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PART ONE

Noise, resistance, and intertext in Helmut Lachenmann's *Dal niente (Interieur III)* and *Accanto*

Abstract

This study examines the centrality of noise, and related concepts of resistance and intertextuality, to the music and writings of Helmut Lachenmann. It begins by outlining the challenges posed by writing about noise in relation to Lachenmann but argues a historical case for its significance in the second chapter. The third chapter focuses on *Dal niente* (1970), suggesting that the piece maps noise and resistance from the empirical level of its sonic surface, to the more abstract level of its communicative ecology. This is read in the context of Lachenmann's 1966 essay, '*Klangtypen der neuen Musik*', and Heidegger's theory of *das Zeug*. Chapter Four illustrates noise as a form of cultural resistance in *Accanto* (1975-76), which is read alongside '*Zum problem des musikalisch Schönen heute*' (1976), '*Bedingungen des Materials: Stichworte zur Praxis der Theoriebildung*' (1978) and '*Vier Grundbestimmungen des Musikhörens*' (1979). Finally, I suggest the usefulness of intertextual theory as a critical framework within which to understand this mapping of noise and resistance, proposing a proximity between intertextuality and Lachenmann's concept of dialectical structuralism.

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A note on translation: unless otherwise stated, all translations from German and French are my own.

Introduction: 'In the beginning was the noise'[1]

The late 1970s saw a fundamental shift in Helmut Lachenmann's compositional thought. From *TemA* (1968) and *Air* (1968-69) to *Accanto* (1975-76), Lachenmann's music was driven by *musique concrète instrumentale*, an approach concerned not so much with the sounds themselves, but with the means of their production, the material and energetic conditions out of which sounds are formed, and the structural connections that arise between them. Through its intense scrutiny of these conditions and these structures, brought into the foreground through sonic deformation and the "denaturalisation" of conventional instrumental technique, Lachenmann's *musique concrète instrumentale* sought to bring the awareness of its listeners to, and in so doing free them from, the predetermined conditions and structures of their listening. In *Accanto* and after, however, Lachenmann began to expand his compositional worldview so that it would not only encompass the immanent structural properties of, and relations between, sounds but also confront the entire "aesthetic apparatus" of listening, recognising that sounds structure and are structured in a dialectical relationship with the subjective social structures of their production and reception – market forces, myth and tradition, strata of memory and association.[2]

[1] Michel Serres, *The Parasite*, tr. Lawrence R. Schehr (Baltimore and London: The John Hopkins University Press, 1982), 13.
[2] Lachenmann's first published use of the term "aesthetic apparatus" (*äesthetichen Apparat*) appears in his 1976 essay '*Zum Problem des musikalisch Schönen heute*', see *Musik als existentielle Erfahrung: Schriften 1966-1995* (Wiesbaden: Breitkopf & Härtel, 1996), 109.

This thesis argues that noise, and related concepts of resistance and intertextuality, are fundamental to a proper understanding of Lachenmann's compositional shift in the 1970s. I begin by outlining some of the challenges posed by writing about noise in relation to Lachenmann but argue, in the second chapter, a historical case for its particular significance when it comes to thinking about his music. The third chapter focuses on *Dal niente (Interieur III)* (1970) for solo clarinet, treated as a paradigmatic example of *musique concrète instrumentale*, in which noise and resistance are mapped from the empirical level of the piece's sonic surface, to the more abstract level of its communicative ecology. This is read within the context of Lachenmann's 1966 essay, '*Klangtypen der neuen Musik*'. Chapter Four follows Lachenmann in taking this abstraction a step further, illustrating how noise of various kinds within *Accanto* (1975-76) for solo clarinet, orchestra, and tape generate a kind of cultural resistance against the aesthetic apparatus. *Accanto* is read alongside '*Zum problem des musikalisch Schönen heute*', written in the same year, as well as '*Bedingungen des Materials: Stichworte zur Praxis der Theoriebildung*' (1978) and '*Vier Grundbestimmungen des Musikhörens*' (1979). Finally, I suggest the usefulness of intertextual theory as a critical framework within which to understand this mapping of noise and resistance, proposing a proximity between intertextuality and Lachenmann's own, noisy concept of dialectical structuralism.

Chapter One: *Was ist das für ein Geräusch?*

'There's music everywhere. Ruttledge's door ; ee creaking.
No, that's noise'[3]

This research seeks to fill what is, in my view, a conspicuous gap in the literature on Lachenmann. Despite the fact that Lachenmann's music is noisy, even in the very simplest sonic sense, the function of noise within his music remains undertheorised. Since Elke Hockings' article 'Helmut Lachenmann's Concept of Rejection', published in *Tempo* in 1995 and representing the first critical account in English of Lachenmann's compositional approach, and Ian Pace's two-part (and somewhat selective) survey of his music in *The Musical Times* of 1998, Lachenmann's unusual instrumental treatments, his deconstructions of conventional musical language, and the consequent epistemological challenges posed by a deliberately-created "non-music" [*Nichtmusik*] have prompted an ever-increasing interest in the composer's music and thought within English-language musicology over the last two decades.[4] The same period has also seen an increasing interest in the theoretical study of noise, both inside and outside a musicological context. However, no one has yet attempted to bring these things together. My research intends to address this lack, demonstrating that not only can a theory of noise illuminate Lachenmann's work, but also that Lachenmann's work might help us make better sense of noise.

[3] From James Joyce, *Ulysses*, ed. with an introduction and notes by Jeri Johnson (Oxford: Oxford University Press, 1998), 270.

[4] Elke Hockings, 'Helmut Lachenmann's Concept of Rejection', *Tempo*, 193 (1995), 4-14. Ian Pace, 'Positive or Negative 1', *The Musical Times*, 139:1859 (1998a), 9-17, and 'Positive or Negative 2', *The Musical Times*, 139:1860 (1998b), 4-15. For a comprehensive account of this, and of the increasing presence of Lachenmann's music in UK concert programmes, see Christopher Swithinbank, 'Into the Lion's Den: Helmut Lachenmann at 75', *Tempo*, 65 (2011), 52-61.

Scholars of Lachenmann's music do take occasional notice of noise, but this is only ever done in passing. There has yet to be an in-depth attempt to understand what, or *how*, noise might mean in terms of his compositional approach and its historical situation, and the ways in which his music is experienced by listeners and performers. Hockings, for instance, merely identifies 'muted sounds and extinguished noises', while Rainer Nonnenmann refers (without explanation) to 'the dominance of new noise-effects over traditional practice' in Lachenmann's music, 'and their increasing emancipation as sounds in their own right'.[5] In a similar vein, Piotr Grella-Możejko writes that 'pure, beautiful, conventionally produced instrumental and vocal sound has been replaced by what is traditionally considered "noise"', Wolfgang Rihm points towards 'noise components', and Pace cites 'pointillist piano writing [taking] place against a growing "noise" continuum in the orchestra'.[6]

This kind of colloquial usage presents noise only as a thing that can be heard on the sonic surface of the music, and, in so doing, relegates it to the position of an exotic "other" (noise as the excess of unwanted sound/noise as not-music). However, in the context of a music whose spirit lies in the dissolution of normative systems, this oversight seems particularly problematic. Only chapters by Ross Feller and Paul Craenen begin to explore how noise might *function* within Lachenmann's music, bringing noise into a more abstract, and

[5] Hockings (1995), 8; Rainer Nonnenmann, 'Music with Images--The Development of Helmut Lachenmann's Sound Composition Between Concretion and Transcendence', *Contemporary Music Review*, 24:1 (2005), 1-29.

[6] Piotr Grella-Możejko, 'Helmut Lachenmann--Style, Sound, Text', *Contemporary Music Review*, 24:1 (2005), 62; Wolfgang Rihm, 'Grinding Away at the Familiar', *Contemporary Music Review*, 23:3-4 (2004), 23; Pace (1998a), 7. David Alberman's fairly extensive study of Lachenmann's use of extended techniques in his string quartets presents an interesting case – where one might expect an investigation into the noise components of string playing, the term appears only once ('white-noise-like elements of bowed sounds'), while the term "sound" appears no less than 99 times (David Alberman, 'Abnormal Playing Techniques in the String Quartets of Helmut Lachenmann', *Contemporary Music Review*, 24:1 (2004), 39-51.).

potentially non-sounding, domain. Feller differentiates, in passing, between 'sonic noise' and 'semiotic noise' in Lachenmann's music, the latter 'involving interference in the process of signification itself'; Craenen, similarly fleetingly, refers to 'the noise of the physical and mechanical excess in the musical signal', through whose amplification Lachenmann's makes 'an original resistance audible once again'.[7] The nature of this interference, or of this original resistance, is never explained; while these ideas represent a promising point of departure, both writers leave much to be explored.

Writing in English about Lachenmann, however, does present particular challenges, in large part since the majority of his own writings, published in a collected edition titled *Musik als existentielle Erfahrung*, remain untranslated.[8] Indeed, translating Lachenmann's writing into English is no easy task since, as Elke Hockings (herself a German speaker) and others have noted, Lachenmann writes within a particularly German tradition of speculative philosophy alongside dialectical reasoning, a tradition that can sound unpalatably dogmatic to the English-speaking reader.[9] Added to this are the challenges posed by the greater degree of precision and nuance with which the German language parses its ideas, compared to that of English. This nuance is illustrated well in the case of noise; for the single English word, "noise," German has at least four expressions which, for a non-German speaker, warrant some explanation. The first word, *der Krach*, refers to a loud, disturbing sound that results from an action (usually a movement) but is short lived (like the sound of a plate smashing when it is dropped onto the floor), while *der Lärm* refers to a loud sound, or collection of sounds, that

[7] Ross Feller, 'Resistant strains of Postmodernism: The Music of Helmut Lachenmann and Brian Ferneyhough', *Postmodern Music/Postmodern Thought*, ed. Judy Lochhead and Joseph Auner, (New York: Routledge, 2008), 253; Paul Craenen, *Composing Under the Skin: the Music-making Body at the Composer's Desk* (Leuven: Leuven University Press, 2014), 90.
[8] Lachenmann (1996).
[9] See Hockings (1995), Swithinbank (2011), and David Lesser, 'Dialectic and Form in the Music of Helmut Lachenmann', *Contemporary Music Review*, 23:3-4 (2004), 107-114.

is continuous (like the sound/noise of a building site). Where both *der Krach* and *der Lärm* imply some kind of subjective judgement (more negative than positive), a third word, *das Rauschen* carries a degree of objectivity, referring to noise in an acoustic sense (like white noise), or more generally to any kind of signal disturbance or interference. *Das Rauschen* may, therefore, refer to noise outside the domain of sound. A fourth word, *das Geräusch*, is by far the most polyvalent term and is also, perhaps for this reason, the one that is used most commonly. Like *der Krach* and *der Lärm*, *das Geräusch* refers to the sound that occurs as the unintentional by-product of an act of motion, but it differs insofar as it carries no connotation of value (*Geräusche* may be pleasant, unpleasant, or neutral), nor does it carry any connotation of dynamic intensity (*Geräusche* may be loud or soft).[10] This neutrality complicates matters for the non-German speaker – it means that *das Geräusch* can equally translate as sound, as well as noise.

The difficulties of translating this nuance might go some way to explaining why English-language literature on noise in the context of Lachenmann's music remains so narrowly circumscribed. Another, quite probable, reason for this is Lachenmann's own professed dislike of the English word "noise," owing to its comparative bluntness:

> I have a feeling that the English word noise has more negative connotations than our German word *Geräusch*. We would describe the sound of wind blowing as *Geräusch*, to imply that it's a beautiful and natural sound. It's so stupid when people say that instead of making beautiful sounds, I make noise. For instance, in my opera [*Das Mädchen mit den Schwefelhölzern*, 1990-96] I ask for all of the string players to strike the bridge of their instruments with the bow, so precisely as to avoid making any note. If there are 52 string musicians, and 51 do as I ask but one musician forgets, then the so-called noise is lost. It takes real virtuosity

[10] For further discussion of these distinctions, see Roland Wittje, 'Concepts and Significance of Noise in Acoustics: Before and after the Great War', *Perspectives on Science*, 24:1 (2016), 7-28.

> to produce this sound, and if it works properly it's an incredibly beautiful natural sound.[11]

Of the four German words for noise outlined above, it is *Geräusch* that Lachenmann favours throughout *Musik als existentielle Erfahrung*. However, in the passage above, Lachenmann overturns the sense of unintentionality that *Geräusch* first seemed to imply – he stops referring to noise and refers, instead, to sound. In German, though, he still uses the term, more or less consistently, as distinct from another word for sound: *der Klang*.[12] This seems to suggest that it is indeed the sense in which the term *Geräusch* implies a by-product that allows it to be understood more definitely as "noise," and not as "sound." And yet while *Geräusch* (along with its compound versions) appears 68 times in *Musik als existentielle Erfahrung*, *Lärm* (also a by-product) features just five times, and *Krach* does not appear at all. This may well be due to the relative neutrality of *Geräusch* over *Lärm* and *Krach*, but *das Rauschen*, another neutral term that can also apply to phenomena outside the domain of sound, appears only seven times, each time referring to something sonic: '*Bandrauschen*' (tape noise) in *Fassade* (1973), '*Beckenrauschen*' in Luigi Nono's *Coro di Didone*, three times seemingly interchangeably with *Geräusch*, and once finally in an almost untranslatable sentence that adds to this complexity by implying precise distinctions after all:

> *der Unisono-Klang und das Unisono-Rauschen, das heißt die synchrone Klang- beziehungsweise Geräusch-Vervielfachung beziehungsweise – Verstärkung (was bei sukzessivem "Ausschalten" der Einzelinstrumente den verbleibenden Klang*

[11] Philip Clark, 'The human torch', *The Wire*, 2 (2003), 26. See also Abigail Heathcote, 'Sound Structures, Transformations, and Broken Magic: An Interview with Helmut Lachenmann', in Irène Deliège & Max Paddison (eds.), *Contemporary Music: Theoretical and Philosophical Perspectives*, (Aldershot: Ashgate, 2010), 333.

[12] Again, this is only one of German's words for sound. *Der Klang*, often but not only used in a musical context, is the impression of combined *Töne*, which refer to the English equivalent of note/pitch, but also tone (both in the sense of a sine-tone, but also in the sense of tone of voice). Another word, *der Schall*, refers to sound from the perspective of acoustical physics.

beziehungsweise das Geräusch als Resultat von Subtraktions-Prozessen in ein besonderes Licht rückt und umwertet[.][13]

One might well argue then, as Lachenmann seems to do, that a lot is lost in the translation from German into English, but I would suggest that an understanding of the *Lärm-Krach-Rauschen-Geräusch* complex enables us to integrate the flexible nuance of each German term, as well as their nuanced interconnectivity, into noise's already dense polysemy. And so, taking a leaf out of the German book, and acknowledging that the complex network of meanings carried by the term noise is too often overlooked in literature on the subject, I suggest parsing noise into five categories.

1. "Common understanding" noise: refers to a sound that is unexpected and/or causes irritation or disturbance.[14] It is usually thought of as a loud sound at the foreground of attention (the noise of building site), but it may equally be a quiet sounding presence in the background (the noise of a humming air conditioner). Nevertheless, a noise, by this understanding, occurs as a by-product of an event, generally speaking an event that involves motion and/or motion and contact, and so its function is indexical – noise directs attention towards the thing that made it. Descriptively, common

[13] Lachenmann (1996), 231: 'Unison sound (*Klang*) and unison noise (*Rauschen*), that is, the synchronous multiplication or amplification of sound (*Klang*) or noise (*Geräusch*) (which by successive "switchings off" of single instruments recasts the remaining sound or noise into a different light, as the result of a process of subtraction)'. Evan Johnston, in his English translation of this essay (Helmut Lachenmann, 'On My Second String Quartet ("*Reigen seliger Geister*")', *Contemporary Music Review*, 23:3/4 (2004a), 59-79), and elsewhere Dereck Calandrella in his English translation of '*Hören ist wehrlos - ohne Hören Über Möglichkeiten und Schwierigkeiten*' (Helmut Lachenmann, 'Hearing [Hören] is Defenseless—without Listening [Hören]: On Possibilities and Difficulties', *Circuit*, 13:2 (2003), 27-50) try, with limited success, to circumvent this difficulty by translating *Rauschen* as "rustling."

[14] Greg Hainge refers to this kind of noise as the "common sense definition," but I have adapted his formulation to try and reduce its slightly patronising effect (Greg Hainge, *Noise Matters: Towards an Ontology of Noise* (London & New York: Bloomsbury Academic, 2013). One might also refer to it as "vernacular noise," "demotic noise," "first dictionary definition noise," or as the "communal definition," but all of these labels are problematic in their own way. The difficulty of labelling this first category of noise is, I suggest, instructive.

understanding noise is used in opposition to sound – the *sound* of a group of children singing together, versus the *noise* of a group of children misbehaving in a classroom – and so is highly subjective, contingent on the positioning and interpretation of its observer. Common understanding noise corresponds to *der Krach* and *der Lärm*, as well as to the negative experience of *das Geräusch*.

2. Acoustic noise: from a physical standpoint, the type of noise outlined above might be indistinguishable from sound. However, where common understanding noise can be rendered in the plural form "noises," acoustic noise per se can only be singular. In physics, acoustic noise is any non-periodic complex sound, that is, a sound whose composite frequencies are not multiples of a single base frequency, but are rather distributed continuously across the spectrum. All acoustically-generated sounds contain a certain amount of acoustic noise which may, in turn, make the sound noisy according to the common understanding definition. A digitally-produced sound, like a sine tone, does not contain noise, but only in its production; it might pick up other kinds of noise (see below) in the process of its transmission and reception. This category of noise corresponds most closely to *das Rauschen*.

3. Noise in music: noise arises in a musical context at the point at which the expected experience of sound is interrupted. This may be when the background elements of instrumental sound production are loud enough to interfere with the "pure tone" of the instrument (a key clicking on a clarinet, for instance, or overpressure on a bow – both sounds that are silenced in "conventional" instrumental training), when a sound from "outside" breaks into the musical context (a passing siren, or an audience member coughing), or simply if the music is deemed unpleasant by its listener. Noise within a musical context, then, combines aspects of both of the categories outlined

above; denotatively, noise is understood in opposition to music (note the implied "musicality" of the sound/noise oppositions in the first definition), an opposition that is highly subjective, culturally specific, and therefore subject to change. As with common understanding noise, this may correspond either to *der Krach* or *der Lärm*, as well as to *das Geräusch*, still negatively conceived. Noise in music is distinct from "noise music", a practice (or set of practices) emerging in Europe and Japan in the late 1970s, and in North America in the 1980s that, despite its definitional issues, nevertheless carries cultural weight as a genre/meta-genre with a dedicated following.[15] In German, this is sometimes referred to as *Geräuschmusik* but, more commonly, simply as *der Noise*.

4. Systems noise: in information theory, noise is information that accrues to a given signal in the process of its transmission and transforms it, due to inevitable (but often random) disturbance in its medium or channel of communication. This understanding of noise is far-reaching, and may be applied, amongst other things, to data analysis, cellular biology, semiotics, linguistics, and electronics. Although there may seem to be a degree of objectivity within this category of systems noise (see the equations in Claude Shannon's landmark paper of 1948, 'A Mathematical Theory of Communication'), its designation involves a process of decision making (not unlike the various types of subjective judgment described above) as to what constitutes the primary signal, and what constitutes the noise.[16] The crucial distinction, however, between systems noise and the categories of noise described above, is that systems noise need not be understood solely in terms of sonic phenomena but serves a wider,

[15] See, for instance, David Novak, *Japanoise: Music at the Edge of Circulation* (Durham: Duke University Press, 2013).
[16] Claude Shannon, 'A Mathematical Theory of Communication', *The Bell System Technical Journal*, 27 (1948), 379–423, 623–656; Hainge (2013), 5.

ecological function, reaching into every domain of communication. This corresponds to *das Rauschen* in German.

5. To these five, more or less established, definitions of noise, I add another: conceptual/connotative noise. This type of noise combines various aspects of the categories above, but operates internally within the receiver. It refers to the interference produced by association and memory (wanted, or unwanted) that inevitably shapes the experience of things, such that this type of noise becomes indistinguishable from the experience itself. In that it carries no claim towards objectivity, nor indeed towards any sort of observable or measurable reality, it is the most elusive of the five categories. Nevertheless, it is integral to every experience and so is, in a sense, the most fundamental.

Broadly speaking, these five categories of noise trace a movement between the empirical (sounding) domain and the abstract domain, from noise as a thing to noise as a function. As will become clearer, each of these categories can also be understood in terms of different kinds of resistance, moving between the empirical and the abstract, between thing and function. This complexity has led many writers on noise to argue that finding a unified definition of noise is impossible and that this constitutes some kind of problem that, in the words of Douglas Kahn, will only 'invite noise on itself.'[17] Here, though, I follow Greg Hainge's compelling work towards a relational ontology of noise, and Marie Thompson's work on the ethics of noise music, to suggest that noise's "noisiness" can, in fact, be its great

[17] Douglas Kahn, *Noise, Water, Meat: A History of Sound in the* Arts (Cambridge, MA: The MIT Press, 2001), 21. See also, for instance, Hainge (2013), 273, and Gegensichkollektiv, 'Anti-self: experienceless noise', in Michael Goddard, Benjamin Halligan and Paul Hegarty (eds.), *Reverberations: The Philosophy, Aesthetics and Politics of Noise* (New York & London: Continuum, 2012), 194.

advantage.[18] Thinking noisily allows us to move with Lachenmann between oppositions of thing and function, the empirical and the abstract, sound and not-sound, noise and not-noise.

[18] Hainge (2013); Marie Thompson, 'Music for cyborgs: the effect and ethics of noise music', in ibid., 207-218.

Chapter Two: Noise in the shadow of Darmstadt[19]

Lachenmann's *musique concrète instrumentale* brings to mind Pierre Schaeffer's *musique concrète*. However, the relationship between them has yet to be explored in sufficient depth. For Tanja Orning, *musique concrète* simply 'inspired' *musique concrète instrumentale*; for Rainer Nonnenmann, it 'owes its name'; for Tim Hodgkinson, it is an 'affirmation of debt'; and, for Alastair Williams, the 'derivation' is 'so palpable' that it doesn't seem to require any further explanation.[20] I suggest that it is worth probing the link much further, and that doing so will illuminate a critical point of difference between Lachenmann's and Schaeffer's approaches.

First: *musique concrète*. Pierre Schaeffer's *musique concrète* figures in several histories of noise, positioned as the continuation of Luigi Russolo's art of noises, and as a foil both to John Cage's experiments in everyday sound and to the electronic music production of the *Westdeutscher Rundfunk* in Cologne.[21] From the late 1940s onwards, Schaeffer created pieces whose bases were largely the sounds of the everyday – trains, canal boats, saucepans, spinning tops – non-musical sounds, or, noises. He recorded these noises onto

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[19] Adapted from Lachenmann's title '*Komponieren im Schatten von Darmstadt*', Lachenmann (1996), 342-250. Martin Iddon points out the resonance between this title and the German phrase '*die Schatten der Vergangenheit*' ('the ghosts of the past'), 'die Schatten der Vergangenheit' – 'the ghosts of the past' (Martin Iddon, 'Spectres of Darmstadt', *Tempo*, 67:263 (2013), 63.).

[20] See Tanja Orning, 'Pression – a performance study', *Music Performance Research*, 5 (2012), 14; Nonnenmann (2005), 6; Tim Hodgkinson, *Music and the Myth of Wholeness: Towards a New Aesthetic Paradigm* (Cambridge, MA: The MIT Press, 2016), 178; Alastair Williams, *Music in Germany Since 1968* (Cambridge: Cambridge University Press, 2013), 76.

