3 BERG

The

Culture Culture Reader

+ Les Back



SENSORY FORMATIONS SERIES



The Sound of Music*

Douglas Kahn

There has been a line drawn between sound and musical sound, describing disciplinary demarcation and maintaining musical integrity at an historical juncture in which there were the means to do otherwise. In the absence of any practical challenge from the other arts, music was considered the sine qua non of the arts of sound, and what appeared to be a challenge mounted by avant garde music was instead primarily a recuperation of sound into musical preoccupations. What little pressure was put on musical practices to change was largely discursive and had little positive effect in actual sonic practice. During the heyday of the avant garde, some of the most provocative artistic instances of sound came from literature and other writings, and were distant from the development of the arts or aurality of the time. In the latter half of the 1920s, with the increased technological sophistication of film sound, radio, amplification and microphony, and phonography, as well as a changed aurality shaped by mass-mediated culture, the questioning of musical integrity started to become more pronounced. Soon, however, economic collapse, consolidation and expansion of authoritarian regimes, exile and repression against artists and intellectuals, military activities, would remove what conditions had existed for major artistic revision and elaboration. Nevertheless, although the sporadic activities during the late-1920s and early-1930s failed to assume the broader continuities of an artistic practice, they did indicate a qualitatively different artistic approach toward significant sound. 1

^{*} This chapter is excerpted, with minor modifications, from Kahn, D. (1999), *Noise, Water, Meat: A History of Sound in the Arts*, Cambridge MA: MIT Press. Reproduced with permission.

The tradition of what is called *avant garde*, modernist and experimental music during this century is usually understood as the radical edge of the larger practice of Western art music, a small minority of composers and other practitioners important for the evolution or assertion of different philosophies, poetics, politics, techniques, technologies, styles, and so forth within the larger realm of composition, a way to keep pace with the present. It can also be understood as an adaptive manoeuvre by which arts in the West confronted larger transformations in the social conditions of aurality and kept the full extent of their social, political and poetic provocation at bay by recuperating significant sound into musical materiality. While the first understanding is regularly rehearsed and the second seldom so, they are in many instances functionally interdependent.

Despite the concentration of the bulk of Western art music activity upon the music of past centuries, played on vintage classes of instruments couched within equally vintage rites, the actions of venturesome contemporary avant garde composers grappling with changing conditions of aurality have given rise to an impression that Western art music as a whole has the capacity to respond to the world in which people presently live. Whether they responded admirably in musical terms is not up to question here, merely whether, through the discursive dint of associating musical sound with sound in general, or other aspects on an historical scale quite apart from the personal integrity or the value of the music of this or that composer, they responded as well they could to the changing conditions of sound and aurality. Likewise, the process of musicalization not only acts on one front to rejuvenate Western art music practice, expanding the material and technical base while maintaining the autonomy of musical practice - more significantly it casts musical premises far afield of their natural habitat, where music is further situated and supported through its incorporation into other practices and discourses of culture and aurality. Thus, from the timbral tactics of Russolo's art of noises, through the homegrown legitimation of resident noise, through John Cage's musicalization of aurality itself, Western art music has developed a number of means through its avant garde to maintain its integrity and expand its resources in the changing auditive environments of this century.

One thing that remained tenaciously extramusical, however, was what was usually called imitation. However it may have been invoked past or present – noise, sound, reproduction, representation, meaning, semiotics, and so forth – the primarily sonic has been recuperated into music with relative ease while significant sound has met with great

resistance. Only the briefest and most infrequent instances of worldly sound were allowed into Western art musical practice, while its broader applications of imitation, such as programme music, were commonly considered to be lower life forms. Contraptual sounds produced by non-instrumental objects were banished to the circus, variety theatre, novelty music, vaudeville, theatrical sound effects and folk traditions, and even quotation from musics outside one's own tradition could be an exercise in extramusicality.

