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Music Deferred: A Reappraisal of the Legacy of Pierre Schaeffer's *Treatise on Musical Objects* (1966)

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Abstract

This article reinterprets the tension between sound and music in Pierre Schaeffer's 1966 *Treatise on Musical Objects*. Schaeffer famously insisted that the *Treatise* did not address music or composition; scholars have therefore engaged with it primarily as a theoretical text on sound and listening. In this article, however, I argue that the denial and deferral of music throughout the *Treatise* should be considered a discrete and key part of its theoretical contributions. By the early 1960s, Schaeffer's aesthetic frustration with the practice of *musique concrète* had blossomed into something of an ethical imperative and paradox. He saw it necessary to suspend all musical activity in the present, so as to salvage music's future. This dynamic is key to understanding Schaeffer's controversial and influential calls for the deferral of cultural responses to sound in the *Treatise*, as illustrated by the practices of 'deconditioning' and 'reconditioning'.

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Ten years after the publication of the *Treatise on Musical Objects: An Essay across Disciplines*, Pierre Schaeffer penned a spirited defence of the text, appended at the end of a new 1977 edition. Perturbed by accusations that he had ignored music in favour of sound, Schaeffer argued that his study of sound was, in fact, inherently musical. He wrote:

the misunderstandings occasioned by the concepts of sound object and musical object . . . all finally lead to the same undeserved criticisms – or praise: I have apparently minimized the importance of musical organization and worshipped the sound object for itself alone. ¹

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1 Pierre Schaeffer, Treatise on Musical Objects: An Essay across Disciplines, trans. Christine North and John Dack (Oakland, CA: University of California Press, 2017), 535. This quote is a good example of what Patrick Valiquet calls Schaeffer's penchant for 'obsessing over the critical remarks of unnamed interlocutors' in his published works. Patrick Valiquet, 'Review of In Search of a Concrete Music by Pierre Schaeffer and Sound Unseen: Acousmatic Sound in Theory and Practice by Brian Kane', Twentieth Century Music 12/2 (2015), 285.

Eager to advocate for the relevance of the *Treatise* to music composition and theories of music, Schaeffer went on to clarify: 'The object is made to be useful . . . Useful for what? For making music. The whole question is how to go from sound to the musical.²² Despite Schaeffer's protestations, the narrative of sound object worship endures in the francophone and anglophone reception of the Treatise on Musical Objects.³ In 1987, Jean-Jacques Nattiez wrote in Music and Discourse that 'Schaeffer has a conscious, idiosyncratic prejudice - the Traité des objets musicaux deals only with isolated sound-objects contemplated for their own sake, and not with sound-objects integrated into a musical work.'4 Decades later, Michel Chion took a more judicious stance. In his 2010 book entitled Sound, Chion claimed that Schaeffer's research into sound and listening 'had a horizon and an ideal: reunion with music - with the "most overarching" music possible'. Chion continued: 'In my case, I do not believe it possible to deduce forms of music directly from acoulogical observation.'5 In other words, the Treatise is about deducing music from sound, but this is a hopeless endeavour. The true interest of the Treatise, says Chion, lies not in its musical predilections but in its research on sound, listening, and perception. More recent literature follows suit, implicitly dismissing music as a point of interest in the text. From Brian Kane's Sound Unseen, to the recent edited volume from James Steintrager and Rey Chow on sound objects, a generative body of work continues to interpret the Treatise primarily as a philosophical text on sound, perception, and listening, rather than music.⁶

The category of music maintains a genuinely strange status throughout the Treatise on Musical Objects. Music signifies at once the act of composition and an idealized future music whose fate is uncertain. These two versions of music are often intensely at odds. On the one hand, Schaeffer insisted on the importance of his research for the future of music, but on the other, he warned readers in the preface that the book 'does not remotely claim to tackle the art of composition itself. Schaeffer repeatedly cautioned against those readers who would begin composing too soon, remarking that forbearance was 'the price of musical progress'. 'Perhaps the goal of an intelligent composer should no longer be a dubious shortcut leading directly to the work', he urged. 'He should choose for himself the restricted, forever

² Schaeffer, Treatise, 538.

³ Schaeffer also discussed this misunderstanding over his work in the preface to Michel Chion's Guide des objets sonores: Pierre Schaeffer et la recherche musicale, 1983. See Michel Chion, Guide to Sound Objects: Pierre Schaeffer and Musical Research, trans. John Dack and Christine North (Paris: Buchet Chastel, 2009), 9-11.

⁴ Jean-Jacques Nattiez, Music and Discourse: Toward a Semiology of Music, trans. Carolyn Abbate (Princeton, NJ: Princeton University Press, 1990), 94.

⁵ Michel Chion, Sound: An Acoulogical Treatise, trans. James A. Steintrager (Durham, NC, and London: Duke University Press, 2016), 211. For an overview on Schaeffer's and Chion's differing definitions of acoulogy, see Marc Battier, 'What the GRM Brought to Music: From Musique Concrète to Acousmatic Music', Organised Sound 12/3 (2007), 198.

⁶ See Brian Kane, Sound Unseen: Acousmatic Sound in Theory and Practice (Oxford: Oxford University Press, 2014); James A. Steintrager and Rey Chow, eds., Sound Objects (Durham, NC, and London: Duke University Press, 2019); François J. Bonnet, The Order of Sounds: A Sonorous Archipelago, trans. Robin Mackay (Falmouth: Urbanomic, 2016).

⁷ Schaeffer, Treatise, xxxix.

overflowing, framework of a preparatory exercise.'8 This contradiction between his exhortations that readers abstain from composition and his defensive statements on the Treatise's importance for the future of music led to rather predictable misunderstandings. In the same 1977 defence of the Treatise, Schaeffer attempted to explain the oddity of a text on music that, in many ways, refused to address music composition:

[The Treatise] is about the materials of music, not music itself. Now, as these (musical) materials imply music, we are likely to find throughout the book an uneasiness linked to this implication.⁹

Uneasiness indeed. Sound remains unnamed in the preceding quote, referred to only as a material somehow incontrovertibly marked for music. Yet, 'music itself' is also denied a place in the Treatise, leaving even the most fundamental question of the subject of the text unsettled.

Faced with such circuitous and prescriptive statements, any reader might be forgiven for concluding that the *Treatise* was limited to the study of sonic material. Yet I want to maintain a space for doubt here. Elsewhere in the Treatise Schaeffer likened a musical composition to a piece of architecture - just as the architect must thoroughly know their material in order to design a structure, so must the composer know sound in order to craft music. 10 Thus, when Schaeffer wrote that the 'whole question' of the Treatise was how to go from sound to the musical, he was identifying the goal of the research described in the Treatise: to actually produce new music.¹¹ These musical goals have typically been overlooked in accounts of the Treatise not only because of Schaeffer's aforementioned insistence that readers refrain from composing, but also because the music Schaeffer imagined would emerge from this research never materialized in his own oeuvre. One might say that the text is marked by a curious gesture of deferral. Schaeffer deferred music in order to study its 'materials' - sound - refusing to compose or discuss composition, and exhorting his readers to do the same. Yet, Schaeffer was committed to this sonic research as a means to incubate future musics. Thus, he deferred music for sound, but only because he cast sound as the catalyst for music's return. How, then, might we understand the nature of Schaeffer's attachment to and deferral of music and attune ourselves to the way this manifests in his theories of sound and listening? This article offers two broad answers to this question. First, I trace Schaeffer's refusal to broach the subject of composition or 'the music itself' in the Treatise back to his ambivalence towards musique concrète, arguing that what began as an aesthetic dissatisfaction became an ethical imperative to redesign the musical experience through research into sound and listening.

⁸ Schaeffer, Treatise, 390.

⁹ Schaeffer, Treatise, 532.

¹⁰ Schaeffer, Treatise, 395-6, 500-2, 538.

¹¹ Patrick Valiquet rightly notes that Schaeffer's goals in the Treatise are twofold: the invention of new musics, and a form of analysis that could be applied to all existing musics, regardless of their cultural origin. Valiquet argues that Schaeffer sets aside the project of defining a new musical language for the pursuit of this analytic, whereas I contend that both goals are inextricably linked. See Patrick Valiquet, 'Hearing the Music of Others: Pierre Schaeffer's Humanist Interdiscipline', Music & Letters 98/2 (2017), 256-8.

Second, I argue that a fresh close reading of the Treatise for the topic of music reveals a strained and circuitous relationship between 'music' and 'sound', raising a web of questions that may strike contemporary music and sound scholars as unusually timely.