[21] See, for instance, Brandon LaBelle, *Background Noise: Perspectives on Sound Art* (London & New York: Bloomsbury Academic, 2015); Hainge (2013); Joanna Demers, *Listening Through the Noise: The Aesthetics of Experimental Electronic Music* (Oxford: Oxford University Press, 2010).

shellac discs (and later onto magnetic tape), manipulated them through the electronic means that were available to him at the time, and presented them through loudspeakers. The aim of this acousmatic presentation was reduced listening – divorced from the origins of its production, and thus stripped of its connotative or social value, a sound could be heard, in *musique concrète* '*dans toutes ses qualités sensibles*': 'Deliberately forgetting every reference to instrumental causes or pre-existing musical significations, we then seek to devote ourselves entirely and exclusively to listening, to discover the instinctive paths that lead from the purely "sonorous" to the purely "musical."'[22]

In its ideal sense, then, reduced listening expanded listening, enabling the listener to attend to sounds, or to those parts of sounds, which would conventionally be ignored as noises. In this way, *musique concrète* was an amplification of noise, indeed perhaps an early kind of noise music. But by divorcing sounds from their origins, obscuring their basis in a material, social domain, *musique concrète* also amounted to a form of noise reduction of a different kind. The reduced listener enters into a self-enclosed loop with the *objets sonores* of Schaeffer's *musique concrète*, as if hermetically sealed off from the noise that this loop in fact produces: noise from the mediation of material structures of listening, of bodies and equipment, as well as the noise of association, memory, and sociality.[23] Schaeffer sought to

[22] Hainge (2013), 162-3. Pierre Schaeffer, 'Acousmatics', in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York & London: Continuum, 2004), 81. Schaeffer adopted the term acousmatic from the Ancient Greek "*akousmatikoi*" which, so the story goes, referred to the probationary students of Pythagoras, who were made to listen to their teacher lecturing from behind a curtain in order that, without visual distraction, they might listen with more concentration to his voice.

[23] There is an instructive parallel between this and noise cancelling-headphones, developed half a decade later, which create an out-of-phase copy of the listener's environmental noise (according to its common understanding definition) in order to cancel this same noise out, while also creating a different kind of noise (systems noise) through their mediatisation (see Mack Hagood, 'Quiet Comfort: Noise, Otherness, and the Mobile Production of Personal Space', *American Quarterly*, 63:3 (2011), 573-589). Of course, this is only the ideal, for in fact the experience of reduced listening, even in an acousmatic situation, is contingent on a high level of mediation through the noisy (in both literal and figurative senses) incursion of technology within the ostensibly self-enclosed loop, and also within the wider

reduce the resistance involved in sounds' origins, transmission, and reception and through this to transform them into the "purely musical," or, in his own words: 'Having come to the studio to "make noises speak," I stumble onto music'.[24] Schaeffer claimed to have had 'a "Symphony of Noises" in mind', but it was still a symphony, after all.[25]

Like *musique concrète*, Lachenmann's *musique concrète instrumentale* sought to draw its listeners' attention to their own aesthetic predeterminations in order to liberate perception. It did so, however, by amplifying precisely the type of noise that *musique concrète* ended up silencing. Lachenmann himself highlights this fundamental point of divergence in the following passage from *Musik als existentielle Erfahrung*:

> While "music-making" generally involves as discrete an effort as possible to make a tone sound in the desired manner […] I would like to attempt to reverse this causal relationship: allowing the tone to sound in such a way as to reveal the underlying effort, both on the part of the player and of the instrument, so as to bring about an impression of the cause from the effect (which by the way goes without saying for everyday sound) which (and this particularly appeals to me) is not dependent on how "musical" or "educated" one is. It is, in this respect, a form of "musique concrète," but with the fundamental difference that where it sought to incorporate everyday noises [*Alltagsgeräusche*] into musical listening, I want to profane, to demusicalise whatever sound I might chose as a direct or indirect product of mechanical actions and operations, and thus to lay the foundations for a new understanding: sound as an acoustic record of a very specific amount of energy under very specific conditions.[26]

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communication. Daniel Terrugi, for instance, discusses struggles with technology at the GRM, see Daniel Teruggi 'Technology and Musique Concrete: The Technical Developments of the Groupe de Recherches Musicales and Their Implication in Musical Composition', *Organised Sound*, 12:3 (2007), 213–31.

[24] Schaeffer quoted in LaBelle (2015), 27.

[25] Schaeffer quoted in Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford: Oxford University Press, 2014), 15.

[26] Lachenmann (1996), 150: '*Während beim "Musizieren" im allgemeinen eine möglichst diskrete Anstrengung unternommen wird, damit ein Ton in der gewünschten Weise erklinge [...] möchte ich versuchen, den kausalen Zusammenhang umzukehren: den Ton klingen zu*

This is, in fact, one of only three times that Lachenmann makes explicit reference to *musique concrète* in *Musik als existentielle Erfahrung*, and each time he emphasises this point of difference. By the very incorporation of "*instrumentale*" into "*musique concrète*," Lachenmann reintroduces the noise of mediation into his system of communication through the re-incorporation of physicality, the re-incorporation of the material and energetic conditions of a sound's production.

In contrast to *musique concrète*, the situation of *musique concrète instrumentale* is, very definitely, not-acousmatic. Indeed, it is the absence of the physical presence of bodies in an acousmatic situation that motivates Lachenmann's mistrust of electronic music. He sees the loudspeaker as a kind of safety barrier, the consequence of which is a significant loss of information when music is heard in recording:

> a loudspeaker is a totally sterile instrument. Even the most exciting sounds are no longer exciting when projected through a loudspeaker. There is no danger in it anymore […] With electronics, there is no ambivalence. There is no history there.[27]

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lassen, um die ihm zugrunde liegende Anstrengung (des Spielers wie des Instruments) ins Bewußtsein zu rücken, also eine Art des Rückschlusses von der Wirkung auf die Ursache zu veranlassen, was übrigens bei jedem Alltagsgeräusch selbstverständlich und – was mich besonders reizt – nicht davon abhängig ist, ob einer "musikalisch" oder "gebildet" ist. Insofern also eine "Musique concrete", mit dem fundamentalen Unterschied, daß diese die Alltagsgeräusche dem Musikhören einverleiben will, während ich welchen Klang auch immer zunächst als direkten oder indirekten Niederschlag von mechanischen Handlungen und Vorgängen profanieren, entmusikalisieren und von dort her zu einem neuen Verständnis ansetzen will. Klang als akustisches Protokoll eines ganz bestimmten Energieaufwandes unter ganz bestimmten Bedingungen'.

[27] Paul Steenhuisen, 'Interview with Helmut Lachenmann--Toronto, 2003', *Contemporary Music Review*, 23:3-4 (2004), 10. See also David Ryan, 'Composer in Interview: Helmut Lachenmann', *Tempo*, 210 (1999), 24; Craenen (2014), 90, and Paulo de Assis, 'Inscriptions: an interview with Helmut Lachenmann' in Experimental Affinities in Music', in *Experimental Affinities in Music*, ed. Paulo de Assis (Leuven: Leuven University Press, 2016), 93.

There is, however, a history to the term *musique concrète*, and one might well wonder why Lachenmann would borrow from Schaeffer a formulation to describe and determine the first phase of his compositional output when it is, in many ways, ill-fitting. Craenen suggests that this borrowing could have resulted from an incomplete understanding of what Schaeffer meant by *concrète* since, according to Martin Kaltenecker, it is quite likely that Lachenmann hadn't actually read Schaeffer's *Traité des objets musicaux* by the time he introduced *musique concrète instrumentale*.[28] Nonnenmann makes a similar point, suggesting that Lachenmann's use of *concrète* has its roots in the sense in which the word was used in concrete art and poetry.[29] But Lachenmann does make direct, if infrequent, references to the legacy of Pierre Schaeffer, suggesting at least some relation specifically to his *musique concrète*. I consider that Lachenmann's reasons for borrowing Schaeffer's formulation may be more complex, and rooted elsewhere: in 'that international swearword, "Darmstadt."'[30]

Lachenmann first attended Darmstadt in 1957, encountering for the first time such figures as Karlheinz Stockhausen, Karel Goeyvaerts, Gottfried Michael Koenig, Herbert Eimert, Bruno Maderna, and Luigi Nono, who, invigorated by the post-war climate of technological optimism and the rediscovery of the Second Viennese School's serial legacy, were striving towards a new musical avant-garde. Parametric organisation was the ruling principle of this new orthodoxy, the ordering and structural regulation of discrete scales of pitch, duration, dynamics and, to a more limited extent, timbre, driven by the belief that this would liberate music from its bourgeois status as a more-or-less decorative quasi-language. Although some of Lachenmann's earliest pieces adopted this orthodox serial approach, he quickly became

[28] Craenen (2014), 84.
[29] Nonnenmann (2005), 6.
[30] Lachenmann (1996), 69: '*jenes internationale Schimpfwort "Darmstadt*"'.

disillusioned with what he felt was 'a falsely abstract and increasingly sterile structuralism'.[31] He soon saw, in their quest for a "new beginning," the Darmstadt School clinging to the false conviction that musical material could be approached as a *tablula rasa*, devoid of any cultural or historical influence, and so offered no resistance to, and eventually ended up reproducing, the bourgeois social structures against which it had attempted to define itself.[32]

The exception to this rigid approach to material, Lachenmann thought, was Luigi Nono, a committed Marxist and one of Darmstadt's central provocateurs in the late 1950s. Despite his advocacy of serialism at this time, Nono was in Lachenmann's eyes 'the only one not to have fallen into this bourgeois trap'.[33] So it was to the older composer that Lachenmann adhered during his first visit to Darmstadt, the next year travelling to Venice to live and study with him until 1960. These years were transformational; they marked the beginning of Lachenmann's preoccupation with finding ways to structure sounds that were not determined serially by the discrete parameters of pitch and duration, divisible into series of twelve articulated steps, instead looking to discover structural relationships according to continuous spectra – energy, intensity, timbral quality – working in response to the demands of a sound's experiential qualities. As well as this, Nono's unswerving sense of social responsibility strengthened in Lachenmann the belief that musical material is not neutral, but already charged with meaning, inscribed with expressive relations forged by its social environment and historical context. These were sonic considerations dismissed as peripheral noise to Darmstadt's technical concerns.

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[31] Ibid., 344: '*einem schlecht abstrakten und mehr und mehr steril empfundenen'*.
[32] See, for instance, Ibid., 83
[33] Ibid., 343: '*Luigi Nono schien mir durch seine von Anfang an emphatisch-traditionalistische Haltung der einzige zu sein, der nicht in diese bürgerliche Falle gelaufen war'.* ['It seemed to me that Luigi Nono, due to his emphatically traditionalist attitude from the very beginning, was the only one not to fall into that bourgeois trap'].

Meanwhile, though, Lachenmann was becoming increasingly frustrated with Nono's more dogmatic Marxist tendencies, and also with Venice.[34] He criticised in Nono a kind of deafness to his own music, literally as well as figuratively: Venice at the time offered no opportunity for Nono's music to be performed and, due to an insufficiently sensitive inner ear (according to Lachenmann), it was only when he travelled abroad that he was ever able to hear the sounds he had written. This, thought Lachenmann, hindered Nono's potential for proper explorations into sounds, leaving him only to compose with 'homogenous elements' treated in 'a game of combinations'.[35] Deciding that the silent Venetian environment was no longer conducive to his growing desire to compose with the actual sounding properties of sound, he left for Cologne to study, much to Nono's anger, under Stockhausen.

Despite still being more or less bounded by the serial orthodoxy, Cologne in the 1950s and 1960s was a world of vastly-expanded sonic possibilities, thanks to the advances being made by Stockhausen and others in the *Studio für elektronische Musik des Westdeutschen Rundfunks*, and it was against this background that Lachenmann found in Stockhausen the technical and empirical complement to Nono's theoretical and philosophical speculations.[36] Here he learnt 'the pragmatics of handling sound': new forms of notation, new instrumental

[34] Ibid., 207: '*Ich habe ihm genau zugehört und zugeschaut, und ich habe mich über seine Surditäten und Absurditäten hinweggesetzt: seine von mir manchmal als ärgerlich empfundenen dogmatischen Unempfindlichkeiten: Ich war schließlich kein Marxist, sondern eher religiös eingestellt – dabei voll von Zweifeln an allem*'. ['I listened to him and watched him closely, and I shrugged off his deafness and his absurdities; his dogmatic insensitivity sometimes felt vexing to me. I was, after all, not a Marxist, but rather religious, full of doubts about everything.']

[35] de Assis (2016), 95.

[36] Significantly, Stockhausen had had some contact with Pierre Schaeffer, writing his own *Konkrete Etüde* (1952) at the GRM in Paris, but left four months afterwards to work in the newly-founded WDR. This initiated a schism between French *musique concrète* on the one hand, characterised by reactive and instinctive approach to sound, and German *electronische Musik*, characterised by a more constructive approach to creation of new sounds, on the other. See Karlheinz Stockhausen 'Electronic and Instrumental Music', in Cox and Warner (2004), 370-372 and Pierre Schaeffer, *In Search of a Concrete Music*, tr. Christine North and John Dack (Berkeley: University of California Press, 2012), 123-130.

techniques, techniques of spatialisation and, crucially, found opportunities to work with performers.[37] Alongside his lessons with Stockhausen, Lachenmann also took lessons with Henri Pousseur which, although they are less well-documented, had a significant impact on his compositional development. In one lesson, Pousseur asked his students (twelve of them, as it happens) each to find a scale to transform the sound of a whistle into the sound of the opening of Beethoven's Ninth Symphony.[38] Although this task might have been serial in its conception, Lachenmann cites it as an early inspiration towards organising sounds as "families" rather than according to discrete parameters, drawing seemingly incommensurable sounds into relation with one another through their inherent sonic qualities, rather than their arbitrary numerical function.

Lachenmann then went to Ghent in 1965 to spend three months in the IPEM studio, and it was during this time that he wrote his only piece for solo tape, *Scenario*. His reasons for moving to Ghent are not particularly clear, but it is possible that this was, in turn, a reaction against the serial climate of Cologne, since the IPEM was founded following Schaeffer's decidedly anti-serialist (and anti-German) experimental methodology. It is also quite possible that it was in Ghent that Lachenmann first encountered the principles of *musique concrète*, even if, as Kaltenecker suggests, he didn't come across Schaeffer's *Treatise*. Lachenmann has since dismissed *Scenario* as 'defective' but admits that he felt its composition to have been necessary: 'it was a sort of exorcism', he would later say.[39]

Although Lachenmann has repeatedly voiced his resistance towards electronic music, I would argue that his experiences of the possibilities of electronic music in Cologne and then Ghent were of fundamental importance to the development of his compositional approach.

[37] Lachenmann (1996), 153: '*pragmatische Handhabung des Klanglichen'*; Ibid., 205-6.
[38] de Assis (2016), 95.
[39] Ibid., 93.

Aside from a number of his later pieces that would make use of electronic media of one form or another (*Kontrakadenz* [1970-1], *Fassade* [1973], *Schwankungen am Rand. Musik für Blech und Saiten* [1974-5], and *Accanto – Musik für einen Klarinettisten mit Orchester* [1976], a piece to which this study will return in more detail in the fourth chapter), electronic techniques appear to have filtered into some of his instrumental treatments. He attributes, for instance, the discovery of his "reverse pizzicato" (the sudden muting of a forcefully bowed string) to an early accident at Nono's house:

> In 1958, when I was copying my teacher Luigi Nono's tapes in his house, I came across a recording of Arnold Schoenberg's voice. Assuming that it was a two-sided tape, I copied both sides. Unaware, I listened with awe to the backwards-speaking voice of a hoarse/happy Schoenberg, telling stories in what seemed to me a foreign language, full of fanatical excitement owing to the tearing-off effect of the original plosive sounds in reverse…[40]

One could also cite the use of repetition in the final movement of *Ein Kinderspiel* (1980) as a resonance of Schaefferian locked grooves, or the granular sound of his pressed bowing technique in terms of the extreme slowing down by electronic means of an ordinary bow stroke.[41]

But further than this, the practices of both studios opened his ears to the practical possibilities of realising a kind of musical expression driven by continuous scales of intensity and energy,

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[40] Lachenmann (1996), 233: '*Als ich 1958 im Hause meines Lehrers Luigi Nono dessen Tonbänder für mich überspielte, fiel mir auch eine Aufnahme mit dem Originalton Arnold Schönbergs in die Hände. In der Annahme, dies sei ein Doppelspurband, kopierte ich Hin- und Rückseite. Die dabei von mir ahnungslos und voller Ehrfurcht belauschte, rückwärts klingende Stimme des auf der Vorderseite heiser/heiter Geschichten erzählenden Schönberg klang in einer mir "fremden Sprache", dabei voll „fanatischer Erregung" dank jenes Abreiß-Effekts, der sich dem Rückwärtsverlauf der originalen Plosivlaute verdankte …*'.

[41] See Brian Kane, 'Relays: Audiotape, Material Affordances, and Cultural Practice', *Twentieth-Century Music* 14:1 (2017), 67-68 for an overview of the affordances granted to Schaffer by the introduction of magnetic tape into the studio.

driven by the sonic spaces between the conventional, serial parameters of organisation, spaces that I will argue can best be understood in terms of noise and resistance. Lachenmann's incorporation of *musique concrète* into his theoretical language permitted him to continue to align himself with the ethos of sonic discovery he found at the IPEM, but the addition of *instrumentale* could save him from the disembodied unreality of the loudspeaker, and from Darmstadt's sterile quest for a *tabula rasa*. *Musique concrète instrumentale* was Lachenmann's way of bringing sound (back) to life.

Chapter 3: Composing from nothing

'Instead of the musical signs he formed … inflections … in the air'[42]

Although *Dal niente (Interieur III) für einen Solo-Klarinettisten*, commissioned and first performed by Eduard Brunner in 1970, seems to bear close resemblance in name to the first two *Interieur* pieces, I suggest that it is better heard in relation to two others: *Pression für einen Cellisten* (1969), and *Guero* (1969), for solo piano.[43] Written at the same time, and in their shared and radical reappraisal of instrumental sound production, these pieces can be thought of as a triptych of performance studies.[44] Equally, though, can they be cast as compositional studies, since it was at this time, following *TemA* (1968), that Lachenmann was beginning to formulate his ideas around *musique concrète instrumentale*. While *Pression* has been granted a relatively large amount of scholarly attention, perhaps due to its interest as a notational precedent for much of Lachenmann's later string writing, *Dal niente* and *Guero* have both been neglected by comparison.[45] What follows is an attempt to address at least one half of this imbalance.

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[42] From Jacobus Goar's *Euchologium Graecorum* (1647), quoted in Egon Wellesz *A History of Byzantine Music and Hymnography* (Oxford: Clarendon Press, 1949), 235.

[43] Although Lachenmann did write a piece called *Interieur I* for solo percussionist in 1966-67, there is, in fact, no record of an Interieur II.

[44] Lachenmann indeed refers to them as such, see Lachenmann (1997), 227, and de Assis (2016), 96.

[45] Pace (1998a) offers a brief description of the piece. The clarinettist David Smeyers offered something slightly more detailed (David Smeyers, 'The Open-Minded Clarinettist: The Recycling of Society's Discarded and Thrown Away Sounds', *The Clarinet* (1989), 15-17) but this is, sadly, no longer accessible. I am very grateful to the author for kindly sending me a copy.

Dal niente is, in two senses, composed "from nothing." Over roughly twelve minutes, the piece unfolds as an essay in dynamic extremes, emerging from the quietest pianissimo at the lower threshold of audibility, to piercing triple forte. Inverting the conventional *diminuendo al niente*, this piece is a *crescendo dal niente*, a piece that emerges from nothing. But it is the kinds of sounds that Lachenmann explores that bring the piece out of nothing in a second, more figurative sense. Lachenmann's characteristically detailed notation and performance instructions call for audible key clicks, breath sounds coloured by different embouchure and finger positions, 'smacking' sounds, 'whistling' sounds, 'ragged' sounds, sounds that are amplifications of the physical resistance between instrument and player that the Western classical performance tradition has typically striven to silence.[46] Or, put another way, these are noises. It is my contention here that *Dal niente* transduces the noises of resistance on its sonic surface into systems noise (noise as thing, to noise as function), interrupting habituated patterns of performance and listening, and building them up again, from nothing.

Insofar as they run against the grain of conventional instrumental practice, these noises might sound like accidents, but *Dal niente* was in fact the result of an intensive period of collaboration between Lachenmann and Eduard Brunner. The clarinettist describes how Lachenmann would come to him with a description of a sound that he would try to "translate" into a playing technique, subsequently explaining its mechanics to the composer.[47] This "hands-on" approach, typical of Lachenmann, lies at the core of composing from nothing in

[46] See performance instructions in Helmut Lachenmann, *Dal niente (Interieur III) für einen Solo-Klarinettisten* (Weisbaden: Breitkopf & Härtel, 1980a).

[47] In fact, some sounds did indeed emerge by accident, as by-products of the expected process, some of which were consolidated to find inclusion in the finished score – a perfect illustration of the common-sense noise's (and noise in music's) contingency on the subject position and interpretation of its observer. See Antonio Galindo Agúndez, 'Conflicts in contemporary music interpretation. Brunner-Lachenmann: a case approach' (PhD diss., University of Gothenburg, 2011), 28-32, for an interview transcript in which Brunner describes this collaborative process.

musique concrète instrumentale; it shifts the focus from the sounds themselves to the means of their production, from the effect to the cause.[48]

In this way, *musique concrète instrumentale* constitutes an appeal to the materiality both of the performing body and of the instrument through which the performance is sounded. In *Dal niente*, this material relationship is reduced to its essentials – the resistance that a particular object with particular material characteristics produces against the passage of breath, mediated by the oral cavity, lips, teeth, and tongue.[49] This inversion of the conventional cause-effect relationship in instrumental technique not only subverts the preoccupations of Darmstadt's disciples, but also results, as Rainer Nonnenmann explains, in a de-semanticisation of conventional musical language; it is sound's continuous material aspect, rather than its articulated significant capacity that is brought into the foreground of musical experience.[50] Yet, as Erika Fischer-Lichte points out in her seminal work on theatre studies, *The Transformative Power of Performance: A New Aesthetics*, 'materiality does not act as a signifier to which this or that signified can be attributed'.[51] Rather, she argues, 'materiality itself has to be seen as the signified already given in the materiality perceived by the subject'.[52] In his *musique concrète instrumentale*, Lachenmann interrogates the validity of a dichotomy that sees materiality as distinct from significance – it is precisely *how* it sounds, that matters.

[48] Mike Svoboda, for instance, recalls how Lachenmann learnt to play the trombone in order to write *NUN* (1997-99), and how he would bring a violin to orchestral rehearsals to demonstrate his extended string techniques (Mike Svoboda, '*NUN* – An Inside View', *Contemporary Music Review,* 23:3-4 (2004), 161-2).
[49] *Pression* and *Guero* effect a similar reduction, and it is worth noting that these also emerged out of collaborative relationships with performers.
[50] Nonnenmann (2005), 3.
[51] Erika Fischer-Lichte, *The Transformative Power of Performance: A New Aesthetics*, tr. Saskya Iris Jain with an introduction by Marvin Carlson (New York: Routledge, 2008), 141.
[52] Fischer-Lichte (2008), 141.

In bringing to attention the material relationship between performer and instrument, *Dal niente* produces another kind of resistance – the instrument resists its conventional functioning and so becomes 'an object to be scrutinized, dismantled [...] an object before which one takes a step back, or to which one approaches as if for the first time'.[53] This type of resistance can be usefully understood through the lens of Heidegger's theory of *Vorhandenheit*, or "presence-at-hand." Put simply, when using a tool, it is not the tool itself on which one focuses, but on the thing on which the tool is being used.[54] In its proper functioning, the tool is simply a "towards-which," an invisible conduit in the seamless operation between the worker and the work. This, according to Heidegger, is the "readiness-to-hand" (*Zuhandenheit*) of the tool. However, when the tool does not behave in the expected fashion, when it malfunctions or its characteristic use is somehow interrupted (the echoes here with noise in music are not coincidental), the smooth functioning of relationship between user and tool is disrupted and resistance is generated between them. This disruption is the transformation of readiness-to-hand into presence-at-hand. Noticing the object's presence-at-hand means noticing, *as if for the first time*, its material qualities, its significant potential, and its position within a network of action:

> Our circumspection comes up against emptiness, and now sees for the first time *what* the missing article was ready-to-hand *with*, and *what* it was ready-to-hand *for*. The environment announces itself afresh.[55]

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[53] Although this is cited from Martin Kaltenecker's account of *Pression*, it remains relevant to *Dal niente* (Martin Kaltenecker, *Avec Helmut Lachenmann* (Paris: Van Dieren Editeur, 2001), 64: '*Un objet à scruter, à démonter,[...] un objet devant lequel on se recule tout d'abord, ou dont on approcherait comme pour la première fois'*.)

[54] Heidegger (see Martin Heidegger, *Being and Time*, tr. John Macquarrie and Edward Robinson (Oxford: Blackwell Publishing,1962), 97-107) uses the almost untranslatable word *das Zeug*, which roughly translates to tool, equipment, or "stuff," but it is worth noting that Lachenmann refers to the clarinet in *Dal niente* as '*ein Gerät*', which also means tool or equipment, with the added sense of machine/appliance (see Lachenmann (1996), 382.)