It was more difficult to keep 'imitative' sounds at bay after the advent of viable phonographic techniques. Unlike the effect that photographic verisimilitude had upon painting and drawing, music was not relieved of any tradition or aspiration toward phonographic realism. Phonography did, nevertheless, promise an alternative to musical notation as a means to store sonic time and, in the process, deliver *all sound* into artistic materiality, and musical discourse responded by trivializing the complexity of significant sounds and their settings. Indeed, after a certain historical point, it was not so much the potential for musical practices of imitation that were debased, as it was the concept of imitation within musical discourse. Only by distancing itself from attempts at a comprehension of the conditions of aurality within a particular time and place, including the operations of music itself within those conditions, could music protect itself from sound.

How could this be the case within the radical transformations that occurred during the vigorous days of modernism and the avant garde? How could Western art music be so successful in protecting its own domain when, at the very same time, so many other arts inverted their representational modes. If painting could jettison the recognizable for the non-objective, how could Western art music not follow suit and jettison the non-objective for the recognizable? What was the source of this sensorial asymmetry in modernism? Perhaps the most obvious reason why music was not compelled to radicalize its representational means relative to the other arts was the privileged position that music itself was placed among those same arts. Music was valued as a model for modernist ambitions toward self-containment, self-reflexivity and unmediated communication. Its abstracted character was thought to have already achieved what the other arts were attempting. Gabrielle Buffet-Picabia, a musician in a world of visual artists, was in a good position to make a statement very typical of the time:

I had been initiated into the organization of sounds into music, into the strict discipline of harmony and counterpoint, which make up its complex

and artificial structure, the problems of musical composition became for me a constant source of amazement and reflection. Consequently, I was well prepared to hear Picabia speak of revolutionary transformations in pictorial vision, and to accept the hypothesis of a painting endowed with a life of its own, exploiting the visual field solely for the sake of an arbitrary and poetic organization of forms and colours, free from the contingent need to represent or transpose the forms of nature as we are accustomed to see them. (Buffet-Picabia 1949: 256)

Music ceases being mere legitimization and becomes even more central to the work of numerous modernist painters, Wassily Kandinsky and Piet Mondrian being two of the more notable.

Another reason has to do with the conservatism of Western art music itself, against which a relatively modest departure would appear to be transgressive. Dissonance comes immediately to mind, but for our purposes a better case in point would be the reaction that avant garde music incurred through its use of percussion, a reaction based upon the failure to reproduce a certain set of instruments, artistic conventions and sounds. That percussion fell within the bounds of a musical materiality meant that it only had (decreasing) strength as a sign for extramusical sounds. In this way, modernist conflicts over representation could be reproduced internally, without appealing to an external sense of representation. This was played out in terms of noise, resident noise, figures of worldliness such as the glissando, and eventually in the sphere of sound recording.

And then there are institutional and societal factors. The early avant garde had relatively little to do with music; in fact, prior to the middle of the twentieth century the term avant garde music was nearly oxymoronic. Relatively few composers frequented the bohemian haunts of artists and writers, breeding grounds for radicalism of all types because their attendance could be better spent elsewhere. Unlike the relatively affordable technologies needed by writers or painters to complete their art (pen and paper, brush, paints, canvas, and the like), composers were more closely linked to string quartets or symphony orchestras to hear common forms of their practice realized. The artistic and literary avantgarde looked like a cottage industry when compared to the big factory of musical modernism. To gain access to their technologies, composers were required to circulate in the upper reaches of society, participate within the formal rites of high musical culture, and to speak through the discourses attending these scenes. Edgar Varèse, one of the few composers to intersect with the ranks of bohemia, described in 1924 the

stifling effects operating within a generational and class logic. 'There is little hope for the bourgeoisie. The education of this class is almost entirely a matter of memory, and at twenty-five they cease to learn, and they live the remainder of their lives within the limitations of conceptions at least a generation behind the times' (Varése 1924). The surrealist Philippe Soupault put it more succinctly: 'The area of music, a colonial possession inhabited by snobs.' He continues, 'Surrealism was unable to exercise any influence: and this helps explain the decadence of the French school of music before Messiaen' (Soupault 1964). John Cage understood it less as a class phenomenon and more a difference arising between individual and institutional modes of support:

The people who control taste and who give funds to buy things in the field of art are individuals. I think institutions in the case of art follow the lead of those individuals and individual collectors. Whereas in music, institutions get in the way in the very beginning and they close the doors to what they would consider to be rabid experimentation. (Cage 1982: 169)

According to Félix Guattari, the institutions and practices of music worked against music itself:

One has here to contrast the abstract machines of music (perhaps the most non-signifying and de-territorializing of all!) with the whole musical caste system – its conservatories, its educational traditions, its rules for correct composition, its stress on the impresario and so on. It becomes clear that the collectivity of musical production is so organized as to hamper and delay the force of de-territorialization inherent in music as such. (Guattari 1984: 106–7)

If music has the de-territorializing capacities that Guattari attributes to it then its inability to challenge basic premises regarding its artistic materiality can be traced in part to these conventions, and economic and institutional conditions. As we shall see below, however, Guattari would have disagreed because moves toward signification would deterritorialize the de-territorializing capacities he found inherent in music as such.

Demarcative procedures were widely practised throughout philosophies, theories and commentary on music, or anywhere music was used as a rhetorical entity. Although different composers or musics served as signposts for different thinkers, who themselves may have

been composers, there was surprisingly little variation among different schools of thought in recourse to the line. If an historical census could be taken mapping the meandering of this line negotiating the difference between sound and musical sound, it would show the line was more adamantly inscribed the greater the proximity to phonography, noise and other signs of the world. For a conservative philosopher like Roger Scruton extra-musical sounds posed a specific threat to music. 'When music attempts the direct "representation" of sounds it has a tendency to become transparent, as it were, to its subject. Representation gives way to reproduction, and the musical medium drops out of consideration altogether as superfluous' (Scruton 1983: 72). It may come as a surprise to discover that superfluousness, for Scruton, begins with musical quotation, with its emblematic composer being Charles Ives whose

evocation of sounds of Central Park [demonstrates] a constant tendency on the part of the musical medium to collapse into the sound represented . . . All that we are left with is a succession of brass-bands, jazz groups, cries and murmurs, which stand out in the music as isolated particulars bearing no musical relation one to another, just like the sounds in Central Park. (Scruton 1983: 72)

If quotation could prove so vexatious, what then of the pressures brought upon music by phonography? One measure can be found in the lamentations of Pierre Schaeffer, founder in 1948 of *musique concrète*. Using phonographic recording equipment to make his early compositions (only later moving to tape recorders), he rejected his very first composition *Étude aux chemins de fer* (1948) soon after completion because the train station sounds remained too recognizable. He thereafter employed a variety of manipulation techniques that would more assuredly diminish or entirely eradicate any associative properties a sound might have. Once such severance had taken place music was inevitable: 'From the moment you accumulate sounds and noises, deprived of their dramatic connotations, you cannot help but make music' (Diliberto 1986: 56). Yet, over the course of time, even this formulation was not immune to rejection:

You have two sources for sounds: noises, which always tell you something – a door cracking, a dog barking, the thunder, the storm; and then you have instruments. An instrument tells you, la-la-la-la [sings a scale]. Music has to find a passage between noises and instruments. It has to escape. It has to find a compromise and an evasion at the same time; something

that would not be dramatic because that has no interest to us, but something that would be more interesting than sounds like Do-Re-Mi-Fa... (Diliberto 1986: 56)

The intrinsic despair of 'compromise and evasion' finally developed into Schaeffer's remarkable dismissal of his entire career: 'Musique Concrète in its work of assembling sound, produces sound-works, sound-structures, but not music' (Schaeffer 1987: 8). He returned to the notion that no music was possible outside of conventional musical sounds. 'It took me forty years to conclude that nothing is possible outside DoReMi . . . In other words, I wasted my life' (Schaeffer 1987: 8).