Before I delve further, a note on methodology. The question of legacy, whether the Treatise's, or Schaeffer's more broadly, has been a central topic in recent scholarship. There has been a profusion of exciting historical work on Schaeffer in the past ten years, focused on contextualizing Schaeffer and his writings in the historical and intellectual milieu from which they emerged. Schaeffer's thought has been interpreted in relation to phenomenology, the structuralist reception of phenomenology in France, the end of the French Empire, and the development of radio technology, to name only a few. ¹² In this work, scholars have examined the historical conditions of possibility for Schaeffer's thought and writings, as well as proffered timely critiques of his ideas on listening and the nature of sound. Reading and writing about the Treatise in this mode creates the kind of distance between the scholar and the text that is necessary when faced with a work of enduring influence; despite its length and opacity, the Treatise has been central to the theoretical study of sound and listening, and the understanding and composition of electroacoustic music. In this article, however, I want to model a way of reading and writing about the Treatise that risks an intimacy with both the text and its author. 13 Much scholarship on Schaeffer rightly sets about the task of historicizing and critiquing him in order to demystify him enough that something new might be said about the acousmatic, modes of listening, or the objectivity of sound. My article here builds on that work of critique to contribute something different, namely, to enact a mode of reading, writing, and thinking with Schaeffer that understands the Treatise as a text that performs the struggle to think music and sound. As such a live, problematic text, I argue, the Treatise is replete with the potential to speak to - not solve - contemporary disciplinary problems, such as the broader sonic turn in the humanities and the imbrication of the binary of sound and music with nature and culture.

In his definition of 'thinking with', historian Gary Wilder writes that 'thinking with is not just an exercise in contextualization', or a method of treating historical interlocutors only as 'native informants symptomatic of their era', but rather as critical thinkers in their own right, 'whose formulations about politics, aesthetics, and epistemology might help us fashion frameworks with which to reflect upon related phenomena'. 14 Such a style of thinking, as Wilder

¹² Kane, Sound Unseen; Makis Solomos, 'Schaeffer phénoménologue', in Ouïr, entendre, écouter, comprendre après Schaeffer (Paris: Buchet/Chastel, 1999); Valiquet, 'Hearing the Music of Others'; Sam Ridout, "From the Totem to the Antenna": Musique Concrète and the Universal at the End of the French Empire', Music & Letters 101/4 (2020); John Dack, 'Pierre Schaeffer and the Significance of Radiophonic Art', Contemporary Music Review 10/2 (1994); Alexander Stalarow, 'Listening to a Liberated Paris: Pierre Schaeffer Experiments with Radio' (DPhil diss., University of California, Davis, 2017).

¹³ As Martin Kaltenecker recently noted when discussing historiographies of twentieth-century music, 'Like the novelist, the historian can observe their object from a distance or show a certain degree of empathy'. Martin Kaltenecker, 'Recent Histories of Twentieth-Century Music and the Historiographical Tradition', in Revisiting the Historiography of Postwar Avant-Garde Music, ed. Anne Sylvie Barthel-Calvet and Christopher Brent Murray (New York: Routledge, 2023), 14.

¹⁴ Gary Wilder, Freedom Time: Negritude, Decolonization, and the Future of the World (Durham, NC: Duke University Press, 2015), 12. There have been similar calls for such a methodological shift occurring in music and sound

notes, often means giving a writer the benefit of the doubt. However, 'to read generously is not to suspend critical evaluation, but sometimes to extend the logic of their propositions far beyond where they may have stopped'. 15 There is much in Schaeffer's carving of the binary between music and sound that must be - and indeed has been - critiqued. Yet it is also important to acknowledge that these binaries were, already at their inception, marked by struggle and dysfunction, and thus already unravelling towards their own deconstruction. Because of this, I argue that as music and sound scholars, we may - upon close inspection - find the Treatise's internal struggles closer to our own thinking than is comfortable for the purposes of pure critique.

To that end, this article treats Schaeffer as a pivotal figure in an intellectual history unfolding today, one that has led to the current simultaneous blending of and tension between musicology and sound studies. In his blurb for the publication of the English translation of the Treatise, Brian Kane quipped that the text was 'a prescient work of sound studies before there was "sound studies". 16 Kane's turn of phrase is apt: it points towards the various genealogies of sound studies where Schaeffer is positioned as a founding figure, and towards the way in which Schaeffer's terminology and figuring of the question of sound and listening has had enduring influence. Even the title of the *Treatise* points towards the present moment in ways Schaeffer never could have anticipated. As Patrick Valiquet notes, the subtitle of the Treatise, 'essai interdisciplines', implies a work between disciplines more than it does an 'interdisciplinary' one.¹⁷ For contemporary musicology and sound studies, Schaeffer's own struggle to draw a line between music and sound is far more intriguing than his much-maligned claims that 'music's materials' could somehow be studied apart from music. Further, the contemporary convergence of musicology and sound studies makes the imbrication of music and sound in the *Treatise* all the more interesting, and brings up, once again, the question of how music and sound scholars today should understand and evaluate Schaeffer's ongoing influence.

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If one strand of the reception of the Treatise has focused primarily on sound, listening, and perception, another more musicological strand has understood the Treatise as a straightforward continuation of the ideas and methods of musique concrète. In The Cambridge History of Twentieth-Century Music, Schaeffer's 'Personalia' entry states that Schaeffer's 'magisterial theory of musique concrète in Traité des objets musicaux (Paris, 1966) ensured his continuing influence in the field of electroacoustic music'. 18 In one of the most thorough scholarly

scholarship. See Dylan Robinson on an apposite methodology of writing: Dylan Robinson, Hungry Listening: Resonant Theory for Indigenous Sound Studies (Minneapolis, MN: University of Minnesota Press, 2020), 81, and Zhuqing (Lester) S. Hu, 'Chinese Ears, Delicate or Dull? Toward a Decolonial Comparativism', Journal of the American Musicological Society 74/3 (2021).

¹⁵ Wilder, Freedom Time, 12-13.

¹⁶ Kane quoted in Schaeffer, Treatise, back cover.

¹⁷ Valiquet, 'Hearing the Music of Others', 258.

¹⁸ Nicholas Cook and Anthony Pople, eds., The Cambridge History of Twentieth-Century Music (Cambridge: Cambridge University Press, 2004), 662.

engagements with Schaeffer's theories of sound of the past decade, Brian Kane's Sound Unseen, Kane also writes that the Treatise 'represents the summation of Schaeffer's research into musique concrète'. 19 These interpretations of the Treatise as the culmination of the *musique concrète* experiments overlook Schaeffer's insistence in the text's introduction that he was finished with musique concrète and was introducing a new project. It is easy to see why the Treatise would be understood as a continuation of musique concrète.²⁰ Many of the concepts that occupied Schaeffer in the *Treatise* were already partly theorized in In Search of a Concrete Music (1952). Indeed, Schaeffer's enigmatic concept of the sound object was first developed in these journals.²² Additionally, the journals conclude with a solfège of musique concrète that contains the seeds of the typological and morphological experiments that are developed in the Treatise. There is, in short, clearly continuity between musique concrète and the research described in the Treatise, a development of past ideas. When Schaeffer drew a distinction between the two, it revolved around their aims, not their content: musique concrète was an experiment that produced new works, it explored 'a particular type of art, halfway between music and poetry'. The aim of musical research was much grander, a reordering of musical experience, a research beginning with sound, 'but wholly dedicated to reclaiming the indispensable musical abstract'. 23 Thus, when Schaeffer announced a new phase with regard to musique concrète, changing the name of the Groupe de Recherche de Musique Concrète (GRMC) to the Groupe de Recherches Musicales (GRM) in 1958, it was not merely rhetorical positioning. Musique concrète was to be set aside and, in a sense, erased in favour of a more abstract idea of musical research that cast aside compositional practice for a better, future music.

We might, then, pay closer attention to Schaeffer's performance of and belief in a split between the two endeavours of musique concrète and the musical research of the Treatise. It was not only in the introduction to the Treatise that Schaeffer announced that he was finished with musique concrète and moving on. A whole chapter of In Search of a Concrete Music is entitled 'Farewells to Concrete Music'. The meaning of such a farewell – in 1952, no less – as well as the consistent ambivalence and frustration Schaeffer exhibited towards musique concrète in In Search has rarely been commented on, much less understood as a significant

¹⁹ Kane, Sound Unseen, 17.

²⁰ Marc Battier briefly notes Schaeffer's claim that the Treatise was not about musique concrète and Daniel Teruggi is careful to note that the Treatise does not deal 'exclusively' with musique concrète. Neither author, however, meaningfully addresses the relationship between the musique concrète and the Treatise. Battier, 'What the GRM Brought to Music', 198; Daniel Teruggi, Musique concrète Today: Its Reach, Evolution of Concepts and Role in Musical Thought', Organised Sound 20/1 (2015), 53.