[55] Heidegger (1962), 105. Italics in the original.

In light of this, we might also say that the performer of *Dal niente*, in their deviation from expected performance practices, is made present-at-hand. So too, perhaps, does the listener become present-at-hand in the challenge they face to renegotiate their expectations. I will return to these ideas below.

Lachenmann's use of action-based notation also contributes to the production of resistance.[56] In *Guero*, for example, a central line indicates the position of the piano's middle C, above and below which the various movements of the hands over the surface of the keys (and later on the strings and tuning pins) are notated as actions. Different symbols indicate the different modes of contact between the fingers and the key surfaces, the gradient of the lines determining the speed of each movement. Although this notation may have seemed to Lachenmann the most practical way to communicate his musical ideas, it has a secondary implication that draws attention to the act of reading as a form of mediation between the physicalities of the instrument and the physicalities of the body.[57] Faced with an entirely new notational system (along with an entirely new set of techniques, and all that that implies), the pianist must take a step back to consider afresh the material nature of the relationship between instrument, hand, and eye, that learned habits of reading conventionally overlook.

[56] It is worth noting that Lachenmann claims never to write "action scores," but rather that he devises a system appropriate to each piece: 'I normally never write what you'd call "action scores." I don't want to lose control of what should happen. But nor do I have a generally describable conception of how to generate a sound system, as in 12-note music; it depends on the context, which I have to develop in a different way in each piece.' (Heathcote (2009), 339.) His desire to distinguish himself from chance-based composition notwithstanding, it is difficult to deny that Lachenmann's notation here and in *Pression*, correspond to typical definitions of action notation.

[57] See, for instance Jurajs Kojs, 'Notating Action-Based Music, *Leonardo Music Journal*, vol. 21 (2011), 65-72; Christa Brüstle, Timekeepers – Sound Artists – Drum Machines: Studies of Notation and Performance in Contemporary Music for Solo Percussionist', *Twentieth-Century Music*, 6:1 (2009); 63-81, Kari Kurkela, Score, vision, action', *Contemporary Music Review*, 4:1 (1989), 417-435; Mieko Kanno, 'Prescriptive Notation: Limits and Challenges', *Contemporary Music Review*, 26:2 (2007), 231-254.

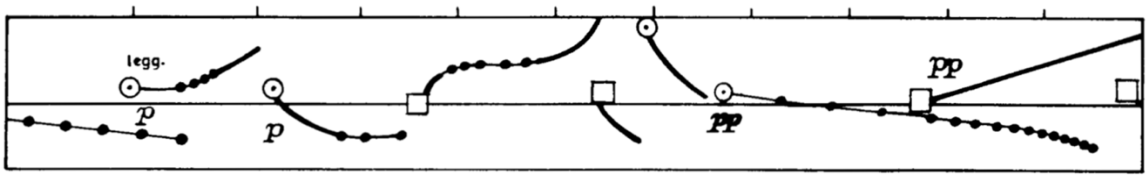


Figure 1: Helmut Lachenmann, *Guero*, line 2. (© 1972 by Musikverlage Hans Gerig, Köln; 1980 assigned to Breitkopf & Härtel, Wiesbaden)

The material nature of this relationship is brought even further into focus through the notation of *Pression*. Here, the actions of the right and left hands are separated, using what Lachenmann calls the bridge clef, and further techniques are illustrated with pictures. The performer then, quite literally, sees an image of themselves and of their instrument, an image that they must find ways to re-embody (and re-sound). Here, as in *Guero*, Lachenmann notates the body and not the sound, inevitably provoking a re-examination of how the two are related. Jonathan de Souza refers to this as a kind of "unyoking," while Aaron Cassidy, whose own notation is very much indebted to Lachenmann's, calls it "decoupling."[58] This notation pulls the performing body apart and reconstructs it, from nothing.

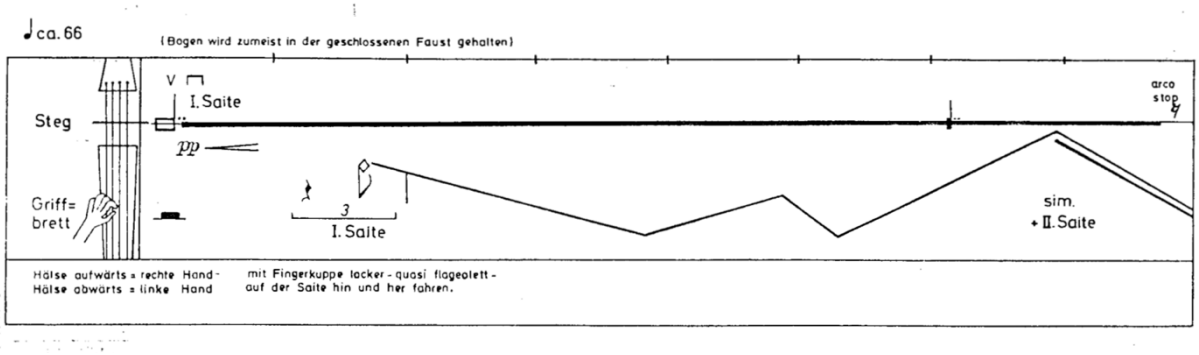


Figure 2: Helmut Lachenmann, *Pression*, line 1. (© 1972 by Musikverlage Hans Gerig, Köln; 1980 assigned to Breitkopf & Härtel, Wiesbaden)

[58] Jonathan de Souza (2017), *Music at Hand: Instruments, Bodies and Cognition* (Oxford: Oxford University Press, 2017), 86; Aaron Cassidy cited in Mark Dyer, 'Helmut Lachenmann's *Salut für Caudwell*: An Analysis', *Tempo,* 70:277 (2016), 35.

Although not action based, the notation of *Dal niente* still incorporates a range of extended symbols – indications of exhalation or inhalation and of open or closed embouchure, stemless diamond noteheads, square noteheads between the staves, and so on. The layout of the score is also unconventional: air-sounds through the clarinet are notated on a separate staff, written in the bass clef. The spatial separation of the two sound types on the page results in a cognitive, or perhaps semiotic, shift when moving between them, interrupting the linear reading of the score. This serves to amplify the differentiation between the two sound types, one that is, in essence, a differentiation of physicality.

The decoupling of the body through the score is later intensified when, from line 59 onwards, three different layers are notated on three different lines in what Lachenmann terms a 'polyphony' of playing techniques: the quality of the air sound is determined by changes of finger position over a staff in the bass clef (as before), the shape of the oral cavity is determined by empty and filled-in oval shapes (later with the addition of symbols to indicate inhalation and exhalation), and the rhythm of these changes (with additional instructions concerning flutter tongue and its own degrees of speed). For a clarinettist, used to reading a single line (and almost always a line in the treble clef), this presents a considerable challenge.



Figure 3: Helmut Lachenmann, *Dal niente*, lines 59-62. (© 1974 by Musikverlage Hans Gerig, Köln; 1980 assigned to Breitkopf & Härtel, Wiesbaden)

In *Dal niente*, Lachenmann holds a magnifying glass to the relationship between the performer and instrument, revealing in the process that what might conventionally be thought of as a single unit, ready-to-hand to serve as a "tool" for the music, is in fact a network (one might say assemblage) of multiple elements – the keys, the fingers, the wood, the lungs, the page – each of which are individually articulated but simultaneously co-constitutive actors in the system. Of course this is always the case, but Lachenmann's *musique concrète instrumentale* lifts the veil and shows what has always stood behind it.

Piotr Grella-Możejko and Ross Feller both situate *musique concrète instrumentale* within the context of Viktor Shklovsky's theory of *ostranenie* (estrangement).[59] According to Shklovsky:

> The goal of art is to give the sensation of things as seen, not known; the device of art is to make things "unfamiliar," to increase the difficulty and length of their perception, since the perceptual process in art is valuable in itself and must be prolonged; art is a way of experiencing the artfulness of an object, the object in art being itself unimportant.[60]

The parallels are obvious here, but I think the comparison is only valuable up to a point. For one thing, Lachenmann does not share Shklovsky's predisposition towards the difficult; for another, the comparison does not properly account for Lachenmann's incorporation of familiar elements within his compositions. Simply put, there are in *Dal niente* conventional notations, sounds that are played (and pitched) according to the conventional manner, and even Classical allusions, some oblique (extended sections of semi-pitched passagework that suggest the gestural language of classical virtuoso figurations), and some more direct (a descending D major scale in line 28). However, rather than functioning as reference points to illustrate the unfamiliarity of the rest of the material, these elements stand out as exceptional. For the listener, they stand out in the landscape of the piece; for the performer, these elements suddenly retrigger learnt habits and throw them into relief.[61]

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[59] Grella-Możejko (2005), 61-63, Feller (2008), 254.
[60] Shklovsky cited in Lawrence Crawford, 'Viktor Shklovskij: Différance in Defamiliarization', *Comparative Literature*, 36:3 (1984), 210.
[61] De Souza discusses this in relation to Lotze et al.'s study using EMG feedback into violinists' neural activity when silently fingering a familiar piece of music (see De Souza (2017), 85 and M. Lotze et. al., 'The musician's brain: functional imaging of amateurs and professionals during performance and imagery', *NeuroImage*, 20 (2003), 1817–1829.)

This emphasis on the novelty of Lachenmann's music points to an important aspect that is often overlooked in reviews and anecdotal accounts of Lachenmann's music: that unfamiliar sounds (noises, to some) are not there simply for their own sake. Indeed, this is a point that Lachenmann has himself made clear repeatedly, at one point going so far as to dismiss the search for new sounds as 'pseudo-radical, botanical explorations'.[62] Rather, Lachenmann uses the unfamiliar (and that includes the familiar in an unfamiliar context) in his *musique concrète instrumentale* indexically, to point towards the causal relationships of any sound's production through the challenge it poses to the performer's habits, but also, in its challenge to the listener's expectations, to point towards the conditions of sound's perception. 'The object of music is listening', he writes, 'that is, perception perceiving itself'.[63]

It was precisely this preoccupation with the perception of sound that motivated Lachenmann to write '*Klangtypen der Neuen Musik*' in 1966, a pivotal essay in which he outlines a typology of five different sound categories. Contrary to the serial modes of creating structures according to one value or another attached to a sound, Lachenmann proposes that it is the perception over time of the material quality of each sound type, and the relationships that emerge between them, through which a piece of music of achieves its structure. Despite its importance as a document of Lachenmann's early compositional thought (Josef Haüsler in his foreword to *Musik als existentielle Erfahruing* refers to it as his music-literary opus one),

[62] Helmut Lachenmann, 'Philosophy of Composition – Is There Such a Thing?', in *Identity and Difference: Essays on Music, Language and Time*, ed. Peter Dejans (Leuven: Leuven University Press, 2004b), 66.
[63] Lachenmann (1996), 117: '*Der Gegenstand von Musik ist das Hören, die sich selbst wahrnehmende Wahrnehmung'*.

Klangtypen has yet to be translated into English.[64] A brief survey of Lachenmann's typology is therefore worthwhile.[65]

The first type, *Kadenzklang*, is the build-up and decay of a sound. It is this dynamic gradient, rather than the pitch contour, that develops the character of the sound of a *Kadenzklang*. It might consist of a single sound emerging and decaying, but it can equally be formed in an ensemble context by an initial impulse, followed by a secondary resonance, as in Stockhausen's *Gruppen*:

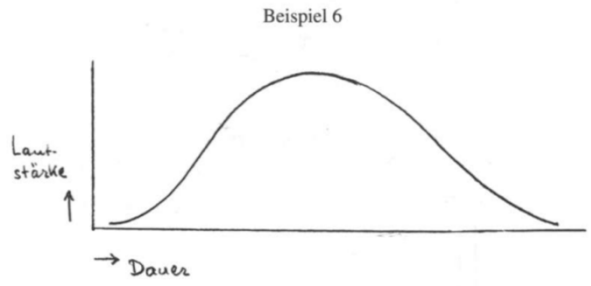


Figure 3: Graphic representation of *Kadenzklang*, showing dynamic level against duration (Lachenmann (1996), 3). (This image, and those following, are reproduced by kind permission of Breitkopf & Härtel, Wiesbaden)

[64] See foreword to Lachenmann (1996), xviii. It is interesting to note, in relation to the Stockhausen vs Schaeffer issue, that the essay was first delivered as a broadcast on *Westdeutscher Rundfunk Köln*.

[65] For another useful overview of Lachenmann's *Klangtypen* essay, see Heathcote, 'Liberating Sounds: Philosophical Perspectives on the Music and Writings of Helmut Lachenmann' (MA thesis, University of Durham, 2003), 21-32.



Figure 4: *Kadenzklang* in Stockhausen's *Gruppen*, followed by its graphic representation (Lachenmann (1996), 3).

The second sound type is the *Klangfarbe*, defined as any unchanging "block" of sound:

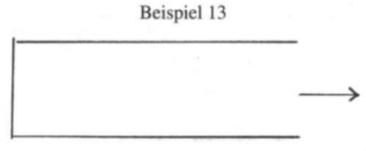


Figure 5: Graphic representation of *Klangfarbe* (Lachenmann (1996), 8).

Unlike the *Klangkadenz*, which must unfold according to its own time (*Eigenzeit*) in order to convey its dynamic character, the timbral quality of the *Klangfarbe* (which Lachenmann locates, for instance, in the opening bars of Ligeti's *Atmosphères*) can be almost immediately perceived. This leads Lachenmann to make an important distinction between sound as process (*Klang-Prozess*) and sound as state (*Klang-Zustand*).[66]

The third type, *Fluktuationsklang*, consists of trills, tremolos, and any other kind of repeated figuration; it is like *Klangfarbe* set in motion.

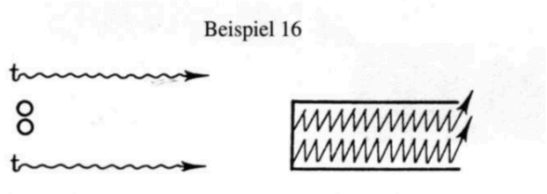


Figure 6: Graphic representation of *Fluktuationsklang* (Lachenmann (1996), 10).

The *Fluktuationsklang*, which Lachenmann's locates in several examples from classical repertoire, citing the openings of Beethoven's Ninth Symphony and Debussy's *Feux d'artifice*, is somewhere between process and state; a process is repeated, the perceptual result of which is a state. The space between perception of process and perception of state is the *Fluktuationsklang*'s *Eigenzeit*.

The fourth type is related to *Fluktuationsklang*, but describes a complex of sounds made up of multiple lines, each moving independently of one another and without a clear pattern of repetition. Lachenmann calls this type *Texturklang* and, like *Fluktuationsklang* and for similar

[66] Ibid., 8. It is also this that differentiates *Klangfarbe* from Schoenberg's *Klangfarbenmelodie*.

reasons, it also lies between process and state, even if its *Eigenzeit* is necessarily longer than that of the previous three categories.

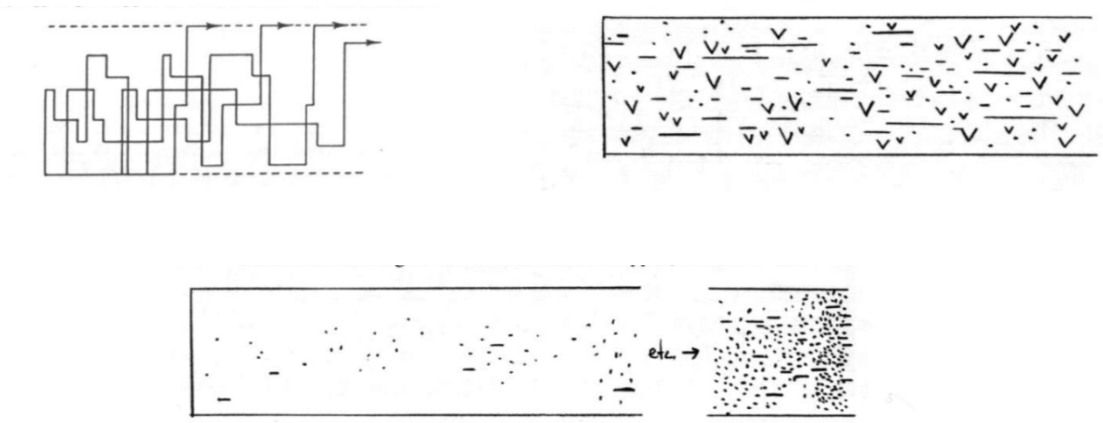


Figure 7: Graphic representations of three different *Fluktuationsklangen* (Lachenmann (1996), 15-16).

The fifth and final category, *Strukturklang*, is the combination or perhaps culmination of the other types. As such it is the most important, but also the most elusive. It refers to a collection of sounds (which might include any of the four types above) that combine to form an expressive unity, not on account of any imposed, predetermined structure, but because of their inherent, sounding properties, and the relationships that are heard between them. Rather than the structure determining the arrangement of sounds, then, the structure *is* the sounds. Given the breadth of possibilities that this final category entails, Lachenmann acknowledges the difficulty of representing *Strukturklang* schematically, but attempts the following illustration:

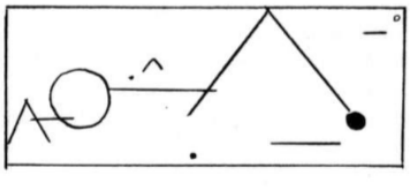


Figure 8: Graphic representation of *Strukturklang*, (Lachenmann (1996), 18).

Indeed, Lachenmann's clarity breaks down somewhat at this point of *Klangtypen*. Fortunately, though, he does offer a (slightly) clearer explanation of *Strukturklang* in a later essay, '*Hören ist wehrlos – ohne Hören: Über Möglichkeiten und Schierigkeiten*' (1985):

> [In *Strukturklang*] the experience of form is inseparable from the experience of the subordinating sound-character (pop musicians would say "sound"). In other words, construction is inseparable from expression, just as, in listening, intellect is inseparable from intuition: the two inspire each other.
>
> The term "*Strukturklang*" – which I introduce here as an alteration of the term "*Klangstruktur*" – is based on a conception of sound that, as a multi-dimensional structure of arrangements, does not communicate itself straight away as a flat acoustic stimulus, but only gradually opens up in a multi-dimensional, ambiguous process of feeling out the construction as it passes, with its characteristic and related sound components.[67]

This gradual process of feeling out (*Abtastprozeß*) is an idea to which Lachenmann returns throughout *Musik als existentielle Erfahrung*, and it perfectly reflects the importance he places on a hands-on approach to composition, as well as the centrality of the physical in his understanding of perception. Indeed, a little later in '*Hören ist Wehrlos*', he describes how

[67] Ibid., 123: '*Und so wenig wie in solchem Erleben das Erlebnis der Form vom Erlebnis des übergeordneten Klangcharakters („Sound" würden die Popmusiker sagen), anders gesagt: So wenig sich Konstruktion und Ausdruck voneinander trennen lassen, so wenig läßt sich beim Hören Intellekt und Intuition trennen: Das eine beflügelt das andere.*
Jener Terminus Strukturklang, den ich – in Umstellung des Wortes Klangstruktur – hier eingeführt habe, geht von einer Klangvorstellung aus, die – eben als mehrdimensionales Gefüge von Anordnungen – sich nicht als platter akustischer Reiz schnell mitteilt, sondern sich viel- mehr erst allmählich erschließt in einem vielschichtigen, vieldeutigen Abtastprozeß an der vorüberziehenden Konstruktion mit ihren charakteristisch aufeinander bezogenen Klangkomponenten'. Derrick Calandrella renders this untranslatable oxymoron of Lachenmann's title appropriately as 'Hearing is Defenseless – without Listening: On Possibilities and Difficulties' in his English translation (Helmut Lachenmann (2003)).

this feeling out also *reaches out*, beyond the structure of the piece and into the wider ecological structure of performance:

> This feeling out process conveys not just the structure of the instrument, but indirectly also the structure of the instrument builder and the instrumentalist. It conveys the structure of the composer themselves.[68]

What Lachenmann leaves out however, and somewhat conspicuously, from this shared process of feeling out, is the listener. How is *Strukturklang* in *Dal niente* heard? Fred Lerdahl's theory of salience, later taken up by Michel Imberty and Christian Utz (who uses it to some effect in his analysis of *Pression*) offers a possible approach to this question.[69]

Salient events, according to Lerdahl, are ones which occur either in strong metrical positions, at registral extremes, or that have some sort of motivic significance. To this I would add events that occur at the upper extremes of the dynamic range. In atonal music, given its lack of stability conditions (cf. Lerdahl and Jackendoff's *A Generative Theory of Tonal Music*) salience gains a new cognitive importance that it may not possess in tonal music; it is, as he argues, the primary means by which listeners 'organize atonal surfaces'.[70] As a result of this, Lerdahl claims, 'atonal music collapses the distinction between salience and structural importance', a claim with significant parallels to Lachenmann's collapse of the distinction

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[68] Ibid., 124: '*In solchem Abtastvorgang teilt sich nicht nur die Struktur des Instruments, sondern indirekt auch die des Instrumentenbauers und Instrumentalisten mit: diejenige des Komponisten selbst*'.

[69] Fred Lerdahl, 'Atonal prolongational structure', *Contemporary Music Review* 4:1 (1989), 65-87, Michel Imberty, 'How do we perceive atonal music? Suggestions for a theoretical approach', *Contemporary Music Review* 9:1-2 (1993), 325-337, Christian Utz, 'Time-Space Experience in Works for Solo Cello by Lachenmann, Xenakis and Ferneyhough: A Performance-Sensitive Approach to Morphosyntactic Musical Analysis', *Music Analysis*, 36: 2 (2017), 216-256.

[70] Lerdahl (1989), 73. See also Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge MA: MIT Press, 1983).

between sound and form in *Strukturklang*.[71] Salient events, then, register to the listener as perceptually, and structurally, more important than non-salient or less salient events, and so different degrees of salience form an internal hierarchy within a piece of music. However, a difficultly lies in the fact that Lerdahl's article places the focus squarely on pitch-based music. How might we employ the idea of hierarchies of salience to understand a piece like *Dal niente*, whose structure is not determined primarily by pitch?

It is, perhaps, surprising that some of the most salient events in *Dal niente* are, in fact, pitched events. In a piece whose note values tend to be very short, it is the pitched elements that are held for some of the longest durations, like the G held from line 22 to the end of line 24; for a piece whose dynamic level is usually quiet, it is the pitched elements that reach the highest dynamic extremes. But this is to be expected: due to the technical (and material) demands of the instrument, conventionally pitched sounds on the clarinet can support a far wider field of dynamics than unpitched breath sounds, and can sustain longer durations, given the need to pass less breath through the resistance between the embouchure and the mouthpiece.

The first salient event in the piece, according to Lerdahl's criteria, occurs from line 22-24: a single G4 which, after the near-constant movement of the preceding lines, stands out in spite of its quiet dynamic, assisted by a twelve second rest at the start of the line. Soon afterwards, the movement of the piece resumes and this G4 moment appears to have been forgotten. At line 42, however, the music comes to rest once more on a G. Although this G is transposed an octave lower and notated as toneless, repeated semiquavers, it can still be heard in relation to the first G4 since, as Utz points out, even Lachenmann's unpitched sounds may inevitably retain some degree of pitch and, what is more, this is the first time since the first

[71] Lerdahl (1989), 73.

G4 that *Dal niente* has returned to a point of stillness.[72] This new G provides the central reference point to an extended passage of "toneless" semiquaver movement (lines 44-47), which is then consolidated into a long tremolando (again toneless) between G and E flat (lines 50-52), before we hear a sustained, conventionally pitched G, this time in the altissimo register and reaching a *sforzando* triple forte (line 55-56).[73]

This account illustrates one way in which sounds enter into relation with one and another within *Strukturklang*, but it also, I suggest, illustrates the limits of the usefulness of salience, with its implications of hierarchy, as it relates to *Dal niente*. In the piece, the extent to which pitch will leak out of the unpitched "noise" components (according to the first three definitions in Chapter One) will depend on the specific performance situation, the instrument, the player, and this is precisely part of the point of *musique concrète instrumentale*. Furthermore, as the treatment of the G in passage above shows, *Dal niente* "filters" between pitch and noise. In the same way that any acoustically-produced pitched sound contains elements of noise (that which surrounds the intended sound), pitch becomes the "noise" to unpitched sound. Or, perhaps more precisely, pitch and noise are one and the same in *Dal niente*: both are results of energetic processes and material interactions. By acknowledging this, Lachenmann challenges conventional measures of salience in his search for new ways of hearing. Thus,

[72] Utz (2017), 222.

