulting from consistent density of chords and conjunct or proximate motion (or at least non-overlapping parts); or a recurrence of a particular interval class in various transpositions (the focus of DeLio's analysis). These elements moderate the primary strategy just enough to prevent it from being too unequivocal or systematic. A connotation of 'disinterestedness' arises from the interaction of the syntagmatic and anti-syntagmatic. Two things about Feldman reinforce this hypothesis: first, his love of being 'between categories' and refusal to be pinned down; second, more specifically, his underlying competition with Cage and his desire to distinguish himself from what he suggested was the academicism of chance.

Among these elements, the one I would like to emphasise here is that of tonal implication. The elongation of notes tends to be anti-syntagmatic in the melodic sense, but I suggest it also tends to reinforce any available tonal implications, depending on context. This may partly explain Feldman's reliance on clusters in the late, harmonically very slow music. It can be tested by listening to all four of *Last Pieces*, two of which are slow, two fast. In the very slow third piece analysed by DeLio, there is a strong tendency for the simple and compound minor thirds to be processed as tonic and third of a minor triad, and thus as sombre. The terminology and etiquette of set theory is misleading in this regard. I would even suggest that sixths are less stable than thirds, as in counterpoint theory, and for the same reason: because of the determining role of the bass. *Last Pieces* no. 3 may sound as if it is starting anew with every sonority, but very often the new start suggests a key. This may explain the evasive Bartókian enharmonic spelling of some dyads. A common Feldman event is the compound major second dyad, from the low to middle register (also noticeable in *Routine Investigations*); I have long found this to have an effect of warmth and restrained grandeur, which may derive from the combination of the register and the tonal implication of tonic plus appoggiatura. In *Last Pieces* no. 3 this compound second occurs on sonorities 11, 18, 41, and 45. In each case, the ninth follows a much higher sonority. Sonority 33 is also a compound major second, but extended up into the soprano register, which reduces the warmth.

Tonal implications may also arise from the *succession* of sonorities. For example, in the same piece, D4 in sonority 7 completes a G minor chord already implied in the previous dyad, and thus retrospectively reinforces this meaning, while giving C#6 the character of a non-chord note. Moreover, *non-adjacent* events may also semantically condition one another (e.g., the parallel sixths from sonority 6 to 8). This makes the overall situation much more

complex, and it is for this reason unlikely that an analysis conducted from this point of view could ever be as exhaustive as DeLio's pitch-class analysis. In addition to the difficulty of gauging how intersubjective each factor is, there is the question of the time-span across which one may regard events as plausibly conditioning one another.

Before moving on, I would like to refer briefly to two more examples to show how an adjustment in parameters can create a significant semantic change. The first is *Christian Wolff in Cambridge* (1963) for mixed voices. Fig. 3, below, shows the first nineteen sonorities, which are then repeated exactly. In this piece, the connotation of the sacred is activated not only by the timbre and tempo but by the fact that, in comparison with *Last Pieces*, disjunct motion is reined in (perhaps also for the benefit of the singers) and by an ongoing diatonic implication of C minor. In addition, the formal repetition, so that the passage shown effectively constitutes a phrase (although one stretching beyond the psychological present), could be said to reinforce a connotation, if not specifically of the sacred, of ritual or archaism.

To focus on the tonal aspect, we may notice that:

- The top Soprano line begins on the tonic and ends on the third of C minor, and remains within the tritone B3-F4, i.e., the tritone that reinforces cadential closure in tonal music
- The first chord includes a first inversion C minor triad at the top
- There is something resembling a half-cadence around sonorities 9-12; the last bass note before a pause is the low dominant degree.
- The last sound heard is C, in the Tenor. The silence of the other voices throws this into relief.
- The outer parts begin in largely orthodox counterpoint, in contrary motion until sonority 6, with voice exchange between sonorities 4 and 5; on sonorities 3 and 6 the outer voices have the root and third of chords V and I. The tonal counterpoint between outer voices continues into sonority 7 if the Bass note is interpreted as Db. There is a subtle play on C#/Db as (1) root of the Neapolitan chord and (2) mid-point between two Gs.
- The only note in the Soprano line foreign to C minor is also C# and again affords two tonal interpretations: as an echo of the Neapolitan or as an implied appoggiatura to an unheard D natural, which would harmonise with the D and the following B in the Alto and confirm the G in the Bass.

**Fig. 3. Feldman, *Christian Wolff in Cambridge* for mixed voices (1963), first 19 sonorities**

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On the other hand, counterbalancing all this:

- The tonal implication of first chord is compromised by a three-note chromatic cluster in the inner parts.
- The inner voices are always dissonant against at least one outer voice.
- Considered in isolation, the inner voices disconfirm the key of C minor except in sonority 2 (C4 and F4), and possibly sonorities 3, 7, 9, and 11, where they could imply an applied dominant (and in all these cases the conflict with the outer voices negates this).
- Between 13 and 16, after the 'half cadence' the harmony becomes denser, and highly chromatic (the chords include interval class 1 5, 5, 3, and 5 times respectively)
- The last Bass note C# strongly conflicts with the closure implied by the last Tenor note.

One could even regard the latter points as a tertiary rhetorical level, moderating the tonal implications.

My second short example is from the short *Piano Piece 1952* (Ex. 4). This piece is notated in measured note values in order to ensure a rhythmically invariant stream of notes, unfolding in the two hands in alternation. This creates an entirely different, discomforting character. The notes are notated as dotted crotchets despite the absence of any subdivision—an early example of one of Feldman's apparently unnecessary notational quirks that nonetheless convey something: in this case the dot is perhaps meant to encourage a non-rushed, deliberate performance. Wide disjunct motion is again the norm, mostly in dissonant leaps. The musical dialectic arises from the fact that each hand is outlining an independent contour, so that pitch proximity in the middle register is a-periodic. Parts occasionally cross and there is one noticeable moment at which they meet in such a way as to suggest conjunct motion—almost the only identifiable 'event' of the piece.[54]

**Fig. 4. Feldman, *Piano piece 1952*, opening**

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### 2.4 THE INTERPRETATION OF THE GRAPH SCORES

#### 2.4.1 *Projection 1*

The graph scores raise special interpretative problems. They seem the most ascetic, anti-syntactical expression of Feldman's position. What is one to conclude from the non-indication of pitch? I shall begin with this question, focusing on *Projection 1* for cello (1950), probably the earliest graph work, which I shall later analyse. After that I shall summarise the subsequent development of graph scores, insofar as they elucidate the question of Feldman's sonicism.

*Projection 1* is the sparsest of the series and the one that best can be described as pointillist: only one note at a time is heard, and these notes are often articulated by silence,

[54] See also Noble, *Composing Ambiguity*, pp. 84-85.

especially because pizzicato sounds are the most frequent. Feldman uses separate grids (the equivalent of staves) for each main timbre (harmonic, pizzicato, and bowed notes), as if each represented a distinct instrumental part. In later pieces, such as *Intersection 1*, he would use the more economical option of indicating these techniques with abbreviations or symbols within the three register rows ('A' for arco, a diamond for harmonic, etc.).[55] In *Projection 1* he uses dotted vertical lines to group four 'icti' together into something suspiciously like a bar; this is another convention he would later eliminate. Moreover, *Projection 1* appears to be metrically simpler than later pieces. The instructions state: 'Duration is indicated by the amount of space taken up by the square or rectangle', and these squares and rectangles always occupy complete icti (although this is not feasible for the pizzicato notes).

The non-specification of pitch in the notation does not necessarily eliminate pitch norms, since there is good reason to think that performers were expected to be sensitive to tacit modernist norms—if not to produce pastiche Feldman. David Cline reprints an example of such pastiche, from David Tudor's fully written-out version of *Ixion*, consisting of dense chromatic clusters softened by octave displacement.[56] Cage's remark can be turned on its head: perhaps other people performing the graph music 'are' Feldman writing it precisely.

These norms were not always entirely tacit, as one pianist discovered when she played a minor triad during an open rehearsal with the composer. Peter Dickinson, who recounted this, inferred that Feldman was 'working within common practice stemming from Webern where intervals of the ninth, seventh, or tritone dominate', although with some 'octave doubling'.[57] Feldman's response to this (in a letter to Dickinson) was that his objection had not been to the triad in itself but to the pianist's having resorted to it unthinkingly, without having really 'heard' it: it was a habit, a 'tick'.[58] There seems to be no record of Feldman's having congratulated other players for using such syntactically loaded chords in an authentically 'heard' way, but Cline quotes Cage as a witness of Feldman's acceptance of tonal materials on other occasions.[59] Cline regards the matter as being

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[55] In certain later pieces for larger performing forces, e.g. *Marginal Intersection*, Feldman dispensed with the specification of register, except in the piano part. In these cases, density is all-important, and the 'vertical axis' corresponds to the conventional score order the instruments (from flutes down to double basses). In other works, conversely, such as *The King of Denmark* (1964) for solo percussionist, first performed by Max Neuhaus, he occasionally subdivided range into more than three bands.

[56] Cline, *The Graph Music of Morton Feldman*, p. 279. Cline is more interested in Tudor's interpretation of the register bands.

[57] Dickinson, 'Feldman Explains Himself', p. 21.

[58] Letter reprinted in Dickinson, 'Feldman Explains Himself', p. 23.

[59] Cage, 'Lecture on Something', in *Silence*, p. 133. Quoted in Cline, *The Graph Music of Morton Feldman*, p. 253.

'clinched' by Feldman's letter, which corresponds to similar statements by the composer regarding 'authenticity' in both music and painting. He asks a pertinent question: 'Would the pianist's selection have sounded better if chosen differently [more authentically]? Feldman did not say, but a negative response would imply that sonically identical performances might be of different qualities, which would fit uncomfortably with his insistence on the priority of sound.' His resolution of this problem is not very satisfactory: 'The alternative view, that he held that the authenticity of a creative act is always manifest, is therefore preferable. If so, then Feldman's position must have been that the pianist's selection sounded bad.'[60] However, even if it is true that the triad was not taboo in itself, the episode still suggests that Feldman made judgments about rhetorically persuasive and unpersuasive uses of given intervals and chords, which would be better explained in terms of their immediate pitch context (which we do not know in this case) than by appealing to personal authenticity.

In general, Feldman's gamble seems to be that the graph notation is sufficient to establish a gestural and textural framework, as described above, that secures the desired anti-syntactical effect, irrespective of performers' pitch choices. In *Projection 1*, which is monophonic, the temporal and registral disjunction of the 'line' seems to secure an atomistic quality. In denser scores, the superposition of layers can be expected to obscure any unwanted melodic implications. Clearly, Feldman relies on the improbability of five players landing on, for example, a dominant minor ninth chord. All that can go wrong is, in fact, a pianist playing a noticeably tonal chord, or brass players mischievously taking advantage of the salience of their instruments to play popular tunes.[61]

Barring mishaps of this kind, diverse performances can be experienced in a curiously traditional way, as tokens of the same type (as it is often put it analytic philosophy), almost as in a classical work, and even when the difference in pitch choice is noticeable. Meyer may have overstated the indeterminacy of these pieces in comparing them to graphic scores by Bussotti.[62] This unusual situation, in which the work is surprisingly stable despite the fact that pitch choice becomes a matter of performer interpretation, can only be judged for oneself by comparing performances. It may be useful to give an example, by comparing two realisations of *Projection 1*, by Frances-Marie Uitti (Hat Hut, 1992) and Taco Kooistra (Barton Project, mode 146 Mode Records). This piece is an ideal test case because it is

[60] Cline, *The Graph Music of Morton Feldman*, pp. 254-255.
[61] Unpublished transcript of an interview with Robert Ashley (1963), quoted in Cline, *The Graph Music of Morton Feldman*, p. 45.
[62] Meyer, *Music, the Arts, and Ideas*, p. 69.

monophonic; the melodic intervals—and thus any residual melodic-motivic relationships—are thus more exposed than in the subsequent compositions. Ex. 5 and Ex. 6 show annotated transcriptions of the recordings; each system corresponds to a page of the score.

The performance instructions state: 'Any tone within the ranges indicated may be sounded. The limits of these ranges may be freely chosen by the player.' It emerges that both players 'impose' an unequivocal pitch organisation on the graph (they have the opportunity of supplying a second-order rhetorical strategy) but they do so in contrasting ways. Uitti fixes eight out of nine elements on a single pitch,[63] using two adjacent pitches for the low harmonic:

Harmonic: c'/d', b', a".
Pizzicato: e♭, e', f".
Arco: D♭, b♭, a♭"

This makes the recurrence of the pitches recognisable, at least when there is immediate or short-term repetition; of course, listeners will vary in the degree to which they notice this. Uitti's pitch choice reflects mainstream post-tonal compositional thinking, with just a few hints of diatonicism. The ten pitches used add up to a ten-note chromatic set from A♭ up to F. The pizzicato notes, which recur the most frequently, cover the top trichord of this set, taking the form of superposed minor ninths. This already establishes compound seconds, major and minor, as privileged intervals. The arco notes (which I have transcribed as flat notes) and harmonics (naturals) intersect to complete the set; the three arco notes and three of the harmonics form [0,2,5] trichords related by a semitone. The lowest interval (from D♭ to e♭) is another compound second, and the combination of the lowest note D♭ and the pizzicato trichord e♭-e'-f" occasionally suggests the D♭ as 'tonic'. This distribution of pitches is refined in itself, but it also yields an economical pitch *structure* consisting of a basic sonority of [0,1,2,4] and its subsets, interspersed with 'episodes' consisting of (i) quasi-diatonic fragments including [0,2,3], (ii) three different diminished triads (icti 9-14, 61-63, 94-101), and (iii) the tetrachord [0,1,5,7], which suggests a hemitonic pentatonic collection. Major and minor triad formations are avoided (this may explain the selection of d' rather than c' on ictus 14).

[63] Clemens Gresser has already noted her strategy. '(Re-)Defining the Relationships between Composer, Performer and Listener', p. 117, n. 152.

**Fig. 5. Transcription of Frances-Marie Uitti's realisation of *Projection 1* (hat ART CD 6101, 1992)**

**Transcription removed for copyright reasons.**

**Fig. 6. Transcription of Taco Kooistra's realisation of *Projection 1* (mode 146, 2005)**

**Transcription removed for copyright reasons.**

Kooistra takes the opposite approach, not only varying the pitch of each row of the graph but also varying his pitch choice criteria, on a page by page basis. The most unequivocal patterning can be found from the half-way point onwards. On page 3 he takes a sequence of descending perfect fifths, and octave-displaces the notes to the prescribed registers. For most of page 4 he does the same with a descending chromatic scale. The interval patterns start to become discernible when Feldman's register pattern temporarily becomes simplified: for example, there is a noticeable moment of sequence (parallel fifths) between ictus 125 and 140, and a sequence of ascending perfect fourths shortly after. The first two pages are realised with more frequent changes of pattern. A number of triads are outlined, mainly on page 2; the augmented triad at the end of page 2 is the most noticeable, at least to my ear, perhaps because of the repetition of two of the pitches in two different octaves. It is noticeable that Kooistra tends to use either a common/repeated tone or the 'default' interval of a tritone (shown with arrows) to connect cells. Despite the presence of diatonic cells, it is probably no coincidence that the realisation begins and ends with interval class 1.

In short, Kooistra goes through a succession of different pitch-*class* structures that, if they were compacted into a single octave, would sharply articulate the piece into contrasting sections—but which, because of the constant register shifts, do not substantially compromise the overall uniformity, even to a listener trained to recognise such structures. It is as if he is setting out to demonstrate this. For the same reason—that of disjunct motion—it is hard to imagine that many listeners will experience these two interpretations as more dissimilar than two contrastingly ornamented performances of the same Vivaldi concerto movement, one reined in, the other more free-wheeling. Pitch structures are not neutralised altogether, as Feldman and some commentators might make out, but they are not as decisive as they would be without the octave displacement. However, this is not because of the notation but because of the gestural strategy; this explains why Feldman accepted some rearrangement of the graph notation for performance purposes. The graph notation can be regarded not so much a practical means for ensuring a non-hierarchical outcome as a symbolic declaration of such an outcome, as a foregone conclusion.

The question remains of how the organisation of *Projection 1* may be understood. I shall therefore move away from specific realisations and back to the analysis of the composition as notated. Is there anything to add beyond referring to the frequent leaps and silences?

Analyses of the graph scores have tended to be architectonic and usually statistical in orientation. The general thrust of the statistical approach is to show that the pieces are not chaotic, to find order (and implicitly skill) in them—but not *too much* order. This approach conforms somewhat to Feldman's preferred, anti-syntactical reading (it is no coincidence that in *Style and Music* Meyer used the term 'statistical' in opposition to 'syntactical'). The statistical approach also appears reasonable because of Feldman's practical approach to composition. By his own account, and that of Christian Wolff, Feldman would pin up his graph paper and work on it in an 'all-over' manner, like Pollock, i.e., distributing marks here and there, rather than working horizontally from beginning to end.[64] This was perhaps the most direct way in which he modelled his practical approach on painters.

John Welsh pioneered the statistical approach in his analysis of *Projection 1*. He divided the pieces into six sections and traced the distribution of timbres and registers in each, along with the frequency of events per 'ictus'.[65] As Cline has observed, Welsh's analysis was compromised by his arbitrary decision to regard silences of at least four beats as boundaries between sections.[66] Some of these silences interrupt clusters of similar sounds that one might otherwise group together; this decision also yielded a final section consisting of two notes (skewing all his charts). It is likely that Feldman deliberately sought to impede any such unequivocal formal division. In *Projection 1*, as in an abstract expressionist 'all-over' painting, there is a global impression of balanced dispersion, with particular timbres and registers predominating temporarily in certain passages.

Another architectonic approach has been to focus on the completion of sets or aggregates equivalent to the chromatic aggregate. Noble applies this approach to *Projection 1* by regarding the nine constituent sound types as an 'aggregation', and counting their statements. There are two complete statements, unfolding through the first half of the piece. The third statement (if that is what it is) is incomplete, and Noble implies that this is for semantic purposes: the missing sounds are 'almost literally erased, as the piece succumbs to overwhelming incursions of silence on the final page'.[67] He describes the result as a 'cantilevered' form, which he finds typical of Feldman.

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[64] David Cline has written about this all-over method extensively, regarding it as indicative of 'holism'. See 'Allover Method and Holism in Morton Feldman's Graphs', *Perspectives of New Music* 51/1 (Winter 2013), pp. 56-98; and *The Graph Music of Morton Feldman*, especially Chapter 5, 'Holism' (pp. 140-162).
[65] John Welsh, '*Projection 1* (1950)', *The Music of Morton Feldman*, ed. by DeLio, pp. 21-38.
[66] Cline, *The Graph Music of Morton Feldman*, p. 249.
[67] Noble, *Composing Ambiguity*, p. 160.

Let us turn to the question of whether there is local patterning amenable to non-statistical interpretation. Cline discusses pattern in his own discussion of *Projection 1*, but still within statistical limits. He focuses on what he calls 'register contours', i.e., the moves between registers. He identifies 'repeated or reversed *modules*'[68] of two or more sounds. Given the reduction to three terms (high, middle, low), the presence of such modules might seem unremarkable, but Cline has found that they are more frequent in *Projection 1* than in 'randomly generated analogues' of his own devising (a neat method, especially as it reminds us of the difference between Feldman's approach and Cage's chance methods). He has also discovered that 'wide register shifts', i.e., moves between the extremes of high and low, are more frequent in this piece than they are in a random sample (although less frequent than 'narrow shifts'), and that continuation in the same register is less frequent than it would be in such a sample. He concludes that Feldman 'attended to aspects of register contour' (which is difficult to doubt in the first place), but he does not mention the most straightforward motive for preferring the most disjunct motion available: that it is the most anti-syntagmatic. This omission is especially intriguing because he refers to Albert Bregman's *Auditory Scene Analysis*. He suggests that the slow tempo might serve to compensate for the wide register shifts, in such a way as to allow 'natural fluidity', i.e., to allow a listener 'to perceive the sounds as connected'. However, the opposite conclusion can also be drawn from this: that *both* the register shifts and the slow tempo work against stream integration (melodic perception). In terms of rhetorical strategy, then, there is no mystery about the frequent moves between high and low.

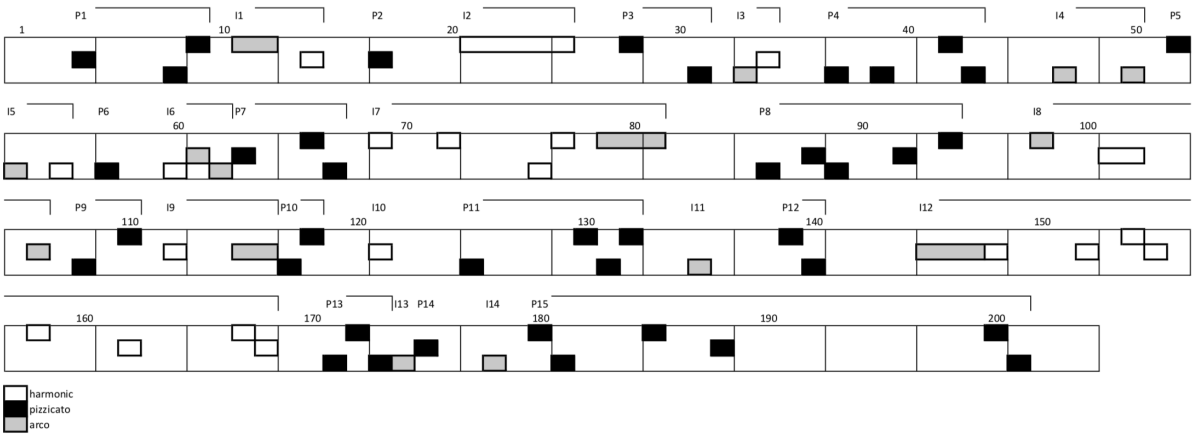
There is a problem with the 'register contour', however. Although it might have some poietic relevance (if it could be shown that Feldman decided on register first and then timbre), in performance it would only be recognisable if the player were to use the same pitch, or at least very close pitches, for each register irrespective of timbre. Pitch choice would then be further limited by the fact that only one or possibly two harmonics on the cello can reasonably be regarded as 'low'. In any case, nothing obliges the performer to obviate ambiguity in this way; it hardly seems in the spirit of the music to do so. Even in Uitti's fixed-pitch approach, it would be hard to claim that the putative 'register contour' is audible as such. In particular, her three 'low' notes are in three different octaves; the lowest harmonic is always higher than the middle arco note and only a second or third lower than the middle pizzicato note. If, by contrast, a performer consistently varies the pitch, as Kooistra does, then

[68] Cline, *The Graph Music of Morton Feldman*, p. 164.

there is even greater uncertainty, because it will never be certain whether a moderate leap, say a sixth, represents a change of register or not. One could conclude from this disconnect between score and realisation that sounds have been projected all the more freely into time, and that the notation serves to guarantee disjunction. I shall take the view that the widest leaps between extremes, especially in the same timbre, are *relatively* recognisable. I therefore suggest there is a semantic opposition between wide leaps and all the other motion.

At this stage I would like to propose an alternative interpretation and suggest that there is indeed a rhetorical dimension in the syntagmatic placement of sounds. There is no suggestion that this corresponds to Feldman's conscious intentions, but it is not incompatible with his all-over (or pin-up) technique. For the purposes of the analysis, I have reduced the piece to a single high-middle-low grid, colour-coding the timbres as black (pizzicato), grey (arco) and white (harmonic) to make the patterns more visible (Fig. 7).

**Fig. 7. Feldman, *Projection 1*, analytical reduction**




I propose to treat timbre contrast as the primary differentiating factor (because it is unequivocal) and register as secondary (because it is less so). I also wish to abandon the anti-hierarchical perspective by regarding pizzicato notes as primary and everything else as secondary. This is above all on simple statistical grounds, mentioned neither by Welsh nor Cline: that the pizzicato notes are by far the most frequent (40 notes out of 75) and are the sounds that most often occur successively (only 4 are isolated). They are also the first and last sounds heard. Harmonics appear half as frequently (20 times) and are isolated except on two occasions, which are very noticeable for this reason (four successive notes in beats 69-77 and eight successive notes in beats 148-168). There are only 15 bowed notes and never more than two in succession (again, this happens twice). It does not seem coincidental that the pizzicato notes are notated in the centre of the score, so that the harmonics ('in the heavens') and arco

notes (‘rooted’ at the bottom) represent swings in either direction from this centre, at least in a visual sense. I have therefore labelled groups of pizzicato notes (and isolated pizzicato notes) P1 etc., and *intervening* bowed notes or groups of bowed notes as I1 etc.

On this basis, a new interpretation becomes available. If we look at groups of successive pizzicato notes, we find that wide leaps are now not only more numerous than in a chance sample, but more numerous in absolute terms (15 wide, 10 narrow, 1 unchanged). Of these fifteen wide leaps, seven ascend and eight descend. If we include connections between pizzicato notes that are interrupted by a note of another timbre, wide leaps are again the most numerous (21 wide, 13 narrow, 5 unchanged); among the wide leaps, the descending ones are still more preponderant (9 ascending, 12 descending). Pizzicato notes fall on adjacent beats on twelve occasions (I shall call this *immediate* motion), and eleven times out of twelve these are wide leaps (4 ascending, 7 descending). In a straightforward numerical sense, therefore, Feldman privileges pizzicato; and within pizzicato motion, wide leaps; and within these wide leaps, descending motion.

Moreover, of the groups of successive pizzicato notes (excluding the isolated ones) all but the middle one (labelled P8) *end* with a wide leap. Of these leaps, four ascend and six descend. This is consistent with what we already observed, but perhaps more significant is that eight are immediate leaps (on adjacent beats) and only two are broken up with one or more beats of silence (I shall call this *delayed* motion).

This raises the question whether the immediate wide leap at the end of a segment *signals* the end of a segment, i.e., provides a form of closure, especially in the descending form. Such an interpretation is reinforced by the appearance of an immediate wide descending leap as the final gesture, conspicuously isolated by the longest silence in the piece. This gesture is poised between at least two conflicting interpretations, which could only arise in an avowedly anti-syntagmatic style. An orthodox interpretation would be that the long silence is meaningless and purely statistical (this would be more plausible if Feldman were using chance operations); if the final gesture has any connotation at all, it is that of an ‘outlier’, confirming the non-hierarchical, non-teleological quality of the whole piece, or possibly that of an ‘afterthought’. But at the same time, the isolation suggests a less orthodox interpretation: it tempts us to give the gesture special significance as a privileged motive—moreover, one of closure. A further, purely visual clue to this effect is that the figure crosses the dotted line between boxes (in effect, the bar-line). Indeed, through the piece, five of these immediate pizzicato figures cross the bar-line, and their distribution appears significant: one is low-to-high, early on page 1; one middle-to-low, on page 2; and

three high-to-low, all on the last page. (A similar descending cello pizzicato figure recurs in *The Viola in my Life 2* for ensemble (1970).)

Leaving aside the cadential association, which is not indispensable, we can safely claim that the wide pizzicato leap (thus the most disjunctive succession also in terms of sound production) is a privileged gesture, and that it consistently forms a goal at the level of the segment as well as dramatically concluding the whole piece. The delayed wide leap is perhaps even more anti-syntagmatic, but the immediate leap *emphasises* the registral disjunction. The rhetorical dialectic is between the emphasis of this gesture and various forms of mediation and counterbalancing. The middle register 'mediates' (by definition) between extremes, and the contrasts of timbre set up a competing type of patterning. Thus, we have again a second-order 'mediating' strategy preventing the connotation 'independence of sounds' from being *too obviously correlated* to the constant alternation of high and low—just as hints of consonance and tonality in a post-tonal chromatic context served to prevent the primary atonality from seeming too unambiguous.

Let us consider relationships between pizzicato fragments. I am subsuming continuation in the same register under 'narrow' for reasons mentioned above; and to simplify the analysis I am disregarding the number of intervening beats between sounds.

P1: delayed-narrow—immediate-wide

P2: isolated (P2 + P3 form a stretched inversion of P1)

P3: delayed-wide (new)

P4: delayed-narrow—delayed-narrow—delayed-wide—immediate-wide (expansion of P1 incorporating delayed-wide from P3)

P5: isolated

P6: isolated (but P5 + P6 echo the end of P4)

P7: delayed-narrow—immediate-wide (cf. P1, inverted contour)

P8: delayed-narrow—immediate-narrow—delayed-narrow—delayed-narrow (a contrasting segment with no wide motion, and returning to the initial delayed-narrow motion)

P9: delayed-wide (cf. P3)

P10: immediate-wide (same direction as P9)

P11: delayed-wide—immediate-wide—immediate-wide (cf. P8, this time with no narrow motion, but with the same succession delayed-immediate)

P12: immediate-wide (cf. P10, opposite direction)

P13: immediate-wide—immediate wide (same contour as first three notes of P11 but same rhythm as the last three notes of P11)
P14: isolated (P14 + first two notes of P15 correspond to P7)
P15: immediate-wide—delayed-wide—delayed-narrow—delayed-narrow—immediate-wide (the last three notes of P15 correspond to P7)

The overall trajectory is from the least dramatic gesture (delayed-narrow) to the most dramatic one (immediate-wide). This also appears as a pattern on the surface at three key moments: the very beginning and end, and in P7, just before the first interlude of several harmonics. If one counts intervening bowed notes as delays, it also occurs across P2 and P3, and across P14 and P15. It is interesting that both gestures include a disjunctive trait (delayed, wide) and one favouring syntagmatic perception (immediate, narrow). The most syntagmatic combination (immediate-narrow) only occurs once. The most disjunctive one (delayed-wide) occurs on its own (P3, P9) or is adjacent to an immediate-wide motion (P4, P11, P15).

We can also observe connections between successive intervening bowed segments. To simplify, I shall leave aside wide/narrow motion. (A = arco, H = harmonic, S = sustained for more than one 'ictus'):

I1: AS (delay) H
I2: HS
I3: A (immed.) H
I4: A (delay) A
I5: A (delay) H
I6: H (immed.) A (immed.) A
I7: H (delay) H (delay) H (immed.) H (delay) A
(The 4 harmonics form the inversion of P4)
I8: A (delay) HS (delay) A
I9: H (delay) AS
I10: H (isolated)
I11: A (isolated)
I12: AS, followed by then 8 harmonics forming two narrow-motion variants of P4
I13: A (isolated)
I14: A (isolated)

It seems, then, that the non-specification of pitch in no way obviates a similar rhetorical situation to that discussed with reference to *Last Pieces*. The primary, anti-syntagmatic strategy is based on the same gestural norms as the pitch-specific works. Against this there is consistent patterning, creating a subtle counterbalance. To observe this, it is necessary to opt out of the customary anti-hierarchical paradigm and accept what is fairly evident on the page, that is, the preponderance of the pizzicato layer. It seems likely that Feldman at least noticed some of these relationships emerging as he worked. The dialectic between the anti-syntagmatic and the syntagmatic is independent of, and not incompatible with, his 'all-over method' of adding cells non-sequentially, with the graph paper pinned up. This method did not entail complete abstention from controlling the result rhetorically.

We have also seen that in *Projection 1*, and in any solo piece of this type, the performer has the opportunity of contributing to this rhetorical operation by further moderating the anti-syntagmatic character of the explicit structure. Uitti does this by fixing pitches, creating an overall harmonic consistency. Kooistra does it by reconciling the explicit structure with note-to-note pitch-class patterns.

### 2.4.2 Later graph scores

After *Projection 1*, Feldman rethought his graph notation in ways calculated to further ensure the disguising 'horizontal' relationships without installing traditional polyphony. It appears that he found *Projection 1* still to be a little too 'horizontal', i.e., still constituting a cello melody, albeit a highly disjunct one. *Projection 2* for flute, trumpet, violin, cello, and piano uses the same notational format but is no longer monophonic: sounds are superposed in simultaneous instrumental parts. Moreover, boxes in the piano part include numbers, indicating how many notes to play simultaneously. This greater vertical density of sound would increasingly be the norm. That Feldman regarded *Projection 2* as a substantial step forwards is not a purely analytical inference. In the sleeve notes quoted above it was *Projection 2* that he described as the 'first experience' with his new conception; and Boutwell points out that Feldman turned his sketch book upside down and started again with *Projection 2*.[69]

[69] Brett Boutwell, 'Morton Feldman's Graphic Notation: *Projections* and Trajectories', *Journal of the Society for American Music* 6/4 (2012), pp. 457-483 (pp. 473-474).

Many of the graph pieces featuring numbers incorporate conspicuous 'number strings', as Cline calls them, i.e., passages in which Feldman has used a sequence of numbers (for example, from 1 to 7) once each.[70] By doing so, Feldman maximises variation in density; perhaps he also valued completism on conceptual grounds. These pieces are therefore particularly amenable to the analytical method of identifying aggregates mentioned above. In other pieces, a numerical 'aggregate field', as Noble calls it, takes up a much longer passage; he demarcates these fields on the basis of the appearance of the last number.[71] Because the other numbers may be repeated many times before the last one appears, this might be a questionable analytical move if not for the fact that Feldman does frequently appear to save the last number for proportionally significant moments, such as the half-way point. Such proportional thinking would be consistent with the practical composition process of filling in a grid.

Feldman also rethought the rhythmic and metrical aspects of his graph music, making them more flexible.[72] Whereas in *Projection 1* the instructions ('duration is indicated by the amount of space taken up by the square or rectangle') entail that bowed notes occupy complete beats, in later pieces players (the *Intersections*) are encouraged to enter *within* the time unit but usually to extend to the end of the time unit. Moreover, whereas the earliest use of numbers indicated the density of piano chords, in later graphs numbers greater than 1 also represented *successive* sounds within each cell and could thus be given to melody instruments. This leads to a very different perceptual result, an animated, helter-skelter surface atypical of Feldman, as in *Atlantis* for orchestra (1959). Players tend to resort to scalar figures, since there is no time to bounce 5 or 6 times between extremes of register within the same ictus. Inappropriate or mischievous melodic interpretations are likely to be more noticeable in these circumstances.

Despite blocking melodic perception, the element of superposition made possible new musical relationships and patterns based on the relative durations and synchronicity/non-synchronicity of sounds. Feldman frequently staggers the onsets and offsets of simultaneous long sounds. Brett Boutwell aptly compares the result to 'dense, painterly brushstrokes'.[73]

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[70] Cline, *The Graph Music of Morton Feldman*, p. 189.
[71] Noble, *Composing Ambiguity*, pp. 153-161.
[72] As Cline says, Feldman may have heard of and reacted to Boulez's criticism in this regard. See Pierre Boulez and John Cage, *The Boulez-Cage Correspondence*, ed. by Jean-Jacques Nattiez, trans. by Robert Samuels (Cambridge: Cambridge University Press, 1993), pp. 103 and 115.
[73] Brett Boutwell, 'Morton Feldman's Graphic Notation', p. 475.

Ryan Vigil has proposed an analytical method for studying these compound textures, which focuses, like my own, on differential relationships, and which he applies to *Projection 4* (1951). He uses six concepts: 'restriction' (e.g., low register only), 'exclusion' (e.g., no low register), 'diversity' (not restricted), 'saturation' (combining all possible terms for a given parameter), 'density' (temporal frequency of onsets), and 'novelty' (including the effect of the return of an element previously excluded).[74] He draws attention especially to Feldman's dramatic use of novelty, including the use of a sustained chord of unprecedented density at the end.[75]

Some observations that I have made with regard to *Projection 1* could be added to Vigil's findings. For example, it is also the case in the violin part of *Projection 4* that pizzicato notes account for approximately half of the notes, and are the notes most frequently heard in uninterrupted succession. The wide pizzicato leap again appears to have a more than local significance, although it is now interrupted in an even more insistent way by sustained bowed notes. For example, a wide descending pizzicato leap is heard immediately before the sustained final chord. There is no space to develop this line of enquiry here, considering the complexity that results from the interaction of two instruments.

Vigil has devised a method for tracing transformations of what composers often call 'states of the material', but he avoids ascribing quasi-motivic significance to particular configurations. He is explicitly reluctant to 'allow the foregoing observations to congeal into a portrait of the structure of *Projection 4*' because this would be 'at odds with the work's compositional aesthetic.'[76] He thus defers to Feldman's vision, like other authors—apparently on the basis of the non-specification of pitch: 'The graphic notation effectively eliminates the possibility of conceiving of a group of pitches at one point in the piece creating a meaningful structural connection with a similar group of pitches elsewhere.' He appears to discount the possibility that the performers might collectively establish such pitch connections but also to underestimate the recognisability of gestural patterns across the piece. He continues:

> Rather, we are left with the piano, pizzicato, arco, and harmonic violin sounds weighing on each other—leading in various instances to a restricted, diverse,

[74] Ryan Vigil, 'Compositional Parameters: "Projection 4" and an Analytical Methodology for Morton Feldman's Graphic Works', *Perspectives of New Music* 47/1 (Winter 2006), pp. 233-267 (pp. 242-243).
[75] Ibid., p. 255.
[76] Ibid., pp. 255-257.

> or saturated sonic field. Free from a concern with construction, the sounds are projected onto Feldman's time canvas, playing on the surface of its aural place. Ironically, by opting not to approach the sounds in his composition with absolute specificity Feldman creates a musical environment where the absolute quality of those sounds emerges as the subject of the composition.[77]

Thus, at the last moment, like DeLio, Virgil retreats from the implications of the analysis and confirms the sonicist line.

### 2.5 Sound and pattern in the late music

I have focused on early works in which, if we take Feldman at his word, any 'horizontal' connections more meaningful than the raw fact of succession were specifically disavowed. I have gone into some analytical detail in order to provide an alternative reading of works whose inscrutability I believe to have been overestimated. I now turn to late reiterative works of the late 1970s and 1980s, which are usually precisely notated. There were earlier pieces in which Feldman had used repeated figures along with other elements, such as *Structures* for string quartet, but it is in later compositions that repetition and subtle variation become the driving principle. Since the construction of these pieces is not so mysterious, I will go into less analytical detail and touch on aesthetic questions arising from Feldman's reintroduction of unequivocal relationships.

From a broad sonicist perspective, Feldman's turn to repetition is not difficult to understand, as repetition has been a staple of the sound-oriented avant-garde, from Varèse onwards—indeed, ever more so up to the present day. The underlying principle is that repetition deflects attention away from the sequential dimension and on the sound object. There is a comprehensible sequential relationship but not one that invites continued attention. To use linguistic or semiotic terminology, such a sequence does not count as syntagmatic because it is not syntactical or meaningful.

Feldman's approach to repetition and variation is usually still non-systematic, and it is rarely possible to explain more than a few bars at a time in terms of quasi-minimalist process. He varies patterns in sometimes more, sometimes less noticeable ways: sometimes he reorders the pitches, very often he minutely permutates the rhythms. But this variation of

[77] Ibid., p. 258.

patterns undoubtedly occasions *comparison* and thus a retreat from extreme particularism. It is also noticeable that these minute variations are more notation-driven than ever before. This is especially true of the metrical and rhythmic permutations. Feldman may have found the pitches at the piano but probably not the rhythmic relationships. Is there an element of *Augenmusik* in the late work? Feldman once said, like Cage (and in conversation with Cage), that he wrote in order to hear,[78] and in the essay 'Crippled symmetry' he acknowledges that he is creating 'notational images that do not create a direct impact on the ear as we listen'[79] but that contribute to a new musical result. Art provided an additional justification for the visual element, once again, in that he took to emphasising parallels between his pieces and the irregular patterning of Middle Eastern rugs.