²¹ Part III, 'The Concrete Experiment in Music', contains chapters on the musical object, on the relationship between objects and language, and on the relationship between objectivity and subjectivity - all topics that Schaeffer returned to at length in the Treatise. Pierre Schaeffer, In Search of a Concrete Music, trans. Christine North and John Dack (Berkeley, CA: University of California Press, 2012), 113-221.

²² See Kane, Sound Unseen, 15-17, for a more detailed discussion of early iterations of the concept of the sound object in In Search of a Concrete Music.

²³ Schaeffer, Treatise, 8.

aspect of his thought.²⁴ This farewell and Schaeffer's conflicted feelings about musique concrète, however, are central not only for understanding why Schaeffer insisted the Treatise was a distinct contribution, but also for understanding the entire intellectual programme of the Treatise itself. The role of a music deferred in the Treatise - both as an act of composition and as an idea - cannot be understood without attending to this earlier history.

In spring 1951, Schaeffer and Pierre Henry were collaborating on the musique concrète opera Orphée 51 ou toute la lyre. The process was, by all accounts, a struggle. Nearly four years into the musique concrète experiment, Schaeffer expressed frustration with the results of his efforts - and specifically his inability to craft individual sounds into anything like a convincing musical flow. In a journal entry dated 3 April 1951, he bemoaned the gulf between the 'sketchy scores of concrete music, and the psycho-physiological impact it has on the audience'. 'One is caught between fear of mystifying', he complained, 'and the dread of mystery.'25 Later in the same entry he noted the capricious effects of the manipulations of the sounds on his audience: 'we reel dizzily between fumbling manipulations and erratic effects, going from the banal to the bizarre. It is outrageous. ²⁶ The wealth of sounds now available to *musique* concrète made it impossible to predict what effect sounds would have on the listener, and therefore to create musical patterns based on expectation, surprise, and release. For Schaeffer, this was one of musique concrète's main failures: the inability to weave isolated sonic stimuli into a singularly intelligible musical form.²⁷

This failing was not merely aesthetic; it was personal. Only one day later, on 4 April, he wrote:

I am in a state of alert, hoping to find materials to fill these great gaps, hints of a method. Even the idea of Orphée is a throwing down of the gauntlet. Suffering horribly from the discordance of concrete music and also from its inhumanity, I am seeking a test of strength.²⁸

The overwrought tone of the artist in distress, burdened with the moral responsibility of his creations, is both a kind of romantic posturing - the awe and horror of a Dr Frankenstein beholding his creature - and a genuine expression of frustration. Indeed, just weeks before the 6 July 1951 performance, things were little improved, and bitterness set in. Schaeffer

²⁴ The oft-cited interview between Schaeffer and Tim Hodgkinson in 1986 is often proffered as proof of Schaeffer's dissatisfaction with musique concrète and his musical research as a whole, but little has been written about Schaeffer's frustration with musique concrète in the late 1940s and early 1950s. See Tim Hodgkinson, 'An Interview with Pierre Schaeffer', in The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts, ed. David Rothenberg and Marta Ulvaeus (Middletown, CT: Wesleyan University Press, 2009).

²⁵ Schaeffer, In Search, 79.

²⁶ Schaeffer, In Search, 79.

²⁷ In In Search, Schaeffer often uses language about being in charge of sound's 'effects' to refer to this problem. In a rare moment of positivity, Schaeffer praised Etude aux casseroles (1948, also called Etude pathétique) for being 'in charge of its effects'. Schaeffer, In Search, 20.

²⁸ Schaeffer, In Search, 79-80. Alexander Stalarow notes that part of why Schaeffer utilized voice in Orphée was to restore humanity to musique concrète. Stalarow, 'Listening to a Liberated Paris', 178.

remarked on 16 May that Orphée is 'already a failure musically', going so far as to call it a monster, 'constructing itself like the cells of a cancer'. ²⁹ Schaeffer's words, replete with disappointment in light of Orphée's apparent failure, clarify the stakes of his commitment to pursue laboratory research into the perceived cause of the disease. If the effect of these 'sonic stimuli' on listeners could be understood, music might be rescued from a cancerous future.

Performative anguish, of course, is something of a cliché for a modernist composer. Schaeffer, though he wore the composer's mantle hesitantly, figuring himself as a radio engineer, and viewing the products of musique concrète as painfully caught between experiments and artistic works, was deeply concerned with the historical progress of music and its future.³⁰ The so-called rival approaches of *musique concrète* and electronic music, as well as Schaeffer's numerous comments on the scourge of serialism - a 'Hiroshima bomb. . .fallen on music' reveal a figure fearful for music's future. 31 Schaeffer's resolution to renounce composition, largely abandoning the project of musique concrète in the late 1950s and shifting towards what he called musical research, was in part an effort to safeguard music's future from the pitfalls of other contemporary practices.³² Carlos Palombini examines this tension between music composition and music research in the two years after Orphée, describing it as a choice 'between using concrete material to create oeuvres and doing research into sonority to discover musicality'. 33 As we now know, it was the latter that preoccupied Schaeffer in the late 1950s and early 1960s. In fact, from 1961 to his death in 1995 he wrote no new music, only briefly coming out of retirement in the late 1970s to compose two pieces.³⁴ Looking back on the musique concrète years in 1970, Schaeffer did not speak kindly of his creation, remarking instead that 'I felt that I had committed a crime putting together the first sounds of musique concrète and I was not proud of myself.'35

In this context, the penultimate chapter to In Search of a Concrete Music, entitled 'Farewells to Concrete Music', is fitting. He penned this farewell in 1952, at what might be called a peak moment of success for musique concrète, given the Groupe de Recherche de Musique

²⁹ Schaeffer, In Search, 96.

³⁰ Schaeffer frequently mentions his conflicted relationship to the role of composer throughout In Search. See Schaeffer, In Search, 37, 48, 62.

³¹ Schaeffer, Treatise, 517.

³² Schaeffer extolled a similar decision made by Henry in 1953: 'Pierre Henry finally took the wisest course and (excluding the background sounds for radio productions or film tracks, which are absolutely indispensable to earning a living, and hence respectable) has stopped composing for the time being, giving himself up to those two researches that any future composition demands: research into sonic objects, and research into instrumental manipulations'. Despite Schaeffer's comments here, Henry did not give up composing, 'commercially' or otherwise. Pierre Schaeffer, 'Vers une musique expérimentale. . .' La Revue musicale 236 (1957), 19. Quoted in and translated by Carlos Palombini, 'Pierre Schaeffer, 1953: Towards an Experimental Music', Music & Letters 74/4 (1993), 547-8. Palombini further discusses this shift from musique concrète to musical research and what Schaeffer called 'experimental music' in Carlos Palombini, 'Machine Songs V: Pierre Schaeffer: From Research into Noises to Experimental Music', Computer Music Journal 17/3 (1993).

³³ Palombini, 'Pierre Schaeffer, 1953', 547-8.

³⁴ Le trièdre fertile (1975) and Bilude (1979).

³⁵ Sophie Brunet, Pierre Schaeffer (Paris: Éditions Richard-Masse, 1969). Quoted in Stalarow, 'Listening to a Liberated Paris', 162.

Concrète's (GRMC) official formation and funding on 1 October 1951.³⁶ Yet, Schaeffer had reconciled himself to the fact that musique concrète was inadequate to his musical goals. With a dramatic flourish, he wrote:

Five years of concrete music is fine for a musician if it leads to the future, to musicians, to music! But for a writer, it is time to stop, to step down. I'm certainly not deserting, however. Two fields still require me: the field of means and the field of ends. It's farewell in the sense that I'm giving up writing music.³⁷

This farewell was more than rhetorical – Schaeffer actually left the GRMC in 1954. Shifting focus altogether, Schaeffer spent much of the 1950s working with the Société de Radiodiffusion de la France d'Outre-Mer (SORAFOM). Responsible for the management of France's overseas radio broadcasting, particularly in its African colonies and protectorates, Schaeffer's attention turned decidedly away from experimental music composition. When he returned in 1957 to take over the GRMC once more, he refashioned the group as the Groupe de Recherches Musicales (GRM).³⁸ Those who had been left in charge during Schaeffer's absence - composers and musique concrète collaborators Philippe Arthuys and Pierre Henry - were, according to GRM historian Évelyne Gayou, forced to resign. Thus, far from merely invoking modernist discourses of self-denial, Schaeffer lived them out. He rejected previous musical activities and bemoaned the emphasis placed on musical composition rather than on musical research in his absence: 'I dreamt of an honest approach to the phenomenon of hearing, of experimentation on diverse publics, and an ethic for the listener', Schaeffer proclaimed. 'None of this has happened.' This brief description of an 'ethic for the listener' prefigures the sharp turn to sound research that would define the Treatise on Musical Objects.