[73] To take this analysis a step further, running in a sort of counterpoint (cf. Lachenmann's idea of a 'structure [elsewhere "polyphony"] of arrangements' within *Strukturklang*) is a relationship between C sharp and D natural: Lines 38-39 (in between the first two G moments), consist of an oscillation between the two pitches, first measured and toneless, then as a toneless trill and then, very briefly and at the threshold of audibility, as pitched triplets in quadruple piano. These pitches then reappear around the altissimo G at lines 55-56, developing into a *bisbigliando* on C sharp, which express a heard relationship not only with the vibrato of the first G4, but also arguably the flutter-tongue that precedes it (line 56), which in turn might relate to tremolando and trills from lines 50-53. I would even go so far as to suggest the faint presence of a kind of tonal allusion within this relationship, with the C sharp as a leading note to D, acting as a kind of dominant of G. This argument is reinforced by the D major scale of line 28 and the possibility of an additional leading note relationship between F sharp and G (lines 40 and 54-55). I return to allusions to tonality in the following two chapters.

just as he reduced the distinction between sound perception and form in *Strukturklang*, Lachenmann also reduces the hierarchical differentiation between the perception of sound and the perception of noise. In a sense, then, the form of this piece is also noise.

In its lack of hierarchical organisation, and in the way in which the different elements of a piece make gradual sense of each other, I suggest that it is possible to map *Strukturklang* onto the entire structure of the performance. In *musique concrète instrumentale*, the instrument, score, performer, and listener, as well as the composer, are no longer discrete elements, no longer points in a channel through which communication only flows in one direction. Rather, they are networked together in an assemblage, built up out of nothing, and make sense of each other, "feel each other out," through the process of performance. In *'Affekt und Aspekt*' (1982), and again in '*Komponieren im Schatten von Darmstadt'* (1987), Lachenmann expresses this in the following terms:

> Composing as resistance to the prevailing concept of material means: to shed new light on this concept of material, to investigate it, to discover the oppressed in it, to expose it. Hearing means changing, rediscovering oneself in its changeability.[74]

In *Dal niente*, Lachenmann not only composes *as* resistance, but also *with* resistance – the essential resistance between breath and instrument and the noise it produces – transforming it from a thing into a function that sheds light on the structure of performance. As Greg Hainge explains through a useful analogy with electrical circuits:

[74] Lachenmann (1996), 68 and 347: '*Komponieren als Widerstand gegen den herrschenden Materialbegriff bedeutet: diesen Materialbegriff neu beleuchten, durchleuchten, in ihm Unterdrücktes entdecken, freilegen. Hören bedeutet: sich verändern, sich selbst in seiner Veränderbarkeit neu entdecken*'.

> An electrical circuit (read text) set up for the purposes of the transmission of current (read content) will itself necessarily resist the passage of that current due to its own material properties at the same time as that material system is crucial for the transmission of that current since without it no current could be transmitted (read expressed) in the first place. […] What electrical resistance illustrates beautifully, then, is the way in which any expression, which is to say any material entering into expressive relations […] necessarily enters into a systematic process with its own material ontology (read medium). This medium resists the transmission of the expression at the same time as the expression is entirely depending on the system at its most fundamental level of base materiality, for its expressive potential can only be actualised in a material assemblage formed between the system and the expression that reconfigures both of them.[75]

In *Dal niente*, Lachenmann amplifies the noisy resistance of the media of performance (the performing body, the instrument, the score, the listener, even the composer) so that we hear its form as inseparable from content. In listening to *Dal niente*, as in playing it, we are reminded of our own resistant functions, both as physical bodies, but also of the habitual resistance created by our expectations, our aesthetic and ideological pre-formations:

> [...] one is reminded of the changeability of listening and of aesthetic behaviour, of one's own structure, one's own structural changeability but also of the element of human invariability which makes all this conceivable: the power of what one calls the human spirit.[76]

This reminds us of an important fact, that Lachenmann has made clear several times: that resistance in *musique concrète instrumentale* is here not negatively conceived as a

[75] Hainge (2013), 16-17.
[76] Lachenmann (1996), 91: '*hier wird man an die Veränderbarkeit des Hörens beziehungsweise des ästhetischen Verhaltens, an die eigene Struktur also, an die ei- gene strukturelle Veränderbarkeit, aber auch an jene humane Invariante erinnert, von wo aus allein all dies denkbar ist: die Kraft dessen, was man Geist nennt*'.

straightforward form of rejection.[77] Rather, resistance as a thing functions to bring about liberated perception, perception perceiving itself through noise, and as noisy.

[77] Reference, for instance, the Lachenmann-Henze debate (Lachenmann (1996), 331-333 and Helmut Lachenmann and Jeffrey Stadelman, 'Open Letter to Hans Werner Henze', *Perspectives on New Music*, 35: 2 (1997), 189-200). See also Steenhuisen (2004), 14, and Hockings (1995).

Chapter 4: Composing next to Mozart

Lachenmann's music in the early 1970s continued in a similar vein, expanding the potential of his instrumental resources and, with this, extending his palette of instrumental sounds and noises. In *Kontrakadenz* (1970-1) for instance, his first orchestral piece since *Air*, he augmented the ensemble with four "ad hoc" players, operating Schaefferian everyday objects such as ping pong balls and wash tubs as well as, in a manoeuvre reminiscent of John Cage's *Imaginary Landscape No. 4*, two radios. Later, in *Schwankungen am Rand. Musik für Blech und Saiten* (1974-5), he experimented with the amplification and spatialisation of some of the string players. Tantalisingly, he also wrote a piece for clarinet, cello and piano that combined *Dal niente*, *Pression*, and *Guero* into a trio, *Montage* (1971), but it was never published and receives no mention in *Musik als existentielle Erfahrung*.

But this period was marked by a growing sense of unease. Later, he would recount that he had begun to grow tired of his own approach, perhaps even to suspect his 'almost blinkeredly material-oriented compositional process', and to feel that his explorations of sound had become 'congealed'.[78] He was also becomingly increasingly preoccupied with the concept of beauty which, as he outlined in a polemic essay of 1976, '*Zum Problem des Musikalisch Schönen heute*', he thought of as having become domesticated and bourgeois.[79] Beauty,

[78] Helmut Lachenmann, '*Schwankungen am Rand* – Fluctuations at the Edge', CD booklet note to *Schwankungen am Rand* (ECM New Series 1789, 461949-2, 1994); Lachenmann (2004b), 66.

[79] A version of Lachenmann's essay appeared in *Tempo* in 1980, translated into English under title 'The "Beautiful" in Music Today', which has led Orning to suggest an intentional paraphrase of Hanslick's *Vom Musikalisch-Schönen* (Orning). The validity of this suggestion is debateable, since the resonance is must less clear in German, and Lachenmann never makes the connection. However, there are intriguing parallels between Hanslick's distinction

according to Lachenmann, isn't something metaphysical, but rather refers to the enjoyment of art in its relationship to the real experience of individual consciousness. The experience of beauty, he argues, can trigger one's human potential for self-liberation, happiness and, somewhat recursively, beauty itself. Post-war serialism, he thought, summarily dismissed any concept of beauty in its academicist belief in a musical blank slate and its fetish of abstraction. Meanwhile, composers such as Ligeti, Penderecki and Kagel were exploiting beauty not only uncritically but dishonestly in their recuperation of tonal elements, their works dismissed rather strongly in turn by Lachenmann as 'the cheap pretensions of avant-garde hedonists, sonority-chefs, exotic-meditationists and nostalgia-merchants'.[80]

The precise terms of his argument in this essay are a little unclear, as is the extent to which he implicates his own works in his criticism. What is clear though, amongst the polemical rhetoric, is his call for the recognition of, and confrontation with, the mediated nature of musical material. Musical material, he argues, is inevitably mediated through the historical and present conventions of musical perception, through the weight of tradition, and through institutional and market forces. It is the sum total of these that he terms the "aesthetic apparatus." While this appears to be the first time that Lachenmann formulated his ideas in these terms, there are some hints towards this shift of perspective in the pieces of the early 1970s. *Kontrakadenz* (1970-1), for instance, reaches conventional sounding orchestral climax (at around the conventional "golden ratio" moment) but then parodies this language by repeating the same passage 'at least five times' (bars 313-341).[81] Lachenmann also refers to revealing the 'flipside of the standard philharmonic practices' in *Klangschatten – mein*

betweeen active/aesthetic and passive/pathological hearing, and Lachenmann's distinction between hearing (*hören*) and listening (*zuhören*).

[80] Lachenmann (1996), 106: '*die billigen Prätentionen der Avantgarde-Hedonisten, der Klangfarbenköche, der Meditations-Exoten'*.

[81] Helmut Lachenmann, *Kontradenz für großes Orchester* (Weisbaden: Breitkopf & Härtel, 1982). 64-69.

Saitenspiel (1972) in his suppression of any conventionally resonant string sounds, and to a 'hidden march' in *Fassade für großes Orchester* (1973).[82] It was also during this period that Lachenmann wrote his first string quartet, *Gran Torso. Musik für Streichquarttet* (1971-2), turning towards a medium that he regarded as 'the embodiment of convention'.[83]

Lachenmann's ideas on material and mediation were further formalised in two essays of the late 1970s: '*Bedingungen des Materials: Stichworte zur Praxis der Theoriebildung*', given as a lecture at Darmstadt in 1978 (a year in which, as Alastair Williams notes, neo-Romanticism guided the governing orthodoxy) and '*Vier Grundbestimmungen des Musikhörens*', delivered at the Musikhochschule Stuttgart in 1979.[84] Again, despite the centrality of these two essays to Lachenmann's developing compositional thought, neither has yet been translated into English.

The two pieces of writing can be taken together. In them, Lachenmann outlines four categories, or aspects, of musical material: the tonal aspect, the sensual or experiential aspect, the structural aspect, and the existential aspect (or aura). Lachenmann refers to tonality (*der tonale Aspekt*) not only to mean conventional categories of tonal/harmonic expression (whose dialectical relationship of tension and relaxation, he argues, persists even in atonal music) and the rhetorical gestures that emerge from it, but also as a kind of synonym

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[82] Lachenmann (1996), 387: '*Die Klanglandschaft zeigt quasi die Rückseite der gesellschaftsüblichen philharmonischen Muster; die Saiten, statt zu klingen, werden auf charakteristische Weise am Klingen gehindert'*; Ibid., 388: '*Fassade ist ein heimlicher Marsch [...] Der deutlich metrisch orientierte „marschmäßige" Duktus bricht allerdings immer wieder zusammen, denn jene Klangfelder, welche sich zur „Marschmelodie" zu fügen hätten, wuchern aus und kehren ihr strukturelles Innenleben hervor; sie setzen so dem dynamischen Rahmengestus ihre eigene innere Statik entgegen, sie blockieren und deformieren ihn*'.
[83] Ibid., 386 '*[die] Verkörperung von Konventionen*'.
[84] Alastair Williams, 'Mixing with Mozart: Aesthetics and Tradition in Helmut Lachenmann's *Accanto*', *Twentieth-Century Music*, 8; 1 (2011), 74. Williams' article on *Accanto*'s historical context, as well as Heathcote's Adornian reading (Heathcote (2003), 99-139) are, at this time, the only pieces of writing in English that deal with *Accanto* in any depth.

for the entirety of musical tradition. Tonality, he suggests, is already inscribed in any musical material and, with this, so too are inscribed preformed modes of listening. The sensual/experiential aspect (*der sinnliche Aspekt*) recapitulates the five categories that Lachenmann set out in *Klangtypen*, but here with an added emphasis on each category's relational and perceptual basis, both in terms of its micro/internal and macro/external organisation. The third category, the structural aspect (*der strukturelle Aspekt*) also relates to Lachenmann's earlier category of *Strukturklang*, but here it is dealt with in a more explicitly dialectical manner. This kind of structure is not only the kind of structure that inheres in the relation between sounds (as in *Strukturklang*), but also the structures inside which this structuring takes place – structures of bodies, instruments, institutions, etc. 'Composing', he writes in *Vier Grundbestimmungen*, 'is not a matter of putting together, but rather of putting in relation', and that is a relation that may be (and indeed often is) one of confrontation that produces resistance.[85] The act of structuring, then, may be equally and simultaneously an act of de-structuring just as, he writes later, a piece of wooden furniture can be related to the tree which was destroyed in order to make it.[86] It is also in these essays that Lachenmann first coins a phrase to which he often returns: 'Music only makes sense if it points beyond its own structure to structures – that is, to realities and possibilities – around ourselves and in ourselves.'[87]

The final category, the existential aspect ('*der existentielle Aspekt'*), which Lachenmann also terms the aura, is somewhat elusive. It relates to the category of tonality but extends it into

[85] Lachenmann (1996), 54: '*Komponieren heißt nicht "zusammensetzen", sondern heißt "in Zusammenhang bringen*."'
[86] Ibid., 88: '*zugleich als Desorganisations-Erfahrung ambivalentes Produkt gleichermaßen von Aufbau wie von Zerstörung, Konstruktion wie Dekonstruktion (das Holzmöbel als kaputter Baum...*)'.
[87] Ibid., 47 and 52: '*Musik hat Sinn doch nur, insofern sie über die eigene Struktur hinausweist auf Strukturen, Zusammenhänge, das heißt: auf Wirklichkeiten und Möglichkeiten um uns und in uns selbst'*.

an explicitly extra-musical domain, a more generalised domain of social/cultural consciousness, both on the level of the individual and on the level of the whole – the realm, as he would later write 'of association, memories, archetypal magical predeterminations'.[88] In a sense, aura supplements the concept of the aesthetic apparatus with which Lachenmann had begun to engage in his 1976 essay: aura inheres in material, even before it is approached by the composer, and it is the composer's work to recognise and address it. This chapter will examine how Lachenmann's compositional shift beyond the immanent material qualities of sound to encompass the social and cultural forces that both shape and are shaped by it operates within *Accanto* (1976) for solo clarinet, orchestra, and tape, suggesting that it might be productively understood in terms of an expansion of Lachenmann's field of resistance.

Although it precedes '*Bedingugen des Materials*' and '*Vier Grundbestimmungen*', *Accanto. Musik für Klarinettisten mit Orchester* (1975-76) clearly illustrates the ideas that Lachenmann would go on to express in these essays, and reflects the concerns he had begun to outline in the same year in '*Zum Problem des musikalisch Schönen heute*'. Another result of an intensive period of collaboration with Eduard Brunner, who premiered the piece in

[88] Ibid., 88: '*als Reich der Assoziationen, der Erinnerungen, der archetypischen, magischen Vorausbestimmungen*'. Lachenmann's use of the term aura is typically seen as a debt to Benjamin (see, for instance, Laurent Feneyrou, '*…écoute cet instant*…Helmut Lachenmann / Luigi Nono', *Circuit* 13:2 (2003), 59), but I suggest that drawing uncritical connections is particularly unhelpful in this context. For one thing, as Miriam Bratu Hansen has pointed out (Miriam Bratu Hansen, 'Benjamin's Aura', *Critical Inquiry*, 34:2 (2008), 336-375) its reductive association with 'The Work of Art in the Age of Mechanical Reproduction', has led to a misunderstanding of the term as principally an aesthetic category. 'Anything but a clearly delimited, stable concept,' she explains, 'aura describes a cluster of meanings and relations that appear in Benjamin's writings in various configurations and not always under its own name; it is this conceptual fluidity that allows aura to become such a productive nodal point in Benjamin's thinking' (Bratu Hansen (2008), 339). An understanding of this conceptual fluidity is, I argue, essential for understanding Lachenmann's use of the term (not unlike his use of the term *concrète*). For another, even though Lachenmann does mention Benjamin in one of his discussions of aura (Lachenmann (1996), 46) Hockings claims that Lachenmann in fact 'absorbed' the term from György Lukács. Unfortunately, she offers no further explanation, and it does seem that Lukács's convictions around aesthetic autonomy go against the grain of Lachenmann's compositional thinking (Hockings (1995), 6-7n14).

Saarbrücken at the *Musik im 20 Jahrhundert* festival in May 1976 and to whom the piece is dedicated, *Accanto* represents a significant turning point in Lachenmann's compositional output. It marks both the end of his preoccupation with *musique concrète instrumentale*, and the beginning of a new focus on the incorporation of existing compositional models and pre-existing musical materials.[89] In other words, *Accanto* marks the beginning of Lachenmann's explicit engagement with aura.

Accanto is scored for solo clarinet in B-flat (doubling bass clarinet in B-flat with an optional additional clarinet in A or B-flat without mouthpiece), large orchestra, and tape. The soloist, as well as the pianist, are amplified. The tape runs a recording of Mozart's Clarinet Concerto K.622 with the pauses between the movements removed and played twice back-to-back to prevent the Mozart running out before *Accanto* has finished its course.[90] It is faded in and out by an independent operator according to precise rhythmic indications in the score, and played through a pair of speakers at the back of the ensemble. To begin with, the bursts of the tape are so brief that the material on it is unidentifiable; that is, until just after halfway through the piece, when Mozart's concerto plays out for a few short, but unmistakeable seconds.

[89] Lachenmann attested to this turning point in a 1993 interview with Peter Szendy, published in Lachenmann (1996), 205-212.

[90] It is worth noting that Lachenmann wasn't the only German composer writing music on the subject of past works, as Alastair Williams notes: 'An unexpected outcome of the political turmoil of the late 1960s and early 1970s was that a new generation of composers reacted against their predecessors' disdain for tradition. This tendency became evident around 1974, as younger figures such as Ulrich Stranz, Hans-Christian von Dadelsen, Manfred Trojahn, Hans-Jürgen von Bose, Wolfgang von Schweinitz, and Detlev Müller-Siemens sought to establish connections with Germany's illustrious cultural past. The most prominent exponent of this trend was Wolfgang Rihm, who produced a string of scores with allusions to Romantic repertoire during the 1970s and who, along with Lachenmann, emerged as a leading figure in subsequent years.' (Williams (2011), 74.) Lachenmann doesn't mention this trend in *Musik als Existentielle Erfahrung*.

If it were possible to remove the tape from the piece altogether, or to imagine the piece without it, *Accanto*'s surface would not sound like much of a departure from his earlier music of *musique concrète instrumentale*. The extended timbral palette and instrumental techniques, the use of the ensemble, even some of the solo writing, are all familiar from his earlier work. For this reason I suggest that *Accanto* could be discussed in similar terms to the discussion above of *Dal niente* – the piece renegotiates the relationship between the performing body and the instrument, it challenges listening habits, it blurs the discrete boundaries between composer, performer and listener, and all this is intensified exponentially by virtue of it being a piece for multiple bodies, whose physical and sonic expression can interact in a considerably higher number of relationships. Indeed, Lachenmann recapitulates his definition of *musique concrète instrumentale* even in a 1982 essay on *Accanto*, describing sound 'no longer experienced as a natural result of the usual instrumental playing, but as the result of a specific handling of the instrument, the concrete corporeality, the hardness, the softness, the energetic conditions involved in producing the sound [*Klang*] or noise [*Geräusch*]'.[91] However, to imagine the piece in such a way would be to create precisely the kind of hermetically sealed environment that Lachenmann was now trying so hard to work against. The inclusion of the tape is not incidental, nor is its content accidental; the incorporation of Mozart's concerto opens the work up to new provocations.

As Richard Toop points out in his valuable historiographical account of Lachenmann's orchestral music, Mozart is arguably the most fetishised and the most consumable of any classical composer and, in its use in films from *Out of Africa* to *American Gigolo*, to its inclusion on a dedicated CD 'for dads and dads to be', his Clarinet Concerto is one of his

[91] Lachenmann (1996), 169: '*Klang nämlich wird hier nicht mehr erfahren als selbstverständliches Resultat des üblichen Instrumentalspiels, sondern als Resultat eines spezifischen Umgangs mit diesem Instrument, der die konkrete Körperlichkeit, die Härte, die Weichheit, die energetischen Bedingungen beim Hervorbringen des Klangs oder Geräuschs [...]*'.

most ubiquitous works.[92] For Lachenmann's part, he believed that Mozart's music had become like a drug, 'music to dream by'.[93] But, crucially, it is also music that he loves:

> For me, Mozart's Clarinet Concerto is the embodiment of beauty, humanity, purity, but at the same time it exemplifies a means of running away from oneself that has become a fetish: an art that seems intimately connected with humanity has in reality become a commodity for a society that sees art in terms of Oohs and Aahs.[94]

The resonances between this sentiment and those expressed in '*Zum problem des musikalisch Schönen heute*' (as well as in an essay on a similar theme of 1978, '*Über Tradition*') are clear: the vital, beautiful, and originally transgressive qualities of Mozart's Clarinet Concerto, Lachenmann thought, had become buried under the fetishes made of it. *Accanto* was to be a kind of rescue mission.[95]

In order to rescue Mozart's Concerto, though, Lachenmann felt that he had first to disguise it or, put a different way, defamiliarise it. Composing *Accanto*, he wrote in 1982, 'mean[t] not dodging the means of the familiar musical language, but dealing with it with speechlessness, removing these means from their usual linguistic context and, by re-arranging their elements,

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[92] Richard Toop 'Concept and Context: A Historiographic Consideration of Lachenmann's Orchestral Works', *Contemporary Music Review*, 23:3-4 (2004), 136; Don Campbell, 'Mozart Effect: Music for Dads and Dad-to-Be', (Children's Group compact disc, 1-897166-25-7, 2006). For an excellent critical account of the implication for this myth as one of the motivations behind the so-called "Mozart Effect," see Clémentine Beauvais, 'The "Mozart Effect": A Sociological Reappraisal', *Cultural Sociology*, 9:2 (2015), 185–202.

[93] Heathcote (2009), 342.

[94] Lachenmann (1996), 389: '*Das Mozartsche Klarinettenkonzert ist mir Inbegriff von Schönheit, Humanität, Reinheit, aber auch – und zugleich – Beispiel eines zum Fetisch gewordenen Mittels zur Flucht vor sich selbst; eine "Kunst", scheinbar "mit der Menschheit auf Du und Du", in Wirklichkeit zur Ware geworden für eine Gesellschaft mit der Kunst auf Oh und Ah*'.

[95] Lachenmann suggests that indeed part of what attracts him to Mozart's music, in particular the late symphonies, concertos and string quartets, is the fact that they were first deemed 'not for the palate' (Lachenmann in Heathcote 2009, 342).

creating connections – connections from which these elements are newly illuminated and expressively shaped'.[96] This term "speechlessness" (*Sprachlosigkeit*) figures throughout *Musik als existentielle Erfahrung*, in opposition to "*Sprachfertigkeit*," best translated as "false-fluency."[97] To deal with something speechlessly, according to Lachenmann, is to wake up from the dream, to divest the drug of its narcotic power; it is, he says, 'a first step, over and over again, in the search for forms of illusionless communication.'[98] But what does this mean for *Accanto*, in practice?

Lachenmann divides *Accanto* into two parts: the first before the identifiable Mozart quotation at bar 194, the second after.[99] In the first part, he takes the defamiliarisation of the Concerto to its apparent extreme – the outbursts are so short that not only are they not identifiable as Mozart's Clarinet Concerto, but they are more or less impossible to distinguish from the rest of the ensemble sounds. One might even, especially outside a live performance situation, not notice the presence of a tape at all. Lachenmann in this way strips the tape both of its semantic and material content. See, for instance, the following excerpt from the opening moments of the piece:

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[96] Lachenmann (1996), 169: '*Und so bedeutet für mich Komponieren, den Mitteln der vertrauten Musiksprache nicht ausweichen, sondern damit sprachlos umgehen, diese Mittel aus ihrem gewohnten Sprachzusammenhang lösen und durch erneutes Einanderzuordnen ihrer Elemente Verbindungen, Zusammenhänge stiften, von denen diese Elemente neu beleuchtet und expressiv geprägt werden'*.

[97] See also Heathcote (2003), 84-85.

[98] Lachenmann (1996), 400: '*erster Schritt, immer wieder von neuem, bei der Suche nach Formen illusionsloser Kommunikation*'.

[99] Ibid., 176. Alastair Williams follows Rainer Nonnenmann in subdividing the structure further into four parts, based largely on dominant timbres, but still pivoting around main Mozart quotation. See Williams (2011), 76.