In 1988 I had occasion to describe Schaeffer's lament to John Cage over the dinner table. He quickly responded, 'He should have kept going up the scale!'²

To rationalize his new found conservatism Schaeffer sought recourse in the structural anthropology of Claude Lévi-Strauss: 'I'll bring in Lévi-Strauss, who has said again and again that it's only things that change; the structures, the structures of humanity, stay the same – and the uses we make of these things' (Schaefer 1987: 7). For Schaeffer to invoke Lévi-Strauss to account for the failure of *musique concrète* was an act of insult upon injury bordering on masochism, because Lévi-Strauss had already criticized *musique concrète* in his best known book, *The Raw and the Cooked*. Given the architectonics of his thought and the central role music played, it was inevitable that Lévi-Strauss would draw the line at what was and what was not music, and he found it in *musique concrète*, which, it seems, had abdicated the significance of sound but failed to find significance in music.

It is precisely in the hierarchical structure of the scale that the first level of articulation of music is to be found. It follows that there is a striking parallel between the ambitions of that variety of music which has been paradoxically dubbed concrete and those of what is more properly called abstract painting. By rejecting musical sounds and restricting itself exclusively to noises, *musique concrète* puts itself into a situation that is comparable, from the formal point of view, to that of painting of whatever kind: it is in immediate communion with the given phenomena of nature. And like abstract painting, its first concern is to disrupt the system of actual or potential meanings of which these phenomena are the elements. Before using the noises it has collected, *musique concrète* takes care to make them unrecognizable, so that the listener cannot yield to the natural tendency to relate them to sense images: the breaking of china, a train

whistle, a fit of coughing, or the snapping off of a tree branch. It thus wipes out a first level of articulation, whose usefulness would in any case be very limited, since man is poor at perceiving and distinguishing noises, perhaps because of the overriding importance for him of a privileged category of noises: those of articulate speech.

The existence of *musique concrète* therefore involves a curious paradox. If such music used noises while retaining their representative value, it would have at its disposal a first articulation which would allow it to set up a system of signs through the bringing into operation of a second articulation. But this system would allow almost nothing to be said. To be convinced of this, one has only to imagine what kind of stories could be told by means of noises, with reasonable assurance that such stories would be both intelligible and moving. Hence the solution that has been adopted – the alteration of noises to turn them into pseudo-sounds; but it is then impossible to define simple relations among the latter, such as would form an already significant system on another level and would be capable of providing the basis for a second articulation. *Musique concrète* may be intoxicated with the illusion that it is saying something; in fact, it is floundering in non-significance. (Lévi-Strauss 1969: 22–3)

As Stanley Diamond has written, 'Lévi-Strauss' central metaphor is music, which he considers the most basic of all art forms precisely because it is wordless, hardly cognitive, a pristine syntax of sounds, of harmonic and rhythmic contradictions and progressions – structuralism incarnate' (Diamond 1981: 298). Lévi-Strauss' musical tastes for sonatas, symphonies, cantatas, fugues and for musicians the likes of Stravinsky and especially Wagner (Lévi-Strauss 1969: 14) lead him to elitist and ethnocentric positions, endemic to many practices of anthropology. He fixes upon the Western forms emanating from the lone mind of the composer, circumvents collectivist musics both within and outside Western culture, and adopts the 'hierarchical structure of the scale' as a means toward his own thought. The latter in particular belies a neo-Pythagorean and Leibnizian association of mathematics and music.

The supreme mystery essentialized in music is the ultimate, inescapable anthropological problem. Lévi-Strauss is obviously referring to a final principle of order underlying all cognition and communication, a principle, one would add, that he believes may one day be reducible to mathematical formulation. (Diamond 1981: 300)

Karlheinz Stockhausen, in an electronic music laboratory competing with Schaeffer's studio, also had *musique concrète* in mind when he

valorized electronic sounds over 'all instrumental or other auditive associations; such associations divert the listener's comprehension from the self-evidence of the sound-world presented to him because he thinks of bells, organs, birds or faucets' (Stockhausen 1961: 59–67). So too Pierre Boulez:

Sound which has too evident an affinity with the noises of everyday life ... any sound of this kind, with its anecdotal connotations, becomes completely isolated from its context; it could be integrated . . . Any allusive element breaks up the dialectic of form and morphology and its unyielding incompatibility makes the relating of partial to global structures a problematical task. (cited in Wishart 1985: 70)

And as Dmitri Shostakovich stated, or stated with a censor in the wings:

'Concrete music' is extremely primitive. By the way, a collection of the sound-imitating and noise effects of this form of 'art' can be used for certain episodes of radio-telefilm with an appropriate subject, or in certain instances for sound effects on the stage: for example, shipwreck, fire, railway accident, earthquake, etc. . . . We cannot be too emphatic in stressing the fact that all these anti-humanistic trends are entirely alien to socialistic realism, as well as to the requirements of Soviet people in general and creative artists in particular. (Shostakovich 1962: 21)

Along with musique concrète the other dominant sound/musical sound signpost in the postwar years was John Cage. He earned this role for his championing of noise, use of recorded and transmitted sound, his idea that all sounds can be music, his championing of sound and listening per se, and so forth. His attitude about musique concrète itself was somewhat conflicted. After years of musing and theorizing about the use of recorded sound for musical purposes, he became moved to action, but only after meeting Pierre Schaeffer in Paris, the person who had beaten him out of this particular artistic gate. Cage's first audiotape work, Williams Mix (1952), part of the Music for Magnetic Tape project, consisted of minutely and obliquely cut pieces of magnetic audiotape, chosen and spliced together through chance operations from a stock of 500 to 600 recorded sounds in six categories - city sounds, country sounds, electronic sounds, manually produced sounds (including the literature of music), wind-produced sounds (including songs), and small sounds requiring amplification to be heard with the others. It required an incredible effort on the part of several people to construct and still only lasted about four-and-one-half minutes (at 15 inches-per-second),

when played back on eight tracks deployed spatially with speakers encircling the audience. Although both *Williams Mix* and works of *musique concrète* are premised on the musicalization of sound, the former made sure that not only imitation would be banished, but also any subjective factors attendant upon composition.

People familiar with Williams Mix will know that whatever associative properties the recorded sounds might have once possessed are almost entirely obliterated, except for what sounds like crickets (intense, highpitched sounds identify themselves quickly). Familiarity with Williams Mix usually derives from its inclusion on the 25-Year Retrospective album. In the album's notes Cage writes, 'Since the pioneer work of Pierre Schaeffer at the Radio Diffusion of Paris in 1948, the making of tape music has become international. (The different approaches of the various world centres - Paris, Cologne, Milan, New York are excellently set forth in an article by Roger Maren in The Reporter, issue of Oct. 6, 1955, pages 38-42.)' Looking at the Maren article that Cage so enthusiastically recommended, we find an interesting tripartite categorization. One category pertains to work where tape is used but nothing radical is attempted, for example Luening and Ussachevsky. More interesting is the categorical wedge Maren drives between Schaeffer's musique concrète and Cage's work. Because 'the strong referential significance attached to certain noises' have not been sufficiently eradicated, Schaeffer's musique concrète is, according to Maren, therefore, 'closer to cubist poetry than to music . . . This does not necessarily nullify the value of the work. It simply places the work outside the domain of pure music.' In the third category, Maren distinguishes Cage's work, as well as the tape work of Messiaen, Boulez and Varèse, as pure music because recorded sounds are 'manipulated to the point where they lose all referential significance. The composer's interest is in the sound itself and the patterns into which it can be formed.' In other words, the quality of general organization of recorded sounds - the formidable compositional means of Cage, Messiaen, Boulez and Varèse versus the relatively simplistic arrangements of Schaeffer and company – signalled the extent to which referentiality persisted, despite the attempts to eradicate it. By referring people to the Maren article, in other words, on the occasion of a major retrospective release of his work, Cage conforms to a view that musique concrète is not really musical. In many other instances, of course, Cage not only understands musique concrète as musical but too conventionally musical, indicting Schaeffer later on for, among other things, simulating solfeggio by imposing a twelvetiered taxonomy upon the expanse of sound.