Schaeffer's regrets about *musique concrète*, his formal farewell to that genre of composition, his repeated insistence in the Treatise that composition not begin too soon: the evidence betrays a tortuous relationship to the category of music.⁴⁰ Yet, despite farewells to musique concrète and music composition around 1952, 'music' was hardly vanquished from the Schaefferian enterprise. Schaeffer did not view the turn to sound, even sound-qua-sound,

³⁶ Stalarow, 'Listening to a Liberated Paris', 180. Earlier that year, Schaeffer had also given a lecture on musique concrète at the Darmstädter Ferienkurse.

³⁷ Schaeffer, In Search, 186.

³⁸ Schaeffer briefly returned to composition, collaborating with Luc Ferrari on compositions for the World's Fair in Brussels in 1958. However, these compositions were extremely different from his early musique concrète works and were already thematizing the concerns of the sonic research described in the Treatise. See Kane, Sound Unseen, 120-1.

^{39 &#}x27;Je rêvais d'une approche honnête du phénomène de l'audition, d'une expérimentation sur divers publics et d'une éthique de l'auditeur . . . Rien de tout cela ne s'est passé.' Pierre Schaeffer, 'Lettre à Albert Richard', La Revue Musicale 236 (1957), v. Translation adapted from Kane, Sound Unseen, 73.

⁴⁰ Schaeffer's misgivings about musique concrète as a viable form of music composition did not seem to fade over time. In 1986 he still insisted that 'Musique concrète, in its work of assembling sound, produces sound-works, soundstructures, but not music. We have to not call music things which are simply sound-structures.' Hodgkinson, 'An Interview with Pierre Schaeffer', 41.

as a desertion of the cause of music but rather as a necessary sacrifice towards a new kind of music. In other words, he understood the temporary forfeit of music to be a kind of penance, one that would allow, one day, for the return to a higher synthesis, and a system of musical communication wedded to the human ear. In this sense, Schaeffer's goals were much loftier than a commitment to music's 'progress'. Not only did he believe that rigorous research into sound would reveal hitherto unknown structures for musical composition, but he also believed that a universal musical system was in reach - precisely because such research was focused on 'sound itself', and excluded sound's association with language, context, or the listener's positionality. Indeed, the preface of the Treatise speaks of this sonic research's ability 'to discern the permanent structures of human thought and sensibility'. 41

The stakes of sonic research here are impossibly high and accompany what is at best a painfully idealist – at worst, violently universalizing – belief in the potential and future of music. 42 Given the odd blend of hubris and renunciation, it is perhaps appropriate that Schaeffer likened his musical struggles to the myth of Orpheus. 43 Speaking in 1970 of the 'crime' of creating musique concrète, Schaeffer pontificated:

I was like a hero of antiquity . . . The Orpheus myth was particularly fitting for a music that was at once lost and found, all the while trembling to find its path . . . Certainly the early stages of musique concrète were both an admirable and terrifying discovery . . . And at the same time, it was the loss of the music that I loved, the music that speaks, human music.44

In his study of the premiere of Orphée 51, as well as the work's literary, cinematic, and operatic influences, Alexander Stalarow argues that Schaeffer turned to the Orpheus myth in order to reflect on *musique concrète* and its goals, manifesting himself in the mythic hero's struggle.⁴⁵

Beyond Schaeffer's self-fashioning as Orpheus, however, music here takes on a strange role - it is no longer just Orpheus's gift, the instrument that allows him to cheat death and (nearly) rescue Eurydice from Hades. Music is allegorized as Eurydice herself - as a music both lost and found on the path of sound research. One is reminded of Theodor Adorno's contemporaneous words on Beethoven and a whole system of bourgeois music that 'is irrecoverably lost to us, and is perceived only as something vanishing from sight. As Eurydice was seen. 46 Thus, with this modernist musical asceticism - Orpheus refraining from gazing at his beloved as

⁴¹ Schaeffer, Treatise, xxxviii.

⁴² The universalist aspects of Schaeffer's theories and compositions have been noted by several scholars. See Ridout, "From the Totem", 747; Valiquet, 'Hearing the Music of Others', 264-6 and 278-9; Palombini, 'Pierre Schaeffer, 1953', 556-7; Kane, Sound Unseen, 39-40. I will return to this issue later.

⁴³ It became something of a habit for Schaeffer to liken his musical struggles to Orpheus, not only in In Search, or in the Treatise, but also in his later reflections. See Schaeffer, Treatise, 513-14, 521-4. Chion also notes this habit of Schaeffer using the Orpheus myth to explain himself. Chion, 'Alone', 48-9.

⁴⁴ Brunet, Pierre Schaeffer, quoted in Stalarow, 'Listening to a Liberated Paris', 162.

⁴⁵ Stalarow, 'Listening to a Liberated Paris', 162-92. See also Laura Anderson, 'Musique concrète, French New Wave Cinema, and Jean Cocteau's Le Testament d'Orphée (1960)', Twentieth-Century Music 12/2 (2015).

⁴⁶ Theodor W. Adorno, Beethoven: The Philosophy of Music, ed. Rolf Tiedemann, trans. Edmund Jephcott (Stanford, CA: Stanford University Press, 1998), 6.

they clamber out of the underworld – Schaeffer denied himself music in the belief that a thorough investigation of sound and perception would give birth to a more human music, a music speaking in nature's own tongue. It was Schaeffer's desire for a communicative music that ultimately pushed his deferral of music beyond the aesthetics of musique concrète and into a programme of research in the *Treatise* beholden to the ideal of a universally communicative music.

Ш

The *Treatise on Musical Objects* is an intimidating text. Split into seven books and numbering over 500 pages, the Treatise engages with a variety of disciplines and literatures – acoustics, music theory, phenomenology, structural linguistics, musicology, and information theory, to name only the most central. The seven books can roughly be split into two categories: philosophical and methodological, with Books One, Two, Four, and Seven in the first category, and Books Three, Five, and Six in the second. 47 The organization and form of the Treatise are not necessarily meant to assist the reader in grasping the project; Schaeffer does not define the most central concepts until late in the text. Books Two, 'Hearing', and Four, 'Objects and Structures', discuss the best-known concepts from the Treatise: the four listening modes, the sound object, and reduced listening.⁴⁸ Moreover, Schaeffer often spent multiple chapters developing particular arguments only to arrive at their conclusion and inform the reader that he merely wanted to present an argument to refute it. All this renders the text, at moments, impenetrable, even by the author's admission: 'It is the summation of a body of research presented as it developed, rather than a logical presentation of results and possible applications.'49 Yet what truly makes the *Treatise* odd is that unlike the extensive theoretical writings of his mid-century modernist colleagues, Karlheinz Stockhausen or Pierre Boulez, the Treatise is not a guide to listening to the composer's music, or indeed, any existing music. At most, it is a guide to listening to particular sounds that might eventually be heard in a future music. The Treatise is neither a development of musique concrète, nor a defence of new techniques or new organizational systems for existing compositions. Rather, it is a piece of musical research, an attempt to build a foundation for an entirely new music with absolutely no guarantee that such a music could exist, nor any practical commitment to make it.

The deferral of music became much more than a cessation of composition in the *Treatise*, it became metonymic for the deferral of any cultural response to sound at all, something illustrated by the various 'deconditioning' and 'reconditioning' listening practices outlined in the Treatise. 50 These 'deconditioning' and 'reconditioning' exercises were central to Schaeffer's

⁴⁷ For a detailed book-by-book description, see Valiquet, 'Hearing the Music of Others', 258-60.

⁴⁸ It is the end of Book One, 'Making Music', that contains the chapter on acousmatic listening that first appeared in English in 2004. Christoph Cox and Daniel Warner, eds., Audio Culture: Readings in Modern Music (New York and London: Continuum, 2004).

⁴⁹ Schaeffer, Treatise, 532.

⁵⁰ Déconditionnement' and 'reconditionnement' in Schaeffer, Treatise. Deconditioning and reconditioning share much with the more specific terminology of typology and morphology in the Treatise. I focus on the former to draw out the

eventual goal of a universal musical language and what Schaeffer saw as its correlate, a universal musical society. Drawing on an idiosyncratic understanding of linguistics, Schaeffer aimed at inaugurating an Esperanto-like musical language developed solely from sound.⁵¹ In order to ensure its universality, however, he took a quasi-ethnographic approach. Through deconditioning and reconditioning, Schaeffer aimed to manufacture a musical language and society in his lab, a new music for a new society wrung from sound's embedded truth. Though typical in its modernist aspiration for universality, Schaeffer's project was extreme in its effort to transform such aspirations into actual listening practices, sound reels, and, most notably, theorizations of the aural that are still with us. Most importantly, though, and most systematically overlooked in examinations of Schaeffer, is the fact that he was not simply advocating for the study of sound for its own sake. He remarked that the musician's study of sound has a purpose and that 'this purpose is not a phenomenology of sound, however fascinating this may be: his pausing over the object is a provisionally suspended musical intention'. 52 Schaeffer consistently understood sound to be a means to safeguarding music's eventual, messianic return as part of a new 'reconditioned' society. Music was suspended and deferred only so it could permanently return, remade.