Figure 9: Helmut Lachenmann, *Accanto*, bars 5-9. (© 1984 by Breitkopf & Härtel, Wiesbaden)

Whatever is happening at that moment in the tape (which, of course, will change within certain limits from performance to performance), it is most likely that its identity both as Mozart and as tape will be obscured through its similarities of duration, rhythmic disposition, and mode of attack amongst the percussive sounds of the clarinets and alto flutes. If not, it may register as a kind of difference, but the manner of this difference would be extremely difficult to identify within the field of already defamiliarised sounds.

At bar 193, just over halfway through *Accanto*, the tuba player is instructed to shout through their instrument: '*BITTE BRAZU DAS ZITAT*'.[100] At that point, the recording on the tape emerges clearly and audibly for the first time, lasting for around twenty seconds. There can be no doubt, now, that this is the emergence from something "outside."

[100] 'PLEASE ADD/PLAY THE QUOTE'. This translation can only be approximate, since "*brazu*" is not a known word in German. Williams suggests that the word was likely chosen purely for its phonetic qualities, but I would argue that this linguistic slip conforms to Lachenmann's idea of speechlessness (Williams (2011), 80n).

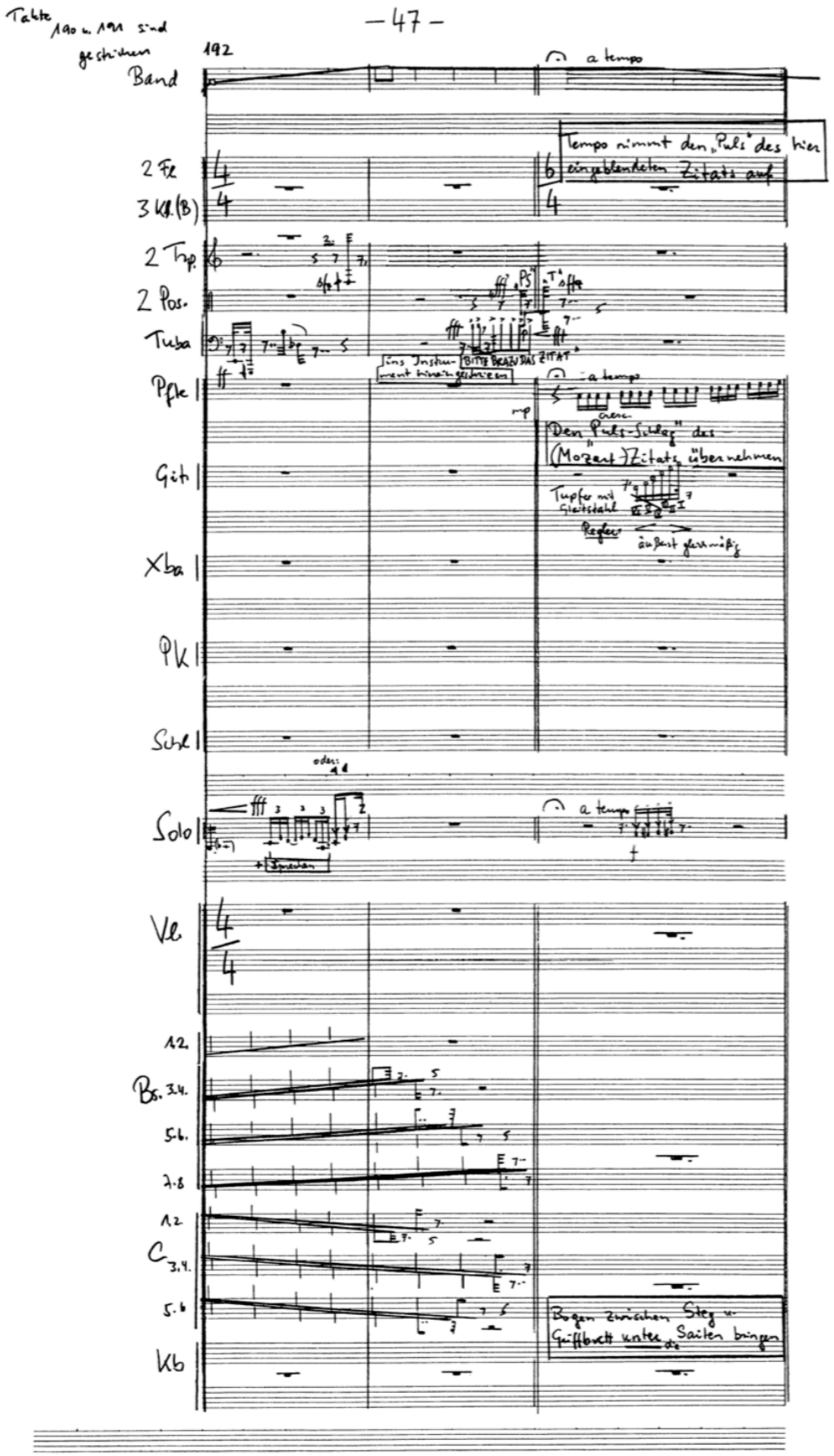


Figure 10: Helmut Lachenmann, *Accanto*, bars 192-4. (© 1984 by Breitkopf & Härtel, Wiesbaden)

This is the moment, says Lachenmann, when the music 'reveals its trauma':

> [Until this point] Mozart's music has repeatedly participated in the structural events in the form of hacked-up insertions. Here, however, this so-called "instrument" is used so plainly, so clearly, that the "sound," which is precisely nothing more than the musical language of Mozart, draws attention to itself as its own music, as a separate world. It is the strange moment in which my music is confronted with what it loves and avoids at the same time – avoids *because* it loves it and hates its ideological abuse. And naturally, that spirit of societal harmony that we seek to experience in Mozart's works is nowhere so far away, so radically challenged, as here, where this music actually sounds.[101]

The extended quotation at bar 194 registers as alien, as other, as the "noise" to the expected signal.[102] After sixteen or so minutes, Lachenmann's instrumental defamiliarisations begin to feel familiar, and Mozart's musical language, usually so familiar, sounds so strange when it is dealt with speechlessly, removed from its original context. But this might also work the other way: perhaps, after an initial moment of surprise, the introduction of the Mozart's familiar musical language reminds the listener of the "abnormality" of Lachenmann's.

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[101] Lachenmann (1996), 174: '*Die Musik gibt hier ihr Trauma zu erkennen*'. Ibid, 175-6: '*Dabei hat in Form von rhythmisch zerhackten Einblendungen die Musik Mozarts schon früher immer wieder, quasi inkognito, am Strukturgeschehen teilgenommen. Hier allerdings wird dieses sogenannte "Instrument" so unverstellt und deutlich eingesetzt, daß der "Klang", der nichts anderes ist als eben die musikalische Sprache Mozarts, auf sich selbst als eigene Musik, als eigene Welt aufmerksam macht. Es ist der befremdende Moment, wo meine Musik mit dem konfrontiert wird, was sie zugleich liebt und meidet, meidet, weil sie es liebt und seinen ideologischen, kommerziellen Mißbrauch haßt. Und natürlich ist jener Geist der gesellschaftlichen Harmonie, wie wir ihn in Mozarts Werken zu erleben suchen, nirgends so weit weg, so radikal in Frage gestellt wie hier, wo diese Musik tatsächlich erklingt*'.

[102] In Heathcote (2009), 333, Lachenmann reiterates his dislike of the English word "noise," but nevertheless goes on to say: 'Incidentally – the most irritating element in *Accanto* is not the noise, but the presence of Mozart's clarinet concert on tape, unexpected fragments of which are 'shot' or faded into the orchestral sound. […] Hearing Mozart's music as an exterritorial signal might be taken as another quite shocking element of noise.'

The poetics, so to speak, of this moment intensify this ambiguity. As the score excerpt above indicates, the orchestra is instructed to pick up the tempo of the Concerto, whatever that is at that particular moment, and it is this pulsing that persists as Mozart is faded out. Is it the Concerto that now motivates the course of Lachenmann's music? Is the fact that they can share such a fundamental aspect of musical expression a gesture towards recapturing something transgressive about Mozart? Or is the orchestra in fact trying to drown Mozart out, to return his music to its indecipherable, semantically reduced state? I do not think that this ambiguity needs to be resolved, but do suggest that the emergence of something recognisably Mozart at bar 194 not only encourages a more attentive listening to the fragments of the recording in what follows, as Williams points out, but that it also necessitates a total re-hearing of the piece and the resistance that the presence of Mozart's Concerto has been producing from the very start.

First, to state what might be obvious, identifying Mozart's Clarinet Concerto reframes *Accanto* from a piece for solo clarinet and orchestra to a concerto for clarinet: Lachenmann's Clarinet Concerto.[103] Here, as in his first piece for string quartet, *Gran Torso* (1972), Lachenmann engages with an aesthetic apparatus that carries with it a substantial weight of tradition and conventional expectation. This also reinforces the sense of resistance – do Lachenmann's and Mozart's materials constitute one and the same piece, or are they pitted against each other? As Williams notes, Lachenmann's solo clarinet does not operate against the orchestra, as one might expect from a traditional concerto, but rather forms a part of it. Does that mean that the tape, and what is on it, becomes the soloist, in its confrontation against the orchestra?[104]

[103] Although Lachenmann has written a number of works for solo instrument and orchestra/ensemble, he never refers to them explicitly as concertos.
[104] Williams (2011), 76.

More specifically, however, Lachenmann himself reveals some "hidden" allusions within *Accanto*, both to Mozart's Clarinet Concerto itself, and to the *idea* of the work as a synecdoche for tonality and for the aesthetic apparatus of the classical performance tradition. In his essay on *Accanto* he points out scalic motion in the solo clarinet (b.60-63) that resembles a whispered version of Mozart's own virtuoso figurations, broken chord figures in the solo clarinet (b.36-39) whose rhythm is then taken up by the orchestra, and the insistent repeated pitches of bars 80-139, an allusion to what he refers to as 'the basis of any tonal determination of time'.[105] As well as the quotation at bar 194 (referred to here as 'a kind of tenuto time-window'), he also points out a quotation from another Mozart piece (incidentally the second subject of the first movement of Mozart's piano sonata in C, no.15 K.545), deformed by the solo clarinet through a kind of *Sprechstimme* and, despite its triple forte marking, more or less inaudible beneath the triple forte brass that surrounds it. Finally, he refers to the rocking figure at the end of the piece as comparable to the accompaniment of Mozart's slow movement, here reduced to 'a kind of toneless breathing'.[106]

There is certainly something elegiac about the close of this piece. But, to Lachenmann, it is in fact an expression of hopeful resistance:

> At the last moment, the music has found its way back to that speechless, searching character which corresponds to its own self-understanding of speechless expression, a self-conception from which it was startled, as it were, by the memory of what it knows to be lost and yet, in its own way, still seeks: a concept of beauty in which our contradictions, our anxieties are recognised and

[105] Lachenmann (1996), 175: '*Grundlage für jede gewohnte tonale Zeitbestimmung*'.
[106] Ibid., 176: '*Aus einer schaukelartigen Begleitfigur, ähnlich der Begleitung zu Beginn des langsamen Satzes des Mozartkonzerts, wird eine Art tonloses Atmen*'. These are some of many allusions that can be identified in *Accanto*. Williams, for instance, mentions a hushed cadenza-like passage at around bar 40 (cf. *Kontrakadenz*), as well as following Nonnenmann in asserting the possibility of the solo clarinet's "upbeat" to the quotation at bar 194 deriving from the upbeat to bar 86 of Mozart's first movement.

> overcome. Because the expression does not avoid the gaze of true alienation, but endures it vigilantly and, through such reflection, resists this universal paralysis and speechlessness.
>
> Where the falsely-fluent masks fall, alienation reveals itself. But recognising this helps one overcome it. And in this sense I understand this piece, along with my others, as an expression of hope…[107]

In my discussion of the tape so far, I have dealt primarily with what is on it, how the Mozart Concerto functions as synecdoche for tonality and tradition, and not on what the tape might mean as a thing itself. *Accanto* was not the first time that Lachenmann made use of electronic media; it was, however, the first time that he used them for their symbolic capacity, rather than solely for their sonic effect.[108] In *Accanto*, I suggest, both the tape and the tape player function as symbols of resistance.

As Alastair Williams points out, the late 1970s were the heyday of classical music recordings on LPs, and it was within the context of this that Lachenmann composed *Accanto*.[109] Or perhaps more accurately, it was against this context: the reification of music in recordings, and its subsequent treatment as a commodity were a fundamental aspect of the bourgeois,

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[107] Lachenmann (1996), 176: '*Spätestens hier hat die Musik zu jenem sprachlosen Abtastcharakter zurückgefunden, der ihrem eigenen Selbstverständnis von sprachlosem Ausdruck entspricht, einem Selbstverständnis, aus dem sie sich sozusagen hat hochschrecken lassen durch die Erinnerung an das, was sie verloren weiß und doch auf ihre Weise immer suchen wird: einen Schönheitsbegriff, in dem unsere Widersprüche, unsere Angst erkannt und bewältigt sind, weil der Ausdruck den Blick auf die reale Entfremdung nicht meidet, sondern wachsam aushält und sich durch solche Widerspiegelung der allgemeinen Lähmung und Sprachlosigkeit widersetzt. Wo die sprachfertigen Masken fallen, entlarvt sich die Entfremdung. Aber Erkennen hilft bewältigen. Und in diesem Sinn habe ich selbst dieses Werk, sowie meine anderen Werke, nie anders verstanden denn als Ausdruck von Hoffnung*'.
[108] After *Scenario* (discussed in Chapter Two), he used two radios in *Kontrakadenz*, spatial diffusion in *Klangschatten – mein Saitenspiel*, and *Fassade. Für großes Orchester* (1973) also features a tape part that plays mostly radio static and a distorted recording of children's voices.
[109] Williams (2011), 86.

complacent consumption of musical experience that Lachenmann sought to critique.[110] As well as this, the proliferation of recorded music speaks directly to Lachenmann's aversion towards the safe sterility of the loudspeaker and, by extension, the acousmatic presentation of sound. Seen in light of this, the inclusion of a *recording* of Mozart's music (in this case not on vinyl but on magnetic tape) throws into relief relationships between process and product, liveness and (after Jason Stanyek and Benjamin Piekut) deadness, acoustic experience and acousmatic experience.[111] Williams sees these relationships in terms of the confrontation of oppositional states, but what this doesn't account for is the possibility of these states being indistinguishable from one another, as is the case in *Accanto*, where the identity of Mozart's tape is hidden within Lachenmann's orchestra through the manner in which it is treated. Lachenmann disrupts the routine functioning of this particular recording/playback medium in precisely the same kind of way as he disrupts the routine functioning of his instruments in *musique concrète instrumentale*, making them present-at-hand. The tape player becomes an instrument (and, perhaps, the tape operator becomes an instrumentalist, since the tape part is notated in an action notation that is very similar to aspects of Lachenmann's string notation) and, once one has become aware of it, its presence within the assemblage of the piece is impossible to ignore.[112]

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[110] See, for instance, Michael Chanan, *Repeated Takes: A Short History of Recording and its Effects on Music* (London and New York: Verso, 1995), Eric Clarke, 'The Impact of Recording on Listening', *Twentieth-Century Music*, 4:1 (2007), 47-70, Mark Katz, *Capturing Sound: How Technology has Changed Music* (Berkeley and Los Angeles: University of California Press, 2010).

[111] See Jason Stanyek and Benjamin Piekut, 'Deadness: Technologies of the Intermundane', *The Drama Review*, 54:1 (2010), 14-38.

[112] This "instrumentalisation" of tape find an interesting parallel in the work of Laurie Anderson, whose Tape Bow Violin, developed just one year after *Accanto*, also problematises the distance between technological and lived experience. See Yuji Sonne, 'Sensory otherness in Laurie Anderson's work', *Body, Space & Technology*, 5:1 (2005), and Philip Auslander, 'Unnecessary Duplicates: Identity and Technology in the Performances of Laurie Anderson, *Art Papers,* 24:1 (2000), 28-33.

However, the tape player also functions as an activator of resistance. Just as it is the resistance of a bow drawn along a string that produces the sound of the violin, or of the breath drawn through the hollow metal tube that produces the sound of the flute, so it is the resistance of the tape being passed across the playback head that produces the sound of the tape. This is particularly relevant within the context of *musique concrète instrumentale*, where sounds are meant to point to the mechanics of their production as well as, in Lachenmann's music of the mid-1970s onwards, to point to the socio-cultural means of their production.

This resistance between the tape and the playback head, even when the tape runs silently, produces a considerable amount of noise and, while I acknowledge a danger of overstating the particular significance of tape's material qualities, I suggest that this is an important point.[113] In just the same way that I have shown the possibility of mapping Lachenmann's creation of instrumental noises onto the production of noise within the system of performance, so too can this conceptual shift be brought into operation when it comes to the noise of the tape. In *Accanto*, the noise produced the tape is transduced from thing to function, brought to bear not just on the experience of the sounds themselves, but on the entire aesthetic apparatus of musical material, exposing this apparatus as an apparatus, as a "towards-which", whose disruption can make space again for beauty.

[113] In fact, I think that this danger point is still far off, so I will return to the topic of tape's materiality in the following chapter.

Chapter 5: Thinking intertextually

'everywhere connections, shifts, transfer, transduction, trans…'[114]

Composing means putting into relation, Lachenmann said. In reference to *Dal niente*, I have described how *musique concrète instrumentale* dissolves the boundaries between composer, performer and listener and brings them into relation. The incorporation of aura into *Accanto*, however – the incorporation of the Mozart on the tape and everything that it comes to stand for – multiplies this network. In the face of familiarity defamiliarised, the listener and performer alike are led to interrogate their relationship to tradition, to recognise their false-fluency and even, perhaps, their complicity in its fetishisation. And so too must the composer: Lachenmann's developing thought in the second half of the 1970s acknowledges that any musical material is already charged with meaning, and that the composer must recognise and address this in their working.[115] But he also recognises that this results in the composer's role being one equally of production and reception; 'composing is thus not a one-way street', he writes and, elsewhere:

[114] From the liner notes to *Clicks + Cuts 2*, cited in Hainge (2013), 136.

[115] See, for reference, the following passage from '*Vier Grundbestimmungen*': 'Musical material is not simply docile, waiting for the composer to charge it with expression and bring it to life. It is already in a context, marked with expression, even before the composer approaches it. The material's pre-existing conditions originate from the same reality that shapes us ourselves, composers and listeners, our existence and our consciousness' Lachenmann (1996), 55: '*Das musikalische Material ist nicht einfach gefügiger Werkstoff, der nur darauf wartet, vom Komponisten in welchem Zusammenhang auch immer zu expressivem Leben erweckt zu werden, sondern es steht bereits in Zusammenhängen und ist expressiv geprägt, bevor sich der Komponist ihm überhaupt nur nähert. Diese vorweg herrschenden Bedingungen des Materials entstammen derselben Wirklichkeit, welche uns selbst, Komponisten und Hörer, unser Dasein und unser Bewußtsein geprägt hat*'.

> Whatever the composer touches and controls, it is never the whole, it is always just the tip of an ultimately intangible whole. Who knows: maybe the whole thing controls him, and the composer is the tail wagging the dog [...] Or more solemnly expressed in the words of Mahler: I do not compose, I am composed. (For the listener: I do not understand - I am understood.).[116]

Lachenmann's theorising reaches its culmination in an essay of 1990 titled '*Zum Problem des Strukturalismus*'.[117] The essay reads as a kind of retrospective; he revisits his ideas on beauty, his typology of sounds, *Strukturklang*, his categories of aura and tonality, but also makes a new proposition – dialectical structuralism – which, in many ways, encapsulates all that he had said before. Dialectical structuralism, according to Lachenmann, means:

> a way of thinking which cannot merely be directed towards the creation, stipulation or drawing of attention to musical structures, but rather towards where such structures emerge, take shape, and make themselves known as the result of direct and indirect confrontation with the structures that are already present [*vorhanden*] in material derived from all realms of experience and existence, especially those outside the realm of music. Musical structures draw their power solely from conscious and unconscious resistance, from their friction with the already existing structures of existence and consciousness.[118]

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[116] Ibid., 61-62: '*Was immer der Komponist anfaßt und kontrolliert, es ist niemals das Ganze, ist immer nur ein Zipfel eines letztlich nicht greifbaren Ganzen. Wer weiß: Vielleicht kontrolliert das Ganze ihn, und der Komponist ist der Schwanz, der mit dem Hund wedelt [...] Oder feierlicher mit den Worten Mahlers ausgedrückt: Ich komponiere nicht, ich werde komponiert. (Für den Hörer: Ich verstehe nicht - ich werde verstanden*'.) This seems to be a favourite phrase of Lachenmann's, which he repeats several times in *Musik als existentielle Erfahrung.*

[117] Ibid., 83-92. English translation in Helmut Lachenmann, 'On structuralism', *Contemporary Music Review*, 12:1/2 (1995), 93-102.

[118] Lachenmann (1996), 89-90: '*Gemeint ist also ein Denken, welches nicht bloß auf die Schaffung, Stipulierung beziehungsweise Bewußtmachung von musikalischen Strukturen gerichtet sein kann, sondern in welchem solche Strukturen sich ergeben, präzisieren und sich bewußtmachen als Resultat der direkten und indirekten Auseinandersetzung mit bereits vorhandenen und im Material wirkenden Strukturen aus allen, und gerade auch aus außermusikalischen, Erlebnis- und Existenzbereichen beziehungsweise Wirklichkeiten. Musikalische Strukturen beziehen ihre Kraft einzig und allein aus dem bewußten und unbewußten Widerstand, aus ihrer Reibung mit den bereits herrschenden Daseins- und Bewußtseinsstrukturen'*.

Resistance, once again. But I suggest that Lachenmann's concept of dialectical structuralism which stands as a model for all of his compositional thought can also be usefully understood through the lens of another critical framework: intertextuality.

In *Problems of Dostoyevsky's Poetics* (1929), Mikhail Bakhtin set out to free language from the "abstract objectivism" of Saussurean structural linguistics, in very much the same way as Lachenmann, some forty years later, sought to liberate sound from the 'increasingly sterile structuralism' of Darmstadt's serial orthodoxy.[119] According to Bakhtin, Saussure's linguistic account presented language in a way that neglected the fundamentally human-centred aspect of utterance, neglected the fact that language is not just an abstract system but simultaneously a social system, a '*concrete* living totality' (emphasis added).[120] The parallels here with Lachenmann's *musique concrète instrumentale* are as plain as they are striking, so it is somewhat surprising that this seems to be a connection that no one has explored.[121]

Bakhtin's writings drifted into obscurity (in no small part due to the stifling intellectual conditions of the post-war Soviet regime), only to be "rediscovered" in France in the late 1960s.[122] The Bakhtin revival was spearheaded by Julia Kristeva, who having recently moved to Paris from Bulgaria could read him in his original language and who, having taken an interest in Bakhtin's anti-structuralist stance and its implications for developing poststructural

[119] Mikhail Bakhtin, *Problems of Dostoyevsky's Poetics*, ed. and tr. Caryl Emerson with an introduction by Wayne C. Booth (Minneapolis and London: University of Minnesota Press, 1999); Lachenmann (1996), 344.
[120] Bakhtin (1999), 181. Interestingly Bahktin, along with Valentin Volosinov and Pavel Medvedev (with whom he worked), all aligned themselves with Shlovksy's Russian Formalism.
[121] One exception to this is Nonnenmann's article, which contains a tantalisingly brief reference to structural polyphony as intertextuality (Nonnenmann (2005), 5).
[122] For a detailed account of Bakhtin's post-1930s intellectual legacy, see Michael Holquist, *Dialogism: Bakhtin and his World* (New York and London: Routledge, 2005), 179-191.

modes of thought, sought to expand his ideas from the site of the novel, to the site of the text more generally. The text, any text, according to Kristeva in an essay of 1966-7, is a 'productivity'; it is not a product, but an open site, shaped constantly by its infinite relation to any and all other texts, any and all writers, any and all readers.[123] The text, in this understanding, is in fact 'a permutation of texts, an intertextuality'.[124] Or, as Roland Barthes put it, working alongside Kristeva in Paris:

> Any text is an intertext; other texts are present in it, at varying levels, in more or less recognisable forms: the texts of the previous and surrounding culture. Any text is a tissue of past citations. Bits of codes, formulae, rhythmic models, fragments of social languages, etc. pass into the text and are redistributed within it, for there is always language before and around the text.[125]

The term "intertextuality" has since become commonplace, even perhaps a kind of academic buzzword, such that Leon S. Roudiez and others suggest that its definition has been overstretched almost to the point of meaninglessness.[126] This is not altogether unsurprising; as Graham Allen notes, the term and the ideas contained within it are appealing to modern cultural conditions (both academic and everyday) of 'relationality, interconnectedness, and interdependence.'[127] And yet it is vital to recognise that the term intertextuality arose out of specific conditions of its own: the late 1960s were a time of massive social unrest and protest, around the world, against centralised authorities. It is not too great a leap to situate the various decentrings that poststructuralism sought to effect within this context. In the case of

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[123] Julia Kristeva, 'The Bounded Text', in *Desire in Language: A Semiotic Approach to Literature and* Art, ed. and tr. Thomas Gora, Alice Jardine and Leon S. Roudiez (New York: Columbia University Press, 1980), 36.
[124] Ibid.
[125] Roland Barthes, 'Theory of the Text', in Robert Young (ed.), *Untying the Text* (Boston & London: Routledge & Kegan Paul, 1981), 39.
[126] See Roudiez's introduction to Kristeva (1980), 14; Andrea Lesic-Thomas, 'Behind Bakhtin: Russian Formalism and Kristeva's Intertextuality', *Paragraph,* 28:3 (2005), 1-20.
[127] Graham Allen, *Intertextuality* (New York and London: Routledge, 2000), 5.

literary criticism, quasi-scientific, "objective" studies through structural linguistics formed the centre; intertextuality was born out of the need to reinstate any possibility of intuitive, subjective responses to text.[128]

It is precisely within this same context of social and political resistance that Lachenmann was beginning his own compositional reflections that would, in turn, began to parallel the developments of the idea of intertextuality.[129] For this reason, I would argue that intertextuality constitutes more than a trendy buzzword here, but rather an invaluable critical framework within which to understand Lachenmann's compositional approach. I will begin by examining intertextual operations within *Accanto*, and then suggest the possibility of intertext between *Accanto* and *Dal niente* that could stand as a kind of vignette for Lachenmann's musical aesthetics more globally.