A demarcative use of Cage's own music comes from an unlikely source – that of Gilles Deleuze and Félix Guattari. One would suspect they might share Cage's musical radicalism, yet they thought Cage went too far and, more surprisingly, the offending works were not among his most raucous but were instead the fairly benign prepared piano pieces. They begin with a paean:

Varèse's procedure, at the dawn of this age, is exemplary: a musical machine of consistency, a sound machine (not a machine for reproducing sounds), which molecularizes and atomizes, ionizes sound matter, and harnesses a cosmic energy. If this machine must have an assemblage, it is the synthesizer. (Deleuze and Guattari 1987: 343)

The reference is to Varèse's statement, 'Personally, for my conceptions, I need an entirely new medium of expression: a sound-producing machine (not a sound-reproducing one)' (Varèse 1939). Deleuze and Guattari's synthesizer will not be entirely recognizable to electronic music buffs, because it would be philosophical, 'like a thought synthesizer functioning to make thought travel, make it mobile, make it a force of the Cosmos (in the same way as one makes sound travel)' (Deleuze and Guattari 1987: 343). That sound could not travel too far across the never-ending vacuum of the cosmos would not prevent it from travelling back in time in order to dust off a few stellar pages from Schopenhauer. Letting actual sound travel freely where it might cross the terrestrial spaces through which it travels best would be 'opening music to all events', which might rupture the type of 'machine of consistency' by coming too close to that most-feared phenomenon of all space travel: the black hole of Cage's prepared piano pieces.

Sometimes one overdoes it, puts too much in, works with a jumble of lines and sounds; then instead of producing a cosmic machine capable of 'rendering sonorous,' one lapses back to a machine of reproduction that ends up reproducing nothing but a scribble effacing all lines, a scramble effacing all sounds. The claim that one is opening music to all events, all irruptions, but one ends up reproducing a scrambling that prevents any event from happening. All one has left is a resonance chamber well on the way to forming a black hole. A material is too rich remains too territorialized: on noise sources, on the nature of the objects . . . (this even applies to Cage's prepared piano). (Deleuze and Guattari 1987: 344)

This will surely be difficult to understand among people who think that Cage's prepared piano music alone could be called music. What terrestrial and territorial hazards drove Deleuze and Guattari away from Cage's music? Their portrayal of Varèse's music as a synthesizer would be appropriate to his percussion-laden music but not, say, Poème Électronique (1958), which used new technologies to both produce and reproduce sound. The prepared piano was an act of melding a percussion ensemble with the piano (itself an instrument already equipped with percussive functions) following Varèse's own formidable forays into percussion. The specific occasion for its development was a dance by Syvilla Fort at the Cornish Institute in Seattle. Fort, an African-American choreographer and dancer, wanted music with an African feel to it, but the stage was too small for a percussion ensemble, thus its miniaturization under the lid of a piano. In this way, Deleuze and Guattari's complaint does not synthesize thought but reproduces the tradition of Europeans hearing non-European music, especially percussion music in a modernist response to primitivism as noise. Why was it, then, that their interpretation of musical events so easily sailed skyward to the unpopulated vacuum of the Cosmos, and not south?

The urge to demarcate in favour of a sanctity of music survives to more recent times as well. After reviewing an article on the history of live electronic music, the British musician Chris Cutler, in his capacity as editor of *ReRecords Quarterly Magazine*, felt compelled to 'resist the unquestioning inclusion of a randomly derived, aleatory and raw environmental sound in what we understand when we use the work *music*.' Pitted specifically against the threat posed by Cage, he argued:

If, suddenly, *all sound* is 'music,' then by definition, there can be no such thing as sound that is *not* music. The word music becomes meaningless, or rather it means 'sound.' But 'sound' already means that. And when the word 'music' has been long minted and nurtured to refer to a *particular* activity in respect to sound – namely its conscious and deliberate organization within a definite aesthetic and tradition – I can see no convincing argument at this late stage for throwing these useful limitations into the dustbin. (Cutler 1988: 46–7)

The irony is that Cutler's attempt to fend off the totalizing effects of Cagean thought occurred at a time when so many of Cage's ideas had been benignly internalized by many other musicians in both artistic and popular contexts. Thus, such an appeal would find Cage himself in the ranks of that same tradition called music. Instead of appealing to either a pre-Cagean or Cagean throwback of what music is or is not in order to re-establish inviolable ground, it would make more sense

to experience artistic works in their own right, not how they might | conform to gross categorical distinctions, and imagine the fruitful possibilities attending the convoluted and elaborate moments where sound and music fuse, intermingle, and pull apart.

Many of these problems could be credited to a general lack of understanding about sound; there is, after all, little discourse on sound. Moreover, if we leave it to the type of candour expressed by Jean Baudrillard in acknowledging his lack of understanding about sound, then the situation may not improve very soon. When asked about the theoretical implications of sound he said, 'I have some difficulty replying to this question because sound, the sphere of sound, the acoustic sphere, audio, is really more alien to me than the visual. It is true there is a *feeling* [spoken in English] about the visual, or rather for the image and the concept itself, whereas sound is less familiar to me. I have less perception, less analytic perception, of this aspect.' Yet he could not refrain from saying in the very next sentence: 'That is not to say that I would not make a distinction between noise and sound' (Baudrillard 1995).

Notes

- 1. I use the term *significant sound* not to differentiate such a sound from insignificant or meaningless ones but to counter long-standing habits of imagining that sounds completely transcend or escape meaning or that sounds elude sociality despite the fact they are made, heard, imagined, and thought by humans.
- 2. This took place at the home of Alvin Lucier, when Cage was in town for the Cage at Wesleyan Symposium, Middletown, Connecticut (February 1988).

References

Baudrillard, J. (1995), 'Vivisecting the 90s, An Interview with Jean Baudrillard, Part 1', interviewed by Caroline Bayard and Graham Knight, *CTHEORY*, 18(1–2), article a024: www.ctheory.net.

Buffet-Picabia, G. (1949), 'Some Memories of Pre-Dada: Picabia and Duchamp', in Robert Motherwell (ed.) (1981), *The Dada Painters and Poets: An Anthology*, New York: G. K. Hall.

- Cage, J. (1982), 'After Antiquity, in Conversation with Peter Gena', A John Cage Reader, Peter Gena and Jonathan Brent (eds), New York: C. F. Peters Corporation.
- Cutler, C. (1988), 'Editorial Afterword', ReRecords Quarterly Magazine, 2(3): 46–7.
- Deleuze, G. and Guattari, F. (1987), A Thousand Plateaus: Capitalism and Schizophrenia, translated by Brian Massumi, Minneapolis: University of Minnesota Press.
- Diamond, S. (1981), 'The Inauthenticity of Anthropology', *In Search of the Primitive: A Critique of Civilization*, New Brunswick: Transaction Books.
- Diliberto, J. (1986), 'Pierre Schaeffer and Pierre Henry: Pioneers in Sampling', *Electronic Musician* (December): 54–9, 72.
- Guattari, F. (1984), 'Towards a Micro-Politics of Desire', in *Molecular Revolution: Psychiatry and Politics*, London: Penguin Books.
- Kahn, D. (1999), *Noise, Water, Meat: A History of Sound in the Arts,* Cambridge: MIT Press.
- Lévi-Strauss, C. (1969), *The Raw and the Cooked*, trans. J. and D. Weightman, New York: Harper & Row.
- Schaeffer, P. (1987), interviewed by Tim Hodgkinson, *Re Records Quarterly Magazine*, 2, (1): 5, 7, 8.
- Scruton, R. (1983), *The Aesthetic Understanding*, New York: Methuen & Co.
- Shostakovich, D. (1962), 'Art Must Reflect Reality', *Music Journal*, 20 (September): 20–1, 77, 83.
- Soupault, P. (1964), 'Traces Which Last', *Yale French Studies*, 31 (May). Stockhausen, K. (1961), 'Electronic and Instrumental Music', *Die Reihe*, 5: 59–67.
- Varèse, E. (1924), "The Music of To-morrow," *The Evening News* (New York), (14 June), reproduced in Timothy Day (1984), 'The Organized Sound of Edgard Varèse', *Recorded Sound: The Journal of the British Library National Sound Archive*, 85 (January): 77.
- (1939), 'Music as an Art-Science', in Elliott Schwartz and Barney Childs (eds) (1967), Contemporary Composers on Contemporary Music, New York: Holt, Rinehart & Winston.
- Wishart, T. (1985), On Sonic Art, York: Imagineering Press.