At the close of the introduction to the *Treatise*, Schaeffer outlined his vision for the programme of 'musical research' chronicled in its pages. He defended its focus on the material of sound and sonic perception by remarking that this was eminently logical, as logical as the linguist who begins with the speech organs or the phoneme.⁵³ This comparison to linguistics was fitting, not only because such comparisons are a recurring theme throughout the Treatise, but also because it elucidates Schaeffer's curious logic. Just as the study of phonemes illuminated language, so his study of sound would illuminate music.⁵⁴ However, unlike a linguist eager to understand extant structures, Schaeffer's study of sound aimed at uncovering musics that did not yet exist. 'We will try to make ourselves very clear', he wrote, 'the whole approach to sound . . . is only a preliminary to the musical'. 55 This deferral of the musical came as Schaeffer grasped at new listening modes, insisting that research into sound should aim at reinventing a musical language system.⁵⁶

relationship between Schaeffer's theories on music and sound, and his views on language and society. For an in-depth study of typology and morphology in the Treatise, see Carlos Palombini, 'Pierre Schaeffer's Typo-Morphology of Sonic Objects' (DPhil diss., Durham University, 1993), 60-91.

⁵¹ When Schaeffer looks back at the failures of this musico-linguistic project, he likens it directly to Esperanto. See Schaeffer, Treatise, 544. See also Umberto Eco, The Search for the Perfect Language, trans. James Fentress (Oxford: Blackwell, 1995), 324-6.

⁵² Schaeffer, Treatise, 538.

⁵³ Schaeffer, Treatise, 19.

⁵⁴ In this way, Schaeffer's project in the Treatise recalls Roman Jakobson's 1932 exhortation that 'Musicology must exploit the achievements of phonology' ('Die Musikwissenschaft muß die Errungenschaften der Phonologic ausbeuten'). Roman Jakobson, 'Musikwissenschaft und Linguistik', in Selected Writings, II: Word and Language (The Hague: Mouton, 1971), 553.

⁵⁵ Schaeffer, Treatise, 379.

⁵⁶ Schaeffer, Treatise, 544.

If our activities take the form of research, it is because they have a group discipline and reject individual whim. But we must not forget their ultimate aim: to lead to possible musics. At base, it amounts to a new awareness and a deconditioning process with a view to creating something.⁵⁷

This new awareness and deconditioning process, as we will see, was all about listening to 'sound itself', manufacturing an 'objectivity' by dissociating oneself from learned responses. If deconditioning was a matter of stripping away cultural responses, the next step, 'reconditioning', would open the possibility of a new musical language by reassociating the listener with sound objects, particles of a new musical grammar. Through a series of test sessions, Schaeffer advocated specific techniques – listening exercises, sound reels, group discussions - for both of these processes, all aimed at engineering a musical language in his lab.

To understand the nature of these test sessions, we might imagine ourselves in the official GRM training course that was instituted in 1961. The course was intended for anyone who wanted to compose music in the studio and was also a prerequisite for becoming an official member of the GRM.⁵⁸ This prerequisite was so strict that it led many collaborators to leave after only a year or so, something Évelyne Gayou attributes to Schaeffer's insistence that members conduct research rather than compose. Describing Schaeffer's research imperative, she writes: 'Everyone was to devote the greater part of their time to preparing the elements of sound that would be listened to during the test sessions, within the group, with the idea of creating a new Solfeggio, which would re-establish music on the basis of the central tenets of the listening experience.'59 The first stage of the test sessions, deconditioning, sounds like a forbidding process. Yet, despite its name, the initial deconditioning was akin to something very familiar to musicians. It was, in essence, a dictation exercise:

New researchers, who in an introductory session are invited to undergo a deconditioning process before entering a new society, will be asked to describe the sounds they hear in terms of their temporal evolution . . . or by comparison with neighboring sounds.60

Beginners would be presented with what Schaeffer called a 'translation reel', which would contain sounds from a variety of origins - electronic sources as well as instruments such as gongs, flutes, or pianos. The sounds likewise featured various manipulations in dynamics, vibrato, and timbre. The task for beginners was not to notate the sounds they heard, but merely to describe them verbally – but, with a catch. Schaeffer set strict limits on their descriptions, warning new researchers 'They would do well to abandon immediately all specialized scientific or musical terminologies, which would soon become inadequate.⁶¹ Thus, although new researchers only had to describe the sounds rather than notate them, any language or

⁵⁷ Schaeffer, Treatise, 380; emphasis original.

⁵⁸ Gayou, 'The GRM', 207.

⁵⁹ Gayou, 'The GRM', 207-8.

⁶⁰ Schaeffer, Treatise, 382.

⁶¹ Schaeffer, Treatise, 382.

concepts previously learned were set aside. This deconditioned dictation, then, was not a practice meant to test knowledge of a musical system. Rather, it was a practice designed to produce a musical system by forcing a new metalanguage about sound to emerge.⁶²

This deconditioning, however, aimed at producing more than just this metalanguage, it was meant to produce a fundamentally new kind of listener. As Tom Fogg notes, the 'deconditioning and reconditioning' passages of the Treatise are addressed to two audiences: an elite minority of Schaeffer's colleagues actually present at the test sessions and an imagined, future global public who would be transformed by these listening practices. 63 This is why Schaeffer framed deconditioning as an essential condition, something new researchers had to do 'before entering a new society'. This correlation between language and society was foundational for Schaeffer's emphasis on group research was not just a bulwark against individual subjectivity that might threaten the results, but more importantly, it was because, in his vision, any new musical language required a new 'musical society'. Yet, the only way to ensure the universality of this language and society was to begin with listeners who were 'deconditioned'. As Fogg puts it, 'this is no mere "theory"; it is a manifesto, a roadmap for social engineering through sound engineering'. 64 Thus, individuals were trained to sever intuitive and cultural meanings from sounds - to practise a type of listening that consciously disoriented the self in order to gain more 'objective' descriptions of sound. The practice of reduced listening is implicit in this deconditioning: new converts listened without reference to cause or meaning, both of which might be explained by scientific or musical terminologies.⁶⁵ Conditioned responses had to be unlearned in order for the deconditioning to occur, a process that aimed to produce nothing less than a 'pre-cultural ear'. At first glance it might appear rather curious that that this production of a supposedly blank, universal, ear was to occur collectively among a particular group at the GRM - the enculturation of a pre-cultural ear, so to speak. This group coordination was necessary, however, for the next stage of 'reconditioning', which was the process by which the deconditioned researchers, now primed to be members of a universal musical society, slowly generated a musical language. The philosophy was that, although beginners entered the test sessions with prior experience of sound or music, with particular cultural references for listening, they would emerge reconditioned, as members of a new musical society, one whose language had not yet formed.⁶⁶

⁶² Schaeffer also refers to this practice as a metalanguage. See Schaeffer, *Treatise*, 384.

⁶³ Thomas Fogg, 'Expériences sonores: Music in Postwar Paris and the Changing Sense of Sound' (DPhil diss., Columbia University, 2018), 78.

⁶⁴ Fogg, 'Expériences sonores', 79.

⁶⁵ Parsing the distinction between deconditioning and reduced listening is difficult because the terms have such a strong overlap (far more than, say, acousmatic listening and reduced listening). Deconditioning, however, as its name implies, is a preparatory exercise to the practice of reduced listening in the Treatise. As Chion puts it in his Guide to Sound Objects: 'reduced listening cannot be practised at a stroke; to achieve it we have to go through deconditioning exercises to become aware of our "by reference" hearing reflexes and be capable of "suspending" them . . . It is thus simultaneously a process of elucidation and of deconditioning.' Chion, Guide to Sound Objects, 33.

⁶⁶ As Palombini puts it, Schaeffer envisaged these listening practices as exercises 'which would liberate sound at the cost of constraining the listening. Should his [Schaeffer's] Utopia of language come to pass, then sound would be constrained anew, and listening liberated.' Palombini, 'Pierre Schaeffer's Typo-Morphology', 179.