Barthes leaves space within his 'Theory of the Text' for the application of intertextual theory to music studies, but acknowledges that literary studies' prior system of signification makes its application to those domains a more straightforward fit.[130] Nevertheless, after Robert Hatten's work on intertextuality in Beethoven, and Kevin Korsyn's ambitious study on intertextuality in the music of Brahms and Chopin, intertextuality began to enter into musicology's critical vernacular; indeed, it was chosen for inclusion amongst David Beard and Kenneth Gloag's "key concepts" of musicology.[131] In its emergence, though, it has

[128] For an account of this perceived "crisis" in literary criticism as the context for intertextuality, see Hans-Peter Mai, 'Bypassing Intertextuality: Hermeneutics, Textual Practice, Hypertext', in Heinrich F. Plett (ed.), *Intertextuality* (Berlin & New York: Walter de Gruyter, 1991), 33-36.
[129] Lachenmann makes this explicit in an interview with de Assis (2016), 96. For a broader discussion of Lachenmann's political contexts, see Laurent Feneyrou, *De Lave et de Fer. Une Jeunesse Allemande: Helmut Lachenmann* (Paris: Éditions MF, 2018).
[130] Barthes (1981), 41-42
[131] Robert S. Hatten, 'The Place of Intertextuality in Music Studies', *American Journal of Semiotics*, 3:4 (1985), 69-82; Kevin Korsyn, 'Towards a Poetics of Influence', *Music Analysis*,

arguably not been properly defined, and seems too often used as a byword for (sometimes equally ill-defined) terms such as borrowing, influence, and quotation.

It is the difference between (or relationship between) intertextuality and quotation that is of interest here in the context of *Accanto*: does Lachenmann's use of Mozart constitute quotation, or is it better understood as intertext? Jeanette Bicknell, following Nelson Goodman, argues that direct quotation is contingent on two conditions: the syntactic replication of the original, and some sort of structure to denote the utterance as a quotation.[132] The first condition, she argues, is easily met – a passage of music can be replicated as it were verbatim in another context – but the second, in music, is harder to fulfil; there is, as she points out, no musical equivalent of a quotation mark.[133] Bicknell seems to rule out familiarity as a criterion for quotation, but I would suggest that the recognition of a quotation as in some way "other" to its new context, whether or not it is familiar and/or identifiable is, if not necessarily a condition of quotation, certainly one of its central affective characteristics.[134] The affective characteristics of quotation are significant here – in the context of something heard, the affective presence of quotation is at least equally as important as its written presence.

So far, I have referred to Lachenmann's use of the Mozart Concerto as a quotation, but in fact *Accanto* problematises these conditions. As I have illustrated, the moments of the Mozart before the extended passage at bar 194 (see Figures 10 and 11) are integrated in such a way as to render them not only unidentifiable as Mozart (their fragmentation disrupting the

10:1/2 (1991), 3-72; Kenneth Beard and David Gloag, *Musicology: The Key Concepts* (London and New York: Routledge, 2005), 71-72.

[132] Jeanette Bicknell, 'The Problem of Reference in Musical Quotation: A Phenomenological Approach', *The Journal of Aesthetics and Art Criticism*, 59:2 (2001), 185-191.

[133] Ibid., 185-6.

[134] Ibid., 186.

syntax of the original and so closing off any possibility for its syntactic replication) and unidentifiable as tape, but also so as not to mark them out as in any way "other" within the context of Lachenmann's piece. Accordingly, these moments clearly do not satisfy the conditions for quotation that Bicknell specifies. We might more easily, however, align the extended tape passage at bar 194 with the category of quotation: it is lengthy enough to constitute an exact syntactic replica and, as such, stands out not only as other but also a clearly identifiable in its familiarity (or in its over-familiarity, as Lachenmann might have it). One could even go so far as to say that the tape player and its loudspeakers function as an equivalent to quotation marks furthering the denotation of the Mozart as a quotation.

As I have also illustrated, the extended tape passage also serves to renegotiate the status of what has come before in the piece: perhaps we are now to hear the moments of the tape, more purposefully, as quotations of Mozart's original. But what, precisely, *is* the original that is being replicated, or quoted, here? The recording of Mozart's Clarinet Concerto, K. 622? If so, which recording, since none is specified in the score? Or perhaps it is the Mozart piece itself. But what does that mean? I suggest that there cannot, in fact, be an original since it is not Mozart's Clarinet Concerto itself (whatever that might mean) that is invoked in *Accanto*, but the *idea* of it and what it stands for – tradition, tonality, the aesthetic apparatus. Indeed, insofar as *Accanto* constitutes a critique of the commodification of, and complacent attitudes towards, musical listening, it is precisely the object status of the musical work (as recording) that forms part of this critique. If, as Heinrich Plett claims, 'every transcoding procedure' signifies the gradual assimilation of the interference created by the conflict between the quoted original and its new context, what happens when there is no original?[135] This absence does nothing to diminish interference; in fact, it amplifies it.

[135] Heinrich Plett, 'Intertextualities', in in Heinrich F. Plett (ed.), *Intertextuality* (Berlin & New York: Walter de Gruyter, 1991), 11.

Intertextuality, on the other hand, does not seek to diminish interference, nor is it contingent on an original. As Barthes explains: 'Intertextuality, the condition of any text whatsoever, cannot, of course, be reduced to a problem of sources or influences; the intertext is a general field of anonymous formulae whose origin can scarcely ever be located; of unconscious or automatic quotations, given without quotation marks'.[136] Indeed, intertextuality recognises that no textual utterance is ever an original, but is rather made up of anterior utterances that, themselves, bear the traces of the social conditions through which they were uttered, much as Lachenmann in the 1970s began to recognise that all musical materials are already imbued with their own contexts. Similarly, intertextual theory traces around discourses of the death of the author, just as Lachenmann was beginning to wonder whether the tail is wagging the dog. If we follow Kristeva and Barthes, though, and agree that all texts are intertexts, then it goes without saying that *Accanto* operates intertextually. This may be so, but thinking intertextually shows us how Lachenmann, in his treatment of Mozart's Clarinet concerto, transforms the work into a text, into a productivity, an open field, letting the interference resonate.

Thinking intertextually also sheds new light on the materiality of Lachenmann's tape. 'From the beginning', notes Steven Connor, 'the materiality of tape has seemed enigmatic or anomalous.'[137] Unlike the vinyl record or the wax cylinder, magnetic tape bears no visual trace of the sound that is upon it, there is no inscription but rather encryption, and this is perhaps why the tape has, as Connor pointed out in 2014, been the subject of 'remarkable neglect in the recent explosion of studies in the culture of sound reproduction.'[138] Perhaps in answer to

[136] Barthes (1981), 39.
[137] Steven Connor, *Beckett, Modernism and the Material Imagination* (Cambridge: Cambridge University Press, 2014), 84.
[138] Ibid.

Connor's call, *Twentieth-Century Music* brought out a special issue dedicated to tape in 2017, in which various scholars of sound studies have written very interestingly about tape's peculiar affordances of reusability and eraseability, cutting, splicing, stretching etc., all of which are relevant to the context of the tape in *Accanto*.[139] The special issue also discusses the histories of magnetic tape as embedded into the material of the tape; 'few media formats', write Andrea F. Bohlman and Peter McMurray, 'follow the contours of the twentieth century and its musical and sonic life like tape'.[140] It could be argued that the very inclusion of the tape in *Accanto* puts the piece into intertextual relation with this history (a part of which, of course, is *musique concrète*).

An antecedent, however, to this recent interest in tape is an article by Thomas Porcello, published in the journal *Ethnomusicology* in 1998.[141] In it, he invokes another phenomenon peculiar to tape: print-through, a form of noise that occurs when the magnetic field of a section of tape is strong enough to rearrange the magnetic signal of the adjacent sections with which it comes into contact when it is stored on a reel. It is an unstable phenomenon, depending on external conditions (such as temperature) and on the amount of time a tape spends without being played. The result of print-through is a very faint pre- or post-echo of the contents of the tape, which Porcello describes encountering in his teenage years:

> That tiny audio shadow had the power to generate a visceral inner tension; I would hold my breath, waiting for the release that came with the "real" beginning of the song. Even at the time, print-through struck me as a type of effective narrative practice that foreshadowed events in small ways prior to their further revelation

[139] *Twentieth Century Music*, Volume 14 – Special Issue 1 (2017). See, in particular, Peter McMurray, 'Once Upon Time: A Superficial History of Early Tape', 25–48 and Brian Kane, 'Relays: Audiotape, Material Affordances, and Cultural Practice', 65-75.
[140] Andrea F. Bohlman and Peter McMurray, 'Tape: Or, Rewinding the Phonographic Regime', *Twentieth-Century Music*, 14:1 (2017), 3.
[141] Thomas Porcello, '"Tails out": Social Phenomenology and the Ethnographic Representation of Technology in Music-Making', *Ethnomusicology*, 42:3 (1998), 485-510.

> or manipulation in the music. And because of the very fact of foreshadowing – the building of anticipation, tension and desire attendant to the partially-known object – the eventual impact of the events was that much more intense.[142]

The noise of print-through presents serious epistemological as well as phenomenological challenges to conceptions of the musical text as autonomous, as Porcello notes, going on to use print-through as a metaphor for 'cumulative listening experiences engendered in the mediated social spaces of musical encounter'.[143] But print-through is also, I suggest, an appropriate metaphor for intertextuality, extending the epistemological challenge to the autonomy of musical texts to all kinds of texts. And it also serves as an illustration of Lachenmann's dialectical structuralism: print-through, in a very real sense, shows how the material structures of media can structure the messages they carry (and vice versa), and are also structured by the structures around them. Whether, in the case of *Accanto*, Mozart's music prints-through onto Lachenmann's, or Lachenmann's music prints-through onto Mozart's, it is difficult to say. But perhaps that is precisely the point.

Thinking in terms of print-through as intertext enables a reconsideration of the relationship between *Dal niente* and *Accanto*. The legend pages of *Dal niente* contain the following, intriguing instruction:

> The notes with stems and normal heads strewn among the square notes on page 1 should burst in rapid and more or less surprising "fade-ins" (just as quasi fragments of a broadcast become audible through the sudden turning-on of a radio).[144]

[142] Ibid, 486.
[143] Ibid.
[144] See performance instructions in Lachenmann (1980a).

Fade-ins like the sudden turning-on of a radio – exactly the same way that the tape is operated, and sounds, in *Accanto*. What might this tell us about the role of conventional pitched material as analogous to the role of Mozart's Concerto in *Accanto*, even if Lachenmann wrote *Dal niente* only with the immanent qualities of sound in mind, before he had begun to formulate his thoughts on the aesthetic apparatus? Or how might we think of *Accanto* printing-through onto *Dal niente,* a piece written half a decade earlier? Thinking intertextually allows us to move beyond a linearity that sees only antecedence and consequence; it allows us to reduce causal chronologies, and so attend to the text as a field of equal forces that constantly shape and are shaped by one another. Or, put another way, thinking intertextually allows us to consider dialectical structuralism in terms of networks, whose elements (sounds, instruments, bodies) are in a continual process of becoming and expression –

> So in the end it is not about listening to a kind of music that complains of the sad course of the world through scratching noises. But neither is it about music that flees before this world into some kind of sound-exoticism. Rather, it is about music in which our perception becomes sensitive and attentive on the basis of itself, of its own structuredness; music that, above all, seeks to make the perceiving spirit sensitive precisely to those same structures of reality to which composing responds.[145]

[145] Lachenmann (1996), 135: '*Und so geht es eben nicht um das Hören einer Musik, die den traurigen Weltlauf durch Kratzgeräusche beklagt, aber auch nicht um eine Musik, die vor dieser Welt in irgendeine Klangexotik sich flüchtet, sondern um Musik, bei welcher unsere Wahrnehmung sensibel und aufmerksam wird im Grunde auf sich selbst, auf die eigene Strukturhaftigkeit, und die darüber hinaus versucht, den wahrnehmenden Geist sensibel zu machen für jene Strukturen der Wirklichkeit, auf die ein solches Komponieren reagiert*'.

Conclusion: 'Nothing essential happens in the absence of noise'[146]

Just as Lachenmann composed not by putting together but by putting into relation, so this study has attempted to put into relation noise, resistance, and intertext. I have proposed the usefulness of these related ideas for an understanding of Lachenmann's compositional approach across the shift of the mid-1970s, from his focus on the structures inside sounds, to his working with the structures that at once shape them and are shaped by them. Thinking in this way has also enabled an understanding of Lachenmann's dialectical structuralism through a theory of intertextuality. These ideas need not stop at *Accanto*, but might readily be applied to Lachenmann's later works, in which the engagement with pre-existing materials becomes more and more of a preoccupation.

I have also put into relation different senses of noise and resistance, showing ways in which they might illuminate each other. Noise and resistance in their empirical senses, operating within the heard experience of Lachenmann's sonic landscapes, have been shown to transform, or transduce, into noise and resistance in more abstract senses, operating within the communicative ecology of his works' performance. The abstract domain and the empirical domain, here, depend on one another as well as determining one another. But how are we to move between them? Douglas Kahn suggests an answer: that we move between them noisily. 'Noise', Kahn writes, 'can be understood in one sense to be that constant grating sound generated by the movement between the abstract and the empirical'; grating,

[146] Jacques Attali, *Noise: The Political Economy of Music*, tr. Brian Massumi with a foreword by Frederic Jameson and an afterword by Susan McClary (Minneapolis & London: University of Minnesota Press, 2009), 3.

perhaps, because it moves against some form of resistance.[147] So has writing about noise only made more noise? For Lachenmann, this would be no bad thing: 'Music only makes sense if it points beyond its own structure to structures – that is, to realities and possibilities around ourselves, and within ourselves'.[148] In this thesis, I have sought to show that Lachenmann's music points beyond itself to noise, noise around ourselves, and within ourselves.

[147] Kahn (2001), 25.
[148] Lachenmann (1996), 47: '*Musik hat Sinn doch nur, wenn sie über ihre eigene Struktur hinausweist auf Strukturen – das heißt: auf Wirklichkeiten und Möglichkeiten – um uns und in uns selbst'*.

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PART TWO

Portfolio of compositions

Introduction

In my thesis I discuss how both Lachenmann and noise put things into relation, disrupting normative hierarchical structures. Another way to understand this disruption, I suggest, is through the relation between noisiness and queerness: noise as queer and as queering / queerness as noise and as noisy.

Like noise, queerness is perhaps better understood as a process, not an attribute. Eve Kosofksy Sedgwick makes this point beautifully in her preface to *Tendencies*: 'Queer is a continuing moment, movement, motive – recurrent, eddying, *troublant*…. Keenly, it is relational and strange.'[1]

In its continual movement queerness inhabits contradictions, as noise does: queerness and noise can be personal at the same time as plural, destructive and generative, wanted and unwanted, conceived of as presence and as absence. But this binary way of thinking is what leads noise and queerness so commonly to be positioned in terms of Others, articulated through a system that sees things in opposition to what they are not. I suggest that noise and queerness are in fact particularly resistant to this kind of

binary way of thinking and, in this resistance, can provide a non-binary conceptual framework that might be extended to other domains of thought.

In his seminal work, *Cruising Utopia*, José Esteban Muñoz invokes Jean-Luc Nancy's idea of "being singular plural" as a fundamental aspect of queerness: the idea that what marks something out as singular is simultaneously its difference but also its relation to other singularities. Thinking of queerness as being singular plural, Muñoz suggests, means thinking of it as at once relation *and* antirelational.[2] This resonates with Greg Hainge's analogy (discussed in Chapter Three of my thesis) between the resistance of noise and the resistance of an electric circuit, in which he shows how the resistant function of noise emphasises the relation between the expression and the system at the same time as showing the two to be indivisible. Noise, then, might also be understood as being singular plural, relational and antirelational at the same time.

Being at once relational and antirelational seems to present an irresolvable paradox. But I suggest that this only holds for as long as one maintains a binary way of thinking. Indeed, binary thinking plagues queer identity (binary gender, for instance), just as it plagues noise (noise and not noise). A possible solution to this might be to think in terms of spectra – the spectrum between noise and not-noise, or

between multiple gender identities. But a spectrum still implies oppositional points at either end and determines that proximity indicates similarity – a spectrum is still constrained within a binary system.

One can find out much more from a colour wheel than from a colour spectrum, but how much more could one tell from a colour sphere? Or, better, from a colour space, one that is not circumscribed in any way at all? I think it is more productive to think of noise and queerness instead as these kinds of spaces – spaces without centres, without hierarchies, spaces constituted by things that have no opposite, only determining themselves by what they are, rather than what they are not.

The work in this portfolio is concerned with noise, but I do not think this means that it is noise music, with its associated (usually male-driven) narratives of dominance and submission. I hope it is, in fact, the opposite: that, through collaboration, notational experiments, installation, and listening-based electronic composition, this work opens up spaces that are shared by those who create them in their own noisiness.

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[1] Eve Kosofsky Sedgwick, *Tendencies* (London: Routledge, 1994), xii.
[2] José Esteban Muñoz, *Cruising Utopia: The Then and There of Queer Futurity* (New York and London: New York University Press, 2009), 10-11.

Pieces

1: *How many eyes do we have then, being two*

2: *RAT-AUD / to play out absolutely his life*

3: *Once a horse was noisy*

4: *into Westfield auger*

5: *Thermi*

How many eyes do we have then, being two

Saxophones, trombone, piano, percussion, bass guitar, electronics, dancers

Duration: 18 minutes

2018

This piece grew out of a project commissioned by Dance Scholarship Oxford that aimed to bring together three composers, three contemporary dancer-choreographers, and musicians (a leading new music ensemble) to create three pieces through a collaborative workshop process. Practical restraints, however, made this collaborative intention difficult to realise – composed music had to be sent the ensemble some months in advance to rehearse and record, and these recordings were then to be sent to the choreographers to devise the movement, before the two things were put together in the workshop. Although I was excited to collaborate on music for dance, and to work with the ensemble, this creative dislocation seemed at risk of adhering to the same structures that the project had sought to move beyond.

When I was introduced to the choreographer Estela Merlos, our creative connection was powerful and immediate. We talked about the philosopher Luce Irigaray's writings on breath as a shared expression of

non-hierarchical intersubjectivity, and thought about ways of using breath and the body as the impulse for movement, rather than more conventional modes of measuring time through counting. We also discussed the sorts of relationships we imagined between the two dancers of the piece – both of us felt that it was important to avoid the (often gendered) power dynamics of a typical pas de deux and to think instead about a sense of compassion, curiosity, a sense of love.

Above all, we wanted to keep the original collaborative spirit of the project alive. So I started to develop material that could remain open to being shaped by the musicians, and then shaped again by the musicians and dancers once we entered the workshop period. Not only Irigaray's ideas, but even her voice and her breath form the basis of this material.

The sounds of the electronic track are derived from four breaths, isolated from recordings of speeches Irigaray has given. Added to these is the line, '*ou je vivrai toujours avec toi*', which stood out in part due to its semantic content, but particularly because of the extraordinary depth of expression in the way that she says it. As is now characteristic of my approach to working electronically with sound material, I tried as far as possible to let the sounds themselves guide the process – I experimented with different processes of transformation and analysis to hear the things that they have to say and, in an intuitive way, responded to

this, recording the transformations until the piece felt complete. That a piece *feels* complete is important to me – the work is a process of listening.

Here, the set-up of the track is not particularly complicated: there are eight tracks for the text and two tracks for the breaths, each modulated through combinations of doubling, delay (specifically left-right and grain delays), reverb, saturation and feedback, arrived at through listening to the demands of the sound. The texture builds gradually in intensity, before reducing again, leaving only the plain sound of Irigaray's voice: '*ou je vivrai toujours avec toi*'.

I sent the tape track to the musicians, along with the material presented in the score below. The material is drawn from the overtones that emerged from the tape, but it is deliberately skeletal – more like a series of invitations for the group to respond to the material on the tape and, in so doing, to shape the music for themselves. I joined them in their studio for the recording session and it was amazing to see how quickly the piece developed over the course of just an hour – at first the musicians were tentative, adhering strictly to what was on the page, but then they opened up to the possibilities that the material put before them. In the end they recorded two versions – one "wild", one "clean".

Estela's response to these recordings was powerful. When she had heard them, she wrote:

When I listen to both tracks I imagine a very vast space just as you do. Two beings in an endless landscape where they only have each other and the environment around them. An encounter based on the pure experience of discovering their own self while discovering the other in an unknown context. How does their own experience of themselves change when meeting the essence of the other. A simultaneous process of unlearning while learning something new.

Listening-Yielding-Answering

I imagine a space where we don't feel conditioned by what we know or think we know, a place where there is no expectation, no judgement, no fear, just pure discovery and openness to what is there in the moment.

I would like to be able to get to a place where the dancers bring attention to themselves first by becoming conscious and present through their pulse, almost like moving in a contemplative and minimal state. Once they feel truly inside themselves I'm hoping they can find a way of moving that is unrecognisable to them – non habitual – but to be moved by a sense of being reborn and return to a sensation of new self-discovery..

After that I would like for them to expand this sensation through their bodies into the space around them, like printing their movement onto the air.

After experiencing how breath can be the initiation of their expression I would like to get them to move together thinking about cultivating breath as two, playing with elements of nurturing, gathering, storing, growing, blossoming...

Some days later, Estela and I met with the two dancers in a London studio. We talked about the piece for a while and played them one of the recordings (Estela and I preferred the expressive breadth of the first one). Then the dancers started dancing and, unprompted, they danced through the whole piece. Afterwards we sat together in silence for quite a long time; one person who had been watching was in tears. It was one of the most extraordinary things I have ever witnessed. And I was just a witness – it wasn't because of what I had done but because of what they were doing. It really was their piece, now.

A month later, everyone came together in Oxford for the workshop. After the ease and the strange naturalness that Estela, the dancers and I had shared during our experience in London, this came as quite a jolt – there were two other pieces to be prepared before the premiere in three days, both of which were fully scored, demanding formal choreography and much more time. It was lucky, then, that there wasn't really anything more to "learn" for *How many eyes*; the ensemble and dancers could spend their workshop time exchanging ideas, their feelings for the architecture of the piece, for a palette of sounds and movements that felt right to them, for the relationships between the players and the dancers, often returning to Irigaray's texts in the preface to the score.

There was a sense, though, in which a kind of ambient anxiety on the part of the musicians and the other choreographers to *get everything done* inhibited the process of compassionate curiosity that Estela and I had had in mind. When the performance came around, the dancers made something really beautiful, but I feel that it was during the performance that certain members of the ensemble chose to express the frustrations that had built up. In some ways this sudden change of heart made me very sad, but in other ways it felt quite appropriate – the piece was always meant to be a response to a particular moment. I don't quite think of the attached film as a finished product, but rather as a record of a process that did feel truly collaborative, and also of the beginning of a creative partnership with Estela which, I am very pleased to say, is about to continue with a new project.