In short, at this stage of Feldman's output, pattern is becoming a priority to rival sound. There is evidently nothing untoward about this; the question is what survives of Feldman's claim not to push sounds around.

It should also be borne in mind that Feldman's turn to repetition came in the wake of minimalism, which, as I mentioned in Chapter 1, is by no means incompatible with the rhetoric of sound. It is not surprising to find, in the late lectures and interviews, some disparaging remarks about Glass and Reich:

> I would say that Phil Glass is a media rather than an artistic phenomena in America. [...] But what's happening in contemporary music is that the middlebrow is winning out. [...] And the young people in a sense, there's a new leisure class in America—the young. And they're a captive audience for these events. And Steve Reich, Phil Glass, in a sense I feel, without insulting them too much, represent this.[80]

In another interview: 'We have popular music, like Reich or Philip Glass, but they're show business. Serious stuff, if I may use that word, experimental stuff, if I may use that word, nothing, nothing.'[81] This is a reminder that the rhetoric of sound may be, among other things, a way of staking out a position in relation to more 'heteronomous', i.e. commercial work.[82]

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[78] Morton Feldman, Bunita Marcus, Francesco Pellizzi, and John Cage, 'Conversation with Morton Feldman (Bunita Marcus and Francesco Pellizzi), *Res* 6 (Autumn, 1983), pp. 112-135 (pp. 129-132).
[79] Feldman, 'Crippled Symmetry', *Res* 2 (Autumn, 1981), pp. 91-103 (p. 97).
[80] Feldman, 'Johannesburg Lecture 1', p. 170.
[81] 'Morton Feldman in Conversation with Thomas Moore. 9 November 1983', in Feldman, *Morton Feldman Says*, pp. 181-183 (p. 182). Originally in *Sonus* (Spring 1984), pp. 14-19.
[82] See Bourdieu, 'The Field of Cultural Production', especially pp. 45-46 and 49.

A number of style traits distinguish Feldman's repetitive music from the more popular minimalists, although less so from La Monte Young. First of all, he maintains his usual traits at the level of the gesture: slow, quiet sounds, hazy and not motoric, generally not metrical or periodic. More often than not, patterns are presented not as melodic figures in one instrumental part or voice but are composites of two or more parts, as in the interlocking violin and piano figures of *For John Cage* (1982)—or, in piano works, are shared between hands, as in *For Bunita Marcus* (1985). There is usually some element of overlap. Patterns are usually chromatic. With regard to organisation, Feldman's pieces cannot be mistaken for process music either on the micro- or macro-levels. Changes from one type of pattern to another generally have an effect of non sequitur, although Wes York has shown that *For John Cage* is organised hierarchically or quasi-hierarchically (without closure) on several levels, each of which is nearly but not quite symmetrical.[83]

The late Feldman is also remarkable for the extreme length of certain pieces, up to five hours in String Quartet 2 and *For Philip Guston* (again, this is not necessarily longer than Young's *Well-Tuned Piano*). Feldman referred to this length as 'scale', again evoking the large-format pictures of painters such as Rothko.[84] With this magnitude come connotations of the sublime (referred to in the title of Boutwell's thesis, *A Static Sublime*). Feldman's discourse now quite frequently shifts from sound to time and the transformation of consciousness of time and of memory. Indeed, Tom Johnson quotes him as saying: 'All we composers really have to work with is time and sound—and sometimes I'm not even sure about sound.'[85]

The question that arises here is whether this scale is compensating for a reintroduction of comprehensible syntax. Indeed, in certain sections of the Second Quartet, Feldman seems to be flirting with conventions of less ascetic genres. It is interesting to see Feldman he glosses this comprehensibility. In programme notes for the Quartet, he acknowledges that his pitch organisation is not unlike that of Schoenberg's *Erwartung*, but nonetheless emphasises

> the difference between constructing a 'composition' and that of assemblage, which is more what this quartet is about. A 'composition' for me forms sentence structures within a scenario of beginning, middle and end. Very much the way Picasso uses a rectangle as a ready-made protagonist. With

[83] Wes York, '*For John Cage* (1982)', in *The Music of Morton Feldman*, ed. by DeLio, pp. 147-198.
[84] Feldman, 'Crippled Symmetry', p. 103.
[85] Johnson, 'Remembrance', p. 35.

> assemblage there is no continuity of fitting the parts together as words in a sentence or paragraph.
>
> A syntactic approach would be as out of place here as Schoenberg felt a tonality not based on triadic harmony would be in his music.[86]

Feldman still suggests that 'composition', which he puts in inverted commas, no longer adequately describes his activity, and again he links composition with a linguistic term, 'syntax'. But this time, he uses 'syntax' to refer not to local pitch relationships, which are now patterned and thus readily analysable, but instead to large-scale form, which in his late works is now the aspect most difficult to reconcile with traditional categories.

How does the tension between sonic autonomy and pattern play out in the music? The key may be Feldman's concept of 'crippled symmetry' (also the title of a piece), i.e., imperfect symmetry. My hypothesis is that reiteration has become the primary rhetorical principle, and that the crippling of the symmetry, or resistance to pattern, is now the moderating factor, maintaining the connotations of 'plasticity' and 'freedom'. This crippling operates within the cell, in the successions of cells, and more dramatically in the succession from one idea to the next. By compromising pattern, Feldman prevented the work from being assimilated to minimalism—just as fragmentary horizontal connections had prevented the particularist work from being purely aleatoric.

## CONCLUSIONS

Feldman acknowledged the utopian character of his ideal of sonic autonomy on several occasions. During a public discussion with the painter Philip Guston, he admitted that 'if I take one sound and I put it against another sound, that's language'. Unlike Guston, he cannot 'make a [unique] mark', because he is working with 'those eighty-eight notes', the musical equivalent of 'a color chart'.[87] This is because scored music is, in Nelson Goodman's term, allographic, even when Feldman writes it.[88] In this respect Feldman yearns for the autographic status of painting.

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[86] Feldman, *Give my Regards to Eighth Street*, 196.
[87] Philip Guston, 'Conversation with Morton Feldman (1968)', in *Collected Writings, Lectures, and Conversations*, ed. by Clark Coolidge (Berkeley, Los Angeles, London: University of California Press, 2011), pp. 86-87.
[88] Nelson Goodman, *Languages of Art: An Approach to a Theory of Symbols* (Indianapolis: Hackett, 1976), p. 113.

It seems clear that Feldman cultivated the tension between sound and note, between an impression of sonic autonomy and its organisational causes or correlates. During one of his lectures from the 1980s, asked why he keeps referring to notes instead of sounds, he admits that he is trying to turn notes into sounds.[89] Elsewhere he writes: 'I prefer to think of my work as: *Between Categories*. Between Time and Space. Between painting and music. Between the music's construction, and its surface'.[90] Perhaps the particular pleasure of listening to his music also resides in this tension: suspending disbelief and imagining the sounds as freed from syntactical constraints, while being aware of the element of compositional illusion. One could, therefore, add to his list: between sonicism and modernism.

[89] Feldman, *Essays*, p. 208.
[90] Feldman, 'Between Categories', *The Composer* 1/2 (September 1969), pp. 73-77, reprinted in *Give my Regards to Eighth Street*, p. 83-89 (p. 88).

# CHAPTER 3

## THE RHETORIC OF AN IRREDUCIBLE SOUND: GIACINTO SCELSI

Giacinto Scelsi's reputation as a major figure in sound-oriented composition rests on his late pieces, especially those from 1958 onwards, in which sustained sounds are 'explored' with a wealth of fluctuations of pitch, width of vibrato, dynamics, and timbre. Scelsi reception is almost unanimous in taking for granted that his music is exemplarily sound-oriented, as one can see from a glance at the titles of books and essays on the composer: *Viaggio al centro del suono*, *Im innern des Tons*, *L'homme du son* (the collected edition of his poetry), *Klang und Quelle*, and so on. As I suggested previously, Scelsi exemplifies an archetype of 'sound itself'. This may be expressed, on the musical level, by a combination of the extreme continuity, sustained sounds, absence or faintness of pulse, minimal melodic motion (conjunct or microtonal), gradualness of change, conspicuous vibrato, and wave-like forms—and, on the verbal level, by a vocabulary of irreducibility, limitlessness, transgression of boundaries, interiority, 'internal' activity and complexity, a supposed absence of definite relations, and a listening experience of microscopic perception, penetration and immersion; sound is often figured as liquid or gaseous.

Scelsi reception is complicated by several biographical and aesthetic factors that have to be considered before we can proceed. It has focused on (1) the matter of his music's special concern with sound and (2) its supposed resistance to analysis, but also on (3) his mystical aesthetics and orientalism, (4) the eccentricity of his working methods and the difficulty of reconstructing them, and (5) the ethical question of his reliance on uncredited collaborators.

Scelsi's eccentricity, in both compositional approach and general behaviour, has often been connected to his aristocratic origins, either negatively (concerning his being a dilettante) or positively (his being radically independent).[1] His compositional training consisted of informal sessions with a variety of composers, including Walther Klein, who appear sometimes to have assisted him in the actual composition of some early works, in which he experimented with techniques based on Scriabin and Berg. By his own account, he suffered from psychological problems that were supposedly exacerbated in the 1940s by the rationalist approach he was taking in his music, to the point that in 1948 he suffered a breakdown. He

[1] See especially Eric Drott, 'Class, Ideology and il caso Scelsi', *The Musical Quarterly* 89/1 (2006), pp. 80-120. Drott has subsequently compared Scelsi's working methods with the Joyce Hatto fraud in 'Fraudulence and the Gift Economy of Music', *Journal of Music Theory* 54/1, Cavell's "Music discomposed" at 40 (Spring 2010), pp. 61-74.

claimed to have adopted, while recovering in a Swiss clinic, the therapeutic habit of meditating on the sound of a single piano note played repeatedly. He made this meditation on single sounds the basic principle of his subsequent music, under the influence of anthroposophy and of ancient Hindu philosophy, largely filtered through Western writings. The most thorough early work on Scelsi's aesthetics was by Gregory Reish, who traced many of the Hindu references and uncovered a strong debt to the writings of Rudolf Steiner and Dane Rudhyar.[2] Reish labels Scelsi's late, sound-oriented aesthetics and style as 'sonorist', using the term normally applied to a specific Polish repertoire; he does not use this term in order to give a critique of Scelsi's aesthetics.

For an obscure combination of aesthetic, psychological, and technical reasons, Scelsi developed an extremely unusual working practice, based on taped improvisation (or real-time composition), editing, and transcription. He regarded the improvisations as *abbozzi* or sketches. His approach to improvisation was consciously anti-rational, and involved Yogic meditation: he claimed to create his music 'without thinking'. Some of these sketches were collaborative, the outstanding example being the *Canti del Capricorno*, created between 1962 and 1972 in collaboration with the soprano Michiko Hirayama. However, most of the important late works were created using Claviolines (usually referred to as Ondiolas), electronic keyboard instruments that allowed subtle gradation of intonation, width of vibrato, dynamics, and timbre. He then selected the more successful sketches for transcription, which he would delegate to assistants; he would later proofread and annotate, generally editing expressive markings but not notes.[3] Over time, he took to intervening on his tapes, compromising the moment of improvisation in various ways, reversing tracks, and building up multi-layered pieces through overdubbing. The reversal of tracks explains the palindromes that were long found anomalous in certain pieces: here both the forwards and backwards versions of a recording are used and so the editing process is rendered audible.[4] Jaecker has also found that, in some vocal works, Scelsi added the 'texts', consisting of isolated

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[2] Gregory Reish, 'The Transformation of Giacinto Scelsi's Musical Style and Aesthetics'*, 1929-1959*, PhD thesis, University of Georgia, Athens, Georgia 2001; and 'Una Nota Sola: Giacinto Scelsi and the Genesis of Music on a Single Note', *Journal of Musicological Research* 25 (2006), pp. 149-189.

[3] See Friedrich Jaecker, '"Funziona? O non funziona?" Ein Streifzug durch das Scelsi Archiv', *MusikTexte Zeitschrift für neue Musik* 128 (2011), pp. 5-11; and '"Improvisation" und "Transkription" im Schaffen von Scelsi', in *Klang und Quelle: Ästhetische Dimension und kompositorischer Prozess bei Giacinto Scelsi*, ed. by Federico Celestini and Elfriede Reissig (Vienna: LIT, 2014), pp. 91-103.

[4] These palindromes were discussed by Wolfgang Thein in 'Botschaft und Konstruktion – nichtimprovisierte Momente in der Musik Giacinto Scelsis', in *Giacinto Scelsi, im Innern des Tons Symposion Giacinto Scelsi Hamburg 1992*, ed. by Klaus Angermann (Hofheim: Wolke, 1992), pp. 51-68.

phonemes, after the transcription had been made, i.e., apparently as an afterthought.[5] It is still unclear to what extent Scelsi's use of assistants was due to a strong psychological aversion to the act of writing music and to what extent he simply required their expertise. Whatever the truth of the matter, the relevance of these working methods to his pursuit of a sonicist aesthetic is that, according to Scelsi, by postponing the act of writing until after the musical substance was 'fixed', and by delegating this act, he was able to avoid the mediation of sound by rational thought and notation. In this sense, his use of assistants was logical: any composer knows that it is almost impossible to transcribe an improvisation without giving in to the temptation to make 'improvements', i.e., to rationalise it. Whether he was right to assume that the assistants would not rationalise it independently is another matter.

The results of this working process were the late works on which Scelsi's sonicist reputation rests, and which are therefore my main concern in this chapter. There will be little space here to discuss the early, relatively conventional, modernist works, or the transitional works of the 1950s. I shall go into some detail about Scelsi's compositional rhetoric in the second half of this chapter; for the moment I shall only summarise the essentials. As usual, the late works are more varied than the idea of a 'late style' might imply. However, there is a main signature style, especially in the works for strings and voices. What most late works have in common is the use of sustained sounds developed almost exclusively by means of small fluctuations of pitch, normally in quartertones, changes of octave, fluctuations of vibrato, changes of dynamics, and changes of timbre, i.e., those parameters that his keyboards allowed him to control. It is unusually appropriate to regard these as 'variables', which seem to influence one another in unpredictable ways. From this aspect stems the idea that this particular music is not reducible to a pitch structure. Notated changes of pitch-class are generally not more frequent than changes in the other variables. Moreover, since what would normally be called 'melodic motion' is almost always restricted to shifts of a quartertone, it is almost indistinguishable from what would be viewed as 'intonation'. Moreover, even this minimal melodic motion is, more often than not, disguised in various ways, which will be described below. The result is that small-scale events that in earlier Western art music (although not in other traditions) would normally be disregarded as nuances, supplementary to the composed structure and provided by the performer, come to constitute the discourse that the listener is expected to follow consciously – as in some minimalist works, especially those of La Monte Young.

[5] Jaecker, '"Funziona? O non funziona?"', p. 8.

Scelsi developed this approach in several ways, with varying degrees of severity. Some compositions are monodic, such as the solos for wind instruments and voice. Most are in some degree heterophonic, with several, similar lines weaving amorphously around a narrow pitch band (normally narrower than a tone). Of these heterophonic pieces, some, such as the *Quattro Pezzi per orchestra (ciascuno su una nota sola)* (1959), are based on a single, fixed pitch-class, usually octave-doubled. Others are based on a pitch band that moves, normally upwards (Johannes Menke has called this 'anabasis').[6] In both of these situations, the intended effect is an impression of 'depth', of a sound object that, while it may have a recognisable pitch centre, is in a constant state of flux, stretching and contracting in all 'directions'—a sound object comparable to those of electroacoustic music. Other compositions are not on a single pitch band at all, but apply the same techniques of micro-variation to two or more clearly distinguishable and independently moving pitch bands, which can be perceived as the equivalent of polyphonic 'parts'; examples include the late string ensemble pieces, such as *Anagamin* (1965) and *Ohoi* (1966), and much of the vocal ensemble music. Some of the larger-scale late pieces include dense chords, bands of glissando reminiscent of Xenakis, and other elements that take them out of his signature style and into the mainstream of post-war New Music. A few anomalous pieces, such as *Antifona* (1970), are in a quasi-archaic, monophonic style.

Scelsi has often been summed up as the composer who writes music 'on a single note', as in the subtitle of the *Quattro Pezzi*. This is misleading, however, since, as we shall see, Scelsi's approach is based precisely on the 'sound' *as opposed to* the 'note', another opposition discussed in Chapter 1. Even when the pieces are nominally 'on' a single note, the category is stretched to breaking point, first because of the pervasiveness of quartertone dyads, and usually also because, although the music is almost always built from discrete pitched sounds, they are superposed and interwoven in such a way as to sustain an unbroken, fluctuating sound. To put it another way, all relationships between elements, whether one considers relationships between simultaneous parts or syntagmatic relationships within parts, are methodically blurred. The result is to create the impression of the dissolution of the category of the discrete note.

Another important aspect of Scelsi's signature style—one that differentiates it from, for example, that of Ligeti in his micropolyphonic period—is its anti-systematic, irrationalist

[6] Johannes Menke, *PAX. Analyse bei Giacinto Scelsi: Tre canti sacri und Konx-Om-Pax* (Hofheim: Wolke Verlag, 2004), p. 236.

character, or 'profound subjectivity', as Christopher Fox wrote in *Grove*.[7] This quality is connected to his semi-improvisatory working methods. It is easy to describe the overall gestures, but in most cases almost impossible to 'explain' particular sequences of gestures in terms of a strict logic or system, or at least of a system comparable to those of most post-war modernist music. As Carl Dahlhaus put it, writing in *Die Zeit* in 1983:

> One can certainly describe Scelsi's music, and run the risk of doubling the score with words, but one cannot analyse it, strictly speaking. Categories such as theme and development, series and derivation, harmony, rhythm, and even *Klangfarbenmelodie* fall short in a vexing way in the face of a music whose most obvious feature is a gesture of refusal: the preclusion of everything that analysts discover or reconstruct in a score as 'coherence of meaning'.[8]

Scelsi had largely stopped composing when, in the 1980s, having been relatively marginal for most of his career, he unexpectedly achieved wide recognition, with important performances at the Darmstadt Ferienkursen in 1982 and 1984 and retrospectives at the Cologne ISCM World Music Days and at Royaumont in 1987. These were the result of the support of Heinz-Klaus Metzger and other senior figures in the New Music world. Also in the 1980s, he published and in some cases republished texts on music, through *Parole Gelate*, the publishing house of his friend Luciano Martinis. These texts were mainly dictated, in line with his approach to composition. In January 1989, five months after his death, a minor scandal (the 'caso Scelsi') broke out when his main assistant, the composer Vieri Tosatti, revealed in the *Giornale della musica* his role in the creation of most of the important scores, and denounced the celebration of Scelsi. In the long run, however, these revelations did no irreparable damage to Scelsi's reputation (again, possibly for reasons connected to his socio-economic class, as Drott suggests), and the novelty of his working methods has in fact provided an extra stimulus for critical reflection and often advocacy.

Scelsi's archive, housed at the Fondazione Isabella Scelsi in Rome (named after his sister), in his flat overlooking the Palatine, has only been open to scholars since 2009. Thus, for twenty years after his death scholars' attempts to understand and demystify the music were obstructed. On the opening of the archive, the composer and scholar Friedrich Jaecker

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[7] Christopher Fox, 'Giacinto Scelsi', in *The New Grove Dictionary of Music and Musicians*, ed. by Stanley Sadie (London: MacMillan), vol. 22, pp. 420-222 (p. 241).
[8] Dahlhaus, Carl, 'Entdeckung. Der Komponist Scelsi', in *Gesammelte Schriften* Vol. 9, ed. by Hermann Danuser (Laaber: Laaber, 2006), pp. 484-485 (p. 485). First published in *Die Zeit*, November 11, 1983.

undertook the task of matching the hundreds of tapes to finished works. Further analysis, notably by Jaecker and Sandro Marrocu, has suggested that the scores correspond closely to the tapes, at least as regards pitch and duration—in other words, that the transcriptions were extremely faithful. Jaecker has emphasised that the terms 'improvisation' and 'transcription' are inadequate, given the level of premeditation on Scelsi's part and the extent of Tosatti's input and that of the other collaborators.[9] My own view is that the term 'improvisation' need not imply that the music is unplanned or haphazard. As to 'transcription', there is no doubt that the input of the collaborators has been minimised in the past. In particular, it still has not been established how decisions regarding instrumentation were arrived at, and by whom. Jaecker and Marrocu gloss the correspondence between tapes and scores as showing the unique and fruitful conjunction of the skills of Scelsi and Tosatti, while acknowledging that Tosatti was left embittered and died mainly known for his role as Scelsi's assistant, a role that Scelsi regarded or affected to regard as merely technical (that of an 'artisan'—see below).

The most paradoxical aspect of Scelsi's approach is perhaps that it is written down at all—that, having attempted to return to a form of 'orality', to transcend habits of thought connected with notation,[10] he then had the music transcribed for performance in fundamentally orthodox, although exceptionally detailed staff notation. It seems clear that he did so simply because he preferred live performance. One of the results, however, is that, as I mentioned above, much of what would normally be supplied in performance as 'nuance' is absorbed into the composition, and notated in such detail that the performer is more constrained than usual. There is, of course, always some space for creative input even in these circumstances: for example, Mieko Kanno has discussed how string players can use bow speed and emphasise timbral differences between strings in order to differentiate Scelsi's microtonal gestures.[11] Nonetheless, one can view the composer's approach as encroaching on the performer's field of interpretation in a way that is frequently observed in modernist music

[9] Friedrich Jaecker, '"Improvisation" und "Transkription" im Schaffen von Scelsi'. See also Sandro Marrocu, 'The Art of Writing Sound', in *Music as Dream: Essays on Giacinto Scelsi*, ed. by Franco Sciannameo and Alessandra Carlotta Pellegrini (Lanham, Md., Toronto, Plymouth: Scarecrow Press), pp. 157-183.
[10] See Giovanni Giuriati, 'Suono, improvvisazione, trascrizione, autorialità, Oriente, ... e Scelsi. Alcune riflessioni di un etnomusicologo', in *Giacinto Scelsi nel centenario della nascita*, ed. by Daniela Tortora (Rome: ARACNE, 2008), pp. 263-279; and Ian Dickson, 'Orality and Rhetoric in Scelsi's Music', *twentieth-century music*, 6/1 (2009), pp. 23-41.
[11] Mieko Kanno, 'Thoughts on How to Play in Tune: Pitch and Intonation', *Contemporary Music Review*, 22/1-2 (2003), pp. 49-51.

informed by a more structuralist ideology. To make matters more complicated, he allowed particular performers substantial liberty to depart from the score.[12]

In reality it is the performers who create the sonic content (in acoustic music, at least), regardless of the degree of strictness with which the composer determines performance. But this, as I argued in Chapter 1, is one of the things that sonicist aesthetics tends to conceal, just as it conceals the importance of the listener; 'sound worlds' are instead presented as if they were already intrinsic to works in themselves. Once one acknowledges that the empirical reality of the sound world is the work of performance, the entire habit of opposing different styles and corpuses as sound-oriented and discourse-oriented, without wondering whether performers and listeners are sound-oriented, begins to appear questionable.

Another aspect of Scelsi's working methods that is—or ought to be—awkward for the sonicist interpretation is the fact that the recorded sketches of most of the major works, executed on keyboards, are significantly different in timbre from the authoritatively performed 'end product'. In this respect they do not anticipate or even hint at the empirical sound world of this end product any more than a traditional, written sketch would. What is transmitted from the tapes, via the scores, to the performance is quantified information not only about timbre and dynamics but also pitch (including vibrato) and duration—precisely those two 'dimensions' of sound whose dominance sonicism aims to transcend. The tapes feature *changes* of timbre, but these correspond only vaguely to the performed equivalent. This seems to encourage an incongruously structuralist interpretation: at a compositional level it is the *change* of timbre that counts, and the particularity of the timbre is secondary. Such an interpretation is reinforced by the fact that in several cases Scelsi had different instrumental arrangements produced from the same sketch; this was obvious all along from the published scores. Why, then, did nobody have second thoughts about the sonicist interpretation, and wonder whether sound might be inessential to these pieces, as in the old charge levelled at tonal music? My suggestion is that such obvious problems have generally been ignored because the sonicist interpretation is based above all on the musical language, the compositional rhetoric.

Before looking in more depth at the compositional rhetoric, however, I shall examine, first, Scelsi's discursive rhetoric and, second, his reception, in the light of the framework of sonicism set out in Chapter 1.

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[12] See William Colangelo, 'The Composer-Performer Paradigm in Giacinto Scelsi's Solo Works', PhD diss., New York University, Ann Arbor: University Microfilms International, 1996.

### 3.1 SCELSI'S DISCURSIVE RHETORIC

Scelsi's own position was one of unequivocal sonicism. In his own texts, he recycles a number of the themes and commonplaces that I discussed in Chapter 1 but gives them a pronounced esoteric flavour that is normally toned down in the reception but not always dispensed with entirely. He embraces the idea of sound as a latent, atemporal cosmic force, which according to Hindu philosophy was the basis of creation. Thus, he repeats the commonplace that sound precedes and is independent of music;[13] but in his esoteric variation on the theme of the anteriority of sound, sound precedes not just the culturally contingent realm of music but all of creation. According to Scelsi, the adept, by means of Yoga, is able to tap into this cosmic force:

> What interests me is precisely to try to perceive, receive, and manifest – with instruments or with the voice – a part, even the smallest part, of this sonorous force, which is at the base of everything, which creates and often transforms men.[14]

Like many composers, and especially like many improvisers,[15] he describes himself as receiving rather than contriving his music. One famous expression is in a letter to Sharon Kanach, in which he describes himself as a 'postman' delivering messages from the beyond.[16] Nonetheless, he generally refers to 'my music'. It is consistent with this conception that the usual metaphor of the liberation of sound does not figure significantly in Scelsi's texts; it would be out of place.

He declares that since his breakdown he has created his music and poetry (published in French) 'without thinking'.[17] He provides no analytical clues, and does not acknowledge the use of any system (again, he is not unique in this). He emphasises instead the nature of his Yoga practice. In the essay 'Son et musique', he explains that this practice involves finding the *son 'juste'*, but he immediately distinguishes 'sound' from 'note'. The 'right sound' is

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[13] Giacinto Scelsi, 'Son et musique' (1981), in *Les anges sont ailleurs…*, collected writings and interviews, ed. by Sharon Kanach, trans. by Sharon Kanach and others, Arles: Actes Sud, 2006), pp. 125-139 (p. 125).
[14] Giacinto Scelsi, *Il Sogno 101*, ed. by Luciano Martinis and Alessandra Carlotta Pellegrini (Macerata: Quodlibet, 2010), p. 6. These memoirs were dictated by Scelsi in two parts in 1973 and 1980
[15] See, for example, Jeff Pressing, 'Improvisation: Methods and Models', in *Generative Processes in Music: The Psychology of Performance, Composition, and Improvisation*, ed. by John Sloboda (Oxford, New York: Oxford University Press, 1988), pp. 139-140 and 142.
[16] Scelsi, letter to Sharon Kanach reprinted in *Les anges sont ailleurs*, pp. 57-58.
[17] Transcript of an interview with Frank Mallet, Marie-Cécile Mazzoni, and Marc Texier, reprinted as 'Conversations avec Giacinto Scelsi', in *Les anges sont ailleurs*, pp. 62-84 (p. 66).

> not at all a question of the right 'note', in relation to any system, tonal or atonal, European, African, or Asiatic, but of the very essence of sound. In the Yoga of Sounds, the adepts [...] listen to their personal sound and, thus, to the Devic sounds. The personal sound allows the perception of the supernormal world, at the same time producing the interior equilibrium that underlies this Yoga. Often the sound manifests its own colour, but this is, again, another thing. All this naturally explains the importance of the 'right' sound, whether it is a matter of the human voice or an instrument. This is why I think that monody can more easily give this rightness than orchestral or symphonic works.[18]

Elsewhere, he makes the typically sonicist denial of being a 'composer', not only in the esoteric sense regarding his 'receipt' of the music, but also on the structural grounds that 'Composing means putting one thing with another. I don't do that'.[19]

He also takes up the common theme of the 'inside' of sound:

> It is when you keep playing a note for a long time that it becomes large. It becomes so large that one even hears much more harmony that grows inside it. The sound envelops you. [...] In sound, one finds a whole universe, with harmonics that one never hears. [...] One swims inside it. [...] You become part of the sound. Little by little you are swallowed up by the sound and you have need of no other sound. Music today is becoming an intellectual pleasure. Putting one sound with another, etc. But that is no longer at all necessary. Everything is there inside. It is already there in the sound, the whole cosmos that fills the space. All possible sounds are contained in it. The conception of music is at present futile, in these rapports of sounds, in this contrapuntal working. Music becomes a game...[20]

He uses a particular geometrical metaphor, again derived from Rudhyar: that of sound as a 'sphere'.

> Sound is spherical, but, listening to it, it seems to us [i.e., Westerners], to possess only two dimensions: pitch and duration – the third, depth, we know exists, but,

[18] Scelsi, 'Son et musique', pp. 128-129.
[19] 'Conversations avec Giacinto Scelsi', p. 83.
[20] Ibid., p. 77.

> in a certain sense, it escapes us. The harmonics and sub-harmonics (which one hears less) sometimes give us the impression of a vaster, more complex sound [...] but it difficult for us to perceive the complexity. In any case, musically, one would not know how to note it down. In painting, perspective has been discovered, which gives the impression of depth, but in music, until now, despite all stereophonic experiences and successive attempts of all kinds, one has not managed to escape from the two dimensions of duration and pitch and to give the impression of the real spherical dimension of sound. There are already glasses that allow one to see the images of photos in relief; one will certainly invent little computers that will allow one to [capture] the third dimension of sound, or even new instruments that will give this result without auricular apparatus.[21]

The 'artist' is the adept who can penetrate this sphere: everybody else is an 'artisan'.[22]

Scelsi's characterisation of previous music also conforms to the paradigm that I described in Chapter 1. The contrast between his music and classical music is that of depth versus point, fullness versus emptiness:

> In general, occidental classical music has devoted practically all of its attention to the musical framework, to what one calls musical form. It has forgotten to study the laws of Sound Energy [...] and thus has produced thousand of magnificent but often rather empty forms [...]. The melodies pass from sound to sound, but the intervals are empty abysses since the notes lack 'sonorous' energy.[23]

Also typical is that he refers to previous, not quite successful attempts to privilege sound, including those of Varèse, Webern, and Cage – an intermediate historical stage between the pre-sonicist stage of classical music and the ideal stage:

> Of course, for a while, sound and sound energy have been studied here in Europe, and even more in America; in that sense one is closer to the oriental conception – let's say, since Webern and Varèse up to electronic music. One is less concerned with the framework, and one could say that lately the framework

[21] Scelsi, 'Son et musique', pp. 126-127.
[22] 'Conversations avec Giacinto Scelsi', p. 64.
[23] Scelsi, 'Son et musique', p. 131.

> has even been destroyed furiously with aleatoric technique, etc. Only, in most of these cases the research is still intellectual or scientific, mathematical or in the domain of pure acoustics. The world was perhaps created with numbers, but not by numbers (this is Goethe).[24]

It is worth noticing, however, that Scelsi is explicit in differentiating his ideal sound from empirical sound:

> I have already spoken at various points of *sound*; but now I should like to specify that there are many types of sound. Obviously, the acoustic type is the result of a vibration in the air; but there are sounds that one hears when sleeping, and loudly, like images that come from unconscious or the super-conscious. Then there are sounds that one hears during meditation, and these come from various levels, often from the Devic plane and still others. And there are the angelic choirs, which can sometimes be heard by bystanders when someone passes away...
>
> As is known, the Indians consider the transcendental sound OM to be the very origin of Creation, and there is a beautiful definition in this respect, which I think I have already cited:
>
> 'Sound is the first movement of the Unmoveable'.[25]

In this respect, at least, Scelsi was more lucid than some of his subsequent interpreters, who, as we shall see, transfer to the empirical sound something of the mystique of the transcendental sound.

The discourse involves, then, several interconnected conceptions of sound: the cosmic sound, a personal 'right' sound of meditation, and the empirical sound of the improvisation, which is still not the same as the empirical sound of the final piece in performance. Since he mentions that 'monody can more easily give this rightness' (that of the *son juste*), it seems that the connection between the level of worldly musical style ('monody') and that of the transcendental, cosmic sound is not entirely one-directional: style is not only a trace of the transcendental sound but helps one to 'find' it. Indeed, there also seems to be a complicated element of representation involved: the empirical musical sound seems to represent the personal sound and, through it, cosmic sound – a special case of the self-signification of

[24] Ibid., p. 132.
[25] Giacinto Scelsi, *Il Sogno 101*, p. 277.

sound. Moreover, it is not only the cosmic sound that the empirical sound represents. For example, the preface to the Suite No. 9 (*Ttai*) for piano, dated 1953, states that this piece consists of 'a succession of episodes alternately expressing Time (or more precisely Time in Motion) and Man, as symbolised by cathedrals and monasteries, with the sacred sound—*Om*'.[26] Another frequently cited example of extra-sonorous representation in Scelsi is the Third String Quartet, the five movements of which have rather Scriabinesque titles, tracing a spiritual journey, such as 'With great tenderness' and 'The call of the spirit'.

### 3.2 SCELSI RECEPTION

Much of the literature on Scelsi shows the direct influence of the composer's own self-representation, with regard to sound if not to the supernatural elements. There are some exceptions, some critical essays focusing on the sociological and ideological implications. I have already referred to Drott's analysis of the influence of social class on the various positions taken towards the composer. Also relevant in this regard is Peter Niklas Wilson's comparison of Scelsi, Nono, and Feldman, in relation to New Age yearnings.[27] On the whole, however, Scelsi reception, even when it does not uncritically accept his position, is strongly marked with his own premises and vocabulary, especially concerning sound. This type of reliance on the composer's word is common enough, but in Scelsi's case it was reinforced by the fact that commentators had to rely for so long on Scelsi's own texts and had no access to any materials that might demystify the music. Thus, the earliest writings on Scelsi tend the most strongly towards the sonicist interpretation, exaggerating the uniqueness of the music and its transcendence of previous compositional principles and categories. What we shall see, however, is that more recent interpretations, while consciously aiming for a more sober assessment, still do not challenge the underlying sonicist assumptions that I discussed in Chapter 1.

The first important publication covering Scelsi, from outside his immediate circle, was Volume 31 of *Musik-Konzepte*, edited by Heinz-Klaus Metzger and Rainer Riehn, in 1983. As Federico Celestini puts it, this volume established the idea of Scelsi's 'aesthetic of incommensurability'.[28] The titles of some of the contributions are indicative: Metzger's 'The

[26] Reish, 'Una Nota Sola', p. 163.
[27] Peter Niklas Wilson, 'Sakrale Sehnsüchte: Über den "unstillbaren ontologischen Durst" in der Musik der Gegenwart', in *Musik und Religion*, ed. by Helga de la Motte-Haber (Laaber: Laaber, 1995), pp. 251-266.
[28] Federico Celestini, 'Scelsi heute und gestern. Versuch einer musikgeschichtlichen Verortung', in *Klang und Quelle*, ed. by Celestini and Reissig (Vienna: LIT, 2014), pp. 9-29 (p. 9).

unknown in music', Martin Zenck's 'Irreducibility as criterion of the avant-garde', and Hank de Velde's 'Giacinto Scelsi, master of the smaller link' (a reference to Adorno's description of Berg as the master of the smallest link – rather apposite given Scelsi's earlier imitation of Berg). The most influential text was probably Metzger's. In particular, he picks up Scelsi's statement that he does not 'com-pose' and develops the antithesis, that what Scelsi does is to dissolve or liquify sound:

> One cannot [...] isolate the existence of any demonstrable single units, as the whole is not produced by the assembling of such units as in a 'composition' of the traditional kind, but rather presented and unfolded as one phenomenon in the ever-changing phases of its dissolution. [...] It is striking that he also alters the pitch, without losing its identity as one and the same tone, so that any hearer spontaneously suspends the convention, engrained in Western musical culture, according to which two tones of different pitch are two different tones. In Scelsi's late scores, on the contrary, the pitch fluctuations that occur are disposed so artfully that differences are not apperceived as intervals, or as relationships of proportion between distinct data, to be put in relation with one another, but rather impress themselves on one as modifications, always significant, of course, of the state of one entity [...][29]

Similarly, when Scelsi dissolves sound in such a way that one can perceive intervals of a fifth or tenth, these are not to be considered as compositional elements but as spectral elements of the sound.[30]

Metzger's idea of dissolution was widely taken up, often reformulated as 'de-composition': by Castagnoli in his analytical article 'Suono e processo nei "Quattro pezzi per orchestra"'; in the preface by Castanet and Cisternino to their volume on Scelsi (1992); and in Tristan Murail's article 'Scelsi de-composer'.[31] Citing Castagnoli, Murail takes up the theme of decomposition, which he suggests makes Scelsi a precursor of spectral music:

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[29] Heinz-Klaus Metzger, 'Das Unbekannte in der Musik. Versuch über die Kompositionen von Giacinto Scelsi', in *Giacinto Scelsi. Musik-Konzepte 31*, ed. by Heinz-Klaus Metzger and Rainer Riehn (Munich: text + kritik, 1983), pp. 10-23 (p. 12).
[30] Ibid., p. 21.
[31] See Giulio Castagnoli, 'Suono e processo nei "Quattro pezzi per orchestra (su una nota sola) (1959)" di Giacinto Scelsi', in *Giacinto Scelsi: viaggio al centro del suono*, ed. by Pierre-Albert Castanet and Nicola Cisternino (La Spezia: Luna, 1993), pp. 246-259; Pierre-Albert Casternet and Nicola Cisternino, 'Giacinto Scelsi—Quasi una premessa', in *Giacinto Scelsi: viaggio al centro del suono*, pp. 10-13; Tristan Murail, 'Scelsi De-composer', trans. by Robert Hasegawa, *Contemporary Music Review*, 24/2-3 (2005), pp. 173-180.

> The connection between my music (and that of other spectral composers) and Scelsi's lies in this attitude, more than in a comparable style or aesthetic; the compositional techniques are completely different, except for a few superficial similarities (microtones, attention to dynamics, continuous processes).
>
> But this attitude, shared by Scelsi, the 'spectral' composers, and many other contemporary composers of all kinds, is crucially important. It is a complete change of viewpoint, a wholesale reversal of the western musical tradition, which for centuries has been based on combination and superposition. We no longer seek to com-pose, juxta-pose, or super-pose, but rather to *de-compose*, or even, more simply, to *pose* the sonic material.[32]

The denial of composition, juxtaposition, etc. is just as tenuous in Murail's case as in Scelsi's.

The antithesis between composition and decomposition also appears in Casternet's and Cisternino's introduction to *Giacinto Scelsi: Viaggio al Centro del Suono*. In their account, however, Scelsi's importance is due not to his 'spectral intuition', which had precedents in Ives, Webern, and Varèse, but to his radically 'a-constructive' approach. Indeed, they favour Scelsi above the spectral composers, among others. This text is worth quoting at length since it is such a comprehensive example of sonicist discourse, not least in the way it reproduces the composer's own self-representation:

> What presents an absolutely innovative aspect in the spectral dimension of sound in Scelsi is the absolutely *a-constructive* modality with which such thinking takes form and substance, detaching itself so completely from the structural thinking and vision dominant in post-war music [...]; sound here is not considered as *material* to handle with more or less numerical-artisanal techniques and exercises, in order to give it form and meaning, but rather as a *sound-Klang*; a sort of primordial sound that, as a complex entity, 'loses its fixity, acquires depth and breadth, and becomes *Klang*' [a reference to a Martin Zenck article in *Musik-Konzepte*].
>
> The micro-sonic and spectral research into the sonorous event that has been given so much theoretical and practical space in recent decades, not only in electroacoustic music, is in reality the fruit of a sort of surgical thinking that,

[32] Murail, 'Scelsi De-composer', p. 173.

> precisely because it is along medical-physiological lines, is traumatic and nihilistic for music.
>
> In Scelsi none of all that could be more distant or extraneous, even though [he used electronic instruments] that allowed him to *explore* the *mobility* of the sonorous and intervallic space until he had a complete mastery of the enharmonic space.
>
> The systematic and largely natural adoption, in Scelsi's thinking and practice, of microtones [...] will do the rest.
>
> Scelsi's organisation of the sonorous space as a *putting into space* of sound is not expressed through a simple formalisation or *putting into a form* of sound, of its intervallic and syntactical relations; sound is a vibration of the space and therefore energy, which expresses itself outside and within man, since '...sound is a sphere' [etc.]. Thus, in the *putting into space* of sound, is introduces that concept of *depth*, of a perspective character in its form – and of a psychic character in its effects – that opens to Western musical thinking the door of three-dimensionality, the totality of the sound-*Klang*.[33]

In this passage we find the idea that sound *no longer* serves as a compositional material (material in the abstract sense) but as an autonomous entity (referred to in German partly in response to the MusikTexte volume, and perhaps for extra solemnity or authority); the suggestion that Scelsi's music is 'natural'; the arbitrary use of the 'surgical' metaphor to disparage other music, including that of the spectral school; the suggestion that one can eschew or abstain from dirtying one's hand with 'intervallic and syntactical relations'; the argument about putting sound into space (an idea that resonates with Max Neuhaus); and yet another claim that three-dimensionality is introduced for the first time in Western music. One could provide many other examples of the same approach.

As more information filtered out about Scelsi's working methods, the unequivocal sonicist interpretation became more difficult to sustain, at least among musicologists. First, it was noticed that in several pieces there was evidence of 'non-improvised moments', that is, of editing and rationalisation. In particular, Wolfgang Thein pointed out palindromic structures, which have proved to be the result of Scelsi's reversing the direction of his tapes. Menke established that there were elements of undeniable rationalisation in some pieces, most

[33] Castanet and Cisternino, 'Giacinto Scelsi—Quasi una premessa', pp. 11-12. Emphasis in the original.

strikingly in the works for orchestra.[34] It was also learned that Scelsi would overdub tape tracks – which immediately reintroduces the element of 'composition'. For some time, it was thought that he was only able to produce one monophonic part at a time. It has been shown that he was able to improvise with two keyboards simultaneously, thus spinning out a two-part texture in real time;[35] however, it was not possible to manipulate nuance on two keyboards. The microtonal heterophonic style thus *required* overdubbing.

Nonetheless, the same sonicist vocabulary (commonplaces about the 'inside' of sound, and so on) has remained widespread, even in relatively cautious texts. For example, the thrust of the volume edited by Angermann, the report of the 1992 Hamburg conference on Scelsi, is to offer a more sober, scientific interpretation. Nonetheless, this report, which includes the Thein article mentioned above, was published under the orthodox Scelsian title *Im Innern des Tons*. This volume includes an essay on 'Scelsi's tone-system in the context of microtonal music', by Hans Rudolf Zeller. Zeller places Scelsi in a historical context, that of microtonal systems going back to Hába, Carrillo, and Busoni's *Entwurf einer neuen Ästhetik der Tonkunst*. But, although he is taking a critical stance by even suggesting that Scelsi might have a 'tone-system', or by referring to the presence of identifiable intervals in the music, he again uses a familiar sonicist language to characterise this system, and in particular concurs with the idea that Scelsi's music is not polyphonic:

> Sound appears in the simultaneity of differently sized tone-spaces, so that the quartertone can be experienced, as never before, as a micro-*interval* and thus as tone space. Therefore, one must speak no longer of polyphony, but rather of poly-spatiality [...].[36]

Gianmario Borio, in his essay 'Klang als Prozeß: die Komponisten um Nuova Consonanza', aims to demystify Scelsi by situating him in the broader post-war avant-garde, and specifically the *Nuova Consonanza* group, led by the composer Franco Evangelisti, one of Scelsi's main supporters in Italy. Borio considers three main aspects. The first is the idea that Scelsi's methods were necessitated by the shortcomings of staff notation as regards the

[34] See Menke, *PAX*.
[35] Elisabetta Piras, Mario Baroni, and Gianni Zanarini, 'Improvvisazioni di Giacinto Scelsi: il caso problematico dell'ondiola', *i suoni, le onde... Rivista della Fondazione Isabella Scelsi* 19/20 (Roma: Fondazione Isabella Scelsi, 2008), pp. 3-9.
[36] Hans Rudolf Zeller, 'Scelsi Tonsystematik im Kontext der mikrotonalen Musik', in *Giacinto Scelsi, im Innern des Tons*, ed. by Angermann, pp. 26-38 (p. 35).

'secondary parameters'.[37] The second is that Scelsi's use of 'automatic writing' can be connected to his interest in the fine arts: he knew surrealists, was friends with Henri Michaux, and in the 1960s co-ran an art gallery specialising in abstract expressionism and *art informel*.[38] The third is 'sound as process'. This is where his account conforms to the dualistic, sonicist norm, as follows:

> Composing here means less the establishing of structures in the work as the shaping of types of motion of the sound matter that come close to natural states and processes. Sound, the result of the interaction of various parameters, is at the centre of this work. This is a moving sound, the processes and tendencies of which are to be *composed*. In this context, Scelsi's move away from parametric thinking takes on a completely different meaning from that of an abstract negation of serialism through the post-modern revival of traditional values. The infra-parametric techniques of an informal composition [as in Adorno's category of *informel* music] have the same basis as that on which the serial music has pursued the dissolutions of hierarchies between the parameters. One could speak of the second stage of the same thought process. When harmony is indistinguishable from timbre, and dynamic gradation from pitch fluctuation, when sustained tones are inconceivable without micro-rhythmic motion, and attacks without a blurring the spectrum, then it no longer makes sense to handle the parameters separately. One begins to understand sound as a multiple force field with certain intrinsic developmental possibilities. The relationship between structure and material is turned around. External structures are no longer devised to organise the material; the nature of a segment of material already gives some indication of possible structural and formal laws.[39]

In contrast with much of the earlier reception, Borio does not single out Scelsi as a unique phenomenon. Moreover, rather than disparaging serial music, he regards that as a first stage in the same voyage into the centre of sound. Nonetheless, while criticising the earlier, cultish habit of singling out Scelsi from other composers, Borio still leaves unquestioned the

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[37] Gianmario Borio, 'Klang als Prozess. Die Komponisten um Nuova Consonanza', in *Giacinto Scelsi, im Innern des Tons*, ed. by Angermann, pp. 11-25 (p. 13).
[38] Ibid., p. 14. See also Alessandro Mastropietro, 'Action music (1955)... action painting. Su un nodo della produzione pianistica di Scelsi e su alcune ipotesi definitorie della sua tecnica compositiva', in *Giacinto Scelsi nel centenario della nascita*, ed. by Tortora, pp. 119-144.
[39] Borio, 'Klang als Prozess', p. 14-15.

underlying dichotomy of sound-oriented and non-sound-oriented music, and the assumption that *Klangkomposition* is fundamentally a twentieth-century phenomenon. He concludes by emphasising that in Scelsi's case, but also in those of the *Nuova Consonanza* composers discussed, 'the composer works directly with and on the matter [*Materie*] of the sound'[40]—precisely the Varèsian formulation discussed in Chapter 1.

This type of interpretation has become quite standard. To take another, more recent example, Federico Celestini, considering the question of Scelsi's historical position (the same question tackled by the Angermann volume), begins by observing that both Scelsi's unusual compositional process and his orientation towards sonority derive from his esoteric aesthetics, but that the latter, the concern with sonority, is no longer controversial or problematic, since 'long before Scelsi's death, it was clear to many composers that the intensive compositional involvement with sonority, with its dimensions and possibilities, constituted a perspective *until then neglected*'.[41] In his own assessment of Scelsi, Celestini refers to Max Weber's concept of rationalisation and to Freud's *Unheimliche*: rather than creating incommensurable or radically 'other' music, what Scelsi does is to challenge Western thinking to attend to those aspects of music that have been *suppressed* in the rationalisation of music, that is, in the ever greater focus on relations between notes.[42] There is no question that so-called secondary parameters have been suppressed in many areas of reception of music, especially in analytical writings. However, this interpretation also disregards the paradoxical side of progressivist-sonicist aesthetics that I identified in Chapter 1: namely, that it is only when allegedly secondary parameters are 'promoted' to primary, structural status, indeed, *when they are rationalised*, that the music acquires its avant-garde status as sound-oriented; and that, in music that retains pitch, as Scelsi's does, there is *still* a rationalising attitude towards the pitch relations—simply one that incorporates the desired foregrounding of 'secondary parameters' into the organisation of pitch.

Analyses of Scelsi's music have also been conditioned somewhat by the sonicist model, although not usually in its extreme form. After all, the true Scelsian position (like that of Dahlhaus, which, however, was sceptical rather than sonicist) would have the music be impervious or resistant to analysis: impossible to segment, and irreducible to discrete pitches. In fact, analysts have had no problem in segmenting the pieces on various levels and have

[40] Ibid., p. 24.
[41] Celestini, 'Scelsi heute und gestern', p. 9. My italics.
[42] Ibid., pp. 28-29.

usually even provided pitch reduction diagrams.[43] Indeed, Scelsi analyses tend to proceed by re-describing large-scale form and working from the global to the local, giving either a straightforward section-by-section account,[44] or an account that splits each section into various parameters.[45]

Even when abandoning the view that the music is non-composite, analysts have in general sought to reconcile their structural observations with a sonicist aesthetics, usually by beginning and ending with a paraphrase of the main sonicist arguments outlined above, and sometimes also by couching the analysis itself in sonicist vocabulary. Let us consider one of the earliest essays, that of Giulio Castagnoli, 'Sound and process in the Quattro pezzi per orchestra' (not to be confused with 'Sound as process', by Borio). He begins:

> Scelsi's music from the 1950s develops as a research focusing on the close rapport between the composition and writing of sound with the perception and experience of listening. [He] is not interested in the sour polemics of Darmstadt, the more or less fashionable position-takings of the successive decades, but maintains an autonomous line of thinking and pursues it from work to work: the absolute faith in sound (*Klang* [again, the German]) and in the emotional richness that it produces for the listener.[46]

As I mentioned, Castagnoli refers to Metzger's concept of decomposition. However, in his view, such a notion still implies

> a conception of music based on the interconnection of various base elements, which are really *rhizomatic* – if one wishes to remain in that qualitative and not quantitative field in which current criticism is wont to place Scelsi's activity – that is, *qualitative parameters*, still close to the thinking of the greater part of post-war and contemporary composers. While in most of these cases the music is born out of the macroscopic projection [the theme of projection again] of parametric relations of a single sound, intercommunicating with other tempered sounds, the novelty of Scelsi is to project such a conception into the unknown microcosm of the stand-alone single sound, permeating it with a metaphysical

[43] An exception to this can be found in Christine Anderson, 'Klang als Energie. Anahit von Giacinto Scelsi', *MusikTexte Zeitschrift für neue Musik* 81/82 (1999), pp. 72-8.
[44] E.g., Harry Halbreich, 'Analisi di Konx-Om-Pax', in *Giacinto Scelsi: viaggio al centro del suono*, ed. by Castanet and Cisternino, pp. 184-197;
[45] E.g., Castagnoli, 'Suono e processo'; see also Anderson, 'Klang als Energie'.
[46] Castagnoli, 'Suono e processo', p. 246.

> aura, a mystical halo, with real ontology, and eliminating any sense of the scientific (pseudo- or genuine) that could emerge from such premises.[47]

Notice that he acknowledges that Scelsi criticism 'wishes' to exclude the 'quantitative field'.

To support this idea of a parametric conception, Castagnoli refers to Scelsi's early text 'Sens de la musique', which discusses in turn rhythm, melody, construction, and harmony, and then their interactions. He also cites Scelsi's remarks on 'depth' of sound, and concurs with the view that Scelsi made a 'precise compositional choice: to abandon or downgrade the discursive or dialectic rapport between sounds in favour of an exaltation of the global and centralising aspect of sound in itself'; in late Scelsi, 'what is investigated and composed is the *story* of how a single sound becomes other, discovering in itself the germ or virus that allows its metamorphosis from its own interior.' He again reminds the reader that in Scelsi the concept of 'material', with its historical implications, should be substituted with that of 'matter'.[48]

Even Adriano Cremonese's book on the relatively traditional early work, which traces the influence of Scriabin and Berg on Scelsi's (apparently ghost-written) music of the 1930s and 1940s, and considers Scelsi's early texts on music in the light of Stravinsky's aesthetics, makes concessions to the sonicist line on Scelsi. He begins with a disclaimer: that his book is not intended merely to trace external influences on Scelsi's work but 'rather, aims to try to understand from the inside the genesis of the new sonorous world that his work represents'.[49] This is most explicit in his discussion of the earliest work to make an impact in the music world, *Rotativa* of 1928—a quasi-futurist piece also somewhat reminiscent of Prokofiev, which exists in several versions. Discussing a sequence of non-functional chords, Cremonese writes the following:

> And it is really in the sonorous quality of these chords and in their game of interlocking and superposition, which gives life to the predominantly chromatic melodic motion, that one should look for the key to a reading of *Rotativa*; it is here that there emerges the idea of sound that Scelsi has already matured. Although we have highlighted what in a first approximation we can call the melodic line [...], it in fact seems clear that the chords that give it

[47] Ibid., pp. 246-247.
[48] Ibid., p. 249.
[49] Adriano Cremonese, *Giacinto Scelsi: prassi compositiva e riflessione teorica fino alla metà degli anni '40* (Palermo: L'Epos, 1992), pp. 7-8.

> depth/thickness are not connected by any harmonic relations and that they constitute instead the specific weight, of tessitura and timbre, particular to each sound of the 'melody', which is conceived not as being sustained by chords but precisely in the globality of its blend, where the other sounds of the chord of which it is the upper part become integral parts of it – they constitute so to speak its 'corps sonore' ['*corpo sonoro*' – presumably not in Rameau's sense]. Thus, it becomes in a sense meaningless to look for a precise name for these chords that betray instead, with their intrinsic sonorous quality, that Scelsi has from the outset an intense perception of sound, a sound that in *Rotativa* is at times crystalline, but more often broad, 'dirty', dense with vibrations'.[50]

This is perhaps not false, but it would also not be false of music by Prokofiev or any number of other twentieth-century composers who are not routinely interpreted in this way.

Another important analysis is Christine Anderson's 1999 essay on *Anahit* (1965), a work for violin and orchestra. She again bases her approach and terminology explicitly on Scelsi's own discourse, seeking to explore 'sound as energy' and Scelsi's concept of a 'spatially animated' or, again, 'three-dimensional music'. Her approach is also parametrical: she interprets sound energy by tracking loudness (measured from a recording), density, range, and 'internal rhythm' (*Binnenrhythmus*).[51] As I mentioned, Anderson is unusual in refraining in this article from giving a pitch reduction, even though in the case of *Anahit* one is easily produced.[52]

Several other writers have used sonogram representation of performances to analyse Scelsi's music, for various reasons. William Colangelo did so as part of a study of the interpretations of performers who worked with Scelsi in person. Gérard Pelé used Scelsi as a case study in 'modelling intensity' specifically in 'semi-improvised music'.[53] More recently, Christian Utz and Dieter Kleinrath have used him, along with Varèse and Lachenmann, as a test case in developing an empirical analysis of post-tonal music, that is, implicitly sound-oriented post-tonal music.[54] Utz and Kleinrath complement score examples with

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[50] Ibid., pp. 12-14.
[51] Christine Anderson, 'Klang als Energie', p. 76.
[52] As in Julian Anderson, 'La Note Juste', *Musical Times*, 136/1823 (1995), p. 27.
[53] Gérard Pelé, 'Modélisation de l'intensité dans la musique semi-improvisée: l'exemple de Giacinto Scelsi', in *Les universaux en musique: Actes du quatrième congrès international sur la signification musicale*, ed. by Costin Miereanu and Xavier Hascher (Paris: Sorbonne, 1998), pp. 447-463.
[54] Christian Utz and Dieter Kleinrath, 'Klang und Wahrnehmung bei Varèse, Scelsi und Lachenmann', in *Klangperspektiven*, ed. by Lucas Haselböck (Hofheim: Wolke, 2011), pp. 73-102; Christian Utz, '"Liberating" sound and perception. Historical and Methodological Preconditions of a Morphosyntactic Approach to Post-

representations of amplitude and spectrum, giving a much more complete representation of large-scale sound organisation than would otherwise be possible, although, once again, one could query the presuppositions involved in carrying out such analysis specifically on those three composers, and not on Bruckner, for example.

One recent interpreter of Scelsi notable for eschewing the romanticised, quasi-metaphysical view of the composer is Johannes Menke. Menke generally refrains from the habitual sonicist formulations, treating Scelsi as, if not a composer like any other, then at least one in whose work the structural-discursive element is not so novel as to require a completely new analytical attitude. He has produced the most sustained analysis of Scelsi's music so far, in his doctoral thesis on the *Tre Canti Sacri* and *Konx-Om-Pax*, which also includes a discussion of *Anahit*. He follows in the critical footsteps of the Angermann volume, dismissing the idea that the music is not amenable to analysis, and locating it within the Western tradition—that of the particular work asserted as such by a recognised author (even when, as in this case, the actual circumstances of creation are more complex). He also criticises the over-simplified idea that Scelsi's music is non-rational and improvisational, pointing to the structural complexity of works such as *Konx-Om-Pax* (11).[55] Indeed, perhaps for this polemical reason, he has chosen to analyse works that are not the most characteristic of Scelsi. Each has an elaborate polyphonic 'macro-structure' (which, he specifies, is a *Gefüge* rather than a *Struktur*—that is, he uses a term that sounds less deterministic), which is independent of the characteristic microtonal 'micro-structure'; and they all betray either an anomalous degree of rational mediation (as in *Konx-Om-Pax*) or some residual contrapuntal thinking (*Anahit* and *Tre canti sacri*). Moreover, they all involve some kind of 'extra-musical' meaning. Menke's analysis concentrates largely on the macro-structure, but he gives a catalogue of micro-structural techniques, which he calls *Satztechniken*, again provocatively incorporating them into the realm of Western compositional technique: various types of glissando, various types of pitch change, and so on.[56]

The polemical edge of Menke's analysis is directed mainly against the mystificatory view of Scelsi's uniqueness and transcendence of rationality; he does not give a critique of sonicism. Indeed, in explaining his decision to analyse these particular pieces he stresses that the 'aesthetic re-orientation' in Scelsi is not limited to the reliance on the single sound (i.e.,

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Tonal Music', in *Organized Sound. Kland und Wahrnehmung in der Musik des 20. And 21. Jahrhunderts. Sound and Perception in Twentieth- and Twenty-First-century Music*, ed. by Christian Utz (Saarbrücken: Pfau, 2013), pp. 11-46.

[55] Menke, *PAX*, p. 11.

[56] Ibid., p. 83.

pitch-class); rather, it is connected to 'the fundamental cohesion of pitch and timbre, which Scelsi understands *anew*, by taking as his subject [*Thema*] the *modelling and unfolding of sound*' (25, my italics).[57] This leaves it a little unclear whether Menke too concurs with the sonicist reading – that Scelsi is privileged in this respect, and that previous music was not concerned (even within its own given stylistic constraints) with the unfolding of sound – or whether, by *Thema*, he implies that this modelling and unfolding of sound are a strictly conceptual matter.

In another article, Menke describes Scelsi's 'new conception of tonality', which he labels 'substantial hyper-tonality'.[58] His idea is that Scelsi keeps a sense of the 'tonic', while avoiding traditional melody, harmony, and technique. Menke calls the main tone of a given movement the 'substantial tone'. In a manner surprisingly similar to the mainstream, he allows that the substantial tone is 'indivisible and infinite, because in each piece there is only one' (only one tonic, that is), even though there are always in fact several pitches. Scelsi has 'revolutionised the idea of tone', making it flexible: 'it moves in time, rising or falling or becoming thicker or thinner'. However, Menke makes the important observation that, although Scelsi uses several pitches, 'they signify [...] *a* single tone. Scelsi does not represent something by means of different tones, but represents tone itself.'

### 3.3 SCELSI'S COMPOSITIONAL RHETORIC

So far, I have concentrated mainly on the discursive level – on Scelsi's self-representation and in the reception of his work. Now I turn back to what I called compositional rhetoric, to the abstract, quasi-linguistic level of the music. Given the critical view that I have taken of the sonicist interpretation, it is important to stress again that my intention is not to 'reduce' the music to this linguistic aspect, or to deny that the music is indeed semantically 'sound-oriented', but to analyse, without resorting to commonplaces of sonicism, what it means in this case for music to be sound-oriented.

I have already argued, in two articles that Scelsi's music has a quasi-linguistic, rhetorical aspect that can be abstracted from sound no less, but also no more, than in other music.[59] In other words, I criticised the prevailing sonicist interpretation, without having yet

[57] Ibid., p. 25.
[58] Johannes Menke, 'La Nuova concezione della tonalità di Scelsi', in *Giacinto Scelsi nel centenario della nascita*, ed. by Tortora, pp. 55-60 (p. 57).
[59] Ian Dickson, 'Orality and Rhetoric in Scelsi's Music'; and 'Towards a Grammatical Analysis of Scelsi's Late Music', *Music Analysis* 31/2 (2012), pp. 216-241.

proposed a general critique of sonicism. In the first article, 'Orality and rhetoric in Scelsi's music', I discussed Scelsi's approach in terms of orality, drawing on the work of Walter Ong. Orality is associated with a high degree of redundancy, a reliance on preconceived 'formulas', and an 'additive' rather than a 'subordinative' approach to structure[60]—all of which are manifest in Scelsi's work. On the other hand, his belief that he was able voluntarily to suspend the influence of writing (i.e., of staff notation) by technological means is typical of *secondary* orality. Scelsi's 'oral' approach, far from obliterating the linguistic aspect, in some senses favoured a discourse character that is in certain respects relatively traditional, in comparison with the predominant tendencies in the avant-garde.

This discourse character is most obvious on the level of large-scale rhetoric, which Menke calls 'dramaturgy': for example, it is generally noticed that Scelsi's late pieces often follow a clear arch form, building up to a dynamic and registral climax, in a series of progressively intensified waves, and then dying away again. However, I proposed that there was also a quasi-linguistic aspect at the level of minute detail, which had so often been regarded as intractably irrational: one could account for the various operations in terms of the manipulation of expectation. My hypothesis is that this element of expectation concerns above all pitch, and in particular the divergences from and convergences towards unisons. The expectation may be attributable in part to listeners' prior experience of the Western 'art' music repertoire, especially to polyphonic forms, or there may be more general psychological processes involved; this could be a fruitful area for future research. One could view the matter as a microtonal equivalent of the melodic implication theorised by Leonard Meyer, Eugene Narmour, and others. Listeners can quickly infer from the opening bars of a piece that motion will be hyper-conjunct, i.e., by quartertone, that unisons will split into dyads or clusters, and that dyads may split and develop further but will probably then converge again on a unison. In my article I compared these operations to grammatical rules, although it would be less contentious to refer to 'norms'. The crux of the matter is that the listener can infer the norms, that is to say, recognise *that* norms are being respected, but can never predict *how* they will be respected: that is, in what order, in what configurations, and after how long the expected operations will occur. For example, when and how will a certain distinct or 'pure' tone be blurred? Will it go up or down? What will happen to a given 'impure' sound, i.e. quartertone dyad or cluster? Will it converge on a unison or be clouded further? Will there be dramatic surprises or unexpectedly overt repetition? In this sense, I suggested, pursuing the linguistic

[60] Walter J. Ong, *Orality and Literacy: The Technologizing of the Word*, 2nd edn., (London: Routledge, 2002) pp. 36-57.

analogy further, that Scelsi's music allows the listener to distinguish the concrete utterance or *parole* of a given piece from the level of rules or norms—in effect, the *langue*—with a clarity that is famously rare in the post-war European avant-garde.

On the other hand, Scelsi's system of norms allows for a greater rhetorical flexibility and variety of mood than one might expect. In 'Orality and rhetoric' I illustrated this by comparing the two movements of the Duo for violin and cello (1965), which use the same gestures and the same framework of norms, yet seem to represent two antithetical rhetorical stances that I described as 'centrifugal' and 'centripetal'. In the first movement, there is a clearly established pitch centre, from which increasingly dramatic gestures are projected; in the second, there is a sustained uncertainty as to the pitch centre, which, in conjunction with the slower tempo and quieter dynamic level, seems to create a more searching atmosphere.

In my second article, I suggested an analytical approach to Scelsi's music, devising a form of quasi-paradigmatic analysis that would allow one to find patterns in the interaction of parameters. I demonstrated this by identifying, through an analysis of the violin solo piece *Xnoybis*, a rhetorical strategy that Scelsi commonly uses in this style: that of disguising what would normally be categorised as 'oblique motion' to and from the unison. It is clear why such a categorisation would be undesirable from a sonicist standpoint. Because this strategy provides a concrete example of the sonicist paradox that I discussed in Chapter 1, that is, the use of syntagmatic means to create the effect that sound is liberated from syntagmatic means, I shall build on this previous observation in the present analysis.

Oblique motion has two main functions in this style. The first is to give a sustained sound temporary extra depth or weight (to use two common metaphors) by introducing an adjunct tone, which will then 'resolve' back to the previous tone. The second is to disguise motion from one pitch to the adjacent quartertone by passing through a quartertone dyad: a single tone bifurcates into a dyad, and then the first tone converges with the second, leaving a new pitch centre (or fades away, creating the illusion of a convergence). In both cases, the oblique motion is frequently disguised through what I shall *blurring* (the use of vibrato to make the pitch of at least one of the parts ambiguous) and/or *masking* (the entry of the newly introduced pitch in at a lower dynamic than the sustained one).[61] Fig. 8 shows some of the main permutations.

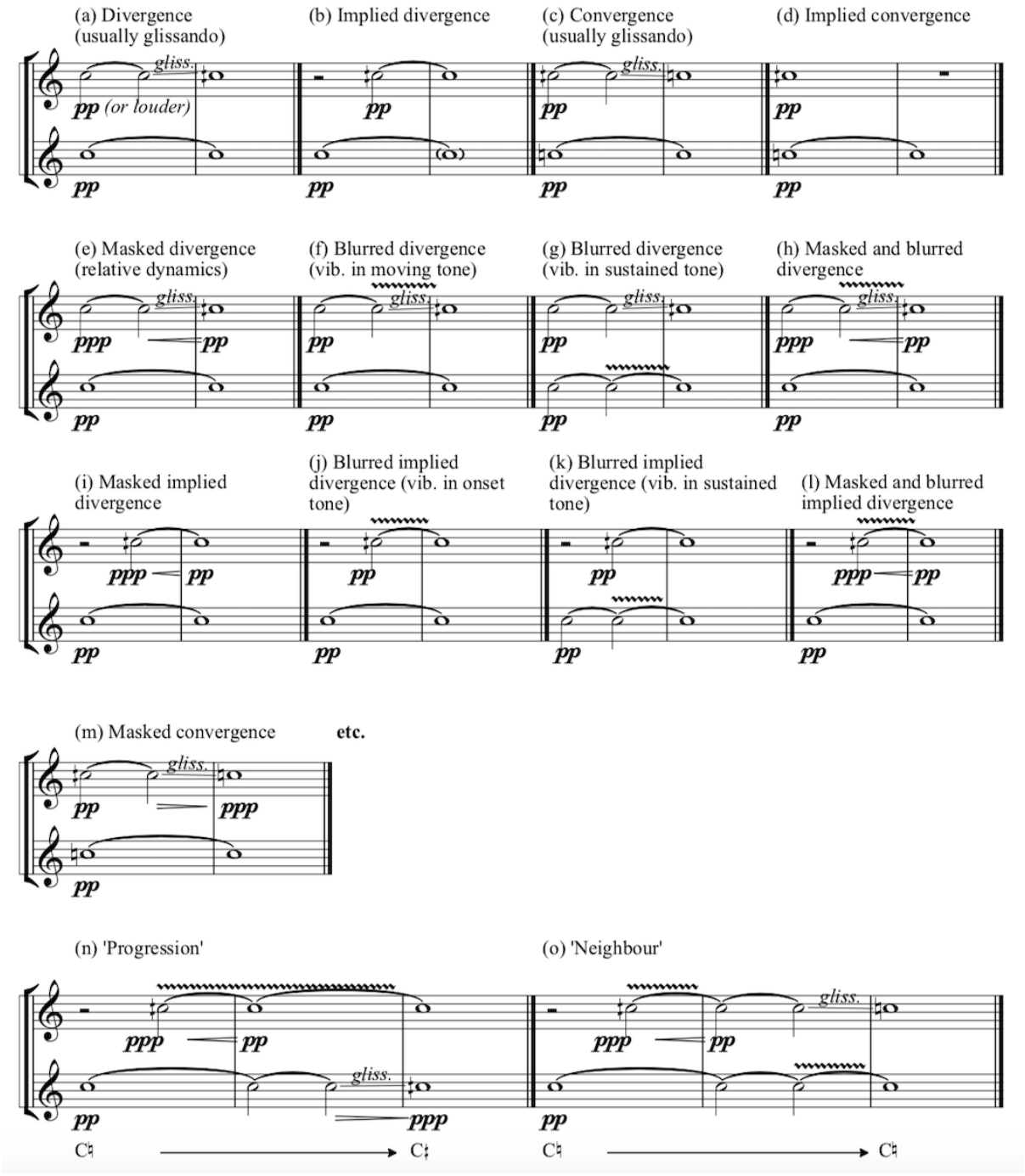
It is important to bear in mind that these are the notational responses of transcribers to the audio content of the tapes and that this audio content is frequently so amorphous that the

[61] Dickson, 'Towards a Grammatical Analysis of Scelsi's Late Music', p. 226.

choice of notational representation can be regarded as somewhat arbitrary. What is important is the gestural *principle* of disguising the pitch change, and this is something that Scelsi uses so consistently that it can be viewed as another norm. When he occasionally introduces a new pitch explicitly, with an accent, this is a deviation from the norm, and has an uncommonly dramatic effect. Nonetheless, the strategy still creates plenty of scope for sustaining tension. First of all, the listener can never predict with certainty whether a dyad functions as what I shall call a 'progression' from one pitch to an adjacent pitch (Fig. 8 (n)), or whether the new tone represents a temporary 'dilation' (comparable to an 'auxiliary note') that will resolve back to the same pitch from which it grew (Fig. 8 (o)). As in more orthodox melodies, we can assume that a chain of such 'progressions' encourages the expectation of another. A chain of progressions in the same direction can be made relatively explicit by using the same configuration of masking/blurring several times consecutively, as in a melodic 'sequence', or they can be handled in a more unpredictable way, for example, by inflecting sometimes the sustained sound and sometimes the newly introduced sound, and by sometimes using glissando and sometimes none.

What I wish to propose at this point is that the rhetorical element in Scelsi's music, as in Feldman, may fruitfully be considered in terms of the dialectic between a sonicist imperative and a more general but tacit rhetorical imperative. The sonicist imperative is again anti-syntagmatic and concerns the disguising of relationships and of the musical discourse character (through a principle of amorphousness). The non-sonicist imperative (frequently suppressed in sonicist interpretations but not in those of Menke, for example) concerns, in contrast, the 'persuasiveness' and 'eloquence' of the disguised musical discourse, from the dramaturgical macro-structure down to the tiniest gesture: namely, the music must hold the attention, avoid banality or 'easy moves' (as Feldman called them), and so on. There is still an element of compositional scruples or judgment beyond what is immediately necessary for the representation of an autonomous sound. In Scelsi's case, such scruples might be, for example, 'Is it too obvious to bifurcate here?' or 'Is it too soon to return to such-and-such pitch?' We know that Scelsi, for example, regarded some of his recorded sketches as substandard, because he labelled them as such on the cassette boxes. Admittedly, it is impossible to tell from such indications whether the failure was one of supernatural communication, compositional taste, or something else, but it would be implausible to rule out the element of compositional taste altogether.

**Fig. 8. Techniques for disguising oblique motion (Scelsi)**




There is a complicated tension and dialectic between these imperatives. The situation to be navigated could be described as follows. The representation of the purely sonorous depends not only on a set of ascetic organisational norms but also on the compositional discretion with which they are handled. If the musical discourse is, according to criteria that are usually tacit and to some extent intangible, *substandard*—for example, if there are longueurs (a constant threat in Scelsi's case, given the severity of the stylistic constraints), but

also if there are lapses of taste or banal choices—then the 'purely organisational' will leap embarrassingly into the foreground, and the illusion of autonomous sound may be broken. At the same time, however, the relations between sounds must not become too 'linguistically' engaging in their own right, for the same reason. One could view the matter in slightly more practical terms as a compositional problem: that of judging the optimal level of redundancy of a musical language, between two indeterminate extremes both of which threaten to spoil the desired effect.

To make this more concrete, let us examine Scelsi's distribution of his basic operations in *Arc-en-ciel* for two violins (1973), and especially the handling of pitch motion. This piece consists of a single sound object moving between d half-flat" and e half-sharp" (all pitches are in this register, so I shall refer to pitch-class only). The overall shape consists of two ascents with a 'setback' in between. But *how* does it move, on the local level? I shall consider especially the ways in which Scelsi seems to try to surprise or outthink the listener (in the first instance, himself, as improviser or real-time composer), in relation to various elements of implication and expectation. However, as I mentioned above, the main element that arouses expectation is the divergence from and convergence on unisons.

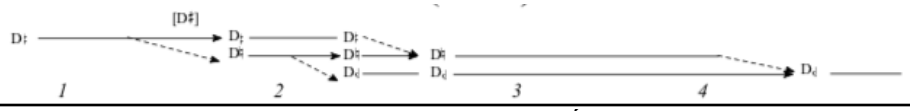
In Ex. 2 I have annotated the published score with a diagrammatic representation of pitch motion that makes it easy to see contrasts in the handling of motion, and I shall discuss these segment by segment. Dotted lines and arrows indicate masking and/or blurring, or the implication of oblique motion by means of the fading in or out of a tone; for the sake of clarity, the diagram treats these as equivalent. By comparing this diagram with the staff notation, one can immediately see whether and how the ambiguity is achieved.[62] One can see at a glance that the piece alternates dramatically between very gradual changes and constellations of quick operations.

Bb. 0.4—4

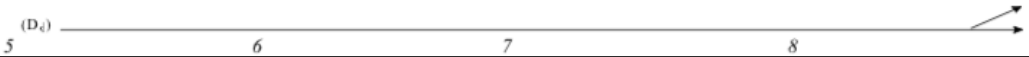
The piece begins not with a straightforward instance of one of Scelsi's basic operations, as in Fig. 2, but with a more complex configuration, as if to prevent the listener from feeling that she has worked out how the piece functions from the outset. There are two, overlapping downward progressions, from D half-sharp to D natural, and then to D half-flat. That is to say, the D half-flat is reached before the D half-sharp is withdrawn, and the dyad D half-flat/D natural is then sustained for two bars before the D natural is withdrawn, with the effect

[62] Menke and Marrocu have used similar diagrams in *PAX* and 'The Art of Writing Sound'.

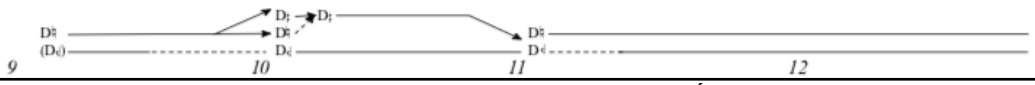
**Fig. 9. Giacinto Scelsi, Arc-en-ciel for two violins (1973), with analytical annotation**




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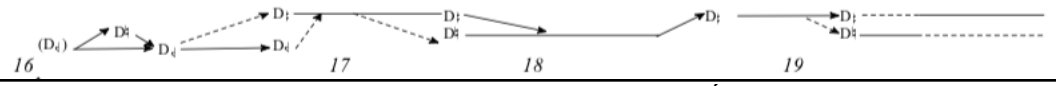

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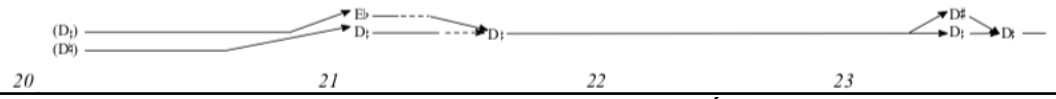

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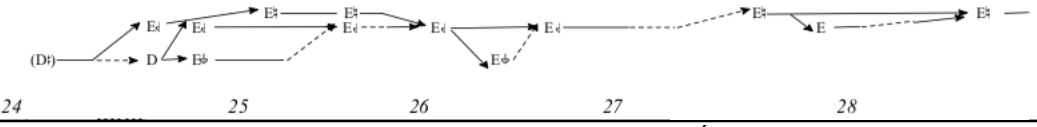

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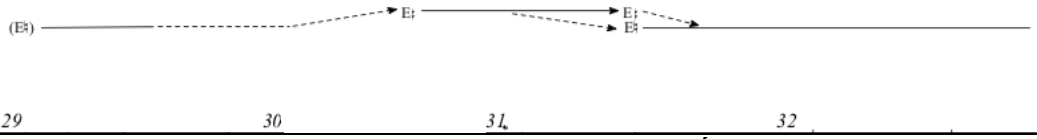

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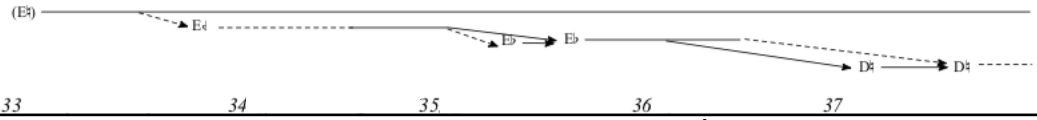

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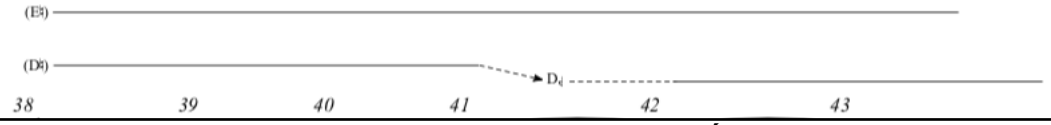

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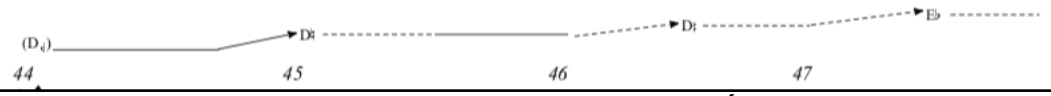

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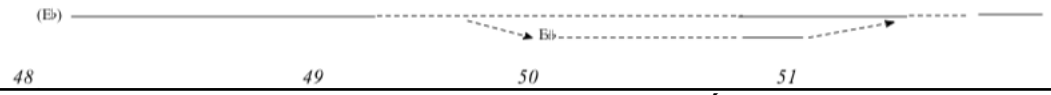

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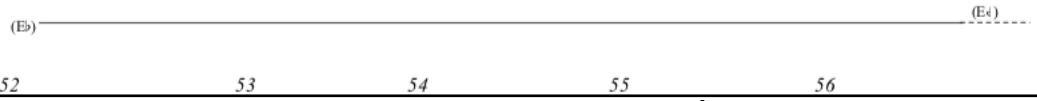

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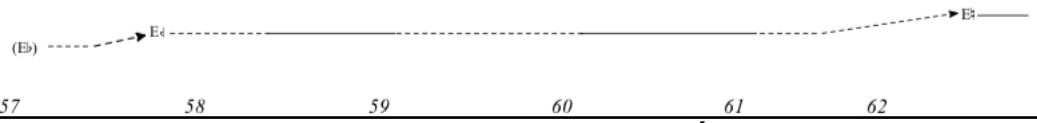

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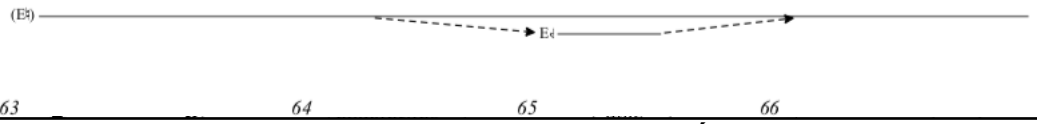

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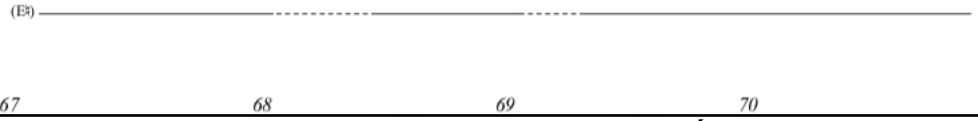

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of ‘uncovering’ the lower pitch. The opening can also be regarded as ‘deceptive’ in that, by descending, it contradicts what will be the overall tendency of the piece: that of ratcheting up tension through a series of upwards gestures. Notice also that the initial tremolo is bar 1 extends upwards to D sharp, contradicting the short-term downward motion of the incipit. In general, the opening gesture of any Scelsi piece has a special significance: that of representing what he frequently called ‘the first motion of the immovable’.[63]

Bb. 5—8.3

After this relatively complex opening configuration, there follows the exact opposite: Scelsi rests on the D half-flat for a whole four bars (more than 5% of the piece), in effect assuring the listener that this, for the moment, is the pitch centre. Indeed, the introduction of the unison in b. 6.4 can be regarded as a gesture of ‘confirmation’, which one might regard as paralleling the confirmation of a new tonic in classical music. The two swells in dynamics (bb. 5-7) can be seen as the minimal events required by the style in these circumstances. This passage serves as a ‘lull before the storm’.

Bb. 8.4—15

Between bars 9 and 15, there is a first attempt at an ascent, reaching the initial D half-sharp. This time, after an initial divergence (bb. 8-9), the two streams move independently before converging again on D half-flat. We can also see that the time interval between pitch events varies unpredictably from one beat (b. 13) to two bars (bb. 11-12).

[63] Scelsi, ‘Son et musique’, p. 128.

Bb. 16-28

The second, more ‘successful’ ascent is from b. 16 to b. 28. The ascent is complicated with various rhetorical ‘figures’, so to speak. Points of interest include:

16.1—16.2: a quick ‘neighbour’ figure, i.e., motion to and from the quartertone above, which can be heard both as a compressed echo of the previous passage and as a tentative foreshadowing of the later ascent
16.2—16.4: ‘overshooting’ followed by compensatory reverse motion; in this case the motion is from D half-flat to half-sharp, overshooting D natural, and this is followed by a progression back down to D natural (bb. 17/1—18.1)
18.3: a rare instance of explicit, monophonic motion, from D natural up to D half-sharp, again followed by reverse motion
20.3—21.1: a denied convergence; that is, it appears that the lower tone will merge with the upper, but the upper is ‘pushed’ upwards to E flat, after which it will again change direction
23.1—23.4: another ‘neighbour’, from D half-sharp to D sharp, which is followed immediately by
24.2—24.3: overshooting of D sharp (the pitch reached in the previous figure), this time, a double overshooting (in the second violin), combined simultaneously with a divergence in the first violin, reaching E natural (which will be the goal pitch); this is the most complicated configuration so far
26.1—26.3: lower ‘neighbour’, again echoing the previous configuration, this time ‘undershooting’ D sharp/E flat
27.2—27.3: progression from E half-flat to E natural, introducing a change of timbre (open E string). Notice that the first appearance of the goal pitch E natural, in its ‘pure’, unison form, only lasts for a quaver, after which there is another ‘lower auxiliary’ figure (27.4—28.2), which resolves gradually up to E natural.

In short, while there is an obvious overall ascent, Scelsi mitigates or tempers it in various ways, partly through the zigzag motion introduced by the overshooting of steps in the quartertone scale, and partly by varying the frequency of events and resting of certain tones so that one is never sure whether a high point has been reached. Possibly these latter instances of stasis correspond to moments in his real-time composition at which he was reflecting on what to do next; but this does not alter the effect.

Bb. 28.3—33.2

These bars consist of a dynamically reinforced confirmation of E natural, with a progression to and from E half-sharp. The motion to E quarter-sharp suggests the possibility of a continuation of the ascent, which does not in fact occur.

Bb. 33.3—43.2

The significance of this last point is revealed in the next passage, which begins with a divergence stretching down from E natural to E flat. Given what has just preceded this, the listener is likely to expect this to be another 'neighbour' figure. Instead, the lower pitch continues to stretch down to D natural (b. 37), and then D half-flat (b. 42), the lowest pitch of the piece, which was established in the opening. This is the first time the interval between parts stretches wider than a semitone, and Scelsi anomalously rests on and 'confirms' a major second (bb.38-40), and then a major second plus a quartertone (bb.42-43.1). At this point the piece is explicitly polyphonic, and we could interpret this moment as a type of gamble, in which Scelsi is counting on having already established the image of an indivisible sound object sufficiently for this intervallic anomaly not to provoke a switch in interpretation on the listener's part. Indeed, one could easily hear a tonal implication here (V4/2—I6 in A major), which Scelsi attenuates by making the lower part louder than the continuing E natural, and by not quite reaching C sharp.[64] It is also interesting to note that this section begins almost exactly half-way through the piece – another example of the surprising formal-proportional precision in Scelsi's music that problematises the casual use of the term 'improvisation'.

Bb. 43.3—63.2

Having reached this intervallic climax, Scelsi withdraws the E, leaving us with D half-flat, the lowest pitch from the opening of the piece. Thus, the previous passage can be interpreted as a 'setback': the ascent has to start again. Pitch motion in the third ascent, beginning in b. 44, is relatively explicit and also, on the whole, louder. Both qualities give an impression of 'increased determination'. The main stages are:

[64] A similar example is discussed in Dickson, 'Towards a Grammatical Analysis of Scelsi's Late Music', pp. 233-234.

1. Three ascending progressions in quick succession (bb. 44-47), taking us to E flat
2. *Fortissimo* confirmation of E flat (b. 48), with a curious extraneous glissando figure (possibly deriving from a glitch in the tape; these were occasionally incorporated into scores)
3. Simultaneous upper and lower neighbour figure on E flat (bb.49-51), although I suspect that there is a missing flat sign in the lowest stave at b. 49 (on the grounds that Scelsi rarely uses a tremolo of three-quarters of a tone); this would make it only a lower neighbour figure
4. Another confirmation of E flat (bb. 52—56.3)
5. Progression up to E half-flat (bb. 56.4—58.1)
6. Brief unison on E half-flat (bb. 58.2—58.4)
7. Lower neighbour figure (bb. 59), perhaps signifying 'final resistance' to the ascent
8. Progression up to E natural (bb. 61—62.2)
9. Confirmation of E natural (bb. 62.3—64.1)
10. Lower neighbour figure (bb. 64.2—65.4)
11. Final confirmation, with unisons (bb. 66—70)

From b. 49 to the end, there is a gradual, overall decrease in dynamics. This last ascent again plays various rhetorical games with the listener. For example, one is likely to wonder whether the prolonged E flat at the dynamic climax (b. 48) is the end-point. Perhaps, in the abstract, one might predict that the final ascent would continue to the same high point as before, or even higher, but, in practice, tracking pitch is so difficult that such a consideration is irrelevant to any listener without perfect pitch, unless he/she is watching the first violinist's use of the open E string. On the other hand, the decrease in dynamics towards the end is an obvious clue that the music is drawing to a close.

The overall form, then, is:

bb. 0—4: deceptive incipit, descending from D half-sharp to D half-flat
bb. 5—15: confirmation of D half-flat, and abortive ascent
bb. 16—28: ascent to E natural
bb. 28—43: confirmation of E natural, and 'setback'
bb. 44—48: ascent to E flat
bb. 48—56: confirmation of E flat; uncertainty as to whether the ascent is complete
bb. 56—62: continuation of ascent to E natural
bb. 63—70: confirmation of E natural, compositional 'goal'

In summary, I have argued that in Scelsi's heterophonic works compositional decisions have to be accounted for in terms of (1) explicitly sonicist considerations, which motivate the basic materials and norms of the style, including features such as the masking of melodic motion and the avoidance/attenuation of tonal implications, but also (2) of general compositional considerations, in particular concerning the fulfilment, frustration, and postponement of expectation, patterning and subversion of pattern, and various symmetries and asymmetries. The two levels are impossible to disentangle, but this, I suggest, is the case in any avowedly sound-oriented musical endeavour, despite what the discursive rhetoric would have one believe. Moreover, although the basic norms of Scelsi's style can quickly be inferred even on a first hearing, it would be implausible to discount the influence of listeners' broader musical experience on expectations concerning the 'motion' of pitch; and the representation of 'upward strivings', 'setbacks', 'renewed vigour', and so on are by no means unprecedented.

The rhetorical effects that I have observed in *Arc-en-ciel* are typical of Scelsi's heterophonic style, but not all pieces use precisely the same rhetoric. I have chosen a composition based on a single pitch-band, in order to keep the discussion relatively concise. From a rhetorical point of view, the more explicitly polyphonic pieces, with a non-microtonal 'macrostructure', such as those studied by Menke, are exponentially more complicated rhetorically. I have observed previously that such pieces also raise the rhetorical stakes by making a relatively conventional, syntagmatic interpretation much more tempting:[65] that is, one could interpret the music as 'polyphonic', so that all the microtonal detail would be once again treated as subordinate. In that case, even if the listener continued to accept that the music had a profound rapport with the purely sonorous, the supposed aesthetic gulf between sonicist and pre-sonicist music would be undermined. In those pieces, then, the question is how does Scelsi compensate on the local level for the polyphonic macrostructure.

I should add that matters are further complicated when one considers the recording of Scelsi's music. Most engineers prefer a reverberant, diffuse sound, evoking the composer's ideal of a vibrating sphere of sound. However, it can become difficult to perceive where Scelsi ends and the studio begins; indeed, in principle, one can 'Scelsify' any music in the studio. I am not suggesting that this is a problem; it is simply an interesting implication of a musical artefact that has been first fixed as recorded sound, then painstakingly notated, and subsequently rerecorded in performance.

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[65] Dickson, 'Towards a Grammatical Analysis of Scelsi's Late Music', p. 235.

## CONCLUSIONS

In this chapter I have tried to place Scelsi's style, his discourse, and his reception within an overall theory of sonicist interpretation. With regard to his musical style, I have attempted to counterbalance the sonicist bias, whether strong or attenuated, that I find in most interpretations, by exploring the music's abstractable discourse character. That the music is heard both as sound and as discourse is evident but is an observation that is often suppressed. The musical discourse in Scelsi's case happens to be motivated by and to represent a transcendental sound; however, as Scelsi himself emphasises, this transcendental sound is not to be confused with empirical sound, and therefore cannot be elucidated with sonograms. The transcendental sound is in a sense the extra-sonorous (if not extra-musical) 'subject matter' of the music. The habitual 'weighting' of the musical meaning in Scelsi towards sound and against discourse is based on presuppositions that I have already discussed. One can even argue that Scelsi's music distinguishes itself by its linguistic innovation: that is, in order to foster a conscious attention to a level of detail that would normally be taken for granted as nuance, it elaborates a complicated musical discourse at this 'nuance' level. Sonicist formulations that identify this level of nuance with 'sound itself' do so arbitrarily. As to the reception, I have observed that even accounts that criticise the excesses of early, cultish interpretations, which obviously exaggerated the irreducible and non-systematic character of the music, usually still do not explicitly challenge the basic assumptions behind the older sonicism.

Two questions are regularly prompted by Scelsi interpretations. First, as so often, it is usually unclear what is meant by the word 'sound': sound as an ideal of an aesthetic position, or sound as perceived and cognitively processed. The two often seem to be conflated. I pointed out that Scelsi himself was relatively lucid in this respect. Some interpretations, such as that of Metzger, are prescriptive, asserting that the music is conceived or perceived as, or *is to be* conceived and perceived as *x* rather than *y*: as an entity rather than categories, matter rather than material, and so on. Of course, assertions of this kind are by no means unique to sonicist aesthetics; they are commonplace in Western music aesthetics more generally. However, this only reinforces the point that it may be even more difficult to emancipate sound from verbal language than from musical language. Utz is perhaps the most conscientious writer in specifying what he means by 'sound', and he consistently puts it in inverted commas, as if to indicate the danger of any complacency about its meaning. This uncertainty is, as I have already mentioned, one of the basic problems of sonicist aesthetics.

# CHAPTER 4

## BEYOND MEDIATION: WORKING DIRECTLY WITH SOUND IN ELECTRONIC MUSIC

In this and the next chapter I move from the sphere of acoustic music into that of electronic and studio-produced music and then out of the musical sphere altogether and into that of sound art. The aim of the chapters is to show the continuity of the vocabulary and argumentation of sonicist discourse and of certain organisational principles. Broadly speaking, the value of electronic music is connected with the deficiency of acoustic music with regard to the 'shaping' of sound: acoustic music is relegated into the category of the 'ordinary' largely on this basis (as in Schaeffer). In the next chapter, we shall see how music as a whole (even electronic music and experimental music) becomes the 'ordinary' other to sound art. In each field, however, it will also be seen how the initial emancipatory euphoria appears to decline over time. My overall hypothesis is that this is a logical consequence of the familiarisation of the new sound material and of organisational strategies.

In Chapter 1, I summarised the view that the technological revolution is the major threshold in the liberation of sound, or the sonic turn. Technology offered an enhanced version of the claims available to score-producing composers, with regard to the expansion of the field of available of sounds, the individualisation of sounds, and the dissolution of morphological constraints. Beyond this, however, the composer's ever greater control over sound events, through recording and later synthesis and processing, encouraged a discourse based on the idea of *direct access* to a materialised, malleable sound. Electronic music was not only sound-oriented as a matter of priorities but also *in effect* directly inscribed in sound, rather than requiring realisation in sound. To put the same general position in Hjelmslev-Eco terms, the supremacy of electronic music with regard to sound is thought to derive from (1) the possibility of using new expression-continua that one could not achieve acoustically (*as well as* those that *could* be achieved acoustically), (2) the idea that there are no perceptually relevant limitations on the segmentation and shaping of this expression-continuum, and (3) the ideological value of 'concreteness' arising from the fact that technological reproduced sound elides type with token.

From this point of view, what might seem a questionable hypostatisation of sound on the part of a composer such as Feldman becomes a matter of fact, or close enough. When Feldman suggested that *he* made a particular sound on the cello, he was speaking figuratively

in order to convey the care that he had taken in planning the sound in an experiential and not just formal sense; in doing so, he assimilated the performer's production of sound to himself. Scelsi's remarks about penetrating inside sound, Murail's idea that Scelsi de-composed sound, and other such remarks are similarly figurative. This is no longer regarded as being the case in the studio, because of the quantitative precision of the apparatus but also because the mediation is through apparatus rather than another individual.

Precisely because the technological arguments are so persuasive, the basic claim of a special status with regard to sound becomes regarded as axiomatic very quickly and the discourse turns to other things: to meanings connected to or emerging from the sounds, or to the suppression of such meaning; to meaning involving technology; theories of listening; or to the exploration of specific technological possibilities such as spatialisation. That is, we arrive very quickly at a post-emancipatory stage of sonicism in which the explicit discourse may not necessarily centre exclusively on sound 'per se', but the creative possibilities involved are nonetheless believed to have been opened up by the emancipation of sound.

In electronic music, all the sonicist signifiers I have covered so far are amplified. The tendency towards fragmentation and disjunction finds its extreme in microsound; but electronic sound production also favours the tendency towards elongation, as in the work of La Monte Young and Eliane Radigue. Scelsi's techniques for smoothing over the passage from note to note are taken to a microscopic degree of detail in the 'dynamic morphologies' of electroacoustic music (which will be discussed below). Repetition as a neutralisation of syntax is given a new ineluctability and a more absolute sense of invariance in the analogue or digital loop. And so on. Indeed, there are acoustic pieces that acquire a meaning specifically from the fact that they are *not* electronic. For example, in La Monte Young's *Arabic Numerical (Any Integer), to H. F.* (1960, also known as *X for Henry Flynt*) the performer is to repeat any sound exactly an indefinite number of times: the ostinato inevitably highlights the imperfection of human repetition in a way that would be impossible without the implicit contrast with the sample.

The present chapter is divided into two parts. I compare two traditions that both involve the premises outlined above but differ stylistically, above all with regard to the question of note structure, i.e., whether any note structure ought to be perceptible. The first part focuses on post-Schaefferian electroacoustic music; I shall use 'electroacoustic' to refer to music associated with research institutions. I discuss influential writings by the composers Denis Smalley and Trevor Wishart. In this approach, the organisational norm is an ongoing

flux in the internal morphology of sound; melodic and metrical structures tend to be avoided entirely and there is great circumspection about the *note*.

The second part of the chapter focuses, by contrast, on genres of what Leigh Landy might call 'note-based' (and therefore *not* 'sound-based') electronic music—music with a discernible, usually minimalist melodic-harmonic and sometimes metrical structure. I shall look mainly at composers or producers of electronic music or electronica in the nominally popular sphere, such as Brian Eno. These producers use studio techniques such as reverb and compression to differentiate their pitched sounds morphologically from the 'classical note', but they retain identifiable scale degrees and intervals.

### 4.1 THE SCHAEFFERIAN TRADITION

The Schaefferian tradition in electroacoustic music is so called not only because of institutional connections (composers such as Luc Ferrari, Bernard Parmegiani, Henri Bayle and others spent time either working with Schaeffer or at the institution he founded, the Groupe de recherches musicales) but also because of a set of aesthetic concerns that he established. As I mentioned in Chapter 1, in Schaeffer's aesthetics the orientation towards sound is phenomenological and focuses on the cultivation of an enhanced perception of sound objects; the creative process begins with the study and *classification* of these objects in terms of their internal properties. There was also a commitment from the outset (which I illustrated in my summary of *À la recherche d'une musique concrète*) to negating received musical language at the level of the sound object. The note was perhaps not something to be dogmatically avoided but it was regarded as the Achilles heel of music, the point at which apriorism was able to intrude. Many of Schaeffer's successors disputed his acousmatic position and embraced real-world associations, but few questioned this underlying organisational bias.

On the discursive level, the tendency towards radical avoidance of tonal language in the Schaefferian tradition leads to a paradox. The celebration of the technological liberation of sound tends to be displaced by a new claim, that of the superiority of a new hyper-differentiated organisation, which is valued in its own right (not only in respect of the priority of sound) and, curiously enough, frequently evoked in linguistic terms, semantic and/or syntactical. Schaeffer himself led the way with this recuperation of linguistic metaphor in the *Traité des objets musicaux*; several more recent examples can be found in Simon Emmerson's volume *The Language of Electroacoustic Music*. My hypothesis is that the

conspicuous absence of any trace of note-based syntax (major-minor, serial, or other) is what gives electroacoustic composers the confidence to adopt such metaphors without fear of being criticised as formalistic themselves. In line with my general argument, I suggest that this is another example of a style preference that is expressed in terms of an aesthetic or ontological principle regarding the sound material itself.

### 4.1.1 Suitable sounds

In his own theoretical work, Schaeffer focused mainly on sound objects, and he admitted in a postscript to the 1977 edition of the *Traité* that the book ideally ought to have been complemented by a treatise on musical organisation.[1] This gap is what authors such as Smalley and Wishart have filled, in texts that I shall discuss shortly. First, it is useful to consider Schaffer's typology and morphology of sounds.

In later electroacoustic texts, 'morphology' typically refers to the shaping of perceived sound through time. In Schaeffer, typo-morphology is part of a more complicated dialectic of classification and description connected to his schematised phenomenology of listening.[2] Schaeffer's approach is also normative. He proposes that one find 'suitable' (*convenables*) sound objects for making music (music not bound by ordinary musical language); the *objets musicaux* of the title refers to these. Suitable objects tend to be memorable and 'balanced' and to favour Husserlian 'reduced listening'. Balanced sounds are those in the central boxes of Schaeffer's complicated typological schema, but to summarise: they have neither pure locatable pitch nor a 'very variable mass' (mass meaning 'mode of occupation of the pitch field'); they have a 'closed facture' (i.e. they are sustained), but they are not too long. Schaeffer rules out explicit traditional notes but retains 'value' (roughly, some pitch content) and the discreteness of the unit. This would effectively disqualify drone music as well as the sustained noise of artists like Masami Akita or Yasunao Tone. He also talks about 'suitable collections' of sound; here we move into the syntagmatic. The key appears to be that such collections of objects favour the 'emergence of a value', but without 'a qualification of this value by intervallic relations with scalar functions'.[3]

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[1] Pierre Schaeffer, *Treatise on Musical Objects: An Essay across Disciplines*, trans. by Christine North and John Dack (Berkeley, London: University of California Press, 2017), p. 530

[2] For an extended analysis of Schaeffer's 'solfège', see Carlos Palombini, 'Pierre Schaeffer's Typo-Morphology of Sonic Objects', PhD diss., University of Durham, 1993.

[3] Schaeffer, *Treatise on Musical Objects*, p. 374.

A convenient way into Schaeffer's framework of listening is via the 'summary of listening intentions' at the end of Book II.[4] The starting point is a 'theoretical "raw" sound'. One can listen to this sound in several ways: 'reduced listening' implies the 'intention to perceive the object in itself'; this is in contrast with 'ordinary listening', in which the sound is a 'signifier' and the 'signified' is either quasi-linguistic 'meaning' (*sens*) or real-world 'indices'. The ordinary listening is thus subdivided into two alternatives: one listens to meaning if one listens with the 'intention to understand [*comprendre*] the message (abstract)' in a 'context of language (purposes)'; and one listens to indices if one listens with the 'intention to take in [*appréhender*] the messenger (concrete)' in a 'context of events (causes)'.

### 4.1.2 Schaefferian reactions to Schaeffer

Schaeffer's ideology of reduced listening is the aspect of his aesthetic position that has been most frequently criticised. Jean-Jacques Nattiez has observed that the *Traité* is an uneasy combination of phenomenological study and normative composing treatise, since the 'listening' is specifically that of a composer seeking to determine which sound objects make appropriate musical objects.[5] In the title of his concise guide to the *Traité*, Michel Chion tones down this normativity by replacing 'musical objects' with 'sound objects'.[6] In fact, a glance through the literature on music and phenomenology (for example, the work of Alfred Schutz and Thomas Clifton) is enough to remind one that a phenomenological approach is perfectly compatible with acoustic music, visible instruments, and tonality. Indeed, Roger Scruton used the same term 'acousmatic' to characterise a similarly abstracted listening also in relation to classical music.[7]

Even within the world of electroacoustic composition, Schaeffer's position in respect of external reference has been widely rejected. Numerous composers have adopted the opposite approach, that of foregrounding sound material precisely in terms of its real-world origins and connotations. Luc Ferrari pioneered this trend with his *Presque rien, ou Le lever du jour au bord de la mer* (1967-1970), also known as *Presque rien no. 1*, an edited

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[4] Ibid., p. 114.
[5] Jean-Jacques Nattiez, *Music and Discourse*, pp. 91-101. See also Brian Kane, 'L'objet sonore maintainent: Pierre Schaeffer, Sound Objects and the Phenomenological Reduction', *Organised Sound* 12/1 (2007), pp. 15-24.
[6] Michel Chion, *Guide des objets sonores: Pierre Schaeffer et la recherche musicale*, Paris: INA/Buchet/Chastel, 1983.
[7] Roger Scruton, *The Aesthetics of Music* (Oxford: Clarendon, 1997), pp. 2-3.

soundscape of dawn in a Croatian fishing village. Many composers play on the dialogue between real-world sound source and the 'purely musical'—as Schaeffer himself did in practice (e.g., in *Symphonie pour homme seul*, co-composed with Pierre Henry). Ambrose Field has even suggested that, 'by compartmentalising real-world sounds into objects and suggesting that listeners might focus their attention solely on the timbral activity within a sound, Schaeffer had invented the electroacoustic equivalent of the note.'[8] This illustrates that nobody is immune from such a charge. There are still enthusiasts of the acousmatic concept, however, perhaps the most prominent being Francisco López, who works in the worlds of field recording and sound art.[9]

Much has been made of this move beyond Schaeffer's prejudice against identifiable sounds within electroacoustic music. My main point in this regard is that the reaction was mainly against just one of Schaeffer's twin taboos: the identifiable cause of the sound. The principle of minimising any residue of musical language based on explicit intervals has gone largely unchallenged (although not by Ferrari). The emphasis on the aesthetic opposition between strictly acousmatic and referential electroacoustic music supervenes on something of a consensus with regard to the segmentation and organisation of the expression-continuum.

It is also striking that in order to theorise this advance on Schaeffer, composers often display the same taxonomic and structuralist tendency as Schaeffer. For example, in his essay 'The relationship of language to materials', Emmerson develops a 'language grid' for categorising works or moments within works. Along a 'syntax' axis one proceeds from 'abstract' (also known as 'formalistic', or 'a priori' in Schaeffer's terms) to 'abstracted' (in which the sound material precedes and determines the syntax); the 'discourse' axis goes from 'aural discourse' (corresponding to the purely musical) to 'mimetic discourse' (with extrinsic reference, e.g. soundscape works).[10] Ambrose Field, in the essay mentioned above, proposes categories of 'landscape morphology' for describing evoked sonic landscapes: they are 'hyper-real' (as in Ferrari's *Presque rien*); 'real' (not subject to any processing); 'virtual' (evidently simulated and usually surrealistic); or 'non-real' but nonetheless with a 'sense of landscape'.[11] In a similar vein, he proposes a 'rhetoric of reality', listing the following figures: 'sonic metaphor' (such as the sound of doors for a boundary between sections);

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[8] Ambrose Field, 'Simulation and Reality: The New Sonic Objects', in *Music, Electronic Media and Culture*, ed. by Simon Emmerson (Aldershot: Ashgate, 2000), p. 37.
[9] See Francisco López, 'Profound Listening and Environmental Sound Matter', in *Audio Culture*, ed. by Christoph Cox and Daniel Warner (New York: Continuum, 2004), pp. 82-72.
[10] Simon Emmerson, 'The Relationship of Language to Materials', in *The Language of Electroacoustic Music*, ed. by Simon Emmerson (Basingstoke: Macmillan, 1986), pp. 17-39 (p. 24).
[11] Field, 'Simulation and Reality', pp. 45-47.

‘sonic simile’ (establishing a relationship between two real-world sounds, usually by transforming one into the other); ‘sonic hyperbole’ (such as adding a Tarzan cry to a jungle soundscape); and ‘sonic synecdoche’ (in which the extra-musical reference is only implied, by inconclusive cues—perhaps for this reason, Field gives no example).

### 4.1.3 Spectromorphology

I shall summarise two theoretical answers to Schaeffer, those of Denis Smalley and Trevor Wishart. They both exemplify the tendency to promote the state of morphological flux as a new stylistic norm for sound-based music, without describing it as such. In order to show how, it is necessary to outline their theoretical approaches in some detail.

Smalley offers his version of Schaeffer’s typo-morphology, extending it to cover musical organisation, in the essay ‘Spectro-morphology and structuring processes’. This essay is also an example of the idea that electroacoustic music constitutes a renewed, superior language, with none of the limitations of a ‘vernacular’. His starting point is that there has been ‘an historic bifurcation in musical language: tonality with its metrically organized harmonic and melodic relationships has continued to be the vernacular language, absorbed unconsciously from birth, while the other fork, in its most recent guise, is represented by spectro-morphology.’ The reference to an unconsciously accepted ‘vernacular’ already makes it clear which fork is being advocated. However, he refrains from defining spectromorphology (now commonly used without the hyphen) *as* an alternative language, representing it as something more flexible, an ‘approach’ or way of thinking:

> Spectro-morphology is an approach to sound materials and musical structures which concentrates on the spectrum of available pitches and their shaping in time. In embracing the total framework of pitch and time it implies that the vernacular language is confined to a small area of the musical universe. Developments such as atonality, total serialism, the expansion of percussion instruments, and the advent of electroacoustic media, all contribute to the recognition of the inherent musicality in all sounds. But it is sound recording, electronic technology, and most recently the computer, which have opened up a musical exploration not previously possible.[12]

[12] Denis Smalley, ‘Spectro-morphology and Structuring Processes’, in *The Language of Electroacoustic Music*, ed. by Emmerson, pp. 61-93 (p. 61).

Since the superseded vernacular was also based on the organisation of pitches in time, his definition only makes sense once one understands that the word 'pitches' encompasses frequency components other than the fundamentals of notes and that 'shaping' is conceived as the *internal* temporal shaping of sound events, in respect of their attack, sustain, etc.—and *not* to configurations of discrete notes within a gesture of several discrete notes. It is evident that electroacoustic music is the repertoire that most stands to be legitimated by such an approach. Thus, while spectromorphology is not explicitly synonymous with electroacoustic music, it unsurprisingly 'finds its true home' there.[13] Instrumental and vocal music can only approximate it. Instruments can be 'moulded in a spectro-morphological manner' but were 'conceived and developed for an harmonic music. Even if modern performing techniques seem to have enabled us to escape from harmonic confines, it is a temporary and illusory freedom [...]. The future of live performance must lie with new instruments.' As to the voice, Smalley allows that, as 'sound sources, language and vocal sounds have discovered a new significance *as a result of their contact with* electroacoustic media.' Moreover, both instrumental and vocal music leave a residue in spectromorphological thinking at the level of the 'gesture', i.e., in 'the spectral shapes and shape-sequences created by the energy of physical and vocal articulation'.[14] This is one of the distinctive aspects of his theory: he holds that composers should maintain a human connection with the listener by accommodating a natural preference for sound events that correspond to 'energetic phenomena' in the real world, including those of instrumental and vocal performance.[15]

The main stages of Smalley's model are 'spectral typology', 'morphology', and 'structuring'. Spectral typology describes a 'note to noise continuum' from the 'note' (further subdivided into 'note proper', 'harmonic spectrum', and 'inharmonic spectrum'), via the 'node', to 'noise'.[16] As he explains, this typology is provisional, since the temporal shaping of any sound event has yet to be taken into consideration. Nonetheless, he already raises at this stage the problematic character of the 'note proper', in terms not fundamentally different from those expressed by composers of acoustic music:

> If [notes] are used to any extent, particularly in intervallic or harmonic contexts, the tonal system may be evoked and it becomes more difficult to

[13] Ibid., p. 62.
[14] Ibid., p. 62. My italics.
[15] Ibid., p. 68.
[16] Ibid., p. 62.

> coax the ear into observing concurrent spectral qualities, such is the overriding primacy of note perception both as a natural and cultural phenomenon. However, we now realize that the borders between pitch and 'timbre' are very imprecise, and subject to drifting perceptual demarcations among which we may fluently commute if the musical context permits, and if we have acquired appropriate discriminatory skills. Tonal attitudes are therefore not abandoned or segregated but subsumed, and we find a place for the note proper in territory at one extreme of the typological continuum.[17]

Thus, (1) it is above all intervallic relationships that need to be carefully treated; (2) there is a specific system, the tonal system, that needs to be suppressed; and (3) the implied listener is one whose training exacerbates the primacy of the tonal system but (once re-educated) also provides the antidote, in the form of a voluntary acquisition of 'appropriate discriminatory skills'. It is tempting to compare the compositional scruples of spectromorphology, in relation to the note, with those involved in handling perfect intervals in counterpoint. The common factor is not just the normative aspect but the perceptual basis: especially the tendency of perfect intervals to be perceived as a single entity (tonal fusion). In the contrapuntal context too, the problematic element is not necessarily abandoned altogether but is handled with care (hence the rules on the approach of these intervals).

Next is 'morphology', i.e., the 'temporal shaping'. Smalley refers to three 'temporal phases': 'onset', 'continuant' (also a term in phonetics), and 'termination'. From these he derives three archetypes: 'attack-impulse' (without continuant); 'attack with decay'; and 'graduated continuant', an arch shape 'modelled on sustained sounds', i.e., with no audible attack.[18] Each is illustrated with an amplitude/time diagram of a type ubiquitous in electroacoustic music literature. Innumerable variants and permutations can in turn be derived from them, including retrograde forms, various cross-fading effects, and temporal compression of attacks to produce 'grain' (in which the individual onset is no longer perceptible)—more elaborate equivalents of the 'hairpin' gestures of New Music that I mentioned in Chapter 1. From this Smalley proceeds to set out possibilities of 'motion', i.e. in relation to frequency. He lays out a 'motion typology' (bi-directional, uni-directional, linear, etc.), types of 'motion style' (synchrony/asynchrony, continuity/discontinuity, etc.),

[17] Ibid., p. 66.
[18] Ibid., pp. 68-69.

and ‘stable pitch-space settings’ (corresponding approximately to registral position), before turning to ‘structuring processes’ and finally to concepts of space, including sound diffusion.

With regard to structuring, the essay turns more directly to the artistic principles of spectromorphology, treated as a particular style of electroacoustic music. Such music heightens the ambiguity arising from the absence of a ‘consistent low-level unit’ equivalent to the note and thus the absence of a ‘neat hierarchical stratification’ equivalent to that of traditional music (note to motive to phrase etc.).[19] Smalley insists on the artistic importance of multi-levelled structure, affording opportunities for changes of focus. Structural ambiguity is compounded by a principle of extending the basic pattern onset-continuant-termination to higher levels. He outlines a dialectic between ‘gesture’ and ‘texture’. Gesture relates to the ‘application of energy’ and involves a stress on the onset and/or a ‘directed’ (i.e. teleological) motion towards the termination. Texture, on the other hand, represents the ‘internal’ state and centres on the continuant.[20] Smalley adopts the concept ‘structural functions’ in respect of onset, continuant, and termination: for example, the continuant could function as ‘maintenance’, ‘statement’, ‘prolongation’, or ‘transition’. These functions are context-dependent and are a matter of retrospective interpretation, e.g. what appears to be a transition may prove to be a subcategory of termination.

Is this anything to do with sound itself? What makes Smalley’s position relevant to a discussion of sonicism is that he claims not only that ‘spectro-morphological thinking is the rightful heir of Western musical tradition’ but also that such thinking ‘reaffirms the primacy of aural perception which has been so heinously ignored in the recent past’. He adds that this reaffirmation is not true of *all* electroacoustic music; spectromorphology ‘warns composers, researchers and technologists that unless aural judgment is permitted to triumph over technology, electroacoustic music will attract deserved condemnation’.[21] This ‘primacy of aural experience in music’ needs to be reasserted because ‘twentieth-century formalism and the continuing propensity of composers to seek support in non-musical models have produced the undesirable side-effect of stressing concept at the expense of percept.’[22] This leads Smalley to restate the value of Schaefferian reduced listening, while acknowledging that ‘mimesis is always at work’ even in electroacoustic music.[23]

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[19] Ibid., p. 80.
[20] Ibid., p. 82.
[21] Ibid., p. 93.
[22] Ibid., pp. 62-63.
[23] Ibid., p. 64.

What is being described here is a particular style of electroacoustic music: highly amorphous, continuous, aperiodic. Smalley disregards the fact that the opposite approach, i.e., a more pointillist, metrical style, is also possible, as in the work of Ryoji Ikeda, whom I discuss below.

Although he repudiates 'formalism', it is striking that Smalley's own system is based on the perception and classification of shapes. His claim regarding the primacy of aural perception hangs on the assumption that a focus on configurations of 'notes' (even when they are subsumed into gestures, as in arpeggiation) is formalistic, while a focus on the 'internal' shaping of sound units is, on the contrary, a way of restoring the primacy of aural perception. This in turn relies on the idea that, when listening to note-based music, people are indifferent to the internal shaping of notes (in which case, it is unclear why they would prefer human performance to MIDI realisations) and that this is because the internal shaping of classical notes is negligible in theoretical terms.

### 4.1.4 Trevor Wishart: continuum versus lattice

Trevor Wishart's writing shows the perfect compatibility of a mimetic or referential aesthetic with the same general organisational principles represented by Smalley. Wishart does not have the same institutional affiliation with Schaeffer as Ferrari, Parmegiani et al, but he shares many of the same concerns regarding sound morphology. He is known for his directly mimetic and dramatic approach to composition, incorporating speech, animal and environmental sounds, and other real-world sounds. The musical principle for which he is best known is that of 'transformations' within a 'continuum'.[24] For example, a scream may transform into the sound of a bird in flight, as in his most renowned piece, *Red Bird* (1977).

In his books expounding this principle and explaining his techniques, he refers to his practice as 'sonic art' and 'sound composition'.[25] Do these phrases merely denote the medium of the art or do they connote that the art is *exemplarily* sonic? *On Sonic Art* begins with a Varèsian disclaimer: 'sonic art' includes everything from 'music' to 'sound effects', and he has adopted such a term in order to pre-empt the conservative refusal to accept

[24] Wishart, *On Sonic Art*, 2nd edition (originally self-published in 1985), ed. by Simon Emmerson (Amsterdam: Harwood 1996), p. 7. He may have the semiotic use of the word 'continuum' in mind, but does not say so. He does, however, refer on p. 17 to Susanne Langer's 'time-continuum'; Susanne Langer, *Feeling and Form: A Theory of Art Developed from Philosophy in a New Key* (London: Routledge and Kegan Paul, 1953), Ch. 7.
[25] His other books include *Sound Composition* (York: Orpheus The Pantomime, 2012) and *Audible Design: A Plain and Easy Introduction to Practical Sound Composition* (York: Orpheus the Pantomime, 1994).

unorthodox work as 'music'.[26] Nonetheless, it is evident that within this inclusive field there is a sound art *proper*, which falls outside common notions of music. This proves to be (1) made possible by technological analysis and control of sound (although he makes frequent references to avant-garde instrumental works by Stockhausen and others) and (2) irreducible to structures that can be represented in staff notation:

> it now seems clear that the central watershed in changing our view of what constitutes music has more to do with the invention of sound recording and then processing and synthesis than with any specific development within the language of music itself. These latter developments have vastly expanded our knowledge of the nature of sounds and our perception of them and contradicted many nineteenth century preconceptions about the nature of pitch and its relationship to timbre. Computer technology, offering us the most detailed control of the internal parameters of sounds, not only fulfils the original dream of electronic music—to be able to sculpt all aspects of sound—but also [...] makes the original categoric distinctions separating music from text-sound and landscape-based art forms invalid. [...] In future it might therefore be better if we referred to ourselves as *sonic designers* or *sonic engineers*, rather than as composers, as the word 'composer' has come to be strongly associated with the organisation of notes on paper.[27]

Like many composers, he uses Boulez as an emblem of notation-based thinking: specifically, the claim in *Boulez on Music Today* that the primacy of pitch and duration as the 'basis of a compositional dialectic' is *proved* by the fact that notation has become 'developed and coherent' in those parameters.[28] Wishart responds with the equally one-sided view that it is 'notatability which determines the importance of pitch, rhythm and duration and not vice versa'.[29]

The central distinction in Wishart's aesthetics is between the sound continuum, which technology allows one to control, and the 'lattice', which is enshrined in notation. The lattice is shown in a geometrical diagram to be a system of discrete sound-points on two or three

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[26] Wishart, *On Sonic Art*, p. 4.
[27] Ibid., p. 5.
[28] Ibid., p. 37.
[29] Ibid., pp. 6-7. The argument would make more sense if he claimed that conventions of notation determined the pitch-duration-oriented compositional attitude.

planes: pitch, duration, and possibly instrumental timbre. He acknowledges that the lattice is *theoretical*:

> conventional music theories, dealing with the organisation of pitch in finite sets, rhythms using summative notation and most usually in fixed tempi, and sets of instruments grouped into clearly differentiated timbre-classes, I shall call *lattice sonics*. Everything from isorhythm to Rameau's theory of tonality to serialism comes under the general heading of lattice sonics and is adequately dealt with in existing musical text-books. I therefore intend to concentrate on areas that have conventionally fallen outside the scope of these theories. Hence *On Sonic Art*.[30]

He adds another disclaimer, that he is not 'underrating the organisation of pitch and duration parameters as discussed in conventional theories.' Nonetheless, the remainder of the book does indeed lament the limitations of lattice-oriented music, which he associates not just with the anomalous influence of a notational system but with logocentrism and social control.

Wishart's ideal is a form of secondary orality. Despite his commitment to a differentiated exploration of the continuum through technology, he also expresses phonocentric nostalgia for the 'pre-notation musician' who achieves 'an immediate dialectic of musical action and experience' transcending language. The concept of 'gesture', defined as 'an articulation of the continuum', is once again of great importance. As in Smalley, the musical gesture is an organisational concept, both at the level of 'the internal morphology of sound-objects and also in the overall shaping of groups, phrases, etc.'; but it also has a humanistic value owing to its connection to 'the morphology of intellectual-physiological gestures'. The gesture is thus an 'essential feature' of 'direct musical communion'.[31] 'Formalism', by contrast, involves estrangement from 'intuitive gestural experience'.[32] Of course, Wishart's pre-notation musician might have played a keyed wind instrument or such like, in which case there would also have to be a dialectic between gesture and notes.

In his own music, Wishart takes the gestural aspect further by pursuing a very direct, dramatic engagement with real-world subject matter. This is covered in the second and third parts of *On Sonic Art*: the surrealistic placement of recognisable sound-images in a virtual 'acoustic landscape' and the use of the complete 'human repertoire' of vocal utterance. He

[30] Ibid., p. 8.
[31] Ibid., p. 17.
[32] Ibid., p. 35.

has also explored these themes in acoustic works (music theatre and experimental vocal pieces), but they are particularly suited to computer music because the sound-images involved require—and justify—a high degree of morphological detail. There is thus a reciprocal relationship between external subject matter and stylistic radicalism: both are driving the composer towards the exploration of the micro level of the continuum. Subject matter, starting with the implications of the single gesture, serves as a talisman against the danger that digital technology might constitute a 'heaven-sent opportunity for formalism to run riot'.[33]

The logical problems of Wishart's conception arise from the fact that the lattice is not the *opposite* of the continuum; it represents the outcome of selection within the continuum. For compositional purposes, the question arises: where does the lattice end and the continuum begin? Is it sufficient to use non-metrical glissandi, with some timbral transformation, in order to transcend the lattice? Are Scelsi's *Xnoybis* and Fourth Quartet lattice-based? Wishart distinguishes between 'music "hung around" a lattice and music developed "on" the lattice.' As he says, this is a 'matter of degree', but he is confident that Japanese *joruri* singing exemplifies the former (largely because of the use of portamento), a Haydn mass the latter. Jazz in turn fits between the Japanese and European classical examples. It is 'clearly much more strongly influenced [than the Japanese example] by the lattice-based approach of Western harmony. Yet typical jazz vocal and wind instrument production is heavily concerned with the internal articulation of sound-objects.' In the Haydn, however, '[v]ocal production becomes conventionalised and aims at an idealised type of production focusing on the lattice pitches. Idiosyncratic developments of timbral and pitch articulation [...] are to be rejected in favour of a universally stereotyped *bel canto* production.'[34] The performer is maligned once again. A more generous alternative would be to describe the Haydn mass as being hung *more tightly* around the lattice.

The aspiration in sonic art is evidently to go even beyond the stage at which the objects are 'hung around a lattice'. Hence the importance of 'dynamic' and 'unstable morphologies', which can be perfectly controlled only through technology. A dynamic morphology is that of an object with simultaneous change in 'all, or most, of its properties'. Here Wishart specifies: 'I use the word properties rather than parameters here, because [...] it is important to view sound-objects as totalities, or *gestalts*, with various properties, rather

[33] Ibid., p. 43.
[34] Ibid., pp. 27-28.

than as collections of parameters'.[35] Note that this consideration could also be extended to lattice-based music. Unstable morphology, meanwhile, is that of 'sounds which flip rapidly back and forth between a number of distinct states.'[36]

Stable pitch remains a problem. Even a dynamic morphology does not establish a clean distinction between lattice and continuum, when pitch is involved. Wishart touches on this in a 'postscript' to the chapter on 'sound structures in the continuum':

> Much music, of course, starts out from the basis of traditional pitch structure and articulations of the continuum are conceived within this framework. Music adopting a more radical approach to the use of sound-material, however, has to find a solution to this problem. When the musical objects used in an architecture do not in themselves imply any particular lattice structure it becomes *difficult to justify* any steady-state pitch material which enters into the musical discourse. Often a pitch or pitch lattice may be introduced as a drone, either on a single pitch or over a harmonic field emerging out of a noise-based structure in which pitch is not clearly differentiable. This process takes a certain time to unfold convincingly, hence the appearance of such drones.[37]

This is another example of how the use of drone is a logical outcome of sonicist aesthetics. Wishart suggests three other ways of justifying pitch structures. One is to relate them to inharmonic spectra (as in spectral music); another is to filter noise. These strategies might justify discrete pitches or chords but it is hard to see how in either case ongoing pitch motion—i.e., melody—could be justified in this way. The other option is to define a 'harmonic field (or series of such fields) such that any occurrences of stable or temporarily stable pitch objects fall on the lattice defined by the field. In this way a lattice-based architecture may coexist with an architecture of dynamic morphologies.' This is more or less to concede that there is no firm boundary between music 'hung on the lattice' and continuum-based music other than a stylistic preference for a high degree of convulsive pluri-dimensional transformation. Acknowledging that what he has just described is 'similar to the idea of music hung on a lattice', he suggests thinking of it as 'a lattice hung on a morphological music, a change in emphasis.' But what justifies such a change in emphasis, or

[35] Ibid., pp. 93-94.
[36] Ibid., p. 95.
[37] Ibid., p. 107. My italics.

wording? Is it that the sound objects are interpreted as continuum-based because they are computer-manipulated?

A related question is whether the avoidance of the lattice and, consequently, of melody is compatible with Wishart's nostalgia for the primordial spontaneity of gesture. Are melodies allowable in sonic art? On the whole it seems that, like the series in *musique concrète*, in theory they are, in practice they are not.[38] Wishart states that, while 'musical [i.e., notational] practice constrains melodic gestalts to notation on lattice pitches, performance practice [...] would suggest that melodic contour has something to do with the expression of gestural energy through pitch-motion.' The continuum-lattice conception implies melodic preferences. Melodies are untainted insofar as they 'cohere into a single object of perception' and insofar as 'melodic thinking' does not stray into 'motivic thinking'. Melody as gesture is inimical to 'dissection and permutation'.[39] Such a gesture is how the Debussy arabesque is commonly described, although Debussy's own melodies usually do not bear the description out; a better comparison would be with the melodic line in species counterpoint. Indeed, Wishart proposes, somewhat incongruously, a 'counterpoint' of dynamic gestures. These will not be coordinated metrically or through the ebb and flow of consonance and dissonance, but in terms of similarity/dissimilarity and interaction/independence.

It is not undermining the originality or artistic value of Wishart's work to suggest that in holding to the lattice/continuum conception he is instituting a style preference: that of constant transformation in as many parameters as possible, a convulsive style. The valorisation of sound does not in itself oblige composers to privilege dynamic and unstable morphology; it is the taboo on the lattice that does so. Dynamic morphology, when it does not coincide with a scream or other such sound-image, connotes above all technologically-facilitated radicality and control.

The irony of this position is that, by Wishart's own admission, the lattice is only ever 'an approximate representation of what takes place in actual sound experience (*except in the extremely controlled conditions of a synthesis studio*)'.[40] Indeed, the lattice image applies better to Goeyvaerts than anything by Haydn. Sound objects can *only* be treated as bundles of controllable parameters in the studio. The studio implies a degree of determinism with regard

[38] Carlos Palombini, 'Pierre Schaeffer, 1953: Towards an Experimental Music', *Music & Letters* 74/4 (Nov. 1993), pp. 542-457 (pp. 544-547).
[39] Wishart, *On Sonic Art*, p. 111.
[40] Ibid., p. 23. My italics.

to the *continuum* that Haydn could never match (even if it had been his intention) with regard to the lattice.

## 4.2 THE LANGUAGE OF ELECTRONICA

For the remainder of this chapter I shall consider electronic music mainly in the nominally popular domain that is not only 'note-based', as Leigh Landy puts it, but also tonal/modal and/or metrical and periodic. This is not to say that these producers use 'ordinary', traditional musical language—far from it. However, in contrast with post-Schaefferian music, the tendency in genres such as ambient and minimal techno is (as the genre labels sometimes make explicit) towards the 'minimal' or 'minimalist'. Sound quality is foregrounded through melodic and/or harmonic simplification and repetition (the loop and/or the drone); sometimes there is also a conspicuous element of unpredictability, mainly in respect of rhythmic relationships and often arising from the use of metrically irregular loops. Apart from this contrast, the same general arguments already discussed, of technological materialisation and unlimited refinement in the differentiation of sound, are still relevant to this music.

From a research-institution modernist perspective that sees spectromorphology as the end-point of a gradual dissolution of grammaticality, the tonal configurations of electronica are likely to seem severe restrictions on sound material and notional sonic autonomy. For producers not conditioned by anti-tonal bias, however, this is not the case. They are confident that they are taking a radically sound-oriented approach, and their technical arguments are sufficiently persuasive for them to be interpreted in that way, especially in non-academic publications such as *The Wire*. Indeed, it is important to remember that there is also the opposite stylistic bias to the modernist one on which I have focused so far: i.e., the view that a high degree of consonance and simplicity is to be *preferred* as relatively neutral, and that a systematically dissonant (or spectromorphological) organisation would be formalistic and academic.

### 4.2.1 Eno, empiricism, and the note

For my main example from the realm of electronica, I turn to Brian Eno and his ambient music, especially *Ambient 1: Music for Airports* (1978). In doing so, I am largely bracketing out the aspect of noise, other than some gentle hiss; this is a record for which the epithet 'note-based' is *relatively* unproblematic; it has less of an admixture of noise than much later

ambient work (including his own *Thursday Afternoon*). I shall consider Eno's musical style (especially with regard to pitch relationships), his self-representation, and his reception in the light of the discursive and organisational paradigms that I have already outlined.

Eno has become a point of reference in musicological as well as journalistic writing on popular electronic music, largely on the basis of his ambient music, but also because of his articulacy as a 'theorist of rock'. For example, in their anthology *Audio Culture*, Christoph Cox and Daniel Warner describe him as 'a key figure in the shift from "composer" to "producer" in contemporary electronic culture'.[41] The idea of a shift from 'composer' to 'producer' has institutional and ideological connotations beyond those that I have discussed so far. It suggests a move not only beyond the mediation of acoustic instruments, but also beyond the values and mental habits of composers in the art music tradition. From this perspective, when electroacoustic composers such as Smalley represent their work as an 'heir' to that tradition, they are susceptible to being included in the field of 'ordinary' music.[42] As it happens, Eno has retained the label 'composer',[43] but in doing so he highlights the fact that his approach and techniques are unlike those of his classical predecessor, above all because he does not read staff notation; his retention of the term 'composer' thus has almost the same rhetorical function that disavowing it had for Feldman or Scelsi.

At the same time, Eno's conception of ambient music is known to be rooted, aesthetically and technically, in experimental currents within the art music domain: Satie's furniture music and its avant-garde use of deliberate blandness; Cage's renunciation of authorial control and acceptance of the accidental; the minimalist principle of process music, and more specifically Reich's tape pieces of the mid-1960s; and possibly also the quiet sound world of Feldman. Indeed, although Eno established the term 'ambient music', some authors extend it back to Satie. Joanna Demers locates some ambient music within 'Western art music' apparently on this basis, and Mark Prendergast has written a book on ambient music 'from Mahler to Moby'.[44]

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[41] In their introduction to Brian Eno, 'The Studio as Compositional Tool', in *Audio Culture*, p. 127.
[42] Eno makes little mention of research-institution electroacoustic music but, given his embrace of harmony, he is likely to be referring to such music when he says: 'I've seen so many things done on computers that were hopelessly overwrought and complicated and in the end sounded like what I call bubble and squeak music.' Eno, 'Generative Music', *In Motion Magazine*, July 7, 1996, <https://inmotionmagazine.com/eno1.html> [accessed 26 June, 2019].
[43] It is the term 'musician' that he has disavowed. See Eric Tamm, *Brian Eno: His Music and the Vertical Color of Sound* (New York: Da Capo, 1995, rev. edn.), Chapter 4; and Cecilia Sunn, 'Brian Eno, Non-Musicianship and the Experimental Tradition', in *Brian Eno: Oblique Music*, ed. by Sean Albiez and David Pattie (London: Bloomsbury Academic, 2016), pp. 29-48.
[44] Demers, *Listening Through the Noise*, p. 164; Mark J. Prendergast, *The Ambient Century: From Mahler to Moby—The Evolution of Sound in the Electronic Age* (London: Bloomsbury, 2003). Daniel Siepmann interprets

Putting the ambient concept to one side temporarily, let us look at Eno's basic assertion of technological empiricism, as expressed in his well-known text 'The studio as compositional tool'. This was originally a lecture delivered in 1979, then published in *Down Beat* magazine and later reprinted in Cox and Warner's *Audio Culture*. Eno is discussing studio production in general, not only ambient music. The view he expresses in many ways recalls that of Schaeffer. He describes how recording 'takes music out of the time dimension and puts it in the space dimension', how tape makes sound 'a substance which is malleable and mutable and cuttable and reversible', and how multi-track recording means that 'performance isn't the finished item'.[45] He goes on to define his own activity as 'in-studio composition, where you no longer come to the studio with a conception of the finished piece.' In such composition,

> one becomes empirical in a way that the classical composer never was. You're working directly with sound, and there's no transmission loss between you and the sound—you handle it. It puts the composer in the identical position of the painter—he's working directly with a material, working directly onto a substance, and he always retains the options to chop and change, to paint a bit out, add a piece, etc.
>
> Compare that to the transmission intervals in a classical sequence: the composer writes a piece of music in a language that might not be adequate to his ideas—he has to say this note or this one, when he might mean this one just in between, or nearly this one here. He has to specify things in terms of a number of available instruments. He has to, in fact, use a language that, like all languages, will shape what he wants to do. Of course, any good composer understands that and works within that framework of limitations. Finally he has something on the page, and by a process this arrives at a conductor [whose] job is to make an interpretation of it [...]. Then the conductor has the job of getting a group of probably intransigent musicians to follow his instructions, to realize this image of the music he has. Those of you who work with classical musicians know what a dreadful task this is, not to be wished on anyone. […]

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Satie and Cage as 'primary' ambient or 'proto-ambient music', in 'A Slight Delay: Agency and Improvisation in the Ambient Sound World', *Perspectives of New Music* 48/1 (Winter 2010), pp. 175-176. For a list of pre-Eno music reasonably described as ambient, within the non-classical world, see Nick Collins, Margaret Schedel, Scott Wilson, *Electronic Music* (Cambridge: Cambridge University Press, 2013), p. 137.

[45] Eno, 'The Studio as Compositional Tool', pp. 127-128.

> One thing I said about the traditional composer was that he worked with a finite set of possibilities [...] If you carry on the painting analogy, it's like he was working with a palette, with a number of colors which were and weren't mixable. Of course, you can mix clarinets and strings to get different sounds, but you're still dealing with a range that extends from here to here. It's nothing like the range of sounds that's possible once electronics enter the picture. The composer was also dealing with a finite set of relationships *between* sounds [...].

He acknowledges that

> everyone is constrained in one way or another, and you work within your constraints. It doesn't mean that suddenly the world is open, and we're going to do much *better* music, because we're not constrained in certain ways. We're going to do *different* music because we're not constrained in certain ways—we operate under a different set of constraints.[46]

Nonetheless, the overall message is that, if one's primary value is to be 'empirical' with regard to sound, then the constraints on the electronic music composer are more favourable than those on the 'classical', i.e., score-producing composer. As Eric Tamm has pointed out, in the first monograph on Eno, here Eno is underestimating the empiricism of the classical composer, who typically worked at a keyboard.[47]

The metaphorical framework is once again painting versus language. The claim of empiricism is based not so much on the composer's philosophical or psychological disposition as on the practical factor of 'working directly with a material'. In practical terms, this means above all that the sounding result of each component can be determined in every nuance (a) without any 'transmission loss', i.e., without any division of labour with (uncooperative) performers in respect of sound production, and, if one wishes, (b) before decisions about formal combination of components are made (again, this is not really distinct from the process of classical composition, since composers typically 'weigh up' material in terms of its sound before developing it). Notice that the idea of 'transmission loss' represents an unusually overt instance of the 'transmission' model of composer-listener communication for which score-producing composers tend to be rebuked.

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[46] Ibid., pp. 128-130.
[47] Eric Tamm, *Brian Eno*, p. 64.

One way in which Eno's technical position differs from Schaeffer's is that he shows little anxiety regarding notes. He appears to be satisfied with having transcended the *written* note, and confident that the studio-produced note is not a severe compromise on his empiricism. He uses a less demanding equivalent of Wishart's 'lattice sonics' image, emphasising that, unlike the classical composer, he can choose exactly *which* note he uses: he can use one 'just in between' those available to the classical composer. By 'in between', he may be referring to nuances of metrical position, pitch, timbre, or all three—nuances that in classical music were part of the remit of the performer.

Later in the lecture he turns to the individualisation of timbre through equalisation, and the principle that studio-produced music is often 'predicated not on a structure, or a melodic line, or a rhythm, but on a sound; this is why studios and producers keep putting their names on records, because they have a lot to do with that aspect of the work.' Here he is using 'sound' to mean 'timbre'. This relates to the rock usage, as in 'the sound of a band'. This is an ambiguous usage. It evidently highlights sound quality, which is correlated to apparatus such as pedals and amplifiers, but it can also be understood holistically to include syntactical choices, such as chord choices. For example, the spectral effect of the power chord depends on the omission of the third.

Eno does *not* claim that his studio-produced 'note' is so morphologically complex and ambiguous that it can no longer be perceived as a unit. He only touches on the theme of the shaping of sound in a limited way, with reference to the effect of compression on envelope. Indeed, he has remarked elsewhere on the complexity of certain *untreated* acoustic sounds, and he claims to have cultivated the practice of sitting at the piano, listening to the decay of a single sound[48]—like Scelsi but not for therapeutic reasons. Other authors, however, have taken up the thread of the exceptional ambiguity of the electronic note. Daniel Siepmann, for example, does so in terms reminiscent of the early Scelsi reception, with an ambient twist:

> Not only does a single note gain [from the use of reverb, equalisation, etc.] the status of a vibrant and living entity, but when the mass of these notes is stacked, blended, and shifted, the microcosm and macrocosm of Eno's ambient music become indistinguishable. Listeners hear undulating and evolving entities no matter where the ear directs its focus. The referential space itself, enormous and often times unusual, disorients and distracts focus

[48] 1985 interview, quoted in Tamm, *Brian Eno*, p. 43.

> or precise attention from any one element. Ambient music surrounds the listener with a sense of almost unending depth, saturating the listener's perspective. Pieces like these provide a substrate which blends with the environment and invites a musical listening to a perceptually new wash of sound.[49]

Once again, the question is whether this description could not be applied to, for example, Renaissance polyphony heard in reverberant circumstances.

### 4.2.2 Ambient music

Eno's discourse on 'ambient music' again exemplifies the more recent, less polemical form of sonicism. The particular angle in ambient music is to do with the relationship between the music (or sound) and the listener's surroundings. In this respect, it overlaps with the contemporaneous discourse on sound art; indeed, Eno himself is also an installation artist, among other things.

The earlier album *Discreet Music* already displayed the main elements of the idiom, but it was with the release of *Music for Airports* that he established the term. In his liner notes for *Airports* he explained that it referred to his experiments in 'the use of music as ambience', ambience being 'defined as an atmosphere, or a surrounding influence: a tint.'[50] Eno's 'position-taking' was particularly audacious. Whereas Feldman distinguished his quasi-minimalist late work from Reich and Glass by depreciating them as a 'media phenomenon' and 'show business', Eno offered his ambient music as a superior alternative to what is probably the most despised repertoire of all—Muzak or 'canned music'. This discursive strategy left him open to the accusation that he was producing high-brow canned music.[51]

Eno's criticism of canned music focused not so much on its manipulative function as on syntax and style. First of all, it consisted of 'familiar tunes arranged and orchestrated in a lightweight and derivative manner'; according to Eno, this was what had 'led most discerning listeners (and most composers) to dismiss entirely the concept of environmental music as an idea worthy of attention.' The comparison between Muzak and ambient music continues:

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[49] Daniel Siepmann, 'A Slight Delay: Agency and Improvisation in the Ambient Sound World', *Perspectives of New Music* 48/1 (Winter 2010), p. 182.
[50] Eno, liner notes to *Ambient 1: Music for Airports*.
[51] See Tamm, *Brian Eno*, p. 140.

> Whereas the extant canned music companies proceed from the basis of regularizing environments by blanketing their acoustic and atmospheric idiosyncrasies, Ambient Music is intended to enhance these. Whereas conventional background music is produced by stripping away all sense of doubt and uncertainty (and thus all genuine interest) from the music, Ambient Music retains these qualities. And whereas their intention is to 'brighten' the environment by adding stimulus to it (thus supposedly alleviating the tedium of routine tasks and levelling out the natural ups and downs of the body rhythms) Ambient Music is intended to induce calm and a space to think.
>
> Ambient music must be able to accommodate many levels of listening attention without enforcing one in particular; it must be as ignorable as it is interesting.[52]

It is clear from this that Eno's more enlightened use of 'music as ambience'—somewhere between *Gebrauchsmusik* and sound art—will require an understated, 'uncertain' *musical style*: experimental but deliberately innocuous.

It is worth noting that Eno's Eureka narrative regarding ambience, which he included on the liner notes of the slightly earlier album *Discreet Music* (1975), parallels Varèse's Salle Pleyel story, which was discussed in Chapter 1. Given Eno's knowledge of the experimental tradition, this is not certain to have been a coincidence. According to the narrative, while recovering from a traffic accident, Eno found himself listening to a record of classical harp music at a very low level and on one channel, and suddenly discovered 'a new way of hearing music—as part of the ambience of the environment just as the colour of the light and the sound of the rain were parts of that ambience.'[53] Just as Beethoven had been defamiliarised by the acoustics of the Salle Pleyel, Eno's harp music was defamiliarised by the audio set-up. Although the experiences were strongly contrasting (vivid projection of sound versus subdued surrounding sound), in both cases the suggestion was that sound had become foregrounded in relation to official musical content as a result of unusual acoustic circumstances, which the composer subsequently evoked at the level of musical style.

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[52] Eno, 'Ambient Music'. In 1982 Eno gave another explanation of the concept as involving, on the one hand, 'the idea of music that allows you any listening position in relation to it' (i.e., not just a background music function) and, on the other, that of 'creating an ambience, a sense of place that complements and alters your environment'. Interview with Steven Grant, 'Eno against interpretation', *Trouser Press* 9 (1982), pp. 27-30, quoted in Tamm, *Brian Eno*, p. 53.

[53] Liner notes to *Discreet Music* (Astralwerks 1975).

Various interpretative approaches can be distinguished with regard to Eno's ambient music, and to ambient music in general, depending on the relative emphasis given to the 'expression plane' (calm, understated, repetitive musical style) and the 'content plane' (music tinting the surroundings).

Eric Tamm makes clear that the environmental aspects are 'connotations': that ambient music could 'tint the atmosphere of the location where it was played', that it 'surrounded the listener with a sense of spaciousness and depth, encompassing one on all sides, instead of coming *at* the listener', that it 'blended with the sounds of the environment', and so on.[54] He then lists stylistic traits of Eno's ambient pieces:

> quietness, gentleness, an emphasis on the vertical color of sound [i.e., timbre], establishment and maintenance of a single pervasive atmosphere, non-developmental forms, regularly or irregularly repeating events or cycles of events, modal pitch-sets, choice of a few limited parameters for each piece, layered textures tending toward an even balance of tone and noise [this is more applicable to later ambient producers], and a pulse that is sometimes uneven, sometimes 'breathing,' and sometimes non-existent.[55]

Timbre, as the 'vertical colour of sound', is one of Tamm's main themes, providing the subtitle of his book, and he revisits the familiar discourse involving a reversal of the roles of structure and timbre: 'If in the classical work the timbre may be said to adorn the structure, then in the ambient work the structure adorns the timbre.'[56] Although he proposes this in relation to the opposition classical/ambient, he also observes that the principle corresponds to Schoenberg's *Klangfarbenmelodie*.

Daniel Siepmann plays connotations and technique off each other by defining ambient as 'a genre of music that focuses on coloring the listener's sonic environment while largely *disregarding* other functional musical traits such as melodicism, harmonic progression, or rhythmic variation.' He then immediately concedes that '[w]hile these qualities are certainly recognizable in the musical texture, they are all yoked towards advancing an unobtrusive, background music—a music that isn't meant to be listened to directly.'[57] Indeed, far from

[54] Tamm, *Brian Eno*, pp. 131-132.
[55] Ibid., p. 132.
[56] Ibid., p. 173.
[57] Siepmann, 'A Slight Delay', p. 174.

'disregarding' these parameters, producers rely on them in order to create the impression that one's environment is being coloured.

### 4.2.3 *Music for Airports*

What is the sound material of *Music for Airports*, how is it organised, and how have material and organisation coloured interpretations of the album? The record consists of four tape compositions in which piano, synthesiser, and vocal sounds are superposed on loops of different lengths. These sounds are already coded as 'non-standard' simply by virtue of being audibly manipulated. At the same time, there are numerous gestural and textural correspondences with acoustic compositions that I have discussed previously, especially those of Feldman. For example, '2/1'—the second track and one that has especially appealed to musicologists—is built out of vocal sounds with a noticeably subdued attack, reverberant decay and audible 'hiss'.[58] The sounds are sustained for about five seconds and are isolated, i.e., followed on each loop by a much longer silence. Although there is no melodic figure on any loop, the concentration on the middle register means that successive pitches are usually within an octave, and there are enough layers for sounds to continually overlap 'diagonally', so to speak, in a non-metrical and unpredictable manner, with occasional silences. There is thus an oblique or subversive relationship to polyphony similar to that observed in my previous two chapters. Onsets occasionally coincide, but because of the graduated attack they never seem unequivocally synchronous. One author has observed an effect of 'timelessness', which was also a topic in Feldman reception.[59]

At least two important features of the album, however, are unlike my previous examples: the use of tape loop technique (or 'delay line system'), previously associated above all with Steve Reich; and the modal pitch organisation. Let us first consider the loop technique. This is an important element of the musical meaning and one that Eno and his interpreters have frequently emphasised, connecting it to his persona as a non-classical composer-engineer and inquisitive dabbler. Although he made some edits during post-production,[60] the principle of this technique is that, having started the loops running, one allows events to take their course. This leads to a situation in which, despite the extreme

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[58] Tamm, *Brian Eno*, p. 136. See also Siepmann, 'A Slight Delay', pp. 180-181.
[59] Mark Edward Achtermann, 'Yes, but it is Music? Brian Eno and the Definition of Ambient Music', in *Brian Eno: Oblique Music*, ed. by Albiez and Pattie, pp. 85-104 (p. 98).
[60] Victor Szabo identifies a couple of discrepancies: see 'Unsettling Brian Eno's *Music for Airports*', *Twentieth-Century Music* 14/2 (2017), pp. 305-333 (p. 312, n. 31). Eno mentions one such edit in the liner notes to *Discreet Music*.

redundancy of each component loop, the composite note configurations are unplanned and unpredictable. In fact, the technique has implications for sound quality as well, since it can entail gradual quietening of sound (more noticeable in the thirty-minute 'Discreet Music') or, conversely, saturation. The producer may also actively adjust sound quality as the loop goes around.

What Eno and others have emphasised is not merely the melodic and rhythmic unpredictability (which is also a characteristic of scored, aleatoric pieces) but especially the procedural fact that this unpredictability is the result of mechanical automation. By using the loop technique, the ambient composer is said to adopt 'the role of a creative, yet distant, engineer', providing 'only [...] a guiding hand in the actual construction of a piece'.[61] Notice, however, that this interpretation is only meaningful on specific organisational conditions, i.e., that the layers are not metrically coordinated (in contrast with a mainstream EDM track). In fact, the 'actual construction' of *Music for Airports* is not indissolubly tied to the tape medium; in 1997, the Bang on a Can group demonstrated this by arranging the album for live performance. In doing so, they created a Scelsian situation, using the original tape collages as sketches to be transcribed by 'literate' composers.

On the metaphorical level, there is a revealing tension between the image of 'working directly onto a substance' and that of the 'guiding hand' that gently sets things in motion, before letting go. In this technical approach, the producer is 'hands on' with regard to the sound material but 'hands off' with regard to its organisation. Technology is represented as providing unmediated access to the sound material but also as distancing the producer from linguistic responsibility. The producer is responsible for the note configurations down to the millisecond, but this responsibility is not regarded as composition. This is on the tacit assumption that technological automation (whether analogue or digital) constitutes a more genuine renunciation of syntax than anti-syntactical strategies that might be worked out on paper, such as those of Cage and Feldman. Repetition is regarded as a technological rather than a syntactical factor. In both notated and electronic contexts, this interpretation is still composer-oriented, since sound is interpreted as autonomous and free-floating in relation to an apparently 'hands-off' composer who has taken concrete steps to engineer such an impression.

The other important feature that distinguishes the Eno from my previous, modernist examples is that modal pitch organisation is the norm. This may have been due to the

[61] Siepmann, 'A Slight Delay', p. 174.

influence of New York minimalism or indeed of the English experimental school (that of Gavin Bryars, Michael Parsons, and others).[62] Several commentators have remarked on Eno's open-ended or ambiguous use of modes. For example, in '2/1', the ambiguity extends to how many notes there are, a question complicated by some audible overtones.[63] According to Szabo, there are eight notes on eight loops: f, a♭, c', d♭', e♭', f', a♭', c''. The c'' is much quieter than the other notes and Eric Tamm and Siepmann disregard it. In any case, there is certainly a five-pitch-class collection. Tamm classifies the pitch content as 'harmonic' and relates everything to a D flat major seventh chord with added ninth, adding that the low F serves to attenuate stability. Szabo's interpretation is more plausible: he refers it to a F Aeolian scale, pointing out that Eno's ambient music is not without 'affective ambivalence'.[64] Given that the initial onsets of each loop are the moments at which the 'guiding hand' has maximum responsibility, it may be relevant that '2/1' begins in such a way as to emphasise the minor third: it begins with a 'diagonal' minor third (c' overlapped by e♭'); and, during the opening minute, the only sounds attacked more or less simultaneously are F and A♭.

The modal pitch content and the loop technique are mutually compensatory: on the one hand, the modality limits the sense of indeterminacy, since the overlapping, quasi-melodic configurations and fragmentary chords are always guaranteed to be diatonic; on the other, the loop prevents grammaticality, at least in regard to phrase construction. In Eno's terms, we could say that the loop technique provides the 'interest' and the modality makes the music 'ignorable'.

There are significant rhetorical contrasts in the album, most dramatically between the first two tracks. '2/1', which I discussed above, is the most rarefied and least melodic track, and has probably appealed to musicologists for this reason (Tamm compares it to Webern).[65] Siepmann proposes a Deleuzean interpretation regarding systems and chaos, using this track as the only example. The first track, '1/1', by contrast, is much more directly melodic and even quasi-homophonic. Whereas in '2/1' the loops are uniform and equivalent (almost as in a motet), in '1/1' there is a loop consisting of a long piano and electric piano melody, in D Mixolydian, which is heard eleven times and tends to be foregrounded. This melody is

[62] Sunn, 'Brian Eno, Non-Musicianship and the Experimental Tradition', p. 44.
[63] Szabo, 'Unsettling Brian Eno's *Music for Airports*', p. 312, n. 31. Nobody appears to have elicited a more precise account of the composition process. By his own account, Eno deliberately refrains from taking notes on his synthesiser set-ups so that he is not tempted to reuse the same sound (quoted in Tamm, *Brian Eno*, p. 72).
[64] Szabo, 'Unsettling Brian Eno's *Music for Airports*', p. 317.
[65] Tamm, *Brian Eno*, pp. 136-137. See also Siepmann, 'A Slight Delay', pp. 180-181, Szabo, 'Unsettling Brian Eno's Music for Airports', pp. 312-313.

combined with sustained, synthesised notes and chords, which often serve to fill the gaps between melodic phrases, and occasionally harmonise them (whether coincidentally or not): for example, at about 5'30", a synth chord IV under the notes G and A resolves to chord I under the melody note F♯.

This melody is of particular interest. What kind of melody is acceptable in a radically unobtrusive music intended to highlight acoustic idiosyncrasies and to induce calm but also doubt and uncertainty—a music in which, if Tamm is right, structure adorns timbre? The discourse might lead one to expect some implicit limitation on how 'melodic' the music may be, and an emphasis on its ambiguity on the part of interpreters. Indeed, John Lysaker refers to 'a discernible piano part of sorts' and as 'something just short of a melody';[66] this overstates the music's ambiguity. The melody is in four phrases with the form AABC. Each phrase begins with a sequence of isochronous notes, which are normally transcribed as crotchets.[67] The third and fourth phrases include convenient cues: the third begins on the lower dominant degree, and the fourth phrase includes the only appearance of the Mixolydian seventh degree—this note is also distinctive in timbre, appearing in an electric piano part. Admittedly, there is an element of heterophony between the two piano components, and the consistency of the melody notes is attenuated by micro-variations of timing, attack, timbre.[68] These micro-variations do not really obstruct melodic perception but they are essential in creating the track's unique semantic content, a blend of the mysterious and the naive (Lysaker compares it to 'Frère Jacques').[69] The melody has the character of a haphazard 'snatch' of melody, and Eno has explained (in 'The studio as compositional tool') that it was indeed the result of a non-synchronised improvisation between two pianists under his direction. Nonetheless, this confirms that he was astute is recognising that they had produced a melodic configuration with this semantic content.

The other two tracks mediate between extremes (melodic/non-melodic) in different ways. '1/2' combines the non-melodic vocal layers of '2/2' with a piano layer featuring at least one recognisably melodic element, consisting of the notes e♭"-f"-g" in quick

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[66] John T. Lysaker, *Brian Eno's Ambient 1: Music for Airports* (New York: Oxford University Press, 2019), pp. 16-17.
[67] Lysaker, *Brian Eno's Ambient 1: Music for Airports*, p. 19; Cecilia Sunn, 'Resisting the Airport: Bang on a Can performs Brian Eno', *Musicology Australia* 29/1 (2017), pp.135-139 (p. 153); Szabo, 'Unsettling Brian Eno's *Music for Airports*', p. 314.
[68] Cecilia Sunn, 'Resisting the Airport', p. 153.
[69] John T. Lysaker, *Brian Eno's Ambient 1: Music for Airports*, p. 16. The track also shares certain traits with Mompou, whom I mentioned briefly in Chapter 1: bell-like sounds; defiantly simple melodic line; unvaried repetition of an entire melody.

succession—the top of an arpeggiated F minor ninth chord. It is the kind of gesture frequently used by Ryuichi Sakamoto. '2/2', on the other hand, is built out of synthesiser loops that include melodic figures (perfect interval-based) but that are agglomerated as in '2/1', so that no layer is privileged.

### 4.2.4 Style in microsound

I shall now move away from ambient music and consider, more briefly, style in microsound composition, i.e., electronic music built up from tiny grains of sound. My starting point in this respect is Joanna Demers's *Listening through the Noise*. Various features of Demers's book make it relevant to my own argument. She takes a comprehensive approach to the aesthetics of electronic music, covering both 'institutional' (research-institution-based) and electronica, and also stretching to sound art—on the understanding that these three 'metagenres' overlap.[70] She also observes that all three categories are steeped in 'the rhetoric of distinction', i.e., represented as more experimental and autonomous than other fields or repertoires.[71] Moreover, she focuses on sound and meaning and touches on semiotics, although not the Hjelmslev-Eco line.

Her argument is first of all that what originally distinguished electronic music most radically from previous music was its role in 'dismantling' the 'musical frame' that had cordoned off musical sounds from the sounds of real life (electronic music was thus avant-garde in the sense proposed by Peter Bürger).[72] The significant point in this regard is that she identifies this notional 'frame' not just with the recognition of 'musical' instrumental and vocal sounds but also with syntax. She argues, next, that *recent* electronic music is distinguished by its 'concern with the meaningfulness of sound'.[73] She considers meaningfulness primarily in terms of composers' positions on the question of external reference (of whether or not sound refers)—the same question that preoccupied post-Schaefferian electroacoustic composers. Here there is a divide between those who find it 'impossible to hear sound separately from the contexts that lead to its creation and consumption', and those for whom 'successful electronic music purifies sound to its most basic materials, elements that possess no residual associations to the outside world'.[74]

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[70] Demers, *Listening Through the Noise*, pp. 6, 72-73.
[71] Ibid., p. 9.
[72] Ibid., p. 12. See also Peter Bürger, *Theory of the Avant-garde*, trans. Michael Shaw, Minneapolis: Uniersity of Minnesota Press, 1984.
[73] Demers, *Listening Through the Noise*, p. 13.
[74] Ibid., p. 13.

She considers sound as a 'sign' when it refers to the outside world (as in Luc Ferrari), or when it points to the real or simulated 'construction, reproduction, or destruction' involved in the manipulation of the sound as a 'malleable material'. Conversely, she calls sound an 'object' when it is intended to be 'an entity with no pre-existing semantic content', as in certain microsound pieces, or the 'maximal objects' of drone and noise music, which 'push sound beyond semiosis to a state in which it communicates directly to listener's bodies.' In addition, she looks for meaning arising not from the sound's own properties but from its interaction with its spatial 'situation', as in much sound art.[75] The book is organised so as to show how these conceptions of meaning (sign, object, situation) cut across the three meta-genres (institutional, electronica, sound art). The limitation of the approach is the focus on the question of reference, especially because in all the styles covered this question supervenes on a set of presuppositions that already constitute meaning: that sound has been materialised (as an 'object'), that there is a move beyond a 'musical frame', that sound is the subject matter of a work (unlike in ordinary music), etc. These are connotations arising from the expression-plane, independently of whether one believes that there is an identifiable content.

One of numerous fruitful comparisons Demers makes, however, is between 'institutional' and 'independent' microsound composition. The principle of using grains of sound allows for a number of stylistic orientations that are not dependent on the granular technique. Curtis Roads is probably the leading exponent of the institutional kind, and his idiom often recalls post-Schaefferian electroacoustic music, as in *Point Line Cloud*. Work by non-academic producers, such as Richard Chartier, Miki Yui, Carsten Nicolai, and Ryoji Ikeda, tends to be more minimalist: sparse and/or very quiet, and/or repetitive.[76] The most 'heteronomous' microsound style is probably that of glitch music that recalls the idiom of Electronic Dance Music, as in the *Clicks + Cuts* albums released by the *Mille Plateaux* label (2000-). According to Demers, this constitutes a reintroduction of a musical 'frame': by recognising a track as 'music', one is supposedly less inclined to focus on the sound source (i.e., she concurs with Scruton's conception of the acousmatic, rather than Schaeffer's).[77] Since the sound material used in such tracks resembles everyday sounds produced by various devices, this suggests once again that the notion of the 'frame' is above all organisational. In this case, the frame is constituted mainly by pulse and rhythm, and this makes an intriguing

[75] Ibid., pp. 13-15.
[76] Ibid., pp. 71-78.
[77] Ibid., pp. 86-7.

complement to the Eno tracks discussed above, in which harmony and fragmentary melody were more explicit than rhythmic structure.

Ikeda is a particularly interesting example. He uses a limited, highly distinctive palette mainly of sine tones, white noise and impulses (clicks), with a pronounced contrast between very short and moderate durations. There is also a contrast between recognisably periodic sounds, establishing a pulse or indeed metre, and entirely non-memorisable configurations. His rhetoric is rather subtle, as Adam Collis has shown in a recent analysis. On the one hand, he evokes the various layers of EDM (drums, bass, chords) as well as formal conventions, such as cumulative layering and 'single bar "drop-outs"'; on the other, he avoids conventional pitch relationships between layers and the formal use of harmonic rhythm.[78] Collis interprets this in terms of the theme of the 'prioritising of space of time', which, as I mentioned previously, is a staple of sound art discourse—and indeed Ikeda also creates spectacular audio-visual installations, which I shall mention briefly in the next chapter. Perhaps because of this partial subversion of the EDM idiom, Demers describes Ikeda's album +/- as an 'awkward compromise' between the 'abstraction' of Yui and Chartier (which is supposed to direct the ear towards the sound) and the 'referentiality of EDM' (referentiality in relation to the dance idiom, and not to sound sources).

### 4.2.5 Consonance and noise

To conclude, still with reference to Demers's book, I turn briefly to the topic of the coexistence of consonance and noise. She highlights that this relationship is an important trait of certain experimental electronic music. A consonant, sometimes tuneful pitch structure can be heard through extreme distortion and noise. She refers to electronic composers such as Alva Noto as well as the alternative rock/shoegaze band My Bloody Valentine. Her interpretation emphasises the violence of noise and the 'paradox' of the combination of theoretical harmoniousness, which she associates with beauty, and overpowering noise. Her starting point is that the 'materials' of such music (i.e., abstract pitch materials, rather than sound material) 'might be considered conventionally beautiful if heard without electronic amplification or processing.' She observes that 'we can hear [such works] as sublime objects because they contain an admixture of beautiful and dreadful elements: simple tonal language

[78] Adam Collis, 'Ryoki Ikeda and the Prioritising of Space over Time in Musical Discourse', *Organised Sound* 22/3 (2017), 378-384 (pp. 380-381). For an analysis of the similar idiolect of Carsten Nicolai, see Giacomo Albert, 'I linguaggi multimediali della popular music elettronica: Alva Noto', *Philomusica online* 13/2 (2014) <http://riviste.paviauniversitypress.it/index.php/phi/article/view/1713> [accessed 7 December, 2016].

submerged in pure noise or extreme dissonance, loud volumes and long durations.' She goes on to explore connotations involving excess, pain, and transgression (such as Masami Akita's interest in bondage, which can be regarded as a red herring in this context, since his work is rarely consonant or melodic).

The coexistence of familiar musical relationships and noise is undoubtedly an essential part of the meaning of such music. In the case of My Bloody Valentine, for example, this is confirmed by the leader Kevin Shields's distilled description of the band's approach as 'pure noise and pure melody'.[79] Demers's interpretation captures this but she assumes unnecessarily that the use of consonant pitch relationships needs an explanation, on the basis that these relationships entail 'tonality' and thus 'language', and by extension an association with Western art music:

> amid devices and imagery that point to the pushing of physical, physiological, and psychological limits, these works use consonance and tonality, foundations of the language of Western art music. Electronica artists usually posit themselves as avant-gardist in terms of their methods and their position within music history. Why, then, would they employ aspects of an older musical language that have become so suspect?[80]

Demers elides the anti-commercialism of experimental electronica with the modernist repudiation of tonal syntax, referring to Adorno's aesthetics and then to the (implicitly postmodern) 'recuperation of tonality and beauty' by the minimalists and others. She explains the retention of 'language' by emphasising the subversive use of 'beauty':

> For some [popular artists], the way around this potential stumbling block [that of commercialism] is the pairing of beautiful *writing* with noise, static, interference, and the placing of these elements in situations that demand concentrated listening over long stretches of time. Beautiful melodies and recurring consonances can thus destabilize a work, making it excessive, voluptuous, and decadent. Noise and beauty might initially seem like opposites, but in combination, they dismantle the musical frame that used to maintain a healthy distance between the artwork and the outside world.

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[79] Quoted in Simon Reynolds, 'It's the Opposite of Rock 'n' Roll', *Spin* 24/8 (August 2008), pp. 78-84, <https://www.spin.com/2008/08/my-bloody-valentine-opposite-rocknroll/> [accessed 17 July, 2019].
[80] Demers, *Listening Through the Noise*, p. 103.

> In other words, beauty and noise in electronic music can conspire to produce a sense of excess.[81]

The obvious objection to this is that consonance does not entail tonality in the classical sense and that the producers mentioned neither use the tonal system as practised in classical music nor have any reason to adopt atonality.

Let us briefly consider My Bloody Valentine, who might appear to be the most 'linguistic' of Demers's examples in that they are within the tradition of rock song-writing. Admittedly, the band sometimes dispenses with 'language' altogether: their live performances were especially notorious for the fifteen- or twenty-minute barrage of nauseatingly loud feedback that they inserted into 'You made me realise'. In general, however, they broadly adhere to norms of song-writing in respect of metre and structure as well as melody and harmony (many power chords and Sus 4 chords). Metre is quadruple: the albums *Isn't Anything* and *Loveless* both draw attention to this from the outset with drum pick-ups. Macro-structure is on the minimal side: usually instrumental riffs alternate with verses. Harmony is standard: plenty of parallel motion in power chords with Sus 4 chords. It is worth noting that their songs are not entirely consonant: for example, the main riff of 'You made me realise' is in tritones rather than perfect fifth power chords (a hint of the aural assault to follow: given enough contextual knowledge, the tritones connote 'approach an exit'). However, both options (perfect fifth and tritone) are conventional, and this illustrates that what is at issue is convention more than consonance.

Their distinctive 'sound', perfected in *Loveless*, combines extremely amorphous guitar textures in several tracks (an effect represented visually on the album cover, which also 'colours' one's listening) with relatively undistorted drums, bass, and vocals, the vocals being conspicuously gentle and androgynous, and the lyrics largely inaudible. Melody is indeed 'pure', both in a morphological sense, in relation to distinctly impure harmony—but also in a semantic sense, i.e., incongruously innocent and peaceful, often major-mode even when the harmony suggests a minor mode.[82]

The album is widely regarded as a milestone on account of this sound, definitive of the shoegaze genre but also distinctive within that genre. Most critical attention has been on

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[81] Ibid., p. 104. My italics.

[82] Chris McDonald has claimed that the album's opening song 'Only Shallow' is an example of an idiom in alternative rock, that of 'a progression that first established a mode, and then introduces a chord that contradicts that mode'. Nirvana also frequently used this resource. See 'Exploring Modal Subversions in Alternative Music', *Popular Music* 19/3 (October 2000), pp. 358-59.

the performance and production techniques used, on Shields's time-consuming perfectionism in trying ever new combinations of amplifiers and other apparatus, and on the semantic side. A quick summary will be enough to show that many of the textural or morphological characteristics that I have observed in previous examples can also be found in this album, although the technical means and semantic results are very different. Shields's most noted technique in the guitar tracks was to make pitch constantly glide up and down through his idiosyncratic use of the tremolo arm (continuous and slow rather than intermittent and fast). This also affected timbre. The results were made still more complex by his simultaneous use of two amplifiers that responded differently. At the same time, he used 'reverse reverb' to produce a disconcerting amplitude envelope, with (once again) a subdued attack. This is in addition to the ongoing distortion. By mixing several parts of this type Shields created a highly continuous and amorphous overall sound, with a grainy or smooth continuity corresponding to very fast or minimal strumming. It is a sound in which the source of each component is often unclear, not least because he also incorporated samples of the band members (sometimes mixed with synthesised flute).[83]

Although these sonic and textural effects are more individualised than the melodic and harmonic organisation, the fusion of the two is what defines the band's 'sound' in the holistic sense I mentioned earlier. It is important that the virtual chord structure, despite being not what one actually hears, nonetheless attracts attention in its own right (as does the non-metrical, non-repeating chord structure of Scelsi's *Ohoi*). This is partly because the surface texture is so difficult to grasp, but also because the chord structure provides metrical as well as harmonic cues. The listener in this case is forming an abstraction of *both* the theoretical, 'beautiful' substructure and the wavering surface.

## CONCLUSIONS

In this chapter I have considered two stylistic extremes within electronic music: the 'spectromorphological' principle of electroacoustic music composed especially in research contexts, and the more relaxed acceptance of modality and metre in other styles, notably in

[83] See Torben Sangild, 'Noise: Three Musical Gestures—Expressionist, Introvert and Minimal Noise', *Journal of Music and Meaning* 2 (2004), <http://www.musicandmeaning.net/issues/showArticle.php?artID=2.4> [accessed 17 July, 2019]; Samantha Bennett, 'Time-based Signal Processing and Shape in Alternative Rock Recordings', *iaspm@Journal* 6/2 (2016), 3-21 <https://iaspmjournal.net/index.php/IASPM_Journal/article/view/782> [accessed 17 July, 2019]; Simon Reynolds, 'It's the Opposite of Rock 'n' Roll'; Mike McGonigal, *Loveless*, New York, London: Continuum, 2007. Tom Doyle, 'Classic tracks: My Bloody Valentine 'Only Shallow', <https://www.soundonsound.com/techniques/classic-tracks-my-bloody-valentine-only-shallow> [accessed 17 July, 2019].

popular electronica (my one rock example can also be considered a studio artefact). These approaches both reflect the interpretative premises that I summarised above with regard to the advantages of the studio, above all the rhetoric of working directly with sound. What differs is the degree of concern about the presence of notes and especially intervallic relationships.

In much post-Schaefferian music ('spectromorphology' or 'sonic art'), the tendency is to transcend 'the note' by eschewing stable fundamental frequencies, or at least treating such frequencies with great caution so as to avoid 'lapsing' into tonality or even post-tonal chromaticism. As I suggested previously, the underlying premise here (made explicit by Leigh Landy), is that 'sound-based' music cannot be 'note-based'. This orientation leads to a convulsive style, a style of maximum flux, because the composer has to allow for the broadest possible interpretation of the 'note'.

From the spectromorphological perspective, music by producers such as Eno is surely 'note-based'. However, such music also aspires to a move 'from note to sound' in its own way, not only because it does not rely on the 'note' as written symbol but also because it moves 'beyond' the *classical* note in morphological terms. As Eno and his commentators emphasise, the studio note is marked by a blend of pitch and noise and/or conspicuous 'internal' shaping (as in spectromorphology but without the attenuation of the fundamental); the latter factor is connected to the slow harmonic rhythm that is so common in ambient, minimal techno, and other genres. Admittedly, these traits will not necessarily convince an interpreter with a strong morphological bias that the note has been transcended to a meaningful extent in Eno. As I have already argued, the concept of the 'note' is much more ambiguous than it might appear and is very often used to advance particular stylistic agendas. I also regard it as reductive to call classical music 'note-based', although this charge may seem more noticeably reductive in the case of electronica.

My broader point is that, in both approaches, the idea that sound is being worked with 'directly' depends on an organisational strategy that takes on its own life as a substitute language. As we have seen, composers such as Emmerson have been unusually candid about this process, by theorising the 'language of electroacoustic music'. The spectromorphological flux begins as a way of getting to the heart of sound and even restoring the 'primacy of aural perception', but takes on its own life as an autonomous, self-justifying formal principle. However, this is not to say that the retention of modality in electronica is stylistically 'neutral', or without norms and biases with regard to the *kinds* of modal configurations that are accepted. It is plausible that many electronica producers concur with their university-based peers in holding classical music as the negative model of 'ordinary' and 'linguistic'

music, but regard a minimalist approach as successfully transcending this model. As it happens, there is at least one repertoire that evokes classical syntax in incongruously contemporary sound material: the ‘neoclassical’ metal of musicians such as Yngwie Malmsteen. Unsurprisingly, this is repertoire is little discussed in surveys of the sonic turn.

Some organisational position *has* to be taken with regard to pitch; there is no neutral option. I therefore regard the modal (minimalist) norm in electronica as equivalent to the other norms discussed so far: the modernist chromatic norm in Varèse and Feldman; the microtonal norm, as in Scelsi or the typical spectral composition (other than for piano); and the spectromorphological norm of keeping the whole spectrum in flux without privileging any fundamental. Each norm is implicitly regarded, in its respective world, as the least grammatically and rhetorically loaded option.

# CHAPTER 5. BEYOND MUSIC

In this chapter I consider the interpretation of sound art, examining a number of influential texts and focusing especially on the relationship between sound art and music. Although most authors now agree that no unequivocal boundary can be drawn between these two art forms, it remains customary in sound art discourse for music to be treated as the 'ordinary' other. My main argument is that the same interpretative framework analysed in my previous chapters (selective hypostatisation and particularisation of sound on the one hand, selective identification of convention on the other) still operates in sound art discourse, but is now projected on to the level of artistic 'domains'. That is, the idea of an exceptional materiality and particularity of sound now resides in a vocabulary of sound as a *fine art material* or *medium* ('much like oil painting', as Caleb Kelly put it), while various constraints imposed on sound are categorised as essentially *musical*.

This way of thinking is consistent with the standard view of sound art as a highly open-ended field that is best understood in practical, conceptual, and institutional terms, rather than being defined by particular sonic characteristics. As an extension of the fine arts, such work is 'exhibited', 'installed', or realised in some other institutionally recognised way (conventional acoustic performance being the most firmly excluded way) by official artists, in galleries or temporary exhibition spaces; the work is then discussed in the art press and by art scholars. In this sense (which I do not see any reason to dispute), sound acquires the status of 'art material' by virtue of being 'exhibited' in this way.

However, I argue that it is again the case, in sound art as in declaredly sound-oriented music, that the belief in a privileged mode of working with sound (in this case, as 'art material') also depends on decisions about sound material and *organisation*, and not only on the particular concept or physical set-up of an installation. Most often, this special status is *conveyed* through a radical neutralisation of conventional musical language. Indeed, artists tend to go even further than experimental composers in pursuing a zero degree of musical rhetoric. However, it is noticeable and perhaps inevitable that they tend to use anti-rhetorical figures that are also commonplace in experimental music, especially the drone, click, cloud, and loop—often in more extreme manifestations (e.g., a completely undifferentiated drone lasting for several years).

It is also noticeable that, despite these correspondences, artists and other writers on sound art tend to gloss over the possibility of any *style decision* on the artist's part that might

be *comparable* to those of composers. This is another tendency that could already be observed in discourse on sound-oriented music. The novelty here is that the idea of sound as an institutionally consecrated art material provides a new way of dissociating the artist from what in the musical domain would be recognised more readily as the adoption of a style.

One twist of sound art aesthetics, in relation to musical sonicism, is that it is more frequently asserted that sound is used as a means to non-sonorous ends. In Chapter 1, I gave the example of Neuhaus, who claimed to use sound 'as a subtle tool to shape a new perception of space'. This in itself is not the twist, but another example of the post-emancipatory stage of sonicism, in which the belief in a privileged mode of working with sound is so unquestioned that the declared aesthetic focus turns elsewhere. In asserting that sound is being used *not* for its own sake, a sound artist runs no risk of being mistaken for the formalist, 'ordinary' predecessor who took sound for granted, because the declared non-sonorous, conceptual end (e.g., a new perception of space) will invariably draw the viewer's attention back to the remarkable sonic means. These means are remarkable because they *are* sonic, and not tangible: they are an *extension* of the materials of fine art.

The twist is that there is a line of thought in sound art aesthetics that criticises *music* not only as constraining sound syntactically but as being exclusively concerned with sound objects. This was certainly not an accusation levelled at conventional music by Varèse or Feldman, although, as we have seen, it was anticipated to some extent in electronic music, in the reaction against Schaefferian reduced listening by composers such as Luc Ferrari. But certain authors, notably Douglas Kahn and Seth Kim-Cohen, have represented this listening attitude as intrinsic to music as a whole, and have related the Cagean and Schaefferian focus on sound 'itself' back to the ideology of the purely musical (a comparison I also made in Chapter 1). Therefore, in this chapter, I shall have to consider whether this line of thought is exempt from my own critique of selective sonicism and indeed whether it parallels my critique.

The chapter is organised as follows. After a discussion of the mainstream institutional grounding of the sound art domain, mainly with reference to Alan Licht's well-known survey, I consider some canonical sound art (or 'sounding art') works, relating their physical set-up to their sound organisation. I then discuss the discursive rhetoric of sound as 'art material', on the one hand, and 'musicalization', on the other. To conclude, I compare philosophical accounts of sound art and its status 'beyond' music by Christoph Cox and Kim-Cohen (authors closely associated with sound art) with that of Andy Hamilton, who approaches the matter from the perspective of (broadly analytic) philosophy.

## 5.1 When is sound art?

### 5.1.1 Practical factors

It is a commonplace that sound art resists definition. Opinions differ both on the utility of the term 'sound art' and on the nature of the boundary between such art (whatever it ought to be called) and music. I shall begin with these questions, which are constants of discourse on sound art, although there is no need to attempt to resolve all this uncertainty here. My own argument depends neither on the adequacy of the term nor on the reality of the boundary. The important thing is the underlying consensus that some fields in the contemporary arts involve sound but are distinct from or indeed 'beyond' music[1]—or at least beyond 'ordinary' music.

Since the 1980s, the term 'sound art' has been applied above all to a cluster of artistic practises centring on the sound installation but including certain other types of work, such as the 'sound walks' of Janet Cardiff, Christina Kubisch, and others. Other activities, such as field recording, tend not to be labelled so automatically as 'sound art' but are viewed as belonging within a broader conception of 'sound in the contemporary arts'. A number of authors have sought to avoid institutionalising a core sound art by proposing seemingly less committal terms such as 'sound by artists' or 'sounding art'.[2] Christoph Cox, whose writing I discuss in some detail below, embraces 'sound art' and applies it quite broadly, but even he sometimes uses 'sonic practices' and other near-synonyms; this may reflect a similar reservation. Nonetheless, these phrases can normally be recognised as cautious alternatives to 'sound art'. Among writers who are influential in this area, Douglas Kahn has been perhaps the most tenacious in resisting the reification of sound art and has written mainly about the (mainly twentieth-century) 'history of sound in the arts' as broadly as possible, including radio art and even literary evocations of art.[3]

Max Neuhaus, meanwhile, famously rejected the term 'sound art' on the basis that it was not used restrictively *enough*. What irritated him in particular was what he regarded as the passing off of experimental music as art. He wrote, in a statement for the MoMA exhibition 'Volume: Bed of Sound' in 2000:

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[1] As in the subtitle of Alan Licht's *Sound Art: Beyond Music, Between Categories* (New York: Rizzoli, 2007).
[2] As in Dan Lander and Micah Lexier (eds.), *Sound by Artists* (Toronto, Banff: Art Metropole and Walter Phillips Gallery, 1990); and Marcel Cobussen, Vincent Meelberg, and Barry Truax (eds.), *The Routledge Companion to Sounding Art* (New York, Abingdon: Routledge, 2017).
[3] In his most widely-read book, *Noise Water Meat: A History of Sound in the Arts* (Cambridge, Mass.: MIT, 1999), Kahn does not mention 'sound art'. Thus, for an explanation of his avoidance one must look elsewhere: 'Sound art, art, music', *The Iowa Review Web* 7/1 (August 2005). <https://www.elo-repository.org/TIRweb/feb06/feb06_txt.html> [accessed 10 August, 2019].

> When faced with musical conservatism at the beginning of the last century, the composer Edgard Varèse responded by proposing to broaden the definition of music to include all organized sound. John Cage went further and included silence. Now even in the aftermath of the timid 'forever Mozart decades' in music, our response surely cannot be to put our heads in the sand and call what is essentially new music something else—'Sound Art'. [...] If there is a valid reason for classifying and naming things in culture, certainly it is for the refinement of distinctions. Aesthetic experience lies in the area of fine distinctions, not the destruction of distinctions for promotion of activities with their least common denominator, in this case, sound. Much of what has been called 'Sound Art' has not much to do with either sound or art.[4]

Neuhaus's dislike of the *term* 'sound art' did not imply any doubt as to the boundary between his type of work and music. His intransigence in this regard may have been connected with his own musical background. How ought one to classify his work? According to his website, he was 'the pioneer of *artistic activities with sound*. A renowned interpreter of contemporary music while still in his twenties, Neuhaus went on to become the first to extend sound as an *autonomous medium* into the domain of contemporary art'.[5]

Neuhaus was not alone in wanting to see off musical interlopers. David Toop quotes Minoru Sato (whose work, like Neuhaus, sometimes involves drones) as complaining that 'most sound works have been requisitioned by music' and consequently that 'we are forced to think that the perception/consciousness of the aspect of sound as a phenomenon has not been valued.'[6] That Sato would draw this conclusion is another excellent example of selective sonicism in sound art.

More recently, a softer approach to the policing of the boundary between art and music has become more common. This seems reasonable, both because traditional music is already defined as an 'art of sounds'[7] and especially because that the common ground shared by sound art and experimental music is too obvious to ignore. The overlap is above all with experimental electronic music, since installation normally implies the use of electronically

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[4] Max Neuhaus, 'Sound art?' Liner notes for "Volume: Bed of Sound", P.S.1 Contemporary Art Center, New York, July 2000. <http://www.max-neuhaus.info/bibliography/> [accessed November 1, 2012].
[5] <http://www.max-neuhaus.info/> [accessed November 1, 2012]. My italics.
[6] From a catalogue for Sonic Perception 1996 (Kawasaki City Museum). Quoted in David Toop, *Sonic Boom: The Art of Sound* (London: Hayward Gallery, 2000), p. 119.
[7] Vincent Meelberg acknowledges this in the introduction to *The Routledge Companion to Sounding Art*, pp. 1-2.

generated or recorded sound, with no performance. Non-electronic sound material is also used, especially in the broader realm of 'sound in the arts': sound caused by the visitors, by the environment or even by unconventional performance, as in the subversive performance art of the Fluxus group or Vito Acconci's notorious *Seedbed*. But few of the sounds produced would be inconceivable in Cagean experimentalism. This is to say nothing of the incursions of music into happenings and sound spatialisation, both of which might seem natural territory of sound art. In short, one has to adopt a tendentiously conservative view of music in order to sustain the idea of a clear-cut division between music and sound art.

In any case, a non-dogmatic approach also carries its own prestige: reluctance to be categorised goes with the territory both of experimental music and sound art. It has thus become quite common for practitioners to have a foot in both camps, or at least to avail themselves of both terms, musician (or composer) *and* sound artist. Francisco López is well-known example.[8] This form of self-representation still presupposes that there are two domains and it still implies a move beyond the limits of *ordinary* music.

It is worth adding that some artists exclude their own work from both sound art and music. For example, Alan Licht quotes the radio artist Ian Murray as stating that 'radio art is not sound art—nor is it music. Radio art is radio... radio by artists'[9]—the same formulation as 'sound by artists'.

Licht's frequently-cited book, an early survey of sound art, is revealing for the very direct manner in which he stresses institutional context. Sound art for him implies 'an exhibition situation rather than a performance situation';[10] it has 'visitors' rather than an 'audience'.[11] Music, on the other hand, is 'timed-based'—a property he associates with the 'use of concerts and performance'.[12] He proposes the following types of sound art:

> 1. An installed sound environment that is defined by the space (and/or acoustic space) rather than time and can be exhibited as a visual artwork would be.
> 2. A visual artwork that also has a sound-producing function, such as sound sculpture.

[8] <http://www.franciscolopez.net/> [accessed 1 November, 2012].
[9] Licht, *Sound Art*, p. 119. The emancipation of radio from sound art will have to be analysed elsewhere.
[10] Ibid., pp. 12-14.
[11] Ibid., p. 75.
[12] Ibid., pp. 12-14.

> 3. Sound by visual artists that serves as an extension of the artist's particular aesthetic, generally expressed in other media.[13]

This classification distils a number of common themes of sound art discourse. First there is the space/time dichotomy. This was one of Neuhaus's main ideas but not unique to him: the particular way sound occupies or transforms a given space has always been a major concern in sound art. According to one study, this is especially true of the Germanophone tradition of *Klangkunst*.[14] There is a beautiful economy in the fact that space/location is both the most common subject matter of sound art and its main source of institutional validation.

The idea of an art of space is closely connected to Licht's next category, that of art works that are both sonic and visual.[15] Clearly, even an empty gallery space constitutes a striking visual element. This is in turn related to Licht's third category, which is a catch-all allowing borderline cases to be adjudicated on the basis of the artists' authority. They acquire this status through their participation in a primarily visual art world. Often, their formal training is in the visual arts and not in music (this is also true of many musicians in the popular sphere, including Eno) but this is not indispensable: Max Neuhaus and Christina Kubisch are famous counter-examples. The important thing is that they make their way into the fine art world, and their status as sound artists (rather than experimental musicians) is especially secure if they are also known for making purely visual work. For example, the artist Christian Marclay's turntablism is mentioned in sound art literature even though it can safely count as free improvisation;[16] indeed, he has performed with musicians such as Sonic Youth.

It is significant in this respect that Russolo, who is generally regarded as a precursor of sound art and tends to be taken more seriously in histories of sound art than of modern music, was a trained painter. He mentions this in his manifesto: 'I am not a musician: therefore I do not have acoustic predilections, or works to defend. I am a futurist painter who projects out of himself into an art he much loves [that of sounds] his will to renew

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[13] Ibid., pp. 14, 16. Sometimes art, especially photography, *concerning* sound is discussed in surveys of sound art.

[14] For a comparison of English- and German-language discourses on sound art, see Andreas Engström and Åsa Stjerna, 'Sound Art or *Klangkunst*? A reading of the German and English literature on sound art', *Organised Sound* 14/1 (2009), pp. 11-18. Spatialised sound is, of course, a feature of many musical works, from the Venetian School to electroacoustic music and Nono's *Prometeo*, but is not the norm; in sound art it is standard. On the connection between sound and space in sound art, see also Brandon LaBelle, *Background Noise: Perspectives on Sound Art*, New York: Continuum, 2006.

[15] David Toop has also emphasised the visual in his definition of sound art as 'sound combined with visual art practices'. In the catalogue for the Hayward Galley's Sonic Boom exhibition. Toop, *Sonic Boom*, p. 107.

[16] Licht, *Sound Art*, pp. 204, 280-281.

everything.'[17] On the other hand, in contrast with modern sound artists, he devised notation for his noise compositions.

### 5.1.2 Organisational criteria

Licht's typology includes only one clue that there might be implicit organisational considerations in play: that sound art is not 'time-based' or 'defined by time'. On the most banal level, this means that visitors can walk in and out of an installation at will. There is no need to experience the beginning or end, if there is an end. It seems clear, however, that 'time-based' also implies 'syntactical'. Licht is, therefore, touching on an implicit norm of sound art: that of eschewing musical language, so that 'visitors' do not perceive themselves as a mobile 'audience' walking in and out of—or around—a performance or transmission of music. (I shall return to a notable exception later.)

Licht does mention that sound art tends to be non-narrative and impersonal in character. Sound art, unlike music,

> rarely attempts to create a portrait or capture the soul of a human being, or express something about the interaction of human beings—its main concern is sound as a phenomenon of nature and/or technology. [...] Only as the visual arts became increasingly abstract would the idea of sound art, as opposed to music, find fertile ground.[18]

In a rather crude example of what Demers called the 'rhetoric of distinction', he states that music, 'like drama, sets up a series of conflicts and resolutions' and that this is because, unlike art, it depends on 'popular opinion and public demand.'

He acknowledges that drones and loops frequently occur in sound art but minimises their rhetorical or semiotic value, i.e., as correlates of the impersonal character so essential to sound art. He treats them mainly as a practical aid for the visitor:

> for a sound installation, even if it's seemingly static and fixed, it may take an extended period to fully understand everything the piece has to offer and to absorb the structure the sound artist has intended. A visual artwork manages to

[17] Russolo, 'The Art of Noises', p. 30.
[18] Licht, *Sound Art*, p. 75.

> freeze a moment in time as an image; installations that use loops or drones are an attempt to sustain a sonic moment long enough to examine in detail.

He then quotes Bill Fontana, who gives a more enigmatic explanation of the same figures: 'sounds that repeat, that are continuous and that have long duration defy the natural acoustic mortality of being silent.'[19]

In associating the 'time-based' with performance, Licht seems to suggest that, by eliminating performance, one also eliminates language and style. He quotes the artist Annea Lockwood (well known for her installed field recordings—including 'sound maps' of the Hudson and Danube Rivers) to this effect. She applies the term 'sound art' to

> pieces I make using electroacoustic resources, and which I intend to be presented in galleries, museums, and other places in which sound is, increasingly, conceived of as a medium per se, like video, lasers, but not as performance. [...] That's the difference for me, between music and sound art. There's some distinction to do with the conceptual, also. I think maybe what's termed "sound art" doesn't intend connection to the linguistic. Eventually, all styles of performance music become languages, even Cage's antilinguistic works, as people become more and more familiar with his intentions and sound worlds.[20]

Since the 'conceptual' must have some connection to the 'linguistic', it seems that by 'linguistic' she is referring to musical language and conventionalisation. However, it is unclear why it should be performance that entails this conventionalisation, or why 'electroacoustic' sound art (and not also electroacoustic music) would be immune to this process.

### 5.1.3 Policing the boundary of art

Licht's book is noted for his direct judgements including and excluding work from the domain of sound art.[21] He follows Neuhaus in suspecting that music is misrepresented as

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[19] Licht, *Sound Art*, p. 120.
[20] Annea Lockwood, 'What is sound art?', The EMF Institute (web page no longer available). Quoted in Licht, *Sound Art*, p. 10.
[21] He takes a slightly more conciliatory line in the slightly later article 'Sound art: Origins, development and ambiguities', *Organised Sound* 14/1 (2009), pp. 3-10.

sound art as a matter of deliberate cross-domain imposture or appropriation. He suggests that the label '"sound artist" lends a certain legitimacy that "experimental musician" may not have', and that musicians adopt it to pre-empt the disappointment of the audience by 'aligning this kind of sound work with the aims of non-time-based arts, rather than the aims of music.'[22] In his view, the term 'sound art' was somewhat compromised from the outset, since it was first used, at least in the United States, in 1982 by a foundation that 'primarily seemed to work with "experimental music" or "new music", although it did organize an early show of sound sculpture and other exhibitable work'.[23]

The overlap with experimental music that I mentioned above makes it especially interesting to observe authors' reasons for denying that Cage and his followers were sound artists. According to Licht, Cage is disqualified not only because of his 'use of concerts and performance' but also because of his very retention of the concept 'music' and his

> contention that all sounds can be music. His statement can be taken in two ways—that all sounds can be listened to as music or that they can be used as musical material by composers. Therefore, he is still thinking in terms of music, itself already an established art form, with sound as a potential *tool for composition* as opposed to another *art medium in and of itself*.[24]

This is the same opposition described in previous chapters, but on the domain level: in one repertoire, music, sound is a 'tool for composition'; in another, sound art, it is a substance 'in itself' and *not* a 'tool for composition'. That is, the identification of sound as an art medium wards off the stigma of composition, whereas, in music, even Cage's organisational strategies fail to remove this stigma.

Despite his emphasis on the element of performance in defining music, Licht is no less sceptical of work by electronic music producers, even when it is installed in an art context. In particular, he expresses reservations about the work of Ryoji Ikeda, Carsten Nicolai (also known as Alva Noto), and Richard Chartier. These are three of Joanna Demers's 'independent' microsound producers that I mentioned in the last chapter;[25] Ikeda and Nicolai have worked together. Ikeda is renowned for audio-visual works in which his distinctive audio tracks are correlated with monumental visual projections. The conceptual

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[22] Licht, *Sound Art*, p. 12.
[23] Ibid., p. 10.
[24] Ibid., pp. 12-13. My italics. It is worth noting that the other component of Licht's subtitle, 'between categories', is an echo of Feldman.
[25] Demers, *Listening Through the Noise*, pp. 75-78, 86-87.

aspect of these pieces tends to concern scientific or other data, which are 'materialised' by being converted into various visual motives, such as giant, erratically moving barcodes. This is connected to a semantics of the 'mathematical sublime'.[26] Since the music is sometimes metrical or periodic, it seems likely that the conversion of data, on the audio level, involves some concession to syntax, and Demers wonders whether Ikeda 'worked backwards' from rhythm to data, i.e. falsified the data.[27] More recently, Adam Collis has discovered signs of self-quotation between series of works, suggesting further data breaches.[28]

In any case, Licht's suspicions seem to stem from the fact that these artists also release audio CDs of, or in the same style as, the audio tracks of their multi-media works, and that these audio tracks fall too recognisably within the sphere of glitch electronica ('quiet soundscapes for the laptop generation'). Rather than extending a visual practice into sound, he suggests that they '*attach* sleek but bare visual components to their work', which include 'CD packaging' as well as installation. His view is that 'by "playing the art card," they're sometimes discussed and curated as sound art.'[29]

### 5.2 Sound organisation of key art works

Before discussing the idea of sound as 'art material' in more detail, it is useful to consider a few works that have become canonical (sound art literature is quite orthodox with regard to canon formation). In each case, I shall consider the relationship between the sound organisation and the way it is caused, i.e., the way in which the artist is responsible for it. This is usually a *diminished* responsibility in one way or another. This means that, despite the frequent correspondence to organisational mannerisms of experimental music (especially the drone and the loop), the practical and conceptual set-up of art works is often such that the organisation can be attributed to the contingencies of nature, architecture, machinery, or something else. This was already the case in the tape loop technique discussed in Chapter 4, and indeed Brian Eno has also exhibited sound art work.

The drone is perhaps the organisational principle most frequently acknowledged as being common to music and sound art. A number of individuals, including La Monte Young and Eliane Radigue, are widely recognised as having produced music *and* sound art, both

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[26] Maryse Ouellet, 'Par-delà le naturalisme: médiatisation du sublime dans les oeuvres d'Olafur Eliasson et Ryoji Ikeda', *RACAR: revue d'art Canadienne* 41/2 (2016), pp. 105-120 (p. 118).
[27] Demers, *Listening Through the Noise*, p. 133.
[28] Collis, 'Ryoji Ikeda and the Prioritising of Space over Time', pp. 381-382.
[29] Licht, *Sound Art*, pp. 210-211.

based on drones. Christoph Cox acknowledges that the drone 'has always been a figure of temporal continuity and endlessness', in music as well as sound art.[30] As I mentioned previously, Neuhaus was an artist especially associated with drone-based works, such as *Times Square*. In certain installations he used other resources, such as dense streams of clicks, comparable to microsound, but did so according to the same general principles: avoiding any syntagmatic element, and giving character to space.[31] In *Times Square*, the syntagmatic is now reduced to nil—unless one counts the most minute fluctuations of intensity, possibly related to air flow. However, in rigging up the sound generator, Neuhaus determined the sound material, the particular 'expression-substance', which includes a perceptible harmonic element. In this sense, his own compositional authorship was more decisive than in some other types of sound art, despite his syntactical reductionism.

*Times Square* is one of Neuhaus's so-called Place works. Others, by contrast, have an explicit temporal structure, albeit one of the utmost impersonality and monumentality, in that the drones gradually become louder before suddenly cutting off, then resuming, again and again. He classified these as Moment works. In musical terms, we could say that these pieces use a gesture of the *da niente* morphological type, vastly elongated, and precisely repeated. In *Time Piece Beacon* (2005-), the cut-off happens every hour. The idea is that each the time the drone stops, the visitor has a heightened awareness of the sounds of the location[32]—in effect, an hourly burst of *4'33"*. Neuhaus himself likened the timbre of this drone to that of bells, and according to the curator Lynne Cooke, 'it evokes not merely the function but the character and rhetoric of campanology in rural places in time past',[33] although in fact the rhetorical dimension of campanology is precisely what is repressed.

It is useful to compare Neuhaus's drones with a less directly controlled equivalent, such as Alvin Lucier's *Music on a Long Thin Wire* (conceived in 1977), which is frequently discussed as at least a borderline case of sound installation. A wire, stretched between tables with a magnet hanging over it, is connected to a sine wave oscillator. Originally, a performer would manipulate the oscillator, but Lucier subsequently eliminated this aspect so that the vibrations of the wire would be determined only by the atmospheric conditions of the room.

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[30] Christoph Cox, *Sonic Flux: Sound, Art, and Metaphysics* (Chicago: University of Chicago Press, 2018), p. 154.
[31] Max Neuhaus, 'Conversation with Ulrich Loock', in *Max Neuhaus: Sound Works. Vol. 1 Inscription*, ed. by Gregory des Jardins (Ostfildern: Cantz, 1994), pp. 122-135 (pp. 122-123).
[32] Lynne Cooke, 'Locational Listening', in *Max Neuhaus: Times Square, Time Piece Beacon*, ed. by Lynne Cooke and Karen Kelly (Dia Art Foundation, New York, published by New Haven and London: Yale University Press, 2009), p. 38.
[33] Ibid., p. 38.

In effect, he thus 'de-musicalised' the piece, since the performance aspect was now limited to switching on the oscillator, activating the situation (which is, of course, also necessary for long-term installations of the Neuhaus type). A typical realisation elicits a sequence of micro-variations of vibrato and dynamics, beats, and overtones, somewhat resembling the most severe works by Scelsi. These elements are not composed but dependent on physical micro-processes in the installation space (although they *could* be transcribed and arranged). The important thing is that the differentiation of the sound is independent of a composer or performer.

Now let us consider a seemingly unrelated project, the 'electrical walks' of Christina Kubisch. These are not installations but 'sound walks'. Participants walk through a town wearing headphones designed by Kubisch to convert electromagnetic signals from various electrical sources (power generators, cash machines, etc.) into electronic sound. In this project, she creates a 'work' by planning a route that includes various sounds of interest, and by providing a map. This is in the nature of a prompt, as participants can in practice ignore the map and explore the urban environment autonomously. The sounds produced would not be out of place in experimental electronica: depending on the nature of the electromagnetic sources and perhaps the proximity of interfering sources, they tend to be sustained buzzing drones, erratically flickering variants, or buzzes with a recurring accent (in effect loops). Moreover, they 'fade in and out' (*da niente*/*a niente*) as a consequence of the listener's physical approach and withdrawal. A non-electromagnetic background layer of urban soundscape may be audible. Thus, if one listened to a recording of what participants hear, with no explanation, it would be easy to relate this to the world of minimal electronica; and indeed Kubisch has released a CD in which such recordings are organised into 'studio compositions that emphasise rhythms created by the signals'.[34] As in the Lucier piece, these elements of conventionality are seemingly accidental—but also entirely foreseeable since, as is evident, no other sound structures can be expected of the electromagnetic fields.

Many other correspondences of this kind, between experimental music and installed or mobile sound art, could be mentioned. Even in the intermediate area of 'field recording', which in semiotic terms could be described as a class of 'imprint' sign,[35] it is noticeable in many works that environmental sources have been chosen that yield highly continuous sounds, as in much of the work of Toshiya Tsunoda, or a mixture of continuous electronic hums, loops, and periodic clicks, as in López's *Buildings (New York)* (2001). Is it unfair to

[34] Licht, 'Sound Art: Origins, Development and Ambiguities', p. 6.
[35] Eco, *A Theory of Semiotics*, pp. 221-224.

suggest that artists embrace particular situations and concepts *partly* (in addition to their spatial, psychogeographic or other concerns) because those situations yield organisational signifiers that confirm that the work is a-syntactical and thus that it *is* art and not music? Such a suggestion is not depreciative in the least. It is merely acknowledging that a basic semantic opposition between 'syntactical' and 'a-syntactical' is pertinent to sound art as well as to experimental music aesthetics.

Before we move on, it is important to consider the exception that proves the rule: the installation, in effect, *of* music. Joanna Demers has noted that practical, location-based criteria of sound art (she refers specifically to those of Paul Hegarty) would not disqualify the installation of a stereo playing Beethoven's Fifth Symphony.[36] She plays this example down as a joke but she is right to highlight that such criteria often leave unstated certain assumptions regarding the 'musical': especially that an installation *of* traditional or well-known music would require special justification—and, conversely, that artefacts such as field recordings are liable to be categorised as experimental music once removed from the gallery.

The installation that she mentions, and probably the most discussed example, is Janet Cardiff's 'Forty-Part Motet' (2001), in which the visitor can walk among forty loudspeakers as they play back a recording of Tallis's *Spem in Alium*, one vocal part to each loudspeaker. The main conceit is the identification of loudspeakers with singers (not always individuals, as the soprano parts were sung by groups of children). The viewer-listener moves around the musical texture physically and not only psychologically. The installation implies a strange combination of intimacy and distance as the viewer in effect enters the virtual personal space of the singers in their absence. The piece also has a paratextual element in the form of a few minutes of chatter among the singers.[37]

As Demers points out, the status of this piece in the art domain has not been widely contested. Indeed, Licht regards it as 'more purely in line with the definition of sound art' than Cardiff's sound walks.[38] This appears to be due to the installation aspect. Demers contrasts this with a widespread reluctance to accept other audio works as sound art 'entirely on account of material', i.e., when they are not installed but released on CD.[39] Another key

[36] Demers, *Listening Through the Noise*, p. 129.
[37] This Cardiff piece is not unique. The artist Susan Philipsz is also known for installed musical works. *Lowlands Away* is an installed recording of her own rendition of a song, again from the sixteenth century, for which she won the 2010 Turner Prize. *Study for Strings* (2012) may be a conscious variant on the Cardiff, in that she used only the viola and cello parts from Pavel Haas's work of the same name, composed at Theresienstadt. In this case the organisational resource of fragmentation correlates to Haas's murder by the Nazis.
[38] Licht, *Sound Art*, p. 282.
[39] Demers, *Listening Through the Noise*, p. 130.

factor in the canonisation of the Cardiff piece is surely that she did not compose the music but appropriated it; it belongs to the tradition of found objects. The choice of sixteenth-century polyphony is also intelligent for syntactical reasons: within the pre-avant-garde Western canon it is perhaps the least 'time-based' (or most temporally 'vertical') style available. The appropriation of Tallis in particular is semantically well judged: it is a paradigm of textural density (and thus even more 'vertical' than usual). Moreover, it offers Cardiff the neat possibility of replicating Tallis's own spatial arrangement in her own installation. Installing Beethoven's Fifth Symphony would require more daring, but riskier still would be to compose and install one's own Romantic symphony, or indeed one's own glitch electronica. Installing continuous sounds, on the other hand, is a relatively safe strategy since decision-makers appear disinclined to regard such material as equally derivative.

## 5.3 Material versus convention

### 5.3.1 Sound as art material

The idea of sound as art material or medium is a new, institutional form of the hypostatisation of sound. It has the same rhetorical and ideological values that I have observed previously, along with some new linguistic advantages. As in Feldman and as in electronic music aesthetics, it conveys 'directness' and suggests that the work is autographic rather than allographic, practical rather than theoretical. The paradox of treating sound as a fine art material, 'much like oil painting', invites one to imagine that it is more solid and present than usual—an impression often encouraged through the use of sustained sound. The word 'medium' is now positively loaded, because of this connotation of physical extension: sound is no longer a *mere* medium in the sense of quasi-linguistic communication. Moreover, we should not forget the sheer Romantic prestige of 'art' as the object of aesthetic veneration. Although, as I mentioned earlier, music is traditionally defined as the art of combining sounds, this is not quite the same thing: 'art' in this sense may still suggest *techne* rather than modern 'fine art'.

Perhaps the most important aspect of the rhetoric of sound as a non-musical art material is that it allows artists and their interpreters to use the word 'sound' in a subtly proprietary way. In the discursive context of sound art, it is rare if not impossible for the word 'sound' merely to denote the auditory phenomenon. In this context, 'sound' already refers to 'sound as art material' or at least 'sound as *potential* art material', and thus already

implies sound *art*, even with regard to sound not caused by the artist. Sometimes this is confirmed by the immediate context, as in the phrase 'sound by artists' (the title of the Lander book), but even the word 'sound' without such qualification can imply this. Caleb Kelly's book is entitled *Sound* but one already knows from the cover that it belongs in a series called 'Documents of Contemporary Art'. In short, sound artists and their interpreters have given the word 'sound' the same polysemic structure as 'music'—as artistic domain and as audible instantiation of that domain—in addition to its everyday meaning. This explains the effectiveness of the collocation 'sound and music' (as in the UK arts organisation).

This is especially worth bearing in mind when the 'sonic turn' is discussed with reference to sound art. In such a context the idea of a shift 'from music to sound' tends to elide two different things: a broadening of interest from music to all sonic phenomena, and the superseding of one artistic domain by another. A neat example can be found in the introduction to the book *Sonic Flux*, by the philosopher Christoph Cox, one of the leading writers on sound art (I return to his main argument later).[40] He begins with a vignette: the fact that, in 1979 and 2004, the New York arts centre The Kitchen put on festivals respectively entitled 'New Music, New York' and 'New Sound, New York'. This is meant to be indicative of the sonic turn:

> This shift in title—from 'Music' to 'Sound'—is emblematic, for, over the past several decades, 'music' has lost its monopoly on the field of sonic art, becoming a subcategory within the broader field of 'sound,' the subject of increasing cultural fascination.[41]

What does 'sound' mean in this sentence? On the face of it, the message is that, at least in some quarters, people are developing a 'cultural fascination' for the phenomenon of sound in all its variety, whereas before they were focused on music, an art form that had particular sounds as its physical medium. So far, this is relatively unproblematic. However, on closer inspection, he is also equating 'sound' with 'sonic art' (i.e., music plus sound art). The inverted commas around both 'music' and 'sound' and the repetition of 'field of' hint at this equivalence but, logically speaking, what gives it away is the statement that music has 'become' a 'subcategory' of sound. In the analytic tradition (which is admittedly distant from

[40] He has also discussed the shift from music to sound in 'Von Musik zum Klang: Sein als Zeit in der Klangkunst', in *Sonambiente Berlin: Klang Kunst/Sound Art* ed. by Helga de la Motte-Haber et al (Heidelberg: Kehrer, 2006), pp. 218-223.
[41] Cox, *Sonic Flux*, p. 1.

Cox), this might be seized on as a category error, but it makes sense if 'music' denotes the sound of particular musical performances or playback—as in 'Turn that music off!' This is an everyday use of 'music' but does not fit the context, because Cox is discussing the privileged position of music as an art domain, and because it is not only in recent decades that musical sound has *become* a class of sound. The other logical option is that both terms denote artistic domains and/or their instantiations; i.e., 'sound' is a more portentous way of saying 'sonic art'.

But if this the case, why is it a *shift* and not a broadening out—unless there is a further implication that the shift in interest is really from music to *non-musical* sound *art*? It is clear from the sentences that immediately follow that this is indeed the implication and the thrust of the book:

> Not only has 'sound art' emerged as a prominent form of art making and exhibition embraced by galleries and museums across the globe, but the academy has also witnessed the rapid rise of 'sound studies' within and across disciplines in the humanities and social sciences. In the field of music itself, composers, producers, and improvisers [no mention of other performers] have become increasingly attracted to those sonic domains against which music has always defined itself: noise, silence, and nonmusical sound.
>
> This book aims to come to terms with this sonic turn in the arts and culture and, more specifically, to conceptualize sound art as a practice situated between and beyond music and the visual arts.[42]

Although composers are 'attracted' to the materials of sound art, sound art remains 'beyond music'.

This elision of 'sound' with 'sonic art' and 'sound art' is a rhetorical advantage that proponents of sound art have over composers. It identifies particular works with their physical material—and the various impressive properties of this material, i.e., its boundlessness, mystery, etc.—in a way that composers cannot emulate (unless they adopt the language of sound art). But it is also tendentious, even if the material of sonic art (which includes music) is theoretically coextensive with 'sound', because it elides an awakening, disinterested inquisitiveness about sound in general with the superseding of music by sound art. Cox's association of sound *art* with sound *studies* reinforces this move, since the latter

[42] Ibid., p. 1.

field represents encyclopaedic curiosity about sound, not just aesthetic interest. Composers undoubtedly attempt to make the same elision in the context of competing musical styles, but they cannot equate their work with its physical medium as effectively as artists; the Varèsian term 'organised sound' is still understood as an alternative term for *music*. It is, therefore, not surprising that composers might want to 'play the art card'.

### 5.3.2 Christoph Cox's sonic materialism

Now I shall look in more detail at Cox's philosophical theory of 'sonic materialism'. As I have just noted, he makes no secret of his commitment to sound art, although he treats experimental music as a close neighbour. He admits that the term 'sound art' is imprecise but regards it as discursively useful, because it 'registers that [or, rather, suggests that] "music" is no longer coextensive with the field of sonic art, and that there exist artistic practices *in which sound is paramount*—field recording, sound installation, and soundwalks, for example—that stretch or fall outside the conventions of music, musical performance, and musical recording.' It is significant that he includes musical *recording* in the 'ordinary' field, since he will give such emphasis to the phonograph with regard to sound art. Although 'Cage *responded* to this proliferation of sonic practices by extending the term "music" over the entire field of sound', he succeeded only in 'filling the category until it burst.' The adoption of the term 'sound art' has been a 'more helpful strategy, expanding the field of sonic arts beyond music', and allowing 'the critic, theorist, or artist to redraw the boundaries in revealing ways and to demonstrate material and conceptual connections among disparate practices and media'—practices that, to judge by Cox's examples, have in common the fact that they are all 'beyond' pre-experimental music, or are not sound-producing at all (e.g., Marclay's sound-themed photography).[43]

His distinctive move is to use philosophical materialism to elevate the rhetoric of materiality commonplace in avant-garde music and sound art discourse. Not content to characterise sound art merely on a practical-institutional basis, and regarding the time-space opposition as a 'red herring',[44] he develops a Deleuzean ontology of sound and uses it in sound art's favour at every turn, with remarkable directness. Rather than merely emphasising that sound art explores or foregrounds the physical reality of sound (although he also does this), Cox theorises a 'sonic flux' to which sound art gives special access. However, there is

[43] Ibid., pp. 4-5. My italics.
[44] Ibid., p. 140.

good reason to suspect that he is ontologising the usual avant-garde critique of traditional music.

He introduces the 'sonic flux' as 'the notion of sound as an immemorial material flow to which human expressions contribute but that precedes and exceeds those expressions.'[45] He makes it clear from the outset that he regards 'the sonic flux and the works of art that manifest it' as two aspects of the same inquiry.[46] The concept of the flux is not only the fruit of philosophical deduction but is 'revealed by [...] inventors and artists': first by Edison, who with the phonograph 'disclosed, and submitted to aesthetic attention, a world of sound beyond music and speech'; and then by the sonic avant-garde from Russolo to Kubisch and López, with some experimental and minimalist composers in between. It is these artists who 'affirm and explore the sonic substratum in its material flow'.[47] The image of the flow relates to the philosophy of Deleuze and Manuel DeLanda: Cox refers to the latter's conception of 'all of nature and culture as a collection of flows—of lava, minerals, biomass, genes, bodies, food, language, money, information, and so on'. However, among these he privileges the sonic flux, claiming that it 'manifests and models the myriad fluxes that constitute the natural world'; he does so with reference to Schopenhauer and Nietzsche, who privileged music as manifesting Will and the Dionysian.[48]

Over the course of the book, he associates the sonic flux with a number of related concepts: the interaction of sound and architecture;[49] 'noise' (not so much in the acoustic sense as in the sense of ignored, non-informative or disruptive sound);[50] the ancient Indian conception of a transcendental 'unstruck sound', as in Scelsi (although he does not mention Scelsi);[51] and Bergson's distinction between measured time (*le temps*) and experienced duration (*la durée*).[52] In each case, the subject is interwoven with a survey of the canon of sound art.

Is the sonic flux simply the aggregate of all the sound around us? Not quite: although Cox describes his position as materialist and realist, he subscribes to 'a transcendental realism for which the objects of empirical experience are the ongoing products of virtual structures and intensive processes that are immanent to matter but ordinarily hidden in their

[45] Ibid., p. 2.
[46] Ibid., p. 5.
[47] Ibid., p. 2.
[48] Ibid., p. 3. See also pp. 20-21, 29-30.
[49] Ibid., pp. 13-14.
[50] Ibid., pp. 114-119.
[51] Ibid., p. 126.
[52] Ibid., pp. 141-144.

results (though capable of being disclosed through science and *art*).'[53] His terminology is based on Deleuze's concepts (from *Difference and Repetition*) of the 'virtual', 'intensive', and 'actual', according to which the virtual (as opposed to the 'possible') is actualised through 'intensive' processes such as changes of pressure or temperature; in Cox's summary these intensive elements are 'the set of forces, powers, and differences that produce empirical beings'.[54] Cox's claim, then, is that sound art 'discloses' these elements, in the case of sound. But this raises the question of what it means to 'disclose', 'manifest', or 'reveal' the intensive processes of the sonic flux. Does this refer to air pressure processes? Are they transcendental? Or are these the actualisation of something else?

The negative complement of this aspect of Cox's materialism once again concerns language. He sets himself in opposition to semiotics, post-structuralism, and other approaches that emphasise the mediation of reality by discourse and signification, claiming that such counter-positions are 'confounded by the sonic, which eludes analysis in terms of representation and signification.' He adopts Friedrich Kittler's view that it was sound recording, in particular, that 'opened an ontological domain foreclosed by theories of visual and linguistic representation'; recording has given 'access to the [post-Lacanian] Real: the perceptible plenitude of matter that underlies all representation, a material core that is not a fundament but a primordial flux out of which all signals and signs emerge and into which they inevitably recede' (here he concedes that signs emerge).[55] And his 'materialist aesthetics' is a Deleuzean one in which 'works of art are never representations and they never signify. They *present* rather than *represent*. And what they present are blocs of sensations extracted from the flux of becoming.'[56] The peculiarity of 'sound and music' is 'their ability to go below representation and signification so as to reveal the experimentation with forces, intensities, sensations, and affects that characterizes all artistic production.'[57] This attitude with regard to representation, however, even if one provisionally goes along with Cox's philosophical position, is difficult to reconcile with the particular connotations of the sound art pieces discussed (such as Lucier's allusion to his own stutter in *I am sitting in a room*),[58]

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[53] Ibid., p. 6.
[54] Ibid., pp. 27-28.
[55] Ibid., p. 3.
[56] Ibid., p. 37.
[57] Ibid., p. 41.
[58] In Lucier's *I am sitting in a room* (1969) a spoken text is replayed back into a room until the resonance of the room obliterates it. The original text includes the following seemingly autobiographical explanation: 'I regard this activity not so much as a demonstration of a physical fact [although it is that too], but more as a way to smooth out any irregularities my speech might have'—irregularities that are evident in his own early recording. Brandon Labelle discusses this at some length. Seth Kim-Cohen points out, however, that not all performances,

or their quasi-indexical relationships to other things (natural/urban landscapes, technological apparatus, etc.).

Cox is also resistant to phenomenological interpretations, on the basis that, like post-structuralist ones, they 'begin and end with the human subject as the receiver and interpreter of auditory signals'; his materialism 'rejects the ontological and epistemological oppositions between subject and object, mind and matter, culture and nature'.[59]

Brian Kane has criticised Cox's position (as expressed in an earlier article)[60] in logical terms. He fixes in particular on Cox's use of verbs such as 'disclose', denying that works of art 'disclose their ontological condition', and especially that some do so more than others. He asserts, with reference to Nelson Goodman, that Cox is confusing exemplification with embodiment[61] and that '[a] work of sound art may *sound* more sonic (that is, may draw your attention to its 'sonicity') more than another, but no work of sound art *is* more sonic than another.' He also points out that, 'even if a sound art work could exemplify its ontology', then it would not be 'beyond representation and signification' and that Cox cannot possibly be doing anything other than drawing an analogy between the actual and the virtual.[62] In *Sonic Flux*, Cox shrugs Kane's criticism off by appealing to ontological pluralism and continuing to insist that 'works of art can reveal [intensive] production processes, and that some works of art do this more richly and profoundly than others.' He also insists that a 'sound installation is not a symbol for anything'.[63] However, it is evident that Cox's position depends on a *resemblance* between particular sound art works and a notional raw state of sound, which corresponds roughly to Wishart's 'continuum', without the humanistic 'gestures'.

In fact, Cox does not always use the metaphor of disclosure, and he sometimes formulates his claim in a more modest, orthodox way. He states, for example, that sound art 'has explored the materiality of sound: its texture and temporal flow, its palpable effect on and affection by materials through which and against which it is transmitted.'[64] Elsewhere, he concedes that what he calls the intensive is in fact perceptible, by stating that sound art 'draws attention to a transcendental or intensive domain of sound that has gradually become

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even by Lucier, include the stutter: *In the Blink of an Ear: Towards a Non-Cochlear Sound Art* (New York: Continuum, 2009), pp. 190-191.

[59] Christoph Cox, *Sonic Flux*, p. 4.

[60] Christoph Cox, 'Sound Art and the Sonic Unconscious', *Organised Sound* 14/1 (2009), pp. 19-26.

[61] Brian Kane, 'Sound Studies Without Auditory Culture: A Critique of the Ontological Turn', *Sound Studies* 1/1 (2015), pp. 10-12.

[62] Ibid., pp. 13-14.

[63] Cox, *Sonic Flux*, pp. 131-132.

[64] Ibid., pp. 18.

manifest over the course of the twentieth century'.[65] In this instance, the domain is identified as noise, and so the claim seems to involve the foregrounding of otherwise ignored sound—again, a relatively straightforward claim. A third variant is to say that a work such as *Wind [Patagonia]* (2007), a field recording by Francisco López, is 'a sort of sample of the sonic flux' that 'delimits a region of this flux for aesthetic attention and, in doing so, both discloses the intensive dimension of sound and points to the immemorial or "ancestral" flow from which the sample is drawn', i.e., the wind.[66]

Cox acknowledges that, since 'everything that exists is the product of intensive processes and the actualization of virtual tendencies and capacities', he has to explain why works of sound art should 'reveal their transcendental conditions any more than other entities and, specifically, more than conventionally musical works'[67]—especially as tonal music was good enough for Schopenhauer and Nietzsche. To answer this, he goes straight to the limitations of music (as usual, segmentation and the conventionality of the organisation of segmented units), rather than to properties of sound art, concluding, like Roger Scruton (but depreciatively) and unlike Schaeffer, that music de-emphasises physical cause:

> music tends to tame and territorialize this flux. Distinguishing itself from unintentional or nonmusical sound, it segments the sonic continuum, rendering duration as meter, and frequency as intervals and chords. It routes the sonic flux through systems of tuning and symbolic coding and shapes it into repeatable patterns. As John Cage puts it, music generally functions by transforming the 'purposeless process' of the sonic flux into a set of 'time-objects.' Moreover, our ordinary relationship to music is one of unthinking familiarity—the apprehension and production of perceptual and affective clichés, ready-made forms, conventions, and cultural associations that prevent us from hearing it as anything else. In short, for the most part, music operates for us according to the model of recognition and does not provoke us to think or to ask 'what is this sound?' or 'what are the conditions of its existence?'

By contrast, sound art 'does provoke us to ask these questions, compelling us beyond the objects of recognition and representation towards the material forces that generate them.' It is

[65] Ibid., pp. 113.
[66] Ibid., pp. 131.
[67] Ibid., pp. 136-137.

'that which, *both within and beyond music*, discloses the intensive dimension of sound.'[68] This is tantamount to conceding that stylistic negation is a prerequisite of the disclosure of the intensive dimension.

To underline this point, he writes approvingly of Joan La Barbara's experimental vocal solos, in which she highlighted the physiology of vocal sound production; he notes that they were premiered in art venues. He then seizes on a review by Tom Johnson, who characterised her techniques as 'research' that would probably later be developed into more orthodox compositions (to Johnson's regret), and takes this example to confirm that in most music the 'intensive forces *disclosed*' by La Barbara are not only of secondary importance but 'concealed, only occasionally arising like a [...] symptom or eruption of the sonic unconscious.' Sound art, by contrast, 'fully turned towards this intensive dimension of sound and has continued to make this dimension the subject of its enquiry'—i.e., by not developing the sounds. According to Cox, this is why sound art not only 'broadens the domain of the audible' but also 'discloses a genuine metaphysics of sound.'[69]

The ideal of the sonic flux in fact implies *norms*, and especially organisational preferences: anti-rhetorical and where possible anti-segmental. This could already be intuited from Cox's initial comparison with the micro-processes of nature, and even from the choice of the word 'flux'. In semiotic terms, the sonic flux may be regarded as a content expressed by sound art, connoting 'chaos' and 'the primordial', not unlike Scelsi's cosmic sound; this content could then be 'segmented' into 'room tone' and other categories. In this sense, to 'disclose' means to refer or exemplify, as Kane suggested. But the image of the flux also corresponds to the sum of possible expression-continua, from which sound artists take a sample (in all cases, not only López); in this sense, to 'disclose' means to *leave unformed*, or at least not *musically* formed.

This throws an interesting light on Cox's disapproval of hylomorphism. On the philosophical level, he regards hylomorphism as an obsolete conception of the genesis of entities;[70] but he also disapproves, as a matter of artistic principle, of the imposition of musical form on sound. It is as if sound artists are responsible for proving his ontology correct by shunning musical form.

The rhetorical benefit of a transcendental sonic flux is that it provides a metaphysical justification for an extreme minimalism commonplace in sound art, and discourages

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[68] Ibid., pp. 137.
[69] Ibid., pp. 138.
[70] Ibid., pp. 25, 46, 82.

reflection on the conventionalisation *of* this minimalism: after all, how could the intensive processes that generate any entity be regarded as conventional? Conversely, it naturalises culturally agreed biases regarding the discourse character of music. The image of the flux does not in itself explain the preference for non-traditional sound sources, although it may rule out particular traditional ones, such as traditionally played piano, which entails predetermined segmentation. Nor does it justify the bias against performance. If the mediation of a string quartet is a hindrance to the disclosure of the intensive dimension, this can only be explained by what the listener brings to the experience as the 'receiver and interpreter of signals'.

Where is the threshold of musical language, for Cox? It would be unreasonable to expect him to pin this down in analytical terms, although he makes the question tantalising by mentioning a number of experimental musicians, including some in the nominally popular domain (from Ornette Coleman to Eno), without confirming whether they too disclose the sonic flux. The chapter with the most direct discussion of organisation is the one on time. Here he elides Bergson's *temps* and *durée* with Deleuze's distinction between 'pulsed' and 'non-pulsed time', as well as Cage's contrast between 'time-objects' and 'purposeless process', in each case favouring the latter. The examples he gives are disparate but all organised using strategies that I have already covered. The 'ideal sensuous presentation' of Bergson's duration is the drone, as in Neuhaus.[71] However, before that Cox also interprets both Cage's incorporation of 'the domain of worldly sound' (above all in *4'33"* and *0'00"*) and Feldman's extreme expansion of 'scale' in terms of Bergson's duration.[72] He goes on to say that minimalism 'affirmed a similar conception of time'—and not only the drone-based minimalism of Young and Radigue but also the emphatically segmented work of Reich and Glass.[73] How is this a 'similar conception of time'? Here Cox switches terminology from 'duration' to Deleuze's 'non-pulsed time', which refers not to literal pulselessness but to the absence of 'narrative development'. The only common denominator is that conventional musical discourse is thwarted in one way or another.

Conversely, he expresses reservations about Florian Hecker's *Speculative Solution* CD, in which Hecker 'explicitly investigates the metaphysics of time', specifically Quentin Meillassoux's concept of 'hyper-chaos'.[74] Cox's criticism is both philosophical and stylistic. The work appears to fall short partly because (unlike the sonic flux) the concept of hyper-

[71] Ibid., p. 154.
[72] Ibid., pp. 141-144.
[73] Ibid., pp. 144-145.
[74] Ibid., p. 160.

chaos 'resists sensuous presentation' and is, according to Cox, untenable. However, he also mentions that Hecker's 'timbral palette and rhythmic choices are fully characteristic' of the electronica label involved, and his tracks 'obey a clear set of material and structural rules and fall well within established traditions of electronic music.'[75] This is a *selective* identification of style and conventionality, corresponding to Licht's criticism of Ikeda.

### 5.3.3 'Musicalization'

What, in sound art discourse, is the 'musical', on the other hand? It almost goes without saying that morphological and grammatical constraint are essentially musical. The more intriguing aspect is the critique of composers' exclusive focus on the sound object 'in itself'. Douglas Kahn has written on several occasions about 'musicalization', a term he says was coined by the sound artist Dan Lander. This term refers to the tendency of experimental composers, especially in the tradition of Schaeffer and Cage, to incorporate previously extraneous sounds into music only to suppress their real-world associations and potential meaning. Kahn has explained this as 'a neutral term and not intrinsically pejorative'[76]—and as 'a tactic to direct attention toward the semiotic complexity of sound and new ways of thinking about sound'; he adds that some of those concerned with this semiotic complexity were 'operating within music'.[77] He relates how proponents of the term 'musicalization' were surprised to find themselves accused of essentialising, when 'they were merely concerned with inhibitions within certain traditions of music'.[78] However, it is noticeable that Kahn consistently and often dismissively characterises music as inward-looking and parochial in comparison with sound 'in the arts'.

His essay on the Fluxus movement (as usual, not strictly a 'sound art' movement) is a good example of this. Fluxus, he says, was 'the most musical of the avant-garde […] art movements' but, although it was stimulated by music and especially by Cage, it should not be viewed as 'predominantly musical'. Music was useful for subversive purposes 'because its ostensibly "abstract" nature provided good ground for a malleability of meaning [a malleability absent within music], because the highly codified nature of its practice served as the perfect foil for an anti-practice, and because it was historically unexploited [except by

[75] Ibid., p. 165-166.
[76] Douglas Kahn, 'Sound Leads Elsewhere', in *The Routledge Companion to Sounding Art*, ed. by Cobussen et al, pp. 41-50 (p. 45).
[77] Kahn, *Noise Water Meat*, p. 18.
[78] Ibid., n. 12, pp. 363-364.

composers, performers, and listeners]'. In the history of avant-gardism, according to Kahn, 'with the exception of Italian Futurism, achievements in music certainly could not stand next to those of the visual arts, literature, performance, and cultural thinking in general.'[79]

He then sets out the 'limits of avant-garde music' by knocking down four pillars of the sonicist avant-garde, accusing them of perpetuating the musical tendency to abstract sound from its worldly meaning. First, Russolo, who 'inaugurated avant-gardism in music' by questioning 'the nature of musical materiality', fell short because he wished to 'avoid imitation':

> If he had chosen to create a compositional and performance practice based upon the tension between sound and musical sound, he might have created a (relatively) autonomous art of noises. Instead, his 'great renovation of music' became one that would not confound the representational bounds of what stood as musical sound.

Varèse (who, as we have seen, made precisely the opposite criticism of Futurism) merely 'domesticated Russolo's radicalism'. *Musique concrète* 'served only to repeat the general presuppositions of Russolo's project'.[80] Even Cage 'could only go so far if he was to remain within the bounds of music. Despite the expansiveness of his theoretical programme, he too had to keep sounds from referring to phenomena too far afield from the restricted realm of musical sound.' At this point he mentions 'musicalization', and contrasts it with 'an artistic practice of sound':

> To musicalize sound is just fine from a musical perspective, but from the standpoint of an artistic practice of sound, in which all the material attributes of a sound, including the materiality of its signification, are taken into account, musicalization is a reductive operation, a limited response to the potential of the material. [...] To ask, as Cage did, for sounds bereft of their associations was to dismiss the vernacular, deny experience, and repress memory—for there are no sounds at the material level heard by humans that are *heard* outside culture and society. There are no sounds heard through a pure perception—only an apperception 'contaminated' by sociality. Cage's ideas,

[79] Douglas Kahn, 'The Latest: Fluxus and Music' (1993), in *In the Spirit of Fluxus*, ed. by Elizabeth Armstrong and Joan Rothfuss (Minneapolis: Walker Art Centre 1993), p. 102.
[80] Ibid., p. 102.

> in fact, can be understood as protecting Western art music against an aurality that, during this century, had become increasingly social.[81]

Did Fluxus realise such an 'artistic practice of sound'? Kahn discusses some 'strategic options' that Fluxus artists explored in trying to move beyond Cage. He considers two main topics: 'the sonic materials of music' and 'musical practice and performance', i.e., the subversive exaggeration of concert hall rituals or tacitly prohibited activities (such as coughing or interrupting the music). The first topic is of more relevance to sound art and, probably for the same reason, is the section reprinted in Caleb Kelly's volume. Kahn notes that, in a reaction to the opening up of the field of sound, some Fluxus artists focused on 'the more circumscribed investigation of sound in its singular, existential and elemental state, concentrating on questions of border cases of sound production and audition'.[82] With regard to organisation, he has to recognise that the Fluxus artists extended 'existing processes and configurations'. One is extreme 'sustainment', as in La Monte Young's *Composition 1960 #7*, in which a perfect fifth is 'held for a long time', and Takehisa Kosugi's *South No. 1* and *No. 2*, in which a speaker utters the word 'south' very slowly (in *No. 2*, so as to last at least fifteen minutes). Kahn notes that the Kosugi piece is also an example of process music. Then there is obsessive repetition, as in Young's *X for Henry Flynt* (mentioned in my last chapter), in which any loud sound is to be repeated an indefinite number of times. And there is the play on the interaction of sound and silence, as in George Brecht's *Incidental Music* (1961), in which any sound resulting from various activities at the piano is regarded as incidental, and Young's *Composition 1960 #5*, in which a butterfly is released into the performance space.

Kahn's gloss on each of these resources is not substantially different from interpretations I have covered previously. For example, Young and Kosugi, by using 'techniques of repetition and sustainment', broke with 'traditional notions of the integrity of a single sound' and 'demonstrated that any single sound contained exceedingly complex processes of production, of internal configuration: that a single sound's interaction with corporeal and environmental space transformed it from one moment to the next; and, therefore, that a simple musical structure of repetition and sustainment was not simple at all.'[83] *Composition 1960 #7* (the sustained perfect fifth) was

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[81] Ibid., p. 103.
[82] Ibid., p. 104.
[83] Ibid., p. 107.

> so drastically simplified, that the very idea of time (measured or nonmeasured) in the conventional sense was dislodged and removed altogether. Time could no longer be measured as units of sound passed by, nor could any sequential organization of sound exist. The idea of a "single sound" that would normally have some type of morphological standing ceased to exist and was replaced by an emphatically phenomenal and experiential situation, as attention shifted fully onto the interior, vertical dynamics of the sound and upon the act of listening.

As in Neuhaus,

> [t]he diminishment of time also accentuates the spatiality of sound. Sustained sound can occupy and be heard differently in different rooms and from different places within a room, and it also may 'drift' from one spot to another. A space 'filled' with an almost palpable sound develops around one's body, thereby heightening a sense of corporeality, especially when the body is vibrated by amplified sound.[84]

As usual, this 'sense of corporeality' is the correlate of an organisational strategy, but in Young's case this strategy appears to be less tainted with 'musicalization' than it would be in Cage.

There is undoubtedly some truth in the idea that experimental composers and producers hope to integrate novel sounds into their work so that a unified 'musical' listening attitude can be maintained. But this is an irreducibly subjective matter. How does one know whether this integration has been achieved, and for which listeners? Kahn seems to be working backwards from the institutional status of the resulting artefacts in evaluating this. Moreover, the argument is one-sided since he does not characterise the 'artifying' of sound in the same way.[85]

### 5.3.4 Seth Kim-Cohen's conceptualism

Like Kahn, Seth Kim-Cohen values meaning and representation and rejects not only Schaeffer's Husserlian 'essentialism' but also the cult of 'sound-in-itself'. This puts him at

[84] Ibid., p. 108.
[85] Jerrold Levinson touches on criteria for 'artifying' non-art in *Music, Art and Metaphysics*, pp. 10-11.

odds with Cox's materialism. Kim-Cohen favours the conceptualist tendency in the visual arts, which he claims is suppressed in some sound art, or at least in its reception. He goes so far as to coin the motto of 'non-cochlear sonic art'—a reference to Marcel Duchamp's remarks about 'non-retinal art'. This forms the subtitle of his best-known book, *In the Blink of an Ear: Towards a Non-Cochlear Sonic Art*, in which he appeals to the very philosophers avoided by Cox as discourse-oriented, above all Derrida, as well as art theorists Rosalind Krauss and Hal Foster.

Kim-Cohen is in the Licht tradition in emphasising that he is writing about sound in 'the "gallery" arts'. He explains that this emphasis is necessary because, since 'the conceptual turn',

> what once could be comfortably referred to as 'visual' art now overflows its retaining walls. […] The defining features of such practice no longer have to do with morphology, nor with material, nor specifically with medium. The only consistent indicator that binds these disparate practices is an indication, bestowed by some authority (artist, critic, or institution), that a given experience is meant to be received—primarily, if not exclusively—as art, and not as something else.

'The gallery' thus serves not as 'the final arbiter of questions of art' but as 'a metonymic indication of the universe of terms and institutions that sanction artistic practices distinct from literature, dance, architecture, and, *most crucially for our purposes*, *music*.'[86]

While promoting a conceptualist hermeneutic approach in general terms, Kim-Cohen adjudicates on the kind of work amenable to such an approach. His discussion of Kubisch is representative. First, he observes that her Electrical Walks are commonly interpreted as revealing a hidden dimension of urban life, that of the electromagnetic activity all around us (indeed, there is something about them akin to eavesdropping, especially given the bulky headphones, reminiscent of espionage films). Nonetheless, he then cites her as an exponent of the Cagean tendency to 'try to get out of the way, to "let sounds be themselves."' As he sees it, there is a problem with the reception of the *Electrical Walks*: that the discourse is limited to

[86] Seth Kim-Cohen, *In the Blink of an Ear: Towards a Non-Cochlear Sound Art* (New York: Continuum, 2009), p. xxi. My italics.

> the acceptance of value in the exposition and translation into sound of electromagnetic fields. These sounds, and the way they are presented, decline to engage the rich cultural, technical, social, ontological implications of their origins. The typical reception of the *Electrical Walks*—in article and catalog copy (much of it written by Kubisch or with her cooperation)—does not investigate the work's premises, including the status of the artistic encounter, institutionality, and the social-performative aspects of the spectator's activity.[87]

Later, however, he goes on to suggest that, despite Kubisch's self-exegesis, the *Electrical Walks* do indeed have 'aesthetic value' in the way they 'engage' topics other than the sonic: 'sociality, the formation of identity in the metropolis according to predefined actions, functions, and occupations.'[88]

He finds the work of Francisco López, on the other hand, 'uniquely unavailable to non-cochlear recuperation'.[89] This is ostensibly because of López's hard-line Schaefferian exclusion of everything extraneous to sound. However, it seems that Kim-Cohen also disapproves of the particular meaning emerging from López's work, especially in power terms: López is known for asking listeners to blindfold themselves and sit in circles around him as he presides over a mixing desk. Is it really impossible to perform the same positive hermeneutic operation on López as on Kubisch? Elsewhere Kim-Cohen is open to meaning that was entirely inadvertent on the artist's part, for example, in Stephen Vitiello's field recordings of the World Trade Centre from 1999.

Because Kahn and Kim-Cohen are critical of the 'sound-in-itself' tendency, they might appear out of place in relation to my own argument. However, what I am questioning is not the pursuit of 'sound itself' but the selectivity involved in claiming that an emancipatory sonic ideal (*usually* that of privileging sound) is realised in one's own advocated field. What makes Kahn and Kim-Cohen relevant is their premise that the allusive use of sound that they favour is not to be found in ('ordinary') music. Kim-Cohen is more direct about the work that he *does* advocate: above all, conceptualist sound art.

It has been observed, again by Brian Kane, that Kim-Cohen relies on a reductive conception of scored Western music.[90] Like so many predecessors, he reduces it to its syntax

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[87] Ibid., p. 115.
[88] Ibid., p. 119.
[89] Ibid., p. 128.
[90] Brian Kane, 'Musicophobia, or Sound Art and the Demands of Art Theory', nonesite.org issue 8.

and notation: the 'intervals and logic' that make it 'a closed symbolic system'. Since his thrust is anti-Husserlian (he prefers Merleau-Ponty), it is no surprise to read that 'music's fundamental understanding of itself is inadvertently Husserlian' and that 'music as a language seeks to retain its absolute proximity to itself.'[91] This image of music is extrapolated largely from the historical importance of the concept of the extra-musical.[92] That is, he generalises a particular, largely discredited attitude—that of internalism—as if this attitude really prevented meaning from emerging from musical texts or from musical performance. He makes no mention of stage music, for example. He even claims that '[m]usic has always functioned according to Greenbergian precepts';[93] this comes after a discussion of the resistance of Clement Greenberg and Michael Fried to minimalist art. Thus, he associates the limits of 'music', a universal human activity, in relation to an 'expanded sonic practice', with the superseding of one fairly localised art movement (abstract expressionism) by others (first minimalism, then conceptual art).

In fact, as Kane points out, Kim-Cohen's vision of the hermeneutic implications of an 'expanded sonic practice' is expressed in terms that would not be out of the ordinary in contemporary musicology, even with regard to traditional music:

> An expanded sonic practice [or conception of musical practice] would include the spectator [listener], who always carries, as constituent parts of her or his subjectivity, a perspective shaped by social, political, gender, class, and racial experience. It would necessarily include considerations of the relationships to and between process and product, the space of production versus the space of reception, the time of making relative to the time of beholding. Then there are history and tradition, the conventions of the site of encounter, the context of performance and audition, the mode of presentation, amplification, recording, reproduction. Nothing is out of bounds. To paraphrase Derrida, there is no extra-music.[94]

With regard to 'sound art' in particular, Kim-Cohen continues: 'One could easily argue that sound art, as a discrete practice, is merely the remainder created by music closing off its borders to the extra-musical, to any instance of *parole* that could not be comfortably

[91] Kim-Cohen, *In the Blink of an Ear*, pp. 98-99.
[92] Ibid., pp. 39-40.
[93] Ibid., p. 39.
[94] Ibid., p. 107.

expressed in the *langue* of the Western notational system.' With surprising Eurocentrism, he specifies that even *non*-Western music cannot be counted as sound art because its 'specific features, such as microtonalities not represented in the Western octave, [...] can still be understood and, to some extent, represented in a way that is legible to Western musical methods. Sound art', on the other hand, 'is *art that posits meaning or value in registers not accounted for by musical systems*.'[95]

This is the crux of the matter. If sound art is or aspires to be a form of conceptual art, this will condition its subject matter (psychogeography, the ubiquity of meaningless data, nuclear disaster, and so on), and modes of presentation (for example, meaningless data flashing up on a screen). It is probably not far-fetched to propose that the primary meaning of many works is indeed *that they are conceptual art* and that this precedes any particular psychogeographic or nuclear narrative. It is clear that domains of experience and meaning that are of longer standing and that are already embedded in syntax in codified ways (the pastoral, the noble horse, romantic yearning, etc.) will be shunned, as in high modernist composition. It may be that certain 'registers of meaning' are indeed *incompatible* with Western musical systems. However, it is evident in any case that conventional musical syntax would be as incongruous to a conceptualist aesthetic as academic draughtsmanship would be. This incongruity could undoubtedly be justified conceptually but in general its avoidance can be presupposed. Yet, according to Kim-Cohen, it is the other way around: it was music that 'failed to recognise itself in its expanded situation' and that 'judged the territory adopted by the expansion as alien and excluded it'[96]—even though it is composers such as Ikeda who are accused of trespassing. The whole comparison with music is tendentious, since only the most extreme minimalist experimental music has any chance of satisfying conceptualist criteria.

The question of the implicit anti-syntactical preconditions of 'expanded sonic practice' is complicated, however, by the anomalous appearance among Kim-Cohen's case studies of two examples of syntactically conventional, although not classical, music: a 1948 blues release by Muddy Waters ('I can't be satisfied' and 'I feel like going home'), and 'Like A Rolling Stone' by Bob Dylan. These seem to be included, perhaps as an ecumenical gesture, on the grounds that they are studio-produced. The Waters is discussed in the opening chapter, as one of three landmarks of 1948 that serve as 'iconic symptoms of a change in music', which also suggest 'lines of precedent for a non-cochlear sonic practice'.[97] The other

[95] Ibid., p. 107.
[96] Ibid., p. 107.
[97] Ibid., pp. 3, 159.

two landmarks are Schaeffer's noise studies and Cage's idea (anticipating *4'33"*) of selling a silent piece to the Muzak Corporation. The Waters exemplifies the 'new embodiment of sonic space' arising from the adoption of a modern recording techniques with electric guitar; it marks the 'advent of microphonic singing'.[98] The inclusion of Dylan, between discussions of Lucier and Bruce Nauman, is not so clearly explained. The conceptualist element relates to Dylan's play with persona and authenticity, which Kim-Cohen interprets with reference to Barthes and de Man. Kane points out that in his discussion of Dylan, Kim-Cohen compromises on his non-cochlear stance by focusing on fine details of the recording.[99] The other problem is that, in order to include this track in his 'expanded sonic practice', Kim-Cohen has to significantly exaggerate the extent to which Dylan's flexible performance style undermines 'form'.[100] Can he believe that, whereas non-Western music of oral tradition is susceptible to being assimilated into the notational mentality of Western art music, this track's status as a studio artefact absolves it of any association with this mentality?

Cox and Kim-Cohen frequently discuss the same works (Kubisch, Jakob Kerkegaard's field recordings from Chernobyl, and so on) and their positions are complementary. Cox refers to the extra-sonorous and conceptual connotations of these works but then relates everything back to a sonic flux beyond representation; Kim-Cohen prizes meaning but is predisposed to look for it in musically unsegmented or unformed sonic material—and in Dylan.

### 5.3.5 Sound art in Andy Hamilton's aesthetics

It is instructive to compare these positions with one that that focuses directly on sound material and organisation rather than on the institutional aspect of sound art. The philosopher Andy Hamilton takes such an approach in essays collected in his book *Aesthetics and Music*. His discussion of the relationship between sound art and music is more even-handed than those discussed above. His approach is of interest here as it ties together several of the themes I have been discussing: the expansion of the field of sound; pitched sound versus noise; acousmatic listening; the idea of perceiving sound 'as sound'; and the underlying concern with high art status. These are all themes of music aesthetics in analytic or at least Anglophone philosophy. For example, as I mentioned in my Introduction, there has been a debate on the validity of the (non-selective) 'sonicism' defended by Julian Dodd.

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[98] Ibid., pp. 24, 26.
[99] Kane, 'Musicophobia'.
[100] Kim-Cohen, *In the Blink of an Ear*, p. 197.

Hamilton refers to the ideas of thinkers such as Scruton and Jerrold Levinson. He relates the question of music and sound art to, among other things, Scruton's version of the acousmatic concept—that musical listening is metaphorical and that listening to sounds 'as sounds' is extraneous to music. Hamilton points out that this resembles the view of music taken by many sound artists, although theirs comes from an entirely different aesthetic perspective and they probably do not regard sound as 'merely informational' in their own work.[101] He contrasts this with Levinson's definition of music as involving 'the purpose of enriching or intensifying experience through active engagement [...] with the sounds regarded primarily, or in significant measure, as sounds'.[102] Hamilton's own position is that musical listening is both acousmatic and non-acousmatic.[103]

Hamilton's view of sound art is unorthodox. In particular, he understates the gallery element and presents sound art largely as an off-shoot of music, a consequence of twentieth-century avant-gardism with regard to sound material, especially the inclusion of noise (Russolo, Varèse, et al). He accepts the usual narrative that this radical inclusivity represents a *novel* 'interest in sound as sound [...] *as opposed to* a traditional, more restricted concern with sound as tone'.[104] So far, the word 'tone' implies pitched sound. His classification is unlikely to be accepted by many artists: he subdivides sound art (as distinct from 'sound design') into 'documentary sound-art' (corresponding to soundscape) and 'non-documentary sonic composition', in which he includes Parmegiani.[105]

Hamilton proposes two different criteria for distinguishing music and sound art: 'preponderance of tonal material', and rhythmic organisation. In a chapter entitled 'The concept of music', he emphasises the former. He proposes what he calls a 'non-universalist' alternative to 'conservative universalism' and 'avant-garde universalism'. Conservative universalism, exemplified by Roger Scruton, is the view that 'music is the universal (high) art of sound' and that it is 'tone'-based. Avant-garde universalism, represented by Stockhausen (Cage is an even more obvious example), is the view that music can encompass all sound; this would implicitly make the concept of sound art superfluous. Hamilton accepts one element of the conservative view, that 'the central concept of music is tonal in the broad sense' (i.e., predominantly consisting of 'tones'), but asserts that there is also a 'genuinely

[101] Andy Hamilton, *Aesthetics and Music* (London and New York: Continuum, 2007), p. 58.
[102] Ibid., pp. 52, 56, 58. See also Jerrold Levinson, *Music, Art and Metaphysics*, 271-273.
[103] Hamilton, *Aesthetics and Music*, pp. 108-111.
[104] Ibid., pp. 41-42. My italics.
[105] Ibid., pp. 61-62.

non-musical sound art which aims to "free sound from music"',[106] and which is a 'potential high art'.[107] He emphasises that music is 'on a continuum with non-musical sound arts, differing from them in the preponderance of tonal material', and (in contrast with the authors considered so far) that the 'distinction is not in any way evaluative and is not intended to mark any great metaphysical divide'. Indeed, he does not expect to find necessary or sufficient conditions for music, but only 'salient features' allowing 'apparent counterexamples'.[108]

Summarised in this way, Hamilton's position appears to marginalise not only musical traditions that involve little or no pitch but also sound art pieces in which pitch *is* locatable. His argument is complicated, however, by the fact that he is using 'tone' is two different ways—just as so many authors use 'note' to mean both sound type and symbol. Having discussed the avant-garde liberation of sound as a matter of tone versus noise, he adopts a philosophically motivated use of 'tone' similar to that of Scruton, in order to defend an 'aesthetic', humanistic view of music that excludes noise but also Muzak. He questions the adequacy of an 'acoustic characterization of music' (equating music with organised sound) and proposes a view of tone as 'a relational concept which refers not just to the nature of component sounds but also to how they are structured through rhythm, melody and harmony', and which implies 'human intentional action'. This allows him to deny that the pitched sounds produced by air-conditioning or the Aeolian harp are musical, and to allow for sound art in which pitch is produced in a similarly impersonal way. Less satisfactorily, he has to subsume rhythm under this concept of 'tone'.[109]

The other side of Hamilton's account is, indeed, to regard rhythm as normative. For example, Ligeti's micro-polyphonic compositions 'do not have a role for melody and rhythm in any conventional sense and so, it could be argued, have a tendency towards sound-art'.[110] This aspect is emphasised to a greater extent in a later chapter, in which he says that rhythm is 'the one indispensable element of all music'. On this basis, he states that drone pieces by Eliane Radigue and Sachiko M 'are so non-rhythmic that they should be regarded as sound-art rather than music'. He adds that the same could perhaps be said of Cage's extremely static 'number' pieces, which '"stretch" time in that sound events are situated far apart and casually

[106] Ibid., pp. 59-60.
[107] Ibid., p. 46.
[108] Ibid., p. 46.
[109] Ibid., pp. 48-49.
[110] Ibid., p. 61.

disjunct; even when events coincide within this conceptual framework it appears to be an accidental occurrence rather than a contrivance.'[111]

Hamilton brings to light assumptions about the material-organisational conditions of sound art that are normally implicit, namely that pitch is only characteristic of sound art under certain conditions, the most important being extreme elongation. It is striking that he uses 'tone', a word with associations stemming from German usage (*Tonkunst*) as well as English-language philosophy, rather than 'note'. 'Tone' may be a synonym of 'note' but it can also refer to unsegmented pitched sound. The combination of tone and rhythm, however, as criteria for music, produces *notes*. Hamilton's conception of music and sound art thus brings us back to the sonicist view of traditional music as note-based, although he does not depreciate that music.

## CONCLUSIONS

In this chapter I have suggested that a form of selective sonicism operates in sound art discourse. On one side of the equation, we have the idea of sound as an art material—an institutionalised form of what I have been calling the selective hypostatisation of sound (the idea that only certain producers really 'work with sound'). I do not doubt that this genuinely expresses artists' intentions or their view of their activity, but it also provides substantial prestige and rhetorical advantages over composers. In particular, it clears artists of any responsibility for anything resembling a musical *idiom*. There is a convenient circularity at work here: the principle that artists are treating sound as an art material is what confirms that their work is beyond music. The limitation of this way of thinking is that, time and again, it depends on pre-judgements about producers, based on their institutional status as artists or composers. Among the authors I have considered, Licht reveals this the most clearly, but he is certainly not alone.

Meanwhile, music as a whole now tends to function as the 'ordinary', if not *uniformly* ordinary, foil. Partly this is a straightforward matter of identifying 'music' with the same caricature that the musical avant-garde already applied to traditional music: above all, that it is reducible to discrete units and only concerned with their syntactical relationships. A subtler—indeed, rather ingenious—argument is that of 'musicalization'. This concedes that composers are indeed concerned with sound 'as sound', but denies them any empiricist credit

[111] Ibid., pp. 122, 144.

for this concern by treating it as yet another constraint—and, thus, yet another reason to advocate one corpus over another. While Kahn and Kim-Cohen are right to connect the cult of 'sound itself' with the ideology of the purely musical, the idea that it is sound art (or sound in the arts)—and *not* music—that can shake off this constraint is equivalent to the assumptions of musical sonicists. The message is that an 'artistic practice of sound' is the relatively neutral and open-ended treatment of sound, and 'musicalization' or 'sound-itself-ism' the fussy deviation. This seems to me as one-sided as insisting that the conceptualist 'artifying' of sound is a deviation from the neutral ground of music.

There is an underlying tension in sound art aesthetics with regard to music. On the one hand, there is a reluctance to define or delimit sound art at all (even in relation to music); on the other, an insistence that it is indeed *not* music. Kahn leans towards the former, Neuhaus towards the latter, but almost all authors do both. Kim-Cohen's remark about the gallery arts, quoted above, is a good example: conceptualist sonic art eludes pigeon-holing so completely that evoking 'the gallery' is the only way of isolating it—and distinguishing it 'most crucially' *from music*. The tension here arises from the fact that a tacit imperative to be distinct from music inevitably conditions the art. The artist is obliged to position works judiciously in relation to musical language. There seem to be two main options. One (that of Neuhaus) is to adopt a minimalism so extreme as to differentiate a work even from experimental electronic music. The other (as in Cardiff's Tallis installation but perhaps also in Ikeda) is to tolerate conventional musical structure but provide a particular conceptual justification for it. The artist's dilemma is whether to be seen to be trying to surpass experimental music on its own terms. The institutional success of these strategies is no doubt a matter of interpersonal relationships and persuasiveness, and not something about which general hypotheses could be made (this is also true of music).

In pointing out this underlying preoccupation with musical language, I do not mean to question the autonomy of sound art or subsume it under music. I do not dispute that this autonomy lies de facto in the gallery setting etc. Nor am I suggesting, by pointing out correspondences with some of the organisational strategies of experimental music (extremes of stasis, redundancy, unpredictability, amorphousness, etc.), that sound art is *derivative*. These strategies are simply the logical alternatives to the communicative principles of traditional (mainly Western) music—principles that are generally eschewed in both experimental music and sound art. The correspondences are thus probably inevitable.

It might be objected that I am misinterpreting sound art by attributing to it musical motivations that are foreign to it. This objection would be more plausible if artists and

affiliated commentators did not habitually define music as an 'other' on the basis of its syntactical character. If extreme minimalism is the organisational norm in much sound art, this is not only a consequence of the mechanics of installation but a semiotic strategy: drawing the threshold of musical 'language' as low as possible in order to catch experimental as well as classical music. It is implausible to think that artists have transcended musical language *inadvertently*, purely as a by-product of other concerns.

The idea, on the other hand, that composers or music administrators should court the prestige and excitement attendant on sound art is not particularly far-fetched. The rebranding in 2008 of the UK contemporary music establishment as Sound and Music might be regarded as an example of this.[112] So can habits such as that of calling oneself the 'curator' of a concert series. Perhaps aligning music with sound art is also a way of quietly recuperating high art status without using the presumptuous term 'art music'. Nonetheless, there is a sociological blind spot in the view that it is only the designated interlopers who wish to take advantage of the institutional consecration of 'art' and 'artist', and not the 'real' artists.

[112] The home page: 'SAM promotes challenging contemporary music and sound art. We embrace complexity and risk-taking and invite the audience to listen in new ways.' <http://www.soundandmusic.org/about> [accessed 1 November, 2012]. It is worth noting that one of the organisations merged into this new body was the Sonic Arts Network.

# CONCLUSION: BEFORE AND AFTER SONICISM?

To conclude this study, I wish to return to the historical and historiographic implications of selective sonicism: especially, the questions of how the aesthetic-interpretative paradigm relates to past repertoires and whether it is sustainable, i.e., whether it can continue to be equally persuasive in the future. It is worth restating that this paradigm that cannot be equated with a particular range of types of music (or non-music). This is partly because the authors who shape such interpretations promote different artistic criteria, as I have shown—but also because nothing can guarantee a corresponding mode of reception in every instance on the part of all listeners.

However, underlying the cut and thrust of all the *prises de position* that I have discussed, we have seen some de facto (if not logically cogent) limitations on the application of this framework: above all the assumption that it naturally favours modernist or semiotically 'contemporary' music (and art). There is also the assumption that the putative quality of being exceptionally sound-oriented and/or sound-based is something that belongs to works—specifically modernist or contemporary works (also known as 'tracks', etc.)—rather than to performances or listening experiences, except insofar as such experiences have been intentionally catalysed by the works. This appears to be connected to the fact that this type of discourse has from the outset mainly been promoted by composers and commentators associated with them.

While it is impossible to pinpoint an agreed threshold *at which* music is believed to cease to be 'ordinary', in the cases analysed the necessary (if not, for everyone, sufficient) condition is that a work should be 'beyond' preconceived grammar and rhetoric, and above all that of European common-practice tonality. There are many positions on the question of *how far* beyond such grammar and rhetoric one ought to move: beyond the chromatic scale, beyond the recognisable note, and so on. One of the reasons for taking a comparative approach in this study has been to show that sonicism is conceptually consistent *even though* it cannot be reduced to a univocal stylistic position either on the nature of excessively 'grammatical' form or on the best strategy for transcending it. If there were such a position, then sound-oriented music would be a genre, and that would not suit anyone. Neither intervals nor indeed modality are universally avoided. It seems to me that the most consistently avoided aspect of 'ordinary' music is that of classical thematic construction: patterns of initiating, continuation, cadential and other 'functions'. In sound-oriented music,

we are more likely to hear constant initiation of something new, or restatement of the same thing, or endless continuation. These strategies are compatible with diverse idioms and gestures, from modal minimalism to the densest spectromorphological composition.

My main point is that a 'grammatical' threshold of some kind is the interpretative *sine qua non*, with regard to sound 'as sound', rather than innovation in sound material (as in Russolo, Cowell, Lachenmann) or the technological materialisation of sound in electronic music. These other two elements may allow a more *persuasive* version of sonicism, but sonicism does not necessarily presuppose either of them. The studio, in particular, provides a number of highly persuasive advantages and constitutes a model for much instrumental music (e.g. Ligeti, the spectral school), but sonicism is not inconceivable without it. One can see this by considering the work of Varèse, Cage, and especially Feldman. Even Sibelius is interpreted with reference to '*Klang* meditation' and 'sound sheets',[1] and given contemporary relevance as a model for the spectral composers;[2] Rachmaninov is not. This is because of Sibelius's organisational strategies, not the sound material.

Material innovation and technological control, on the other hand, are valued (with regard to the exploration of sound as sound) not only as technical advances but *because* they help to transcend 'ordinary' musical language. This is often to do with the idea of shaping the 'internal' organisation of sound: a particularly refined form of organisational innovation. Electronic music composers often regard syntactical innovation on paper as a very limited way of exploring sound, but I have pointed out that it is *also* insufficient to materialise sound and make it malleable, unless one takes advantage of that malleability to indicate *organisationally* that one is presenting sound 'as sound'. Otherwise the results are likely to be regarded as a matter of general interest, like *Switched-On Bach* or studio-produced but conventional film scores—or indeed as kitsch, because of the incongruity of the organisation in relation to the technical means. As I showed in Chapter 4, there are substantially different positions in experimental electronic music on *how far* one ought to transcend 'ordinary' musical language (above all, on whether to eliminate notes); however, there is little debate on *whether* one should do so. For my own part, I find this artistically understandable. I am only pointing out that the same *sine qua non*, the same principle of crossing a grammatical threshold applies in electronic music, as in acoustic.

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[1] James Hepokoski, *Sibelius: Symphony No. 5* (Cambridge: Cambridge University Press, 1993), pp. 27-29, 58.
[2] Julian Anderson, 'Sibelius and Contemporary Music', in *The Cambridge Companion to Sibelius* (Cambridge: Cambridge University Press, 2004), ed. by Daniel M. Grimley, pp. 196-216 (pp. 197-201).

Discussing the concept of absolute music, Carl Dahlhaus quotes Nietzsche: 'The price of being an artist is that one perceives what all non-artists call "form" as "the thing itself".'[3] It is interesting to contrast this statement with selective sonicism. Here it is sound and definitely *not* form that the artist perceives as (or, at least, declares to be) 'the thing itself'. However, any such interpretation depends on traits of the organisation of sound (of what *used* to be called 'form', when form was 'grammatical')—and never only on sound material or sound quality. This appears to be a paradox but I think it can also be regarded as a matter of rhetorical distortion. The distortion is that, on the one hand, twentieth-century strategies concerning *both* sound material *and* its organisation (and often they are *mainly* organisational, as in Feldman) are interpreted one-sidedly as a turn towards sound—while, on the other, the traditionalism of older music with regard to *both* material *and* organisation is regarded one-sidedly as a subordination of material to organisation.

It is true that numerous authors identify moments in earlier music that *anticipate* twentieth-century techniques and that are interpreted on this basis as manifesting a forward-looking concern with sound as sound. For example, Robert Erickson mentions Berlioz as a precursor of Klangfarbenmelodie and sound spatialization.[4] Grisey refers to moments in Mozart, Brahms and Bruckner in which 'traditional musical discourse' is suspended and there is a (proto-spectral) 'dilation' of time.[5] Another illuminating example concerns 'sonoristics'—the Polish musicologist Józéf Chomińsky's term for the 'analysis of a musical work in its *sounding* form' (not only in relation to the 'sonorist' compositional school of Penderecki et al).[6] As Zbigniew Granat points out, Chomińsky and his circle extended this form of analysis back to composers such as Wagner and even Beethoven. Chomińsky himself found 'sonoristic phenomena' in Beethoven, such as the harmonically static opening of the Ninth Symphony and various effects—dense (therefore quasi-microtonal) and fragmentary (therefore proto-Webernian)—in the Diabelli Variations. As Granat correctly points out, '[o]bviously, the sonoristic character of these phenomena in Beethoven can only be noticed from the perspective of 20th-century music.'[7] However, this is only correct because of our contemporary limitation of habitually identifying elements as sound-oriented only when they

[3] Dahlhaus, *The Idea of Absolute Music*, p. 152.
[4] Erickson, *Sound Structure in Music*, pp. 86, 145-146.
[5] Gérard Grisey, 'Tempus ex machina: Réflections d'un compositeur sur le temps musical', *Entretemps* 8, pp. 83-121 (p. 102).
[6] Zbigniew Granat, 'Rediscovering "Sonoristics: A Groundbreaking Theory from the Margins of Musicology', in *Music's Intellectual History*, ed. by Zdravko Blažeković and Barbara Dobbs Mackenzie (New York: RILM, 2009), pp. 821-833 (p. 821).
[7] Ibid., p. 832.

correspond to twentieth-century techniques that have already explicitly been proposed and interpreted as such. What nobody claims is that, for example, Mozart's adventurous juxtaposition of topics subverts musical discourse and thus constitutes an approach to sound itself. If this last remark seems ironical, it is because such an idea would be automatically discounted today. It would be far-fetched to deny that the opening of Beethoven's Ninth Symphony solicits a focus on sonority. My point is that it is a self-perpetuating modern bias only to look for evidence of such solicitation in proto-modernist gestures.

Putting aside the twentieth- or twenty-first-century view of older music, let us also consider whether there might have been a pre-modernist equivalent of sonicism, at the expense of contemporaneous or still earlier styles. Since I am questioning the assumption that the avant-garde spirit of sonic *innovation* necessarily entailed a 'sonic turn' regarding the *valorisation* of sound, or the intensity of musicians' and listeners' rapport with sound, I am the first to acknowledge that individuals in earlier periods may also have believed themselves to be especially enlightened regarding the importance of sound. Could it be that the twentieth-century attitude is merely a more strident manifestation of a perennial tendency, with a much greater stylistic difference between the allegedly 'ordinary' and 'sound-oriented' musical styles?

I mentioned in passing in Chapter 1 that the twentieth-century attitude, if not the techniques associated with it, may recall earlier moments in European music aesthetics with regard to the critique of the excessive abstraction of other composers and theorists. We might look at the eighteenth-century preference for 'natural' expression over, among other things, the harmonic systematisation of Rameau (according to Rousseau)[8]—or at the idea that Romantic anti-conventionalism was accompanied by a rebalancing of sound and syntax.[9] Some scholars have connected these two contexts. For example, Arne Stollberg has linked the eighteenth-century opposition eye/ear, especially in Herder, with Wagner's aesthetics. It might be tempting to try to cast Herder, among others, as a proto-sonicist. After all, he asserts that sound enters the body without intellectual mediation, that sound is primary and sound relationships secondary, that music is at risk of being 'colonised' by the eye (not least in the terminology used to analyse it), and so on.[10] However, as was inevitable given the period,

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[8] Jean-Jacques Rousseau, 'Essay on the Origin of Languages, Which Treats of Melody and Musical Imitation' (1753-1761). English translation by John H. Moran, in Rousseau and Johann Gottfried Herder, *On the Origin of Language: Two Essays*, trans. by John H. Moran and Alexander Gode, New York: Ungar, 1966, reprinted Chicago, London: University of Chicago Press, 1986. See especially Chapter 14, 'On Harmony', pp. 56-58.
[9] See, for example, Leonard J. Ratner, *Romantic Music: Sound and Syntax*, New York: Schirmer, 1992.
[10] Arne Stollberg, *Ohr und Auge—Klang und Form: Facetten einer musikästhetischen Dichotomie bei Gottfried Herder, Richard Wagner und Franz Schreker*, Stuttgart: Franz Steiner, 2006 (Beihefte zum Archiv für

none of this stopped him from accepting traditional musical norms, conceiving music as fundamentally melodic and as requiring certain regularities to be artistically satisfactory.[11] In this regard, Rousseau makes an even more 'disappointing' proto-sonicist, because of his association of music with natural language. Although he contrasts the natural quality of the 'beauty of sounds' with harmony, which is 'only conventionally beautiful',[12] he also states that 'the power of music over our souls is not at all the work of sounds' but of melody, which makes music an 'imitative art'.[13] In both the eighteenth- and nineteenth-century contexts, the concrete stylistic polemics were conducted in terms that *seem to us* today (following a century of sonicism) predominantly formal and philosophical. Indeed, as I mentioned in Chapter 1, one can find statements in none other than Hanslick that seem like proto-sonicist slogans.

Admittedly, it is not a novelty of twentieth-century music aesthetics that composers, analysts, or philosophers vie for the empiricist or anti-rationalist high ground, and the focus on the materiality of the sign 'in itself' undoubtedly has roots in nineteenth-century aestheticism. However, while I think the 'sonic turn' warrants some critique, I do not dispute the historical fact that there was a significant turn of some sort. What changes in the twentieth century is that *it becomes possible* to take an antagonistic view of received musical language *as such*—and, therefore, to treat musical language as such (even melody), and thus almost all previous music, as compromising 'sound'. This is when the now-familiar sonicist opposition emerges, whereby one side privileges sound by freeing it from received musical language, or from 'composition' or indeed 'music'—and the other is not merely conservative, academic, rudimentary, culturally inferior, and so on, but falls short with regard to *sound*. At this point, a reciprocal relationship between the privileging of 'sound' and the attempt to transcend or reinvent syntax becomes established, and this makes it in effect obligatory for subsequent composers to signal the priority and materiality of sound in the paradoxically structural way that I have discussed.

It may help to approach the matter from the other direction by trying, in the spirit of hermeneutics, to imagine the perspective of an eighteenth-century (i.e., not only pre-

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Musikwissenschaft 58. See especially pp. 29-41 on Herder's insistence on 'the directness of tone-feeling', and pp. 42-46 on his opposition to the 'colonising of music by the eye'. Key essays include the *Viertes Kritisches Wäldchen* (1769, English translation in *Selected Writings on Aesthetics*, trans. and ed. Gregory Moore, Princeton & Oxford: Princeton University Press, 2006—see especially pp. 177-190, 236-249) and *Kalligone* (1800).

[11] Stollberg, *Ohr und Auge—Klang und Form*, p. 72.

[12] Rousseau, 'Essay on the origin of languages', p. 56.

[13] Ibid., pp. 53, 55.

modernist but pre-Romantic) composer, or indeed performer or listener. In that persona, am I oppressed by the feeling that my field of sound is limited, or that my rapport with sound is fatally constrained by grammatical constraints that are nowhere around me questioned? Probably not: my horizon would seem very limited to a Varèse but for me it is still the horizon. I may have a sense that too much imitative counterpoint, for example, would be an imposition on expression, but I have no idea that anyone will later regard my acceptance of traditional tonal configurations as sufficient to betray an inability to conceive of sound 'as sound'. I thus have no reason to declare that I *am* conceiving sound that way, and I am unaware that this omission on my part will reinforce the later interpretation.

Now let us consider, conversely, the extension of the 'ordinary' *into* the twentieth century. As we have seen, the framework of sonicism is applied not only in opposition to grammatically traditional music (past or contemporaneous), but also to the work of rival modernists. The contrast with an 'ordinary' modernist school is convenient because it appears to mean that the 'sonic turn' is not reducible to modernism. As I discussed in Chapter 1 (section 1.5.3), Post-Webernian music is the repertoire that most often serves this purpose, even though at least some of its protagonists interpreted it as sound-oriented as well as linguistically advanced. I mentioned also Varèse versus neoclassical Stravinsky, Feldman versus not only Stockhausen but also Cage, and so on. In many cases these are stylistic differences that *could* equally (I do not say *should*) be discussed with reference to values such as anti-determinism rather than to sound.

Indeed, it is consistent with this basic association of a 'sonic turn' with innovation that we find the same mechanism applied, in a competitive manner, to a *succession* of breakthroughs within twentieth-century music: hence the 'trajectory' that I have followed in Chapters 2-5. In Feldman and Scelsi, the sonicist interpretation was based mainly on the transcendence of musical grammar or system, i.e., on the earlier syntactical breakthrough of Schoenberg, Varèse, et al. In their own interpretative sphere, the fact that Feldman and Scelsi composed (with one or two exceptions) for traditional acoustic performing forces is treated as neutral. However, from the point of view of electronic music (and to a lesser extent that of *Klangkomposition* in the Lachenmann mould), their transcendence of classical 'common practice' appears substantially attenuated. This is because of (a) the terrain metaphor whereby the sound produced by classical instruments represents a tiny parcel of land within the infinite landscape opened up by technology and (b) the idea that technological manipulation of sound constitutes the first authentically 'direct' rapport *with* sound. Then, however, electronic music is in turn rendered 'ordinary' by another breakthrough, which transcends

music altogether by officially pertaining to the fine arts: the use of sound as an extension of the materials of art. Now suddenly electronic music is reclassified with the rest of music.

In calling this succession of developments a 'trajectory', one implicitly favours the most recent, and this is how the more polemical accounts in each phase present the matter. I have focused largely on such accounts because the interpretative framework that I am analysing is most explicit in them. I do not mean to suggest that such a partisan position is widespread among listeners. In practice, it is normal for the more disinterested connoisseurs of experimental music to appreciate many or all of the fields that I have discussed, hearing each of them in terms of this trajectory without 'rating' them according to it—i.e., hearing Feldman against the foil of Boulez one day and Ikeda against the foil of both Feldman and Boulez the next. There is no culpable inconsistency on anyone's part. On the contrary, it is a consistent interpretative framework applied (perhaps uncritically) to more than one domain. This situation has many winners: innumerable composers, producers, and artists live by the sword of sonicism, so to speak, and hardly anyone dies by it. I am sure that many connoisseurs also set aside the sonicist framework altogether when listening to a vivid performance of 'ordinary' music.

This brings me to the twenty-first-century situation and the question of the end-point of sonicism. As I just mentioned, I have focused mainly on the more polemical self-representation—and the generally non-aberrant interpretation—of twentieth-century composers who regarded themselves as being in the vanguard in liberating sound (Varèse), getting rid of the glue between sounds (Feldman and Cage), tapping into a transcendent sound (Scelsi), revealing the sound object (Schaeffer), or—moving outside the musical domain—taking sound out of time and making it an entity (Neuhaus). In each case, these individuals were able to take such an ambitious line because of the undeniable novelty of their technical innovations.

Today, the situation appears somewhat different, given the substantial institutionalisation of both sonicist discourse and styles associated with it. Let us consider these two aspects in turn. First, the discourse: the polemical, Varèsian version would be ideologically superfluous today and indeed would ring hollow, because the emancipation of sound is generally regarded as a *fait accompli*. It is easy to claim that one is working with sound, free of constraints, but difficult to claim that one's own approach is the one that finally emancipated sound. The rhetoric of the pioneer is no longer plausible. The best one can do is to claim a modernist or experimental lineage that is ever more conspicuously

historical. The question becomes this: for how many more decades, or centuries, will it be persuasive to declare that sound is *now* treated as a material substance, etc.?

This long-term problem is compounded by the fact that the stylistic correlates or signs of the emancipation of sound have become so thoroughly conventionalised. Interpretative commonplaces no longer *need* to be made verbally explicit but can be inferred from the style. The initiated listener does not need to be told, for example, that a particular example of drone music is an 'immersive' experience taking her 'inside' the sound. This may encourage composers and artists in turning to the less grandiose, post-emancipatory variant of the discourse, in which the aesthetic focus turns to particular areas of meaning such as site-specific sound, the implications of digital sound, or cultural values sedimented in sound (as in Lachenmann).[14] This is not to doubt anyone's sincere interest in these topics; my point is that they are cultivated against the background of an agreed 'sonic turn' and they tend to presuppose organisational signs of such a turn.

Does this mean that we are entering a period of 'post-sonicism'? It is difficult to say. We seem to be in a phase in which almost any music that can be recognised as semantically 'contemporary' or experimental *could* persuasively be interpreted using the arguments and vocabulary I have analysed here, even when it is *not* explicitly interpreted that way, on the basis of at least one of the technical grounds that I have discussed: that it is electronic music, and/or that it involves non-notes or nominally 'extended' techniques (which are now well established), and/or because it is syntactically contemporary (e.g. loop-based). This has methodological implications for the approach I have taken in this study. It supports the idea that sonicism is the anti-aprioristic face of modernism, or at the very least that it tends to *converge* with the 'contemporary'. At the same time, it is difficult to know how to extend the sort of critique that I have undertaken in relation to Feldman and Scelsi to cover the work of more reticent composers. The type of discourse that I have analysed may now be conspicuously absent, but one usually has no way of knowing whether it has been left unsaid because authors find it superfluous or unconvincing, or whether the stylistic traits in question have been adopted because a composer found them promising in 'purely organisational' terms. It is difficult to imagine an 'end-point' of sonicism, since it is so thoroughly absorbed into contemporary thinking about music.

It is still the case that there is no univocal sonicist 'style'. The situation resembles the pluralistic, 'fluctuating, yet dynamic, steady-state' of musical styles predicted by Leonard

[14] For a discussion of Lachenmann's aesthetics see, for example, Alistair Williams, *Music in Germany Since 1968* (Cambridge: Cambridge University Press, 2013), pp. 75-124.

Meyer,[15] with the notable downfall of serialism. This is another indication of how intertwined sonicism and modernism are. However, it does seem to me that the more redundant idioms, those based on loops, drones, and gradual transformations, have been ever more consolidated. We can see this in spectral music, the works of Sciarrino, minimal electronica, and many other fields. These idioms seem to have displaced the dramatic modernism of Varèse and the extreme unpredictability and atomism of aleatoric music. Such a shift could be observed in microcosm in the work of Feldman. Reich's tape music and the work of La Monte Young have undoubtedly been influential.

It seems, then, that sonicism tends towards 'minimalism' of one sort or another. It is useful to recall Edward Lippmann's remarks concerning 'minimalism' from his *Musical Aesthetics* reader, which unexpectedly introduce a selection from Cage's *Silence*. He writes that this term can designate not only the repetitive styles (Reich, Glass) but also, 'more generally', music in which 'the contribution of the composer' is minimal, i.e., reduced to initiating the piece in one way or another: music involving environmental sound (as in field recording), 'minimally formulated sounds', and chance. Lippmann points out that music consisting of environmental sound, in particular, 'unavoidably represents a new conception of what music may comprise' and that this conceptual aspect competes 'in importance with the sonorous object itself'[16] (this corresponds to Feldman's criticism of Cage).

One implication of this seems to be a rapprochement of contemporary classical music and the 'autonomous' end (in Bourdieu's terminology) of commercially released electronica. It is a situation marked by a reduced dogmatism but also by a conspicuous, widespread suppression of any acknowledgement of the conventionalisation of the sonicist signifiers—except those that one does not promote, as when Christoph Cox remarked on the conventionality of the Florian Hecker album (see Chapter 5). Certain questions are not being asked. What happens to the emancipation of sound when the means for foregrounding sound become a code? How and when does the discourse become empty? How would one go about emancipating sound from these new conventions?

Although I have taken a critical line on the rhetorical and ideological aspects of sonicist discourse, I wish to restate that I do not in the least mean to depreciate the music, or art. Nor do I regard the modernist pursuit of an ideal of sound-oriented music as regrettable. On the contrary, it has been extremely fruitful, not only because it has driven innovations that

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[15] Meyer, *Music, the Arts, and Ideas*, p. 128.
[16] Edward Lippmann, *Music Aesthetics: A Historical Reader, Vol. 3: The Twentieth Century* (Stuyvesant, NY: Pendragon Press, 1990), pp. 419-420.

have enriched music but also because, perhaps as an unintended benefit, these innovations can in turn reinvigorate one's experience of music of the past. I mentioned previously that some listeners may hear a Renaissance motet as *more* sound-oriented than an aleatoric or spectral composition. However, there may also be listeners who return to more traditional repertoires and find them overwhelmingly sonorous as a consequence of an exposure to more experimental work. For such listeners, the ideology of selective sonicism might be a step towards a more vivid listening without the prejudices of sonicism. This would mean liberating sound once again, this time from the adjudication of composers and other authorities, and from the assumed stylistic or technological criteria that I have been discussing. It would mean reversing the process of increasingly prescriptive declaring of thresholds that I have described. The sound-oriented, sound-based artefact might be sound art or electronic music, but it might also be note-based music, even notated, tonal music—perhaps even syntactically conservative music. In fact, performers demonstrate this every day, and always have.

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