Imagine for a moment that you are listening to a recording of someone speaking a language unknown to you. With enough repeated listening, you might expect to start to hear patterns or repetitions, characteristics that might hint at the structure of this foreign language. This is precisely how Schaeffer considered the 'translation reels' - as if the sounds recorded on them were from a language as yet unknown to him, in need of translation.⁶⁷ Yet, with repeated listening, the hidden structures of this language would begin to reveal themselves. The whole process is like a distorted version of linguistic anthropology. The researchers are tasked with examining the sound reels, not as examples of a language from an existing culture, but as the nascent materials of a future language and future musical culture. This is why they must first be deconditioned – if sounds contained hidden structures of communication within their very materiality, then listeners would be more likely to uncover them if not led astray by their own communication systems. Schaeffer even cast these sessions in the language of discovery, remarking that the new researcher 'ventures into unknown territory . . . he stakes his all on the discovery of the materials of a language that is still to be spelled out word by word'.68 This likewise puts Schaeffer's references to a 'musical society' in new relief: those engaged in the test sessions are both researchers into an emergent musical language and society and the earliest members of that musical society.

If, then, deconditioning aimed to cultivate a blank, objective ear, reconditioning marked the proper beginning of what Schaeffer referred to as the 'new musical society'. Reconditioning exercises were about listening, but more importantly, were also about dialogue and group consensus. Clarifying the difference between the emergent musical society and the members taking part in the test sessions, Schaeffer remarked that 'until now our beginners have been lone men or men with a single technique or from a single culture'. He went on to explain:

This is why their progress, focusing on establishing a new musical society, demands an initial dialogue to prepare for that society, the importance of which goes far beyond simple experimentation on perceptions: the promise of a language depends on this discipline.⁶⁹

As a group, the researchers would listen to the sound reels and establish a shared listening intention to ascertain criteria in sound. If Western music, for Schaeffer, depended on criteria of pitch, reconditioning concentrated on discovering alternative possibilities, such as the grain, allure, or thickness of sound. However, this discussion only established that such things could be heard, after everyone had already agreed they would try to hear these qualities. This process placed an enormous burden on the power of dialogue to dictate the apprehension of sound, and therefore on dialogue's power to bring this future musical society into being. Yet, the goal was that someone outside the studio would listen to one of these sound reels, and, with very little direction or discussion, automatically pick out the overriding criteria of a series

^{67 &#}x27;Translation' is often described in comparison to 'prose composition' in the Treatise, which is about the creation of sound objects with potentiality for music. See Schaeffer, Treatise, 310-13 and 367-9. For an in-depth examination of this binary in the Treatise, see Palombini, 'Pierre Schaeffer's Typo-Morphology', 66-73.

⁶⁸ Schaeffer, Treatise, 380.

⁶⁹ Schaeffer, Treatise, 381-2.

of sound. Only then would the researchers have found something strong enough to build foundations for a new kind of music. In the absence of such a discovery, as Schaeffer remarked, 'the theory is not yet music'. 70

The fact that this theory never became music likely comes as no surprise; that which was deferred remained eternally on the horizon. The impossibility of 'deconditioning', the fantasy of a pre-cultural ear, and indeed what might be felt as the violence of such a training process marks this project as one of an extreme modernist bent. Guided by a familiar vision of a universal music, but dissatisfied with the idea that acoustics or Western music theory could provide the basis for such a universality, Schaeffer set about willing such universality into existence through other means.⁷¹ Both Patrick Valiquet and Sam Ridout have recently argued for the centrality of just such a modernist universal humanism in the Treatise and in the sounds and theory of musique concrète, respectively, which they contextualize with regard to Schaeffer's understanding of structuralism, and his response to and role in the end of the French colonial empire.⁷² Ridout, in particular, elaborates on the role of non-Western music as central to Schaeffer's conception of a type of listening that excludes social and cultural meaning. Similar to how Schaeffer described foreign languages in the Treatise, non-Western music – to the Western listener – arrived supposedly already shorn of meaning.⁷³ The process of deconditioning, then, is Schaeffer's practical attempt to make it so that every encounter with sound was like the Western listener's encounter with non-Western music - or rather, what Schaeffer took to be the essential, paradigmatic encounter between a Western listener and non-Western music. What is alarming about Schaeffer's project is not just this deconditioning, and its modernist universalism, but the reconditioning - the lengths to which he went to prove that sociality could be derived entirely from sound. I insist on this figure of the social in Schaeffer's research programme because the ties to society, to language, and to the cultural are often considered absent, or severed, in his theoretical work. Yet Schaeffer puts an inordinate amount of pressure on sound's potential to disclose new social and linguistic ties - exhibiting a belief in the relation between society and sound that is unusual in its intensity. For this is what reconditioning is - an attempt to group-engineer a musical language that would then birth a new musical society. For Schaeffer, it was patently obvious that nascent languages and nascent societies were correlated. The emergence of any successful musical language would have a new musical society as an enabling condition and by-product.

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This article began with a farewell to composition, with a staunch commitment to defer music to a later date. It ends with a strange - and ultimately failed - reunion of music and sound in a

⁷⁰ Schaeffer, Treatise, 389.

⁷¹ Schaeffer, Treatise, 3-4.

⁷² Valiquet, 'Hearing the Music of Others', 255-79 and Ridout, "From the Totem", 743-64. See also John Dack, 'Pierre Schaeffer and the (Recorded) Sound Source', in Sound Objects, ed. James A. Steintrager and Rey Chow (Durham, NC: Duke University Press, 2019), 33-52.

⁷³ Ridout, "From the Totem", 747.

new society yet to dawn. How did we get here, and what are we to make of these twisted, circular pathways between sound and music? The future music that Schaeffer dreamed of never materialized and can be described only by the effect it was meant to have: universal intelligibility. This music was meant to succeed where musique concrète failed, unlocking a hidden language in sound that universally transcended difference. Schaeffer's views on music and sound depended resolutely on a division between the 'natural' and the 'cultural'. He understood music as eminently cultural and bemoaned 'the deafness of one musical civilization to another'. 74 Likening this 'deafness' to the way in which a foreign language was heard by a non-speaker, Schaeffer believed that any particular music communicated only to the narrow group of listeners trained to understand it. Sound, however - if it could be manipulated so that it was stripped of any connection to source or meaning - became natural, replete with universal potential. If sound as a natural material could be harnessed to produce a new music, Schaeffer believed that such a music would have the potential to communicate universally, untainted by this 'deafness'. Thus, after reviewing Schaeffer's research programme, it is clear that it was not just music that was deferred. The very invocation of the word music, was, for Schaeffer, the invocation of the particular, of the cultural. When he deferred music, he believed he could also defer these other issues and create a universal auditory culture alongside his ideal music. Put another way, the deferral of music was a matter of ethics, a purposeful setting aside of music in order to foster a better, more inclusive, universal musical culture. Sound, then, when heard by a properly deconditioned listener, was figured as a pure, natural material that carried the potential for new social ties. It was only by passing through sound that possible musics could emerge.

As for the legacy that this complex thinking has bequeathed contemporary musicologists and sound scholars, it seems that Schaeffer's figuring of the initial dichotomy of music and sound shares much with what Brian Kane diagnoses as 'musicophobia' in sound art discourse.⁷⁵ Musicophobia refers to the tendency for sound art theorists to position music as the constitutive other of sound. For Kane, this constitutive otherness can be figured in one of two ways: either sound art is taken to be critical, political, and conceptual, with music cast as absolutely autonomous and concerned only with 'sound itself', or, sound art is theorized as having to do purely with the material and phenomenological experience of sound, and music becomes a metonym for the social, the cultural, and the particular. Schaeffer's project would appear to align with this latter kind of musicophobia, deferring music as too cultural so that sound could 'truly' be understood in its universal implications. Yet, as the processes of deconditioning and reconditioning make clear, Schaeffer always intended to resolve the dichotomy in a grand unification of sound and music in a universally intelligible musical language. Schaeffer's musicophobia is, unsurprisingly, really more an outsized musicophilia. All this deferral, this musical abstinence, belies a desire for music's triumphant return more than a preoccupation with 'sound itself'.

⁷⁴ Schaeffer, Treatise, 227.

⁷⁵ Brian Kane, 'Musicophobia, or Sound Art and the Demands of Art Theory', Nonsite.org 8 (2013), https://nonsite.org/ musicophobia-or-sound-art-and-the-demands-of-art-theory/.

Kane is not the only scholar to have diagnosed these types of oppositions between music and sound - it recurs in other scholarship on sound art, as well as experimental music. In her work on an aesthetic theory for experimental music, Joanna Demers cautions against the polarities of hypermaterialism and antimaterialism, the former focused solely on the qualities and experience of sound, and the latter on the meaning of a musical piece irrespective of its material.⁷⁶ G. Douglas Barrett goes further, arguing that sound art is nothing more than absolute music, concerned only with 'sound itself', and advocates for a 'critical music' that is no longer beholden to purely material concerns.⁷⁷ It is no accident that Schaeffer's own figuring of the binary between music and sound would share so much with this scholarship.⁷⁸ Schaeffer is a central figure in the history of experimental music, as well as a critical antecedent to sound art and the often-philosophical nature of the discourse that surrounds it - perhaps even the original 'musicophobe'. Because the Treatise leaves many questions about the relationship between sound and music unsettled, contemporary attempts to deal with the relationship are, in a sense, inevitably in dialogue with Schaeffer. The question is how to respond to this inevitability. In our contemporary disciplines of music and sound studies, the means to critiquing Schaeffer come to us almost readymade: there is no such thing as a pre-cultural ear, there is no essence to sound, no essence to listening, only their continued construction at every specific articulation.⁷⁹ Furthermore, the insistence on a realm of 'pure sound' is an act of erasure on those who make and hear sounds, as well as a pattern with its own modernist and ethnocentric history. 80 Critiques of Schaeffer's project, and its conceptual apparatus, however, may end up doing little justice to the ways in which he figured the dichotomy between sound and music: as an unfinished split, a messy binary that blurs with other binaries, nature and culture, and the materiality of sound versus the sociality of music.

To think with Schaeffer is to observe that his commitment to the materiality of sound was matched only by his commitment to sound's discursive construction and sound's ability to

⁷⁶ Joanna Demers, 'Materialism, Ontology, and Experimental Music Aesthetics', in Tomorrow is the Question: New Directions in Experimental Music Studies, ed. Benjamin Piekut (Ann Arbor, MI: University of Michigan Press, 2014.

⁷⁷ G. Douglas Barrett, After Sound: Toward a Critical Music (New York: Bloomsbury, 2016). Kane, Barrett, and Demers all engage with the antimaterialist trends in art theory, relying on a general narrative of conceptual art's relinquishment of material in the shift from a Greenbergian modernism to the watershed years of the 1960s. The translation of this discussion to sound art and musical works often results in a conceptually and historically false equivalence between medium-specificity, on the one hand, and discourses of absolute music and aesthetic autonomy, on the other.

⁷⁸ A recent interesting contribution to this topic by Pascal Decroupet argues for a 'sonal' history of twentieth and twentyfirst century music. Rather than rely on separate histories of 'sound' and 'music', Decroupet suggests that much twentieth and twenty-first century music is specifically based on the nature of sound. Pascal Decroupet, 'Making Audible the Mysteries of Sound: An Alternative Historiography for the Musical Avant-Garde from Varèse to Grisey', in Revisiting the Historiography of Postwar Avant-Garde Music, ed. Anne Sylvie Barthel-Calvet and Christopher Brent Murray (New York: Routledge, 2023).

⁷⁹ Such critiques are made by both Patrick Valiquet and Sam Ridout. See Valiquet, 'Hearing the Music of Others', 255-79 and Ridout, "From the Totem", 743-64.

⁸⁰ For this argument from the perspective of twentieth-century music studies, see Edmund Mendelssohn, 'Ontological Appropriation: Boulez and Artaud', Twentieth-Century Music 18/2 (2021). For this argument from the perspective of sound studies, see Marie Thompson, 'Whiteness and the Ontological Turn in Sound Studies', Parallax 23/3 (2017).

produce sociality. He paradoxically shares the belief in the possibility of a reconciliation between materiality and sociality with many music and sound scholars of our day.⁸¹ In fact, the Treatise might be characterized as an immense research project into the nature of the relationship between sound and sociality, not through critique, analysis, or case studies, but by an attempt to effectively design a new musical society step by step. This latter aspect of Schaeffer's project - the attempt to grow a musical culture in a lab, wringing sociality from sound - rings today as a modernist fantasy of control run amok. I am, however, offering the uneasy consideration that such a project nonetheless rests on a foundational belief in sound's inherent propensity towards the social, a belief that many scholars share today. For Schaeffer, sound generated language, which in turn regenerated listening, which was meant to be sound's eventual bind to the social and, yes, to music. This is what makes reading the Treatise so difficult: it is a text that resists both dismissal and rescue. Interpretations that would position music as a straw man upon which Schaeffer's well-known theories of sound and listening depend, or as an absent but enabling condition for the *Treatise*'s existence fail to account for Schaeffer's eventual goals. He deferred music with purpose: to reunify music and sound. If composition was postponed, if discussions of musical structure were forbidden, sound could be studied 'objectively', parsed and dissected in order to give up its true nature - a social nature, a nature that tends to language and to music. One of Schaeffer's categorical mistakes was believing that his curious practice of musical deferral would result in the eventual arrival, whole and present, of a sound he could spin, yarn-like, into a new network of social relations.

The trouble here is not with the allure of the project of understanding the sociality of sound, or with the various analyses proffered by later scholars such as Demers or Barrett in order to carry it out. The question is rather why, and how, we might share this ambition with those who came before us, and what, if anything, we might do differently this time. Are we still like Schaeffer, dreaming of a reconciliation between sound and music, nature and culture, because of the promise such a reconciliation implies for the future of humankind? As Schaeffer remarked in his own reappraisal of the Treatise ten years after its publication: "The interest of the musical experience lies . . . in the dialectic between natural and cultural and in the dialogue, personal for everyone, between what can be heard and what is perceived.'82 Such a thoughtful, even-tempered reflection on music, sound, nature, and culture reads as if it could have been written in far more recent memory. Two paradigm-shifting texts similarly articulate the issue of sound and music in connection with the binary between nature and culture. In the introduction to The Audible Past, Jonathan Sterne writes that 'At its core, the phenomenon of sound and the history of sound rests at the in-between point of culture and nature.'83 Ana María Ochoa Gautier goes further in the introduction to Aurality, noting that 'the underlying relation between nature (as the given) and culture (as the

⁸¹ For an excellent piece on the genealogies of sound studies that centres the reconciliation between materiality and sociality, see Tom McEnaney, 'The Sonic Turn', Diacritics 47/4 (2019).

⁸² Schaeffer, Treatise, 542.

⁸³ Jonathan Sterne, The Audible Past: Cultural Origins of Sound Reproduction (Durham, NC, and London: Duke University Press, 2003), 10.

made) [is] implicit in the distinction between music and sound'. 84 As Ochoa notes elsewhere, the values ascribed to sound and music, the distinctions drawn between the two, and the kinds of knowledge they produce has led to 'the renewed debate on the analytic paradigms of musical disciplines . . . point[ing] to a shifting conceptual ground of the acoustic in the humanities'. 85 Schaeffer is part of a longer history of musicology and sound studies not only because of musique concrète, the acousmatic, or his theories on sound and listening, but also because he is an important chapter in the history of how music and sound entwine at this liminal point between nature and culture. His conclusions are not necessarily our own; to think with is, as Wilder reminds us, also to extend beyond. Schaeffer's work may act as a mirror of sorts, offering us a chance to pause and enquire after the unsettling correspondences between his goals and our own, to ask where - precisely - he went wrong, all the while resisting the temptation to imagine ourselves so far beyond the same treacherous passage.

Bibliography

Adorno, Theodor W. Beethoven: The Philosophy of Music, ed. Rolf Tiedemann, trans. Edmund Jephcott. Stanford, CA: Stanford University Press, 1998.

Anderson, Laura. 'Musique concrète, French New Wave Cinema, and Jean Cocteau's Le Testament d'Orphée (1960)'. Twentieth-Century Music 12/2 (2015), 197-224.

Antokoletz, Elliott. A History of Twentieth-Century Music in a Theoretic-Analytical Context. London: Routledge,

Barrett, G. Douglas. After Sound: Toward a Critical Music. New York: Bloomsbury, 2016.

Battier, Marc. 'What the GRM Brought to Music: From Musique Concrète to Acousmatic Music'. Organised Sound 12/3 (2007), 189–202.

Bertrand, Loïc. 'The Language of Things: An Archaeology of Musique Concrète'. Organised Sound 22/3 (2017), 354-61.

Bonnet, François J. The Order of Sounds: A Sonorous Archipelago, trans. Robin Mackay. Falmouth: Urbanomic,

Born, Georgina. 'Modernist Discourse, Psychic Forms, and Agency: Aesthetic Subjectivities at IRCAM'. Cultural Anthropology 12/4 (1997), 480-501.

Brunet, Sophie. Pierre Schaeffer. Paris: Éditions Richard-Masse, 1969.

Chion, Michel. Guide to Sound Objects: Pierre Schaeffer and Musical Research, trans. John Dack and Christine North. Paris: Buchet Chastel, 2009. https://monoskop.org/log/?p=536 (accessed 15 May 2020).