How many eyes do we have then, being two

'How many eyes do we have then, being two? Certainly we each keep our two eyes. But we probably have more eyes, one or two: to contemplate invisibility in the visible, in the light of the day, but also to perceive in the night of interiority. The way of looking will be more contemplative, passive as well as active, capable of discovering an other or a world always unknown. What it is to see is not already defined, and our eyes can thus remain open upon an infinity of views, of sights. Our way of looking, our look itself can unceasingly be born again if we consider the other as other, with respect for the mystery of the difference existing between us. Indeed it prevents us from reducing him, or her, to an object or to an image that we can appropriate, take as a part of our own world, of our own self. A gesture that paralyses the becoming of each subject and finally brings death to the two subjects, the looked at and the one looking, including the death of sight.'

Luce Irigaray, 'Being two, how many eyes have we?'

'We are luminous. Beyond "one" or "two." I never knew how to count up to you. In their calculations, we count as two. Really, two? Doesn't that make you laugh? A strange kind of two, which isn't one, especially not one.'

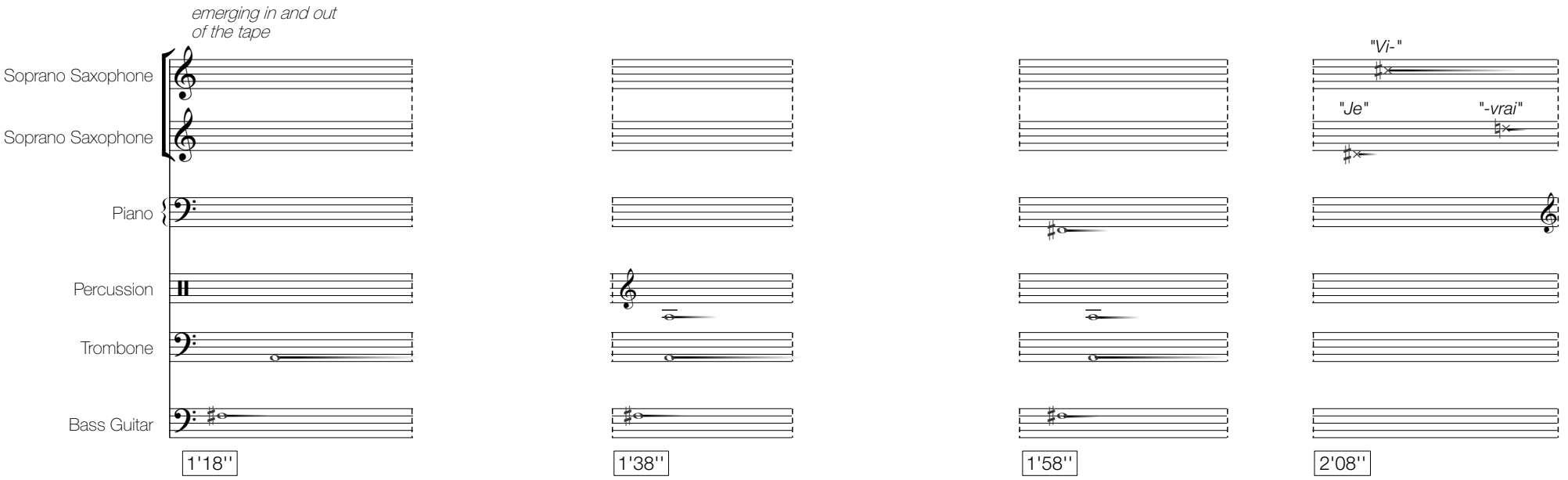
Luce Irigaray, 'When our lips speak together'

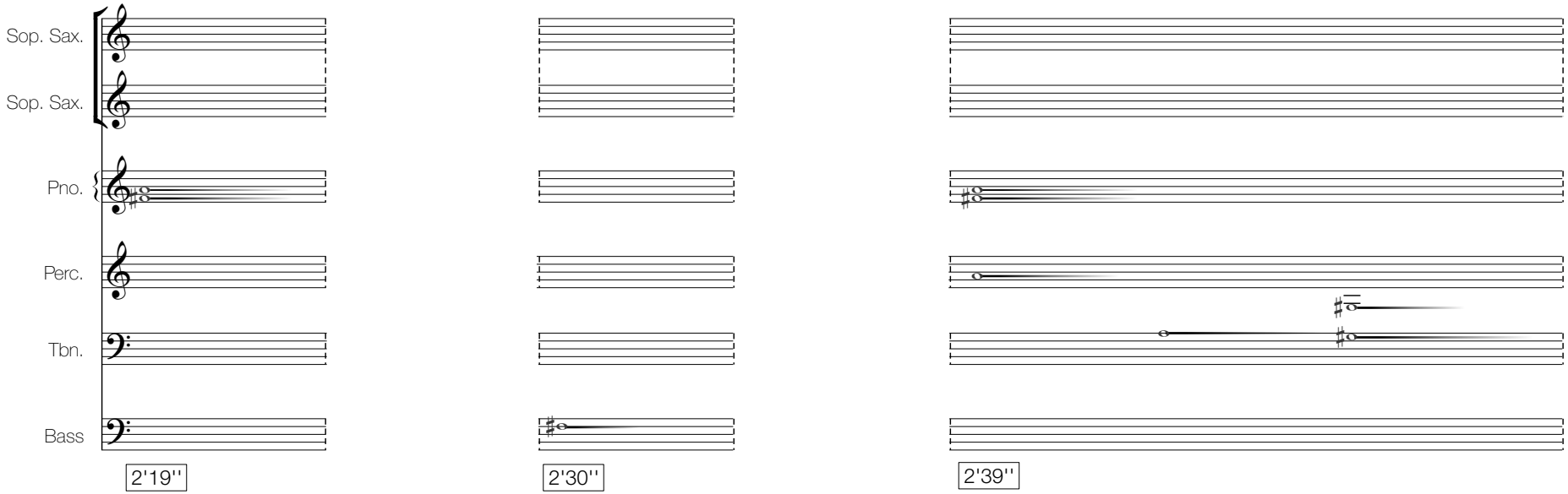
'*... ou, je vivrai toujours avec toi.*'

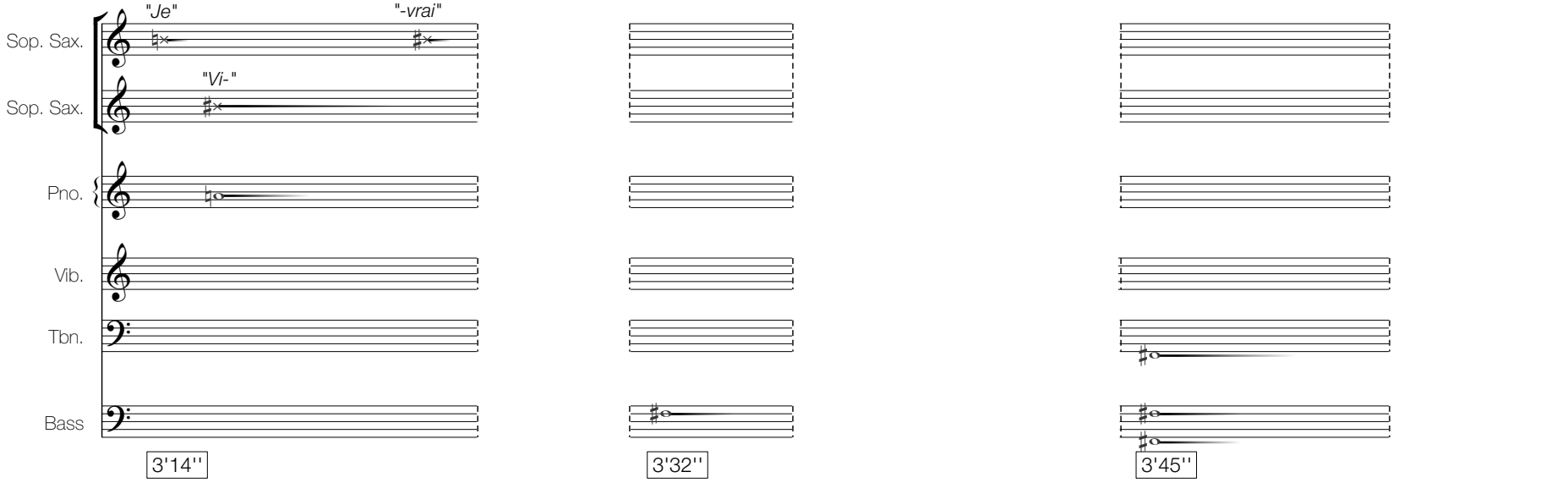
Luce Irigaray, interview (2013)

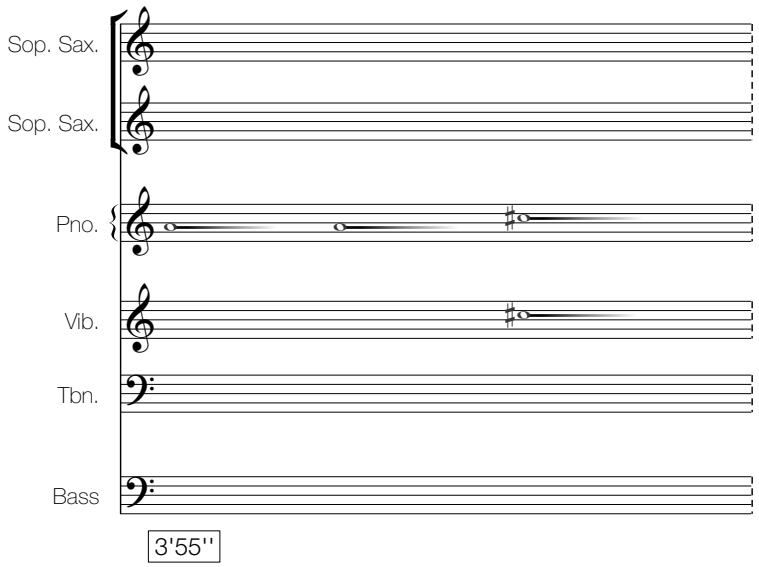
How many eyes do we have then, being two

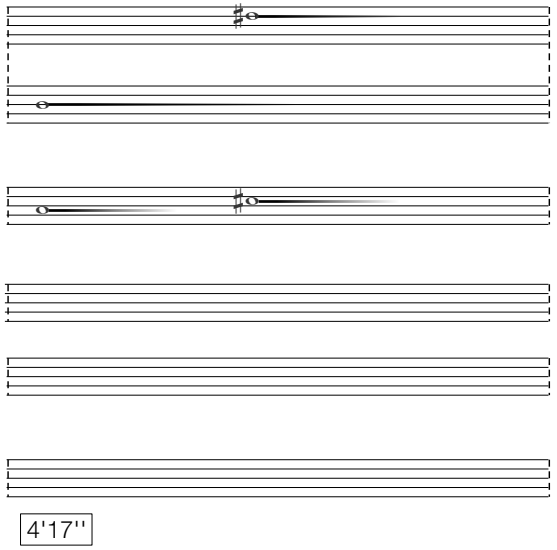
(We are luminous. Beyond one or two.
I never knew how to count up to you)



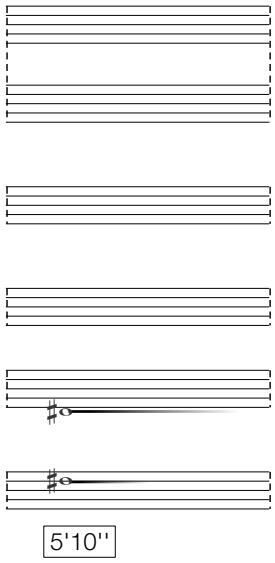

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
2'19''
2'30''
2'39''

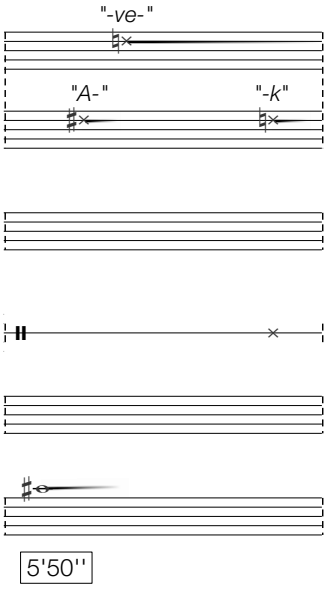

"Je"
"-vrai"
"Vi-"
Sop. Sax.
Sop. Sax.
Pno.
Vib.
Tbn.
Bass
3'14''
3'32''
3'45''

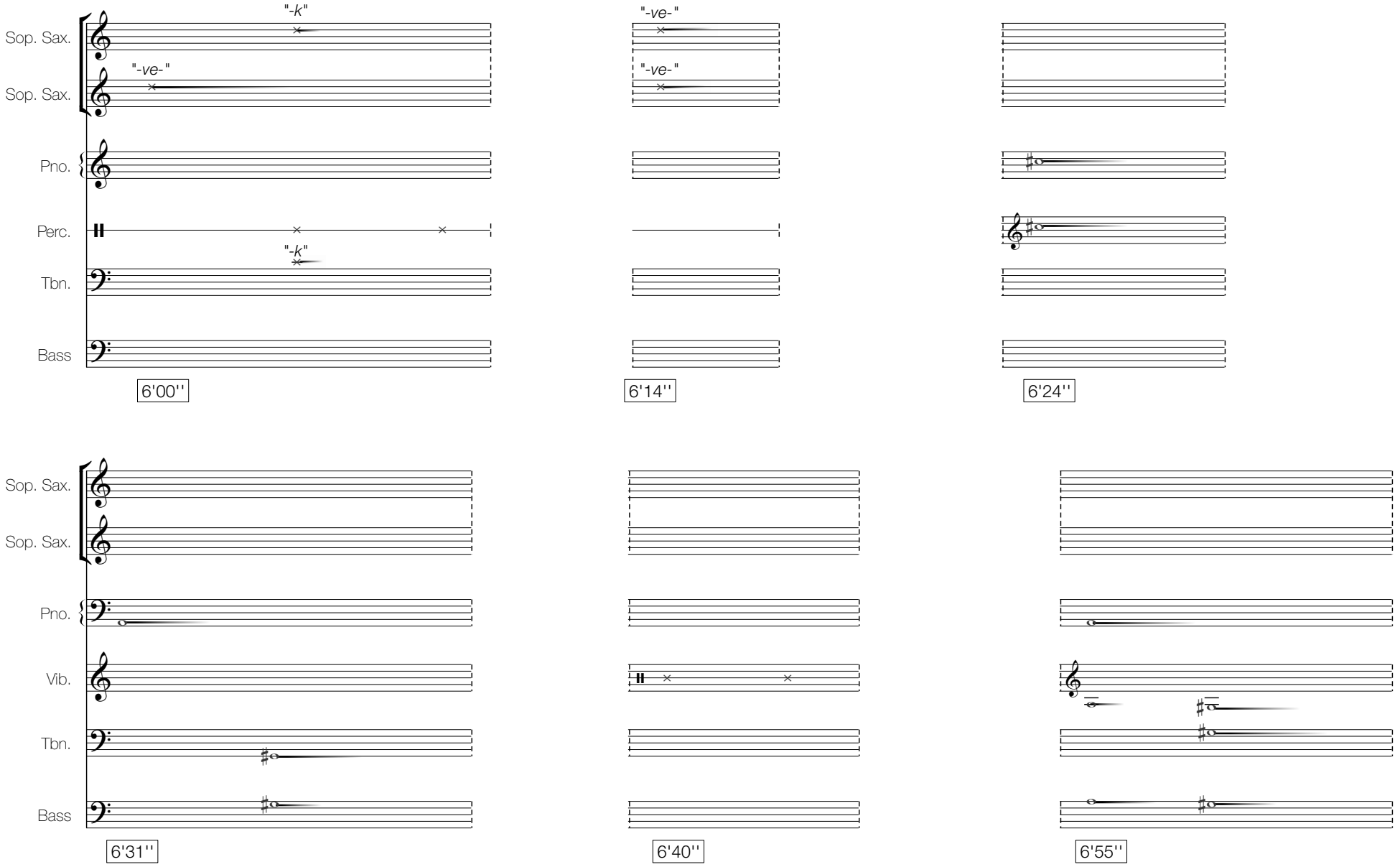

Sop. Sax.
Sop. Sax.
Pno.
Vib.
Tbn.
Bass
3'55''

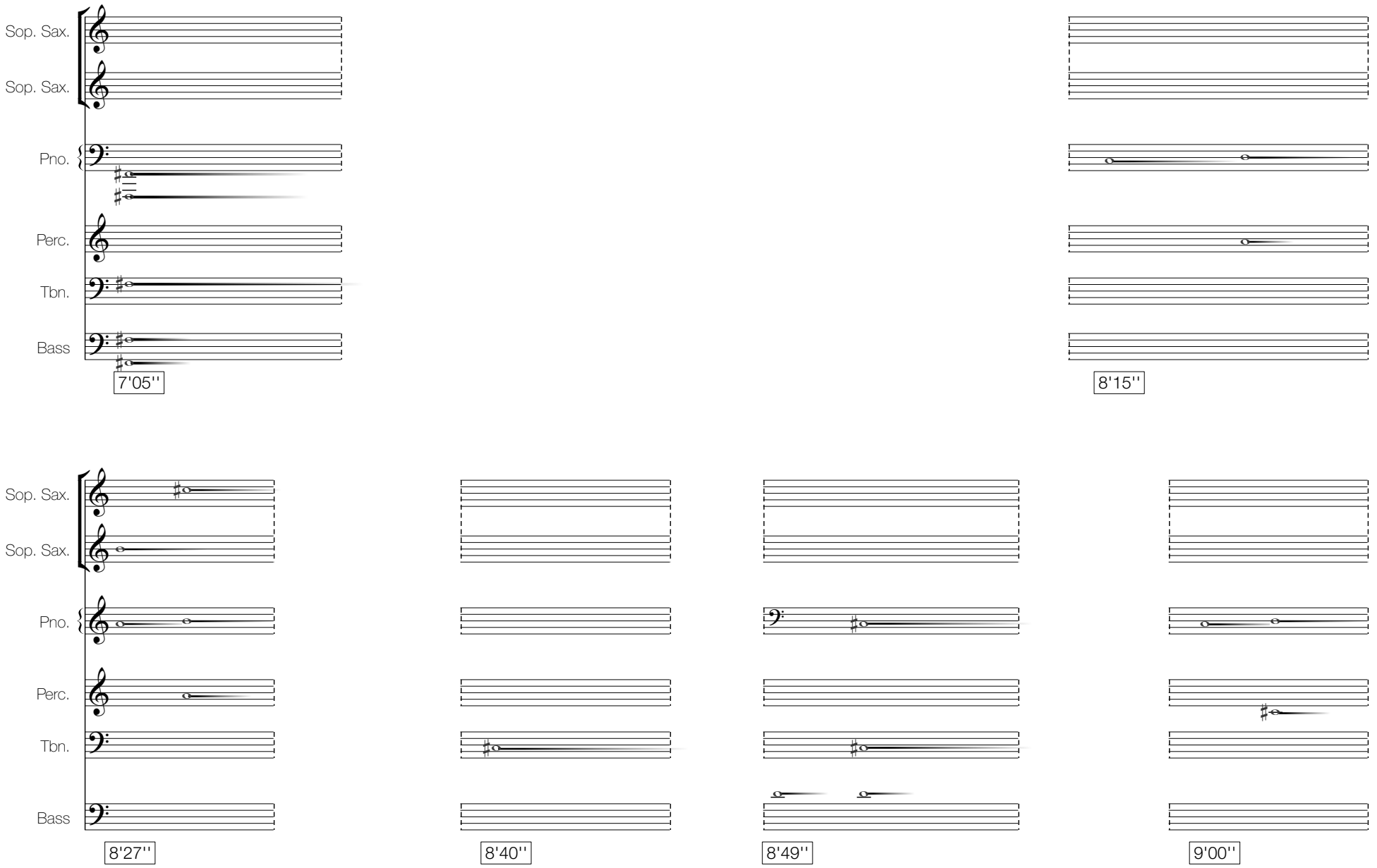

4'17''

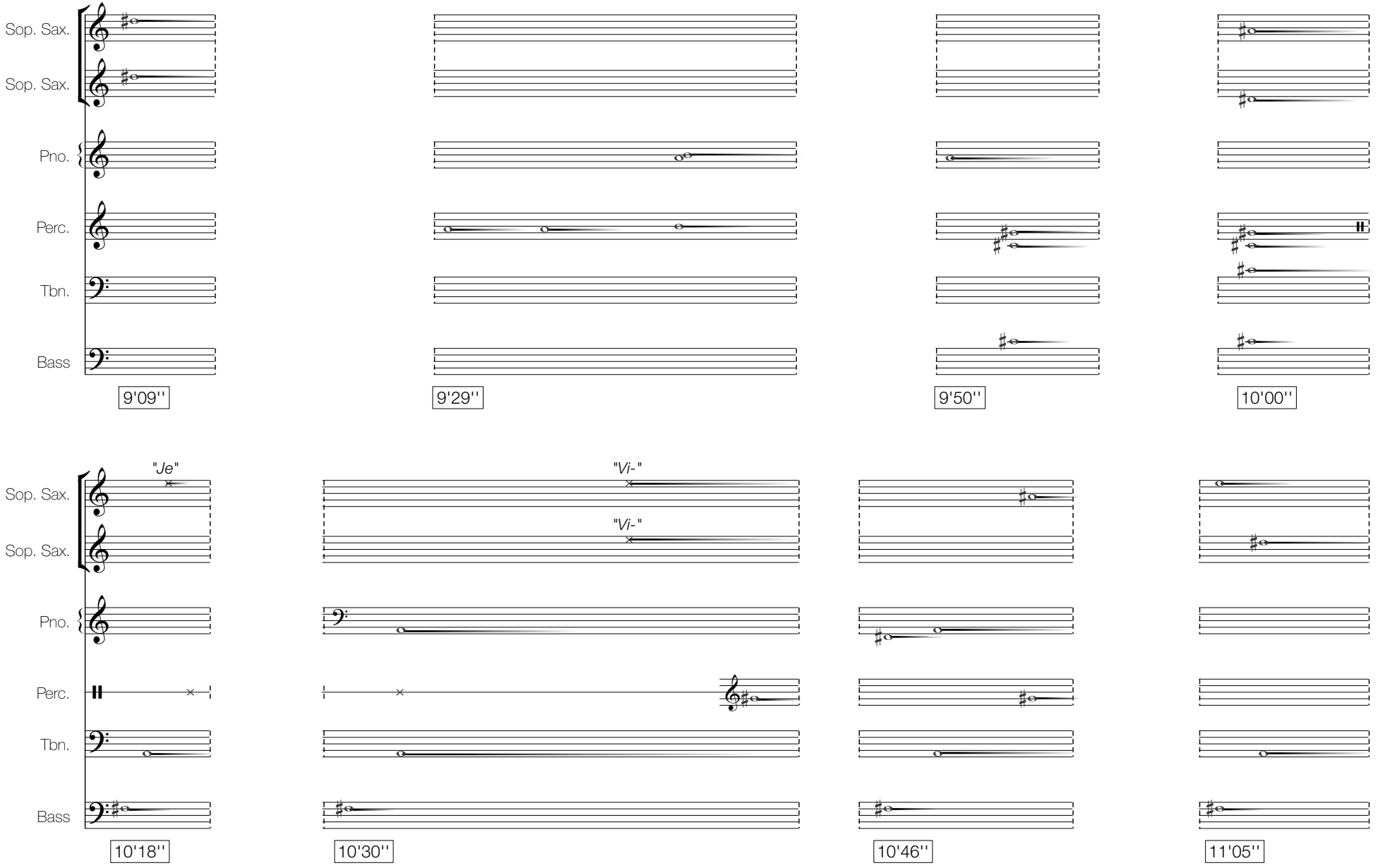

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
4'45''

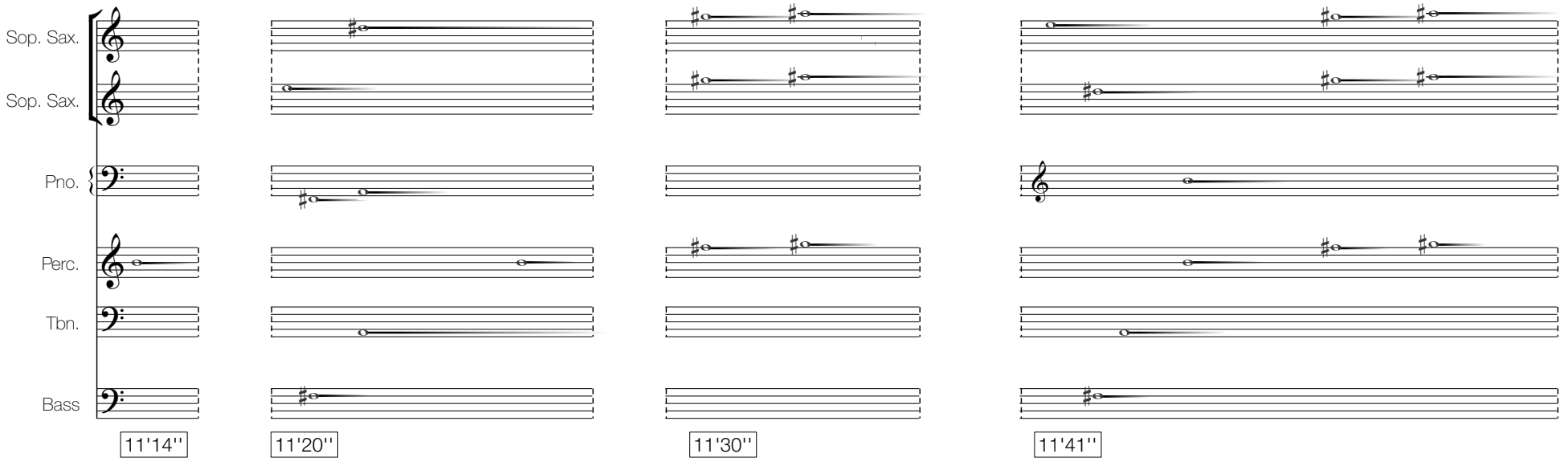

5'10''

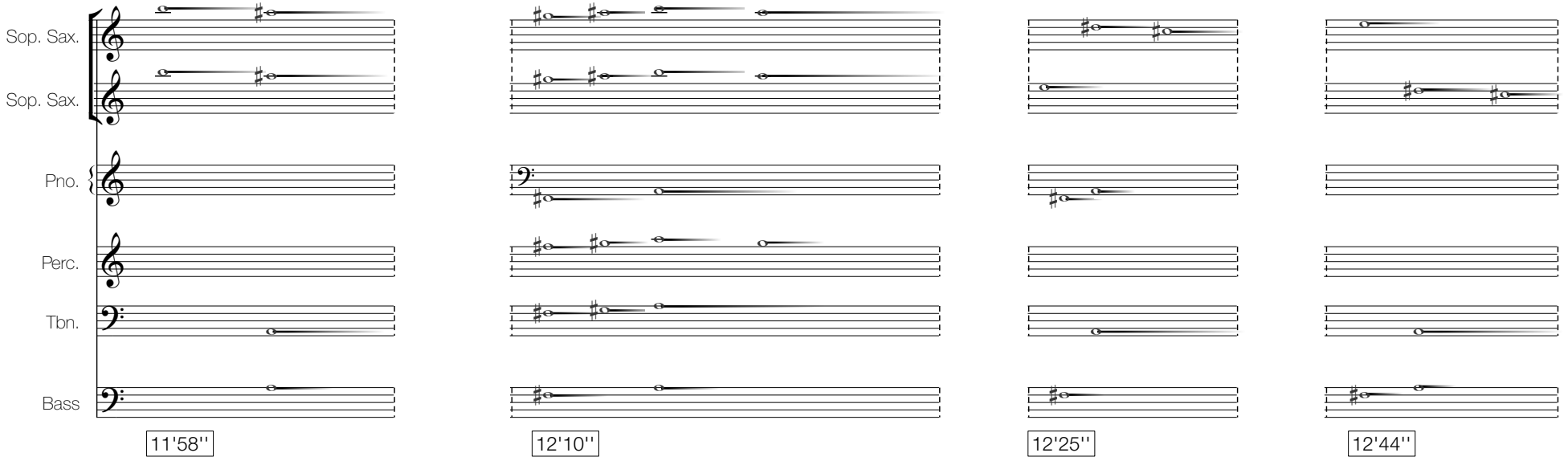

"-ve-"
"A-"
"-k"
5'50''

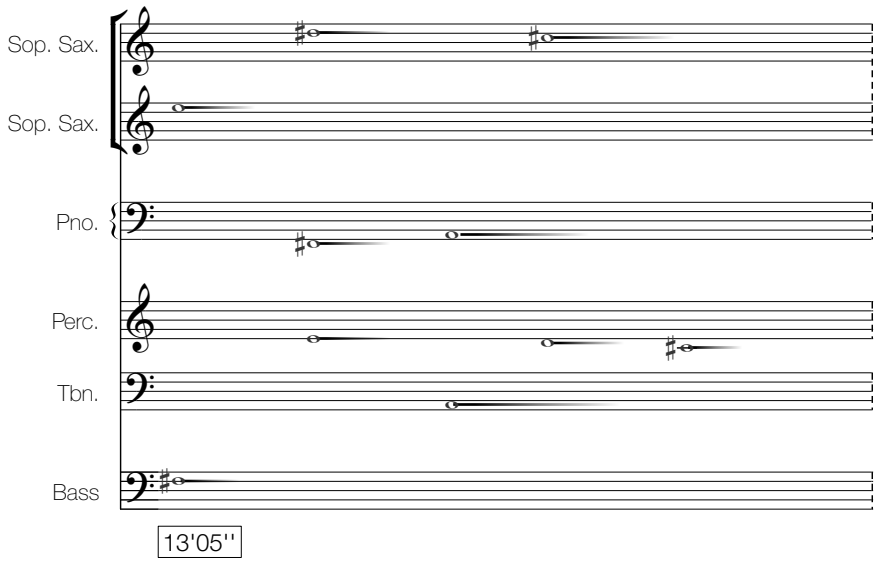

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
"-k"
"-ve-"
"-k"
6'00''
"-ve-"
"-ve-"
6'14''
6'24''
Sop. Sax.
Sop. Sax.
Pno.
Vib.
Tbn.
Bass
6'31''
6'40''
6'55''

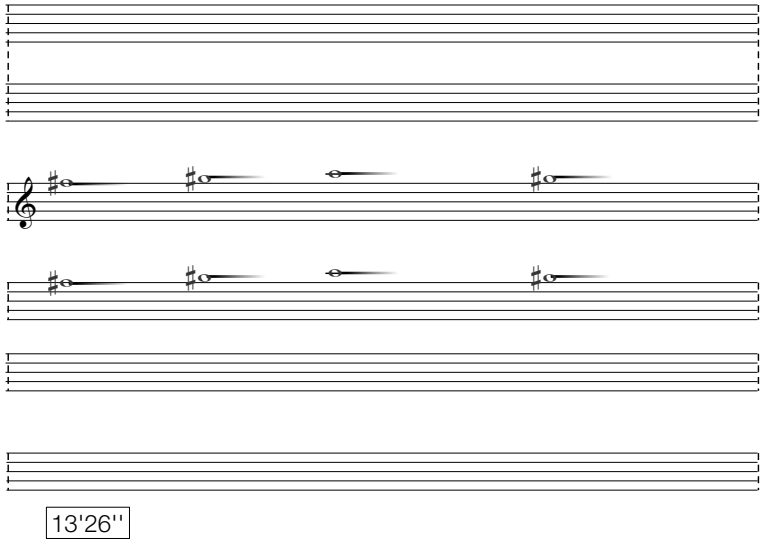

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
7'05''
8'15''
Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
8'27''
8'40''
8'49''
9'00''

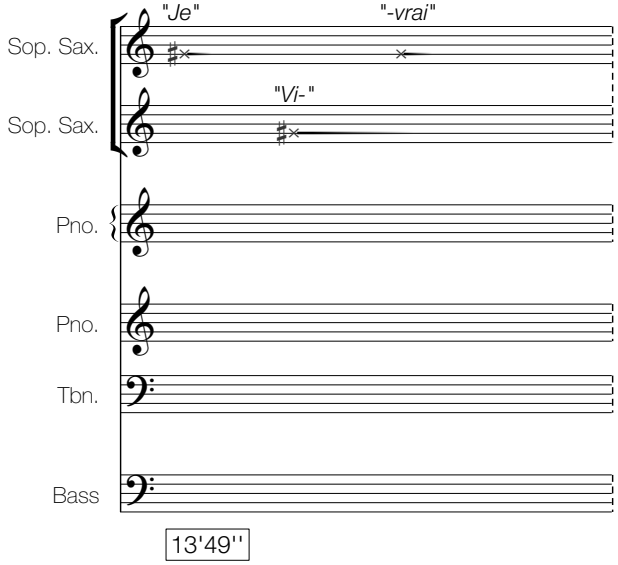

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
9'09''
9'29''
9'50''
10'00''
"Je"
"Vi-"
"Vi-"
10'18''
10'30''
10'46''
11'05''

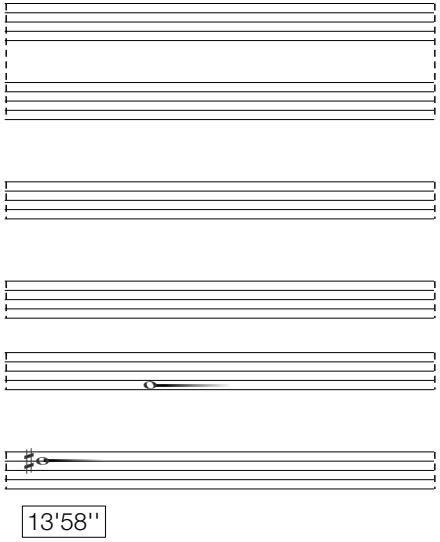

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
11'14''
11'20''
11'30''
11'41''

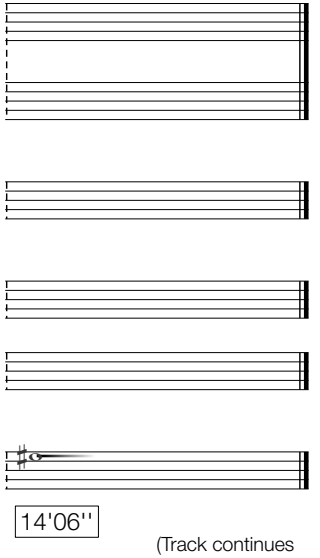

Sop. Sax.
Sop. Sax.
Pno.
Perc.
Tbn.
Bass
11'58''
12'10''
12'25''
12'44''











(Track continues
until 17'25'')

R A T – A U D / to play out absolutely his life

Cello and two percussionists

Duration: 20 minutes

2019

At the beginning of my DPhil research, I thought a lot about the connections between Lachenmann's ideas and those of Antonin Artaud – both in different ways were searching for a concrete language. For a while, this comparison was to be the focus of my thesis, but I became increasingly uncomfortable with Artaud's fixation on pain and difficulty. I moved away from his ideas, but was still fascinated by the tragedy of his story. *R A T – A U D / to play out absolutely his life*, then, is a kind of biography of Artaud through music.

Artaud's voice is integrated into the piece on a formal level, but also on a poetic level. I began by isolating five of Artaud's screams from his 1947 radio transmission, *Pour en finir avec le jugement de Dieu*, analysed their spectrograms, and identified the dominant pitches of each (fig.1 A-E). I then multiplied these five collections of pitches together using chord multiplication to create 25 different pitch complexes (figs. 2 and 3 AA-EE). Next, I worked out each of the complexes' microtonal diminutions (fig. 4 AA^{1}-EE^{1}). Combining

these two sets of complexes together not only gave me a large amount of pitch material to work with, but also embedded a trace of Artaud's voice into the fundamental pitch structure of the piece (fig. 5).

From Artaud's own extensive writings, and from the secondary literature, I chose six moments of his life and work that I found particularly resonant: his early writings on police raids as the ideal theatre, his discovery of Balinese gamelan, his experiences of the Tarahumara peyote ritual in Mexico, his "treatment" through electroshock therapy, the production and censorship of *Pour en finir avec le jugement de Dieu*, and his death, with the possibility of being eaten by rats.

Each of these episodes is represented by its own movement, with an unnumbered 'Interlude' added before the final moment as a non-narrative point of reflection. Where possible, each of the six numbered movements follows Artaud's own descriptions (see the score below). These descriptions are characteristically and peculiarly inconsistent, but I have tried to honour them, to take Artaud at his word.

Each movement plots a path through the 25 pitch complexes, arranged as a 5X5 matrix, according to the letters of his name (fig. 6. The second "A" is inverted, in order to avoid repetition). From there, the process by which the pitches from each path made their way into the final piece was an intuitive one. The plan for

the path of the second movement, for instance (see fig. 7), shows a gradual process of “filtering” from a wide range of pitches to a very narrow one, focused around B natural, which I thought answered to Artaud’s description of the dance – ‘sounds of light’.

In the third movement, I extended Artaud’s description of the peyote ritual into the tempo structure, echoing his account of twelve tempos in twelve phrases. I assigned each complex a different tempo indication (extremely slow to extremely fast), according to its position within the chromatic scale (see fig. 8). A sketch of the first version, in which the performers are aligned in their tempo indications, is shown in Figure 9. But this construction felt overly constrictive – in the final piece, the performers choose the order in which they play each phrase.

The creative freedom that this gives the performers is very important to me in any scored music that I write for people to play. This is why I am so drawn to time-space notation. Playing together, from the score, the performers really interact with each other – they listen, not only to each other, but to the room, to an audience, to how they are all feeling, together. This is, I think, a way of making scored music a collaborative act of creation.

The formal mechanisms at play within the piece were useful for its composition, but I think it is more important that they serve a poetic, expressive function. Artaud is, to me at least, a figure of melancholy – his ideas were never realised and he died alone in an asylum, holding onto his shoe. This piece is meant to bear a trace of him, his voice, and his memory.

Preliminary sketches

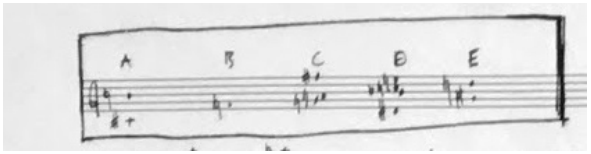


Figure 1: dominant pitches from spectrograms



Figure 3: multiplication part 2

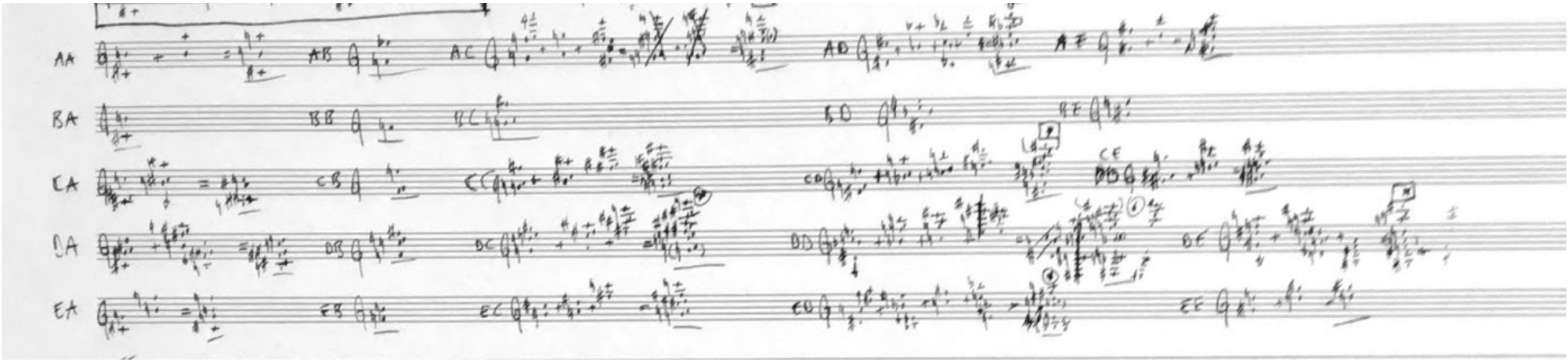


Figure 2: multiplication part 1



Figure 4: microtonal diminutions



Figure 5: all pitch material

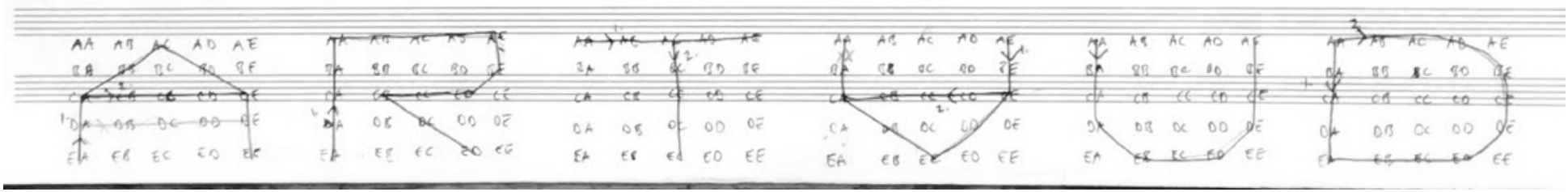


Figure 6: ARTAUD paths (one for each of the six movements)



Figure 7: final pitches chosen from paths

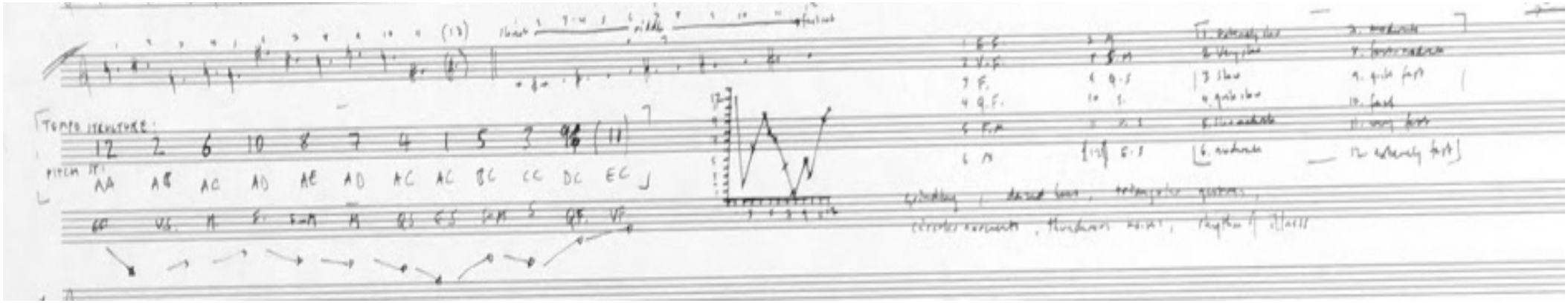


Figure 8: detail from fig. 7 showing the pitch/tempo structure of the third movement

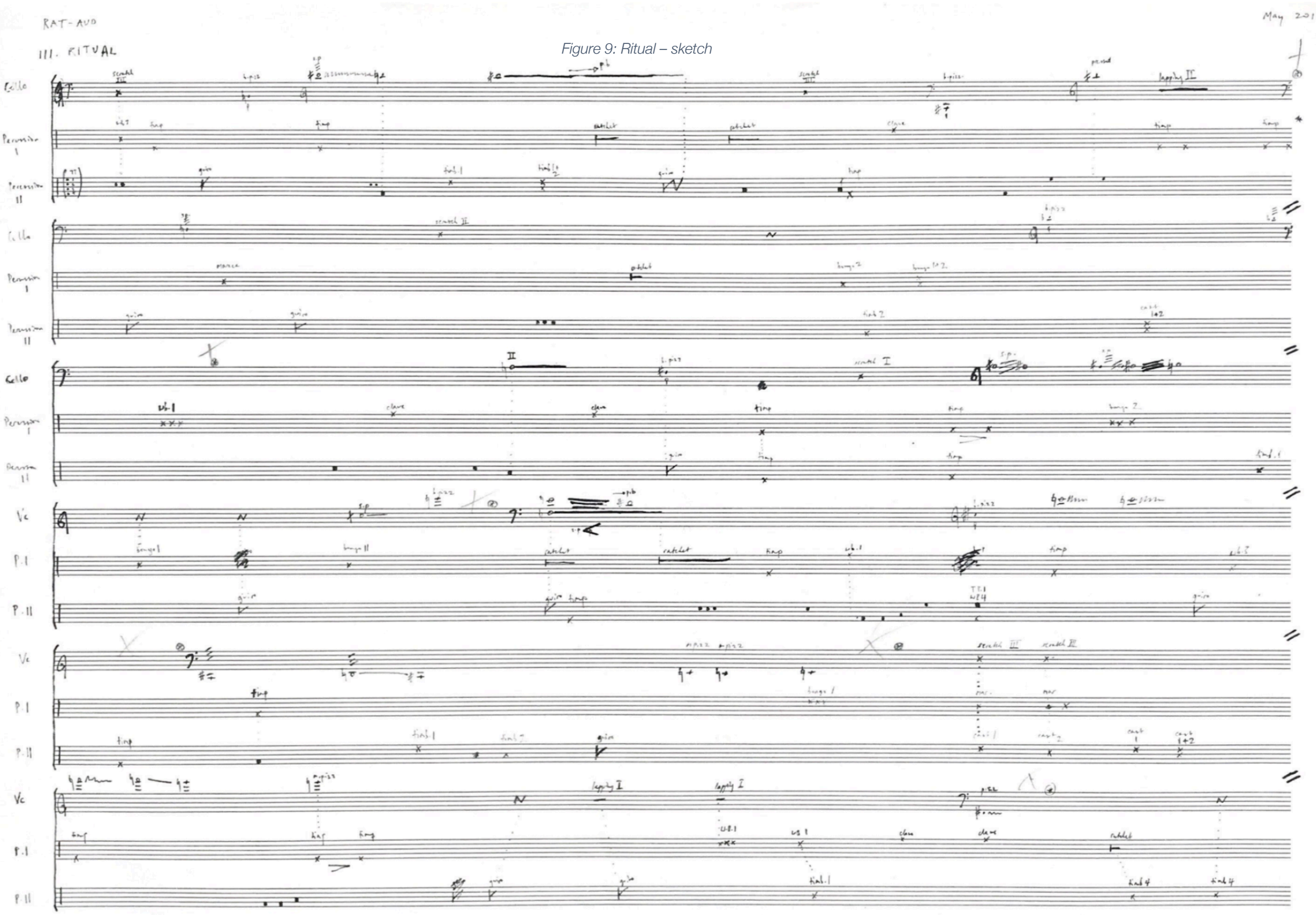


Figure 9: Ritual – sketch


Vc
P.I
P.II
b.pizz
scratch
tapping II
bongo II
flap
bongo 2
bongo 1
claves
vib.1
mar.
vib.2
finger
finger
finger
finger
b. pizz
vib.1
bongo 1
vib.1
finger
vib.1
guiro
scratch IV
finger
bongo II
claves
vib.2
finger
cast 1
cast 1+2
guiro
tapping III
scratch II
scratch I
scratch
scratch
scratch
vib.1
vib.2
vib.?
finger
finger
finger
finger

R A T – A U D

or

to play out absolutely his life

cello and two percussionists

(2019)

R A T – A U D / to play out absolutely his life

1. R A I D : 'The dismal sound of police whistles tears the air. A kind of painful solemnity emanates from all movements. Little by little the circle closes in. Their movements which at first glance seemed insignificant gradually become meaningful – as does that point of space which has served up to now as their pivot'. (From Antonin Artaud, 'On the Alfred Jarry Theatre').

2. D A N C E : 'A new physical language based on signs rather than words'. Sighing wind instrument prolongs vocal chords. Broad, pounding rhythms / insistent driving fragile music / springs of water / armies of insects / sounds of light, deep solitudes, flights of crystals. Angular and abruptly broken, syncopated modulation at the back of the throat, flapping insect wings, rustling branches, hollow drums, robot creaking. (From Antonin Artaud, 'Theatre and its double').

3. R I T U A L : Grinding in stone basins, six hundred small bells, coyote's howl, rhythm of illness. 'An agglomeration of dazed bees caked together in a cracking and tempestuous disorder.' Four points. They grate them in the abstract. Triangular gestures. Between the two suns, twelve tempos in twelve phrases. Rasps. Circular movement. Terrible thunderous noises. (From Antