An Art of the Radio: Musique concrète and mass culture, 1941–1952

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This article attends to the emergence of musique concrète as a theoretical object in Pierre Schaeffer's writing between 1941 and 1952, seeing it as the logical endpoint of Schaeffer's quest for an art proper to the radio. In this strong sense of the word, art is here positioned in opposition to entertainment, and as such Schaeffer seeks to separate the properly radiophonic from the impure, mercenary forms that radio had hitherto adopted. Schaeffer's account of musique concrète follows this logic, seeking to cast off the vestiges of radio drama that remain audible in such works as *Symphonie pour un homme seul*. By way of conclusion, I suggest that grasping the entanglement of musique concrète with mass-cultural forms such as radio requires a mode of reading oriented not towards formalism or sonic ontology but towards the figure of the text.

1. INTRODUCTION

The development of musique concrète as a theoretical object by Pierre Schaeffer in the late 1940s emerged from Schaeffer's extended theoretical and practical meditation on the radio and the cinema in a period in which national, popular and mass culture were, to say the least, contested subjects. After the 1940 Armistice, Marshal Pétain had promised a National Revolution that would reinvigorate a decadent society, not least in the cultural field. At Liberation, the relationship between national culture, the state and the masses was once more the subject of impassioned debate. Schaeffer was a participant in these moments, from the cultural revolutionary project of Jeune France through the programme of radio professionalisation of the Centre de Formation et de Perfectionnement du Personnel (CFPP) to the contested reforms of the Comité de libération de la radio (Nord 2010; Kaltenecker and Le Bail 2012; Jeune France 1941; cf. Fumaroli 1991). As such, musique concrète appeared at a moment at which what was or was not art, and who and what art was for, were questions fraught with political intensity.

In a closely related cluster of texts – principal among them *Essai sur la radio et le cinéma: Esthétique et technique des arts-relais* (1942) and *Propos sur la coquille* (1944–46) – Schaeffer sought to determine the specificity of the radio and the cinema and to propose an art proper to these technologies. Written in

preparation for and reflection on Schaeffer's pedagogical and institutional projects such as the CFPP and the Studio d'Essai, these texts posed the problems regarding art, technology and mass communications to which musique concrète responded. By tracing the guiding concerns shared by Schaeffer's pre-1948 writings and the project of musique concrète, this article situates musique concrète as a response to contemporary hopes and fears regarding the mass media.

There was an urgency to Schaeffer's theorisation because, as he saw it, the cinema and the radio had by the 1940s assumed a sociological significance far outstripping the capacities of existing theoretical discourse. Vulnerable to the anarchic and irrational effects of commercial interests, radio and cinema demanded critical attention because of their enormous influence as mass media, an influence that represented both an opportunity and a threat. It is to this crisispoint that Schaeffer's writing was addressed. As such, the impetus for Schaeffer's theory of an art founded on the specificity of radio was a desire to rescue the radio from the derivative and populist logic of mass culture and to develop the form to ends fitting the goals of a humanist civilisation of quality.²

The account of radio that emerged is thus one that recognises the transformation wrought by the mass media, and in particular the displacement of print media, but that simultaneously sought to separate what is proper to the radio from its existing cultural forms and modes of consumption. It is in this context that the distinction between 'drama' and 'music', expressed in the move from the radio to the concert hall which inaugurates musique concrète, can be read. This is a move that sought to supplant the multiple codes of interpretation structuring the radio in favour

¹The intimate relation between these texts is borne out by the existence of sketches that propose the synthesis of various elements into a book in the early 1950s (Schaeffer 1953, 1951a; cf. Palombini 2010: 73, 92).

²A comparison with the contemporaneous filmology movement is instructive here (cf. Lowry 1985). It is worth noting, in this context, the close relation between the Institut des hautes études cinématographiques and the Studio d'Essai, which shared personnel and students

of a privileged singular code, that of a musical formalism. Despite Schaeffer's best intentions, however, I argue here that musique concrète operates in a way shaped by the intertextual dynamics of radio and film.

Clarifying the rationale for Essai sur la radio et le cinéma, Schaeffer finds the theoretical discourse on radio and cinema in a state of disarray. Despite being the 'essential modes of expression' of modern civilisation, these forms have not yet been the 'object of a disinterested study' (Schaeffer 2010: 7). In a political context that is, for Schaeffer, defined by the opposition between totalitarianism and unfettered capitalism, and thus for which the question of the media's powers of suggestion are particularly salient, such a study assumed a certain urgency (Schaeffer 1946a). Responding to the moment of Liberation, at which, having been 'prostituted to advertising' before the war, the radio was nationalised, Schaeffer hoped that the radio was on its way to becoming a true public service (Schaeffer 1990c: 47). At the moment Schaeffer was writing, however, radio and cinema are plagued by a 'no man's land' separating art and technique: the lack of technical expertise found among poets and other 'men of letters' results in an extreme division of labour between technically minded engineers and speculating aesthetes (Schaeffer 2010: 12-13, 1990c: 71-2). Central among the aims of organisations such as the CFPP and the Studio d'Essai was the surpassing of this divide, producing a professional cadre capable of grasping both the technical and the aesthetic components of radio practice (Schaeffer 2010: 14).

Guiding Schaeffer's theoretical elaboration of 'radiophonic art' is a conception of 'art' that polemically excludes all existing radio work. Schaeffer repeatedly insists that such a form - 'radiophonic art' - is yet to come into existence (Schaeffer 1943a: 1, 1946a, 1947). In order to satisfy Schaeffer's definition of art, radio is obliged, as Philippe Soupault writes in an article on which Schaeffer draws, to undergo 'a cure of purity' (Soupault 1941: 173). This entailed defining what was specific to the radio in a way that separated radio from the social forms and modes of attention with which it was currently associated. It is, for Schaeffer, a betrayal of radio's potentialities that at present it 'takes the place of a newspaper, a home school, a theatrophone, a concert in slippers, background noise for work or relaxation, for washing up and conjugal silences, for surprise parties' (Schaeffer 1990c: 47). The distracted listening that existing radio elicits is, Schaeffer argues, better compared to 'the use of tobacco, of alcohol or detective novels than to the pleasure of an art' (Schaeffer 1990c: 64). Unlike Walter Benjamin's theorisation of the mass media, for Schaeffer a radiophonic art worthy of its name would overcome distraction: 'the radio listener, in slippers, should little by little be drawn away from his household preoccupations and ... this operation on him from the outside world ... would succeed in placing him in a certain contemplation' (Schaeffer 1947: 2).

The contaminating model against which Schaeffer railed most vehemently was that of theatre. Radio, he insists, demands a different style of acting, a deprivileging of the strictly informative function of words and a different conception of temporal and spatial relations (Schaeffer 1990c: 49 and 54-57, 1947). As such the radio is presented with two alternatives: a radio of 'retransmission (at best) and imitation (at worst) of the most diverse genres, of the most opposed techniques, from typography to scenography, from lyricism to journalism'. Or, alternatively, a radio 'of the event in the instant that it takes place, with its smudges, its gaps, its blisters, the irregularities in rhythm and interest, which is the proper domain of the radio' (Schaeffer 1990c: 49). Where the romantic pioneers of the interwar years had forgotten the 'unchangeable rule of the purity of genres', Schaeffer's theory of radiophonic art would be founded in this 'proper domain' (Schaeffer 2010: 12 and 24).

Schaeffer determines those specificities through an analogy with cinema: these forms are characterised by a shared structure of spatial disjuncture between production and reception. Both radio and cinema capture the trace (or 'image', in the case of cinema, and 'modulation' in the case of radio) of an object which is then 'broadcast' (Schaeffer 2010: 19-20). The radio and the cinema are to the classical arts as the telegraph is to the post: in the older partner in each pairing, the object is really present to the receiver; in the newer modes, they only receive 'signals' (Schaeffer 2010: 37). These forms, which he terms, after Valéry, 'relay arts', inaugurate novel forms of experience, radically reordering perception (Kaltenecker and Le Bail 2012: 27-8). Drawing on Frédéric Paulhan's distinction between langage-signe and langage-suggestion, between language as a semantic unit or as a sonorous effect, Schaeffer begins to sketch what that might mean: if the novel, for example, has as its basic unit the word, the words of cinema and radio are the shards of reality captured by the camera and the microphone. Instead of a langage, these forms speak a 'chosage', or a 'language of things' (Schaeffer 2010: 47). This, Schaeffer argues, reverses the conventional relationship of abstract to concrete: instead of passing from ideas to things, cinema and radio necessarily pass from things to ideas. The radio and the cinema reveal the accidental, material qualities of objects: the radio microphone, like the close-up of the film camera, Schaeffer argues, reveals the world anew and strips the speaker of all artifice.

In a move the consequences of which I will grapple with in due course, poetry came to serve as the

principal model in Schaeffer's theorisation of an art proper to the radio. In up-ending the conventional priority of ideas over things, radio shares with poetry an attention to the material aspect of the sign. The distinction between prose and poetry, elaborated in particular with the help of Valéry's essay 'Poésie et pensée abstraite', is mapped onto Paulhan's between langage-signe and langage-suggestion. Valéry sought to describe a certain poetic sensibility that initiated his writing, a sensibility that registers or generates unexpected connections that short-circuit purely logical lines of thought. One route for these shortcircuits lies in poetry's attention to the materiality of language. Valéry argued that in prose the physical signifier is exhausted, passed over in the act of understanding. In poetry, however, the sound of language slows understanding and generates new connections; the sensible and the intelligible mutually inform one another (Valéry 1944). Schaeffer's radio poetics takes up the thread suggested by these texts: a poetics of the radio, for Schaeffer, calls on a certain mode of listening, as in his experience of listening to a rugby match as a poem (Schaeffer 1990c: 59). This entails listening beyond a common-sensical significance of sounds to the myriad relations they suggest: 'Just as I had discovered, beyond words, that a simple recorded conversation taught us more about two beings than a long acquaintance of their person and even a thorough knowledge of their work, I was not surprised that, by recording the noise of the world, we could perceive, beyond the sounds, the daily metaphors it offers' (Schaeffer 1990c: 60-1).

2. LA COQUILLE À PLANÈTES

Schaeffer draws an analogy between his development of La Coquille à planètes and Valéry's development of his poem Le Cimetière marin as narrated in 'Poésie et pensée abstraite'. Schaeffer suggests that poetic and radiophonic creation share the same 'play of alternating incitements between sound and sense', and both accord particular significance to the unexpected. Quoting Valéry at length, Schaeffer narrates the genesis of La Coquille à planètes from 'the click of a machine' which inaugurates the flights of fantasy that form the basis of the work, just as Valéry's poem had begun with 'a certain rhythm' before any determinate ideas (Schaeffer 1990c: 61; cf. Valéry 1944). Schaeffer envisages this process as a model for radiophonic creation, in which the 'fundamental attitude ... is therefore to listen and not to write, to construct with sonic materials; and if one employ words, to consider first of all the noise that they make, their matter, their weight of reality, and not their intellectual signification' (Schaeffer 1990c: 73). That such a practice was possible, drawing out the hidden meanings inherent in material existence, was proof for Schaeffer of the cosmic unities that underwrite reality.

If there was, for Schaeffer, an essence of the radio, a set of characteristics that remain after its merely cultural accretions have been cast off, it lay in a perception that exceeds and serves as a corrective to ordinary human perception. The radio and the cinema perceive in a way that humans cannot, blinded as the latter are by habit, convention and culture. Such a claim served as the key to Schaeffer's La Coquille à planètes, the series of broadcasts in which Schaeffer sought to put into practice his developing conception of radiophonic aesthetics. Setting in play figures and preoccupations from his contemporaneous writing, the seashell against the ear is deployed as a figure for new modes of experience, connecting man with the cosmos, subject with object; as the seashell provides access to the sounds of the sea, so La Coquille à planètes makes the universe available to auditory experience. The work follows Léonard, a young man on his 25th birthday, as he encounters the 12 signs of the Zodiac in the prosaic world of Paris, reluctantly guided by the astrologist Victorien Vobiscum towards experiencing the marvellous in the everyday. The work was the first large-scale project of the Studio d'Essai. As such it self-consciously explored the potential of the radiophonic medium by, for example, superimposing a narrating voice on diegetic sound so that the voice is almost obscured, and experimenting with different acoustics, microphone techniques and speaking choirs.

One striking scene takes place in Vobiscum's Chamber of Marvels, where one of his arcane devices, the 'backwards clock', transmits sounds from across the last two thousand years. The sonic signifiers of this transtemporal broadcast are, unsurprisingly, radiophonic: bursts of speech intercut by the sweeping tone of a shortwave radio. As Léonard and Vobiscum comment on the stations they encounter while turning the dial, fragments of different languages appear ('So spracht [sic] Zarathoustra, "Des Volkes Seele lebt in seiner Sprache", declaims one, a line Schaeffer attributes to Goethe).3 What follows is a three-minute passage of confused voices, shards of varied musical styles, languages and electronic sound, prefiguring later projects of Schaeffer's such as Une Heure du monde and Symphonie pour un homme seul.

The various machines that appear in the radio play – the horoscope machine, the record player, Vobiscum's arcane technologies and the radio itself – generate an arch commentary on the medium of the radio as one that, for Schaeffer, extends human perception and reveals a previously hidden, more authentic or true reality. Eventually Vobiscum leads

³Felix Dahn appears to be the actual source of the quotation (Frech 1999: 686). 'It's a bit annoying', interjects Léonard.

Léonard to the realisation that the marvellous is not to be found through occult magic but through a particular mode of perceiving reality, such that the dissolution of sugar in a glass of water, the sound of pouring water and the way an onion's skin reflects the conditions under which it grew can be marvellous; 'compared to those of nature, our tricks are crudely stitched together [cousues de fil blanc]', Léonard concludes (Schaeffer 1990a: 157).

As might be expected from Schaeffer's contemporaneous writing, the work takes great interest in the sounds of words. As well as Latinate magical chanting, the work features punning wordplay, failed speech and an extended reflection on the 'power of words'. This passage is prompted by the seemingly redundant and meaningless element 'Babylone' in 'Sèvres-Babylone', leading Léonard to claim that 'Babylone' does not designate but rather evokes (echoing Paulhan's distinction between langage-signe and langage-suggestion) and to question the relationship between words and things: 'words are like covers on things: names are hand-me-downs on beings: our vision is like a cover for the eye', he declaims (Schaeffer 1990a: 187). For the world to be experienced anew, authentically, the message seems to be, it is necessary to cast off 'jargon' and intellectual abstractions and attend to the concrete.

Before attending in detail to the way in which this political and aesthetic problematic makes itself felt in the project of musique concrète, the underlying thrust of the preceding can be recapitulated in a way that renders its theoretical import rather clearer. Schaeffer's theory of radiophonic art was one that, though it recognised the displacement of the book, was developed in opposition to mass culture at precisely the moment at which oppositions such as that between 'art' and 'entertainment' were, at the very least, being radically reconfigured by the very technologies with which he was concerned. To delineate this art from commercial or derivative forms, Schaeffer sought to cast off the symbolic practices that the radio had adopted and instead take as a - tellingly literary model, the poem. This model of the pure, bounded work is one that mass culture places under significant pressure (Mowitt 1992: 48-79).

There are, as is fairly immediately obvious, some insurmountable problems in Schaeffer's thinking at this point, problems that the project of musique concrète attempted to solve. Despite developing an aesthetics that took the putative essence of media as a normative criterion, Schaeffer's account of the relations between different sonic codes and between sonic and visual codes is evocative. He divides the materials of radio into three categories: music, words and noises or sound effects (*bruits*) (Schaeffer 1943b: 1). Likewise, on the film soundtrack 'three elements are superposed

that are in my sense extremely heterogeneous: noise, speech, music'. Cinema is defined as 'the juxtaposition, on the same tape, of two tracks, one sonic, the other visual' (Schaeffer 1946b: 45).

As such, there exists in Schaeffer's thinking a tension between a thematic of medium-specific purity and one of heterogeneity. The former leads to a privileging of noise as a category that might subsume the others. Of the three sonic elements, noise is 'the only sound perfectly adequate to the image, as the image can only show things and noise is the language of things' (Schaeffer 1946b: 45). As Schaeffer puts it, words figure 'among the sound objects' at the radio's disposal; in the cinema, 'among the objects that the screen presents, there are sometimes men. The noise of men is speech' (Schaeffer 1947, 1946b: 47). 'Speech should be considered first as the noise [rumeur] of the characters and not as a text that they have to say'; whereas in theatre, characters can be understood in symbolic or realistic modes, 'in the field of cinema ... speech is only conceived as an echo of reality' (Schaeffer 1946b: 47). The realism that is the telos of radio and cinema demands that:

The text must impose itself on the microphone like the image on the camera. Thus he renders the action explicit, but neither more nor less so than is reality, which is most of the time elliptical and ambiguous. If so many contemporary films, however skilful, ring false, it is doubtless that the cinema has been unduly influenced by the theatre and the novel, and that it is impregnated with the verbalism that contemporary poetry has made fashionable. (Schaeffer 1946b: 47)⁴

At the same time, however, Schaeffer celebrated in radio and cinema the possibility of setting to work the tensions and instabilities between different codes. Thus, radio's advance on theatre is located in its capacity to set in productive relation elements that are previously entirely separate: 'plastic scenery is painted once and for all, it is of a different nature than discourse, it appeals to a different sense than hearing', whereas 'sonic scenery is fleeting, also addresses the ear, intervenes in discourse, reacts to it' (Schaeffer 1947). Schaeffer writes of a 'radiophonic counterpoint' in which the 'elements of the sonic ensemble' are placed in a disjunctive relation (Schaeffer 1990c: 69). When analysing Jean Grémillon's attentive work on the soundtrack, Schaeffer writes that 'one can observe the reciprocal articulation of three elements: noise, speech, music' (Schaeffer 1946b: 46). Or, discussing Robert Bresson's Les anges du péché (1943), Schaeffer writes that 'from the conjunction in time of two strongly characterised materials, one musical, the

⁴In the context of Schaeffer's invocations of 'purity', the metaphor of 'impregnation' is telling.

other visual, a particularly rich complex of impressions is born' (Schaeffer 1946c: 65).

Similarly, in the final essay in the series for La Revue du cinéma, Schaeffer uses the psychoacoustic phenomenon of beating – in which two frequencies close to one another produce the effect in the listener of a third oscillation or tone - as a figure for the desired treatment of audiovisual relations in the cinema. Here, sound and image are 'in relation as "vectors" and have an essentially subjective result which is the impression proper to sound cinema', a thought that is valuable for its implication that neither the sonic nor the visual elements are immanently meaningful in ways that can be combined by way of simple addition or correspondence (Schaeffer 1946d: 52–3). These figures – beating, counterpoint and so on - sit uneasily alongside Schaeffer's other claims for the film as a 'homogeneous whole' or his approving citation of Maurice Jaubert's description of the 'mysterious alchemy of correspondences' in film (Schaeffer 1946b: 45, 1946d: 54).

In any case, Schaeffer's desire for purity, which tends towards reducing the experience of film or radio to a series of physiological stimuli, results in an account of radio and cinema that has nothing to say regarding narrative, character and the other representative functions on which the forms generally rely for legibility.

3. MUSIQUE CONCRÈTE

From this perspective, then, the experiments that heralded the project of musique concrète appear as the endpoint of a search for an art proper to the radio. Because, as Schaeffer claims, bruits – noises or sound effects - are, unlike speech and music, the class of sound proper to the radio, Schaeffer's Cinq études de bruits initiated an experiment in the expressive potentialities of noises. In a suggestive passage from 1943, Schaeffer had already floated something like this: 'instead of wearing [noises'] famous evocative power to the bone, we could, thanks to them, make very short radio documentaries similar to those of the cinema' (Schaeffer 1943b: 1).5 In his presentation of the Cinq études, Schaeffer contrasts the conventional use of noises to 'recreate an atmosphere' or 'indicate a peripeteia' with the path taken by these pieces, which seek 'in the rich material of natural or artificial noises, to remove portions that would serve as materials for an organised construction' (Schaeffer 1990b; Stalarow 2017: 122). The attempt to rid radio art of

⁵In the journal of the Club d'Essai, Samy Simon describes a radio documentary about trains that casts some light on Schaeffer's *Étude aux chemins de fer*; Simon describes the sonic composite as a 'symphony' that leads the listener away from an indexical mode of listening (Simon 1947: 54).

theatrical influence is explicit here, and the development of musique concrète is figured as the recoding of sound effects as music.

In his first published account of musique concrète, Schaeffer describes how the form emerged from his attempts to compose a 'symphony of noises', initially manipulating objects before moving behind the controls to manipulate recordings (Schaeffer 1950: 39). In 1951, he writes how, 'concerned with a radiophonic experiment on the evocative power of noises', he 'had been led to notice that ordinary noises were not susceptible to musical composition, being too closely bound to their dramatic connotations, hence a groping study to "snatch" these noises from their anecdotal context and to make of them musical materials' (Schaeffer 1997).

The first of Schaeffer's musique concrète studies exemplifies this transition from radio drama to music quite literally. Schaeffer envisaged a 'concert of railway engines', composed of recordings made at the Batignolles train depot combined with recordings from the radio's sound effect library (Schaeffer 2012: 10–11). The piece vacillates between the 'dramatic' and the 'musical', Schaeffer preferring the latter but accepting to a degree, for now at least, the former, and it is primarily through rhythm that he seeks to 'musicalise' his recordings, extracting and repeating rhythmic cells (Schaeffer 2012: 13). The piece opens with the sound of a train whistle, a sound that reappears later at structurally significant moments, before playing the train's off-kilter mechanical repetition of the closed groove, contrasting different sound complexes with one another while maintaining a consistent pulse and drawing out, through repetition and percussive embellishment, the rhythmic profile of the recordings. The importance accorded to rhythm Schaeffer's attempt to purify recorded sound of theatrical residues recalls earlier accounts of cinematic aesthetics - those of Jean Epstein, Germaine Dulac and Léon Moussinac, for example – that theorised 'cinematic rhythm' as both the form's defining characteristic and the means by which a pure cinema, modelled on music, might be created.⁶

Schaeffer returns to the distinction between prose and poetry that had informed the arguments of the *Essai sur la radio et le cinéma* and *Propos sur la coquille*. Citing the essay of Valéry's on which he had drawn in *Propos sur la coquille*, Schaeffer describes two uses of language: one, 'used as sign and meaning',

⁶On 'cinematic rhythm', see, for example, Abel (1988, i: 112 and 209) and Guido (2012). Having cited Maurice Jaubert's essay in the series, Schaeffer would have been familiar with Roger Leenhardt's series of articles in *Esprit*, among which was an attempt to reprise avant-garde accounts of cinematic rhythm for the realism of the 1930s (Schaeffer 1946d: 54; Leenhardt 1936).

the other 'as signal or substance'. In opposition to the 'musical rhetoric' of Beethoven or Mozart, musique concrète will be a 'musical poetry', or, indeed, something that supersedes poetry (Schaeffer 2012: 149–51). Describing the way ahead, Schaeffer writes that 'an uncharted territory is being opened in this place, but in any case we must say good-bye to any sign of intelligence, any resemblances, any known words, any notes, any conventional figures, and so to any form of language'. 'The musical object', he concludes, 'is preparing to overtake the word at the end of this race for poetry' (Schaeffer 2012: 153; translation modified). Schaeffer's project of forging a pure and proper art of the radio thus spurns the impurity of poetry and adopts music as its replacement model.

Schaeffer emphasises two 'discoveries' that aid the purification of noises, allowing the listener to 'forget meaning and isolate the in-itself-ness of the sound phenomenon': the 'cut bell', a recording of a bell in which Schaeffer raised the amplitude potentiometer after the bell has been struck, resulting in a smooth attack that distances the recordings from a recognisable source, and the 'closed groove', allowing the repetition of a short fragment. For Schaeffer, these simple editing techniques, which reappear as a sort of primal scene in Schaeffer's later writing, exemplify the separation of recorded effects from their source, affording a transition from 'drama' or 'event' to 'music' (Schaeffer 2017: 311, 2012: 13). Through its infinite repetitions, Schaeffer suggests, the closed groove empties recorded sound of its 'anecdotal' content, allowing sounds to be analysed in terms of their 'intrinsic' characteristics. For Schaeffer, musique concrète necessitates the attainment of this purity: 'If I succeeded', he writes, 'there would be concrete music. If not, there would be nothing but stage and radio sound effects' (Schaeffer 2012: 38).

Whatever Schaeffer's desire to purge radio material of extraneous meaning to create pure music, no such sharp distinction appears to have been particularly significant to the practice and reception of musique concrète. Indeed, Schaeffer's conception of musique concrète founders on the very intertextual character of the radio that his writing simultaneously grasps and disavows. Musique concrète was traversed by the codes and institutional shadow of radio, cinema and theatre, and it was in relation to these forms that listeners made sense of it. Respondents to one survey were, for the most part, unconvinced that these experiments constituted music, a sentiment shared by William Rime and Pierre Drouin in Le Monde, who poured scorn on the idea that Schaeffer and Pierre Henry's works were of interest beyond potential applications on the radio, in cinema or in theatre (Schaeffer 1951b, in Delhaye 2010: 642–3; Rime 1951,

in Delhaye 2010: 557; Drouin 1951, in Delhaye 2010: 558).⁷

Indeed, from the foundation of the Groupe de recherche de musique concrète in 1951, much of Henry's time was occupied with precisely these sorts of applications. This included creating a library of sounds, some relatively naturalistic, others more fantastical and atmospheric, for use on the radio. In addition, Henry fulfilled commissions for radio programmes and films, as well as, from 1955, for the theatre (Delhaye 2010: 138-40; Davies 1967: 69–70). Much to Schaeffer's consternation, these sorts of applications continued to figure prominently in the output of the studio; even after the foundation of the Groupe de recherches musicales in 1958, 'applied' music or sound made up the majority of the studio's work until 1974 (Gayou 2007: 427; Schaeffer 1967: 74).

The relation of musique concrète to radio drama is particularly apparent in Symphonie pour un homme seul, the first piece to be composed with Henry. Schaeffer's initial plans suggest a piece that draws on radiophonic conventions, interspersing spoken text with concrète sound (Schaeffer 2012: 47-8). The piece shares with Schaeffer's earlier writings and radio works such as 'Radio Babel' a preoccupation with the voice, language and a quest for authentic expression. Over the course of its creation, Schaeffer and Henry expunged most traces of a text, leaving a mosaic of abstracted human sounds – cries, footsteps, breathing, mumbled speech and laughter – and distorted musical material, above all that of Henry's prepared piano. In Schaeffer's own account, the piece wavers, like *Étude aux chemins de fer* before it, between the musical and the dramatic: 'listeners with dramatic inclinations could simply look for a scenario, a sort of puzzle', he writes, 'while those who preferred music had time enough to enjoy a concrete score'. Even individual sounds are capable of being cast as either semantic units or as musical phrases from one moment to the next: 'I only had to cut off a few bars of footsteps, for example, for the whole sequence to go from the dramatic to the rhythmic' (Schaeffer 2012: 56).8

What this seems to demand, then, is a reading of musique concrète that takes the radio not as a transparent technology that affords an immediate encounter with sound matter but rather as a cultural form serving as a site of the juxtaposition of sonic codes. The sense that a piece such as *Symphonie pour un homme seul* makes is structured by the contrapuntal

⁷Later negative assessments of musique concrète by Boulez and Hodeir, for example, though informed by personal rivalries and animosities, would follow a similar argument (Boulez 1968; Hodeir 1961: 140–1).

⁸It is worth noting how rhythm again stands as the other of representation (see note 6).

logic of the radio in which words, music and sound effects displace one another, a sense that cannot be isolated from the meanings radio makes as a mass cultural form, from the ways it recalls, cites and displaces a host of associations and conventions.

4. CONCLUSION

Framing musique concrète in this way entails that sound and listening are understood to be traversed by the social, a framing that sets itself at odds with the emphasis on pure sound or sound in itself that characterises critical accounts of the style. Though various writers acknowledge the significance of the radio to the development of musique concrète, I want to suggest here that grappling with that significance renders a critique of any notion of immediate or pure sound necessary, and, furthermore, presses at the neat divisions between inside and outside, musical and extra-musical, on which much analytical thought relies (cf. Dack 1994). The analytical languages of François Delalande or Denis Smalley, for example, which combine the formalist semiotics of Jean-Jacques Nattiez with the vocabulary of Schaeffer's Traité des objets musicaux, rely on an alignment of the properly musical with something like pure instrumental sound.

The critique of immediacy is not new, of course, and arguments against the claims made for an innocent perception of the nature of sound figure prominently in the discourse of sound studies. Among the most thorough is that set out by Jonathan Sterne in *The Audible Past*, in which he traces the practices and ideas that have constituted sound as an object. Sound, he argues, cannot be considered apart from such histories: 'there is no "mere" or innocent description of sound'. As Sterne notes, claims for the "nature" of sound ally themselves with late Romantic conceptions of music, which take sound to be transcendent, universal and asocial, a conception that clearly guides Schaeffer's thinking (Sterne 2003: 10–19).

From one perspective, then, the recourse to the model of the autonomous and contained musical work is an attempt to fend off the signifying practices of mass culture. The percussive encounter of sonic and visual codes in cinema that Schaeffer names 'beating' goes some way to grappling with the openness of the radiophonic field as a dissonant ensemble: rather than being sublated into an organic unity, noise, music and speech 'beat', and it is in the instability of their interrelation that their productivity is located. Under the rubric of pure sound the generative distinction between these categories is dissolved. As such, the interpretative strategies that treat an intrinsic and unified sonic structure as the privileged site of a meaning that merely awaits uncovering represent a retreat from the signifying practices of the radio.

Grasping the relation between musique concrète and the radio demands taking seriously the mass-cultural character of the radio. This calls for something like a textual reading, to be pursued elsewhere, a reading alert to the very unsettling of signifying practices that Schaeffer seeks to forestall. Reckoning with the radio as a texture of multiple voices, crossing and interfering, disentangles musique concrète from the paradigm of the autonomous musical work that has shaped its reception.

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