-. Sound: An Acoulogical Treatise, trans. James A. Steintrager. Durham, NC, and London: Duke University Press, 2016.

Cook, Nicholas, and Anthony Pople, eds. The Cambridge History of Twentieth-Century Music. Cambridge: Cambridge University Press, 2004.

Cox, Christoph, and Daniel Warner, eds. Audio Culture: Readings in Modern Music. New York and London: Continuum, 2004.

Dack, John. 'Pierre Schaeffer and the (Recorded) Sound Source', in Sound Objects, ed. James A. Steintrager and Rey Chow. Durham, NC: Duke University Press, 2019. 33-52.

-. 'Pierre Schaeffer and the Significance of Radiophonic Art'. Contemporary Music Review 10/2 (1994), 3-11. Decroupet, Pascal. 'Making Audible the Mysteries of Sound: An Alternative Historiography for the Musical Avant-Garde from Varèse to Grisey', in Revisiting the Historiography of Postwar Avant-Garde Music, ed. Anne Sylvie Barthel-Calvet and Christopher Brent Murray. New York: Routledge, 2023. 172-91.

⁸⁴ Ana María Ochoa Gautier, Aurality: Listening and Knowledge in Nineteenth-Century Colombia (Durham, NC, and London: Duke University Press, 2014), 21.

⁸⁵ Ana María Ochoa Gautier, 'Acoustic Multinaturalism, the Value of Nature, and the Nature of Music in Ecomusicology', boundary 2 43/1 (2016), 108.

- Demers, Joanna. 'Materialism, Ontology, and Experimental Music Aesthetics', in Tomorrow Is the Question: New Directions in Experimental Music Studies, ed. Benjamin Piekut. Ann Arbor, MI: University of Michigan Press, 2014. 254-74.
- Eco, Umberto. The Search for the Perfect Language, trans. James Fentress. Oxford: Blackwell, 1995.
- Fogg, Thomas. 'Expériences sonores: Music in Postwar Paris and the Changing Sense of Sound'. DPhil diss., Columbia University, 2018.
- Fulcher, Jane F. 'From "the Voice of the Maréchal" to Musique Concrète: Pierre Schaeffer and the Case for Cultural History', in The Oxford Handbook of the New Cultural History of Music, ed. Jane F. Fulcher. New York: Oxford University Press, 2011. 381-402.
- -. Renegotiating French Identity: Musical Culture and Creativity in France during Vichy and the German Occupation. New York: Oxford University Press, 2018.
- Gayou, Évelyne. 'The GRM: Landmarks on a Historic Route'. Organised Sound 12/3 (2007), 203-11.
- Godøy, Rolf Inge. 'Gestural-Sonorous Objects: Embodied Extensions of Schaeffer's Conceptual Apparatus'. Organised Sound 11/2 (2006), 149-57.
- Griffiths, Paul. Modern Music and After. Oxford: Oxford University Press, 2010.
- Herrmann, Mitchell. 'Unsound Phenomenologies: Harrison, Schaeffer and the Sound Object'. Organised Sound 20/3 (2015), 300-7.
- Hodgkinson, Tim. 'An Interview with Pierre Schaeffer', in The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts, ed. David Rothenburg and Marta Ulvaeus. Middleton, CT: Wesleyan University Press, 2009.
- Hu, Zhuqing (Lester) S. 'Chinese Ears, Delicate or Dull? Toward a Decolonial Comparativism'. Journal of the American Musicological Society 74/3 (2021), 501-69.
- Jakobson, Roman. 'Musikwissenschaft und Linguistik', in Selected Writings, II: Word and Language. The Hague: Mouton, 1971. 551-3.
- Kaltenecker, Martin. 'Recent Histories of Twentieth-Century Music and the Historiographical Tradition', in Revisiting the Historiography of Postwar Avant-Garde Music, ed. Anne Sylvie Barthel-Calvet and Christopher Brent Murray. New York: Routledge, 2023. 13-36.
- Kane, Brian. 'L'Objet Sonore Maintenant: Pierre Schaeffer, Sound Objects and the Phenomenological Reduction'. Organised Sound 12/1 (2007), 15-24.
- -. 'Musicophobia, or Sound Art and the Demands of Art Theory'. Nonsite.org 8 (2013). https://nonsite.org/ musicophobia-or-sound-art-and-the-demands-of-art-theory/ (accessed 10 October 2021).
- -. Sound Unseen: Acousmatic Sound in Theory and Practice. Oxford: Oxford University Press, 2014.
- Kim-Cohen, Seth. In the Blink of an Ear: Toward a Non-Cochlear Sonic Art. New York: Continuum International, 2009.
- Manning, Peter. Electronic and Computer Music. Oxford: Oxford University Press, 2004.
- McEnaney, Tom. 'The Sonic Turn'. Diacritics 47/4 (2019), 80-109.
- Mendelssohn, Edmund. 'Ontological Appropriation: Boulez and Artaud'. Twentieth-Century Music 18/2 (2021), 281-310.
- Nattiez, Jean-Jacques. Music and Discourse: Toward a Semiology of Music, trans. Carolyn Abbate. Princeton, NJ: Princeton University Press, 1990.
- Nord, Philip. 'Pierre Schaeffer and Jeune France: Cultural Politics in the Vichy Years'. French Historical Studies 30/4 (2007), 685-709.
- Ochoa Gautier, Ana María. 'Acoustic Multinaturalism, the Value of Nature, and the Nature of Music in Ecomusicology'. boundary 2 43/1 (2016), 107-41.
- -. Aurality: Listening and Knowledge in Nineteenth-Century Colombia. Durham, NC: Duke University Press,
- Palombini, Carlos. 'Machine Songs V: Pierre Schaeffer: From Research into Noises to Experimental Music'. Computer Music Journal 17/3 (1993), 14-19.
- —... 'Pierre Schaeffer, 1953: Towards an Experimental Music'. Music & Letters 74/4 (1993), 542–57.
- 'Pierre Schaeffer's Typo-Morphology of Sonic Objects'. DPhil diss., Durham University, 1993.
- -. 'Technology and Pierre Schaeffer: Pierre Schaeffer's Arts-Relais, Walter Benjamin's technische Reproduzierbarkeit and Martin Heidegger's Ge-stell'. Organised Sound 3/1 (1998), 35-43.
- Ridout, Sam. "From the Totem to the Antenna": Musique Concrète and the Universal at the End of the French Empire'. Music & Letters 101/4 (2020), 743-64.
- Robinson, Dylan. Hungry Listening: Resonant Theory for Indigenous Sound Studies. Minneapolis, MN: University of Minnesota Press, 2020.
- Schaeffer, Pierre. In Search of a Concrete Music, trans. Christine North and John Dack. Berkeley, CA: University of California Press, 2012.

- -. 'Lettre à Albert Richard'. La Revue Musicale 236 (1957), iii-xvi.
- -. Treatise on Musical Objects: An Essay across Disciplines, trans. Christine North and John Dack. Oakland, CA: University of California Press, 2017.
- Solomos, Makis. 'Schaeffer phénoménologue', in Ouïr, entendre, écouter, comprendre après Schaeffer. Paris: Buchet/ Chastel, 1999. 53-67.
- Stalarow, Alexander. 'Listening to a Liberated Paris: Pierre Schaeffer Experiments with Radio'. DPhil diss., University of California, Davis, 2017.
- Steintrager, James A. and Rey Chow, eds. Sound Objects. Durham, NC, and London: Duke University Press, 2019. Sterne, Jonathan. The Audible Past: Cultural Origins of Sound Reproduction. Durham, NC, and London: Duke University Press, 2003.
- Teruggi, Daniel. 'Musique concrète Today: Its Reach, Evolution of Concepts and Role in Musical Thought'. Organised Sound 20/1 (2015), 51-9.
- -. 'Technology and musique concrète: The Technical Developments of the Groupe de Recherches Musicales and Their Implication in Musical Composition'. Organised Sound 12/3 (2007), 213-31.
- Thomas, Jean-Christophe. 'Nature and the GRM'. Organised Sound 12/3 (2007), 259-65.
- Thompson, Marie. 'Whiteness and the Ontological Turn in Sound Studies'. Parallax 23/3 (2017), 266-82.
- Valiquet, Patrick. 'Hearing the Music of Others: Pierre Schaeffer's Humanist Interdiscipline'. Music and Letters 98/2 (2017), 255–79.
- -. 'Review of In Search of a Concrete Music by Pierre Schaeffer and Sound Unseen: Acousmatic Sound in Theory and Practice by Brian Kane'. Twentieth Century Music 12/2 (2015), 285-90.
- Wilder, Gary. Freedom Time: Negritude, Decolonization, and the Future of the World. Durham, NC, and London: Duke University Press, 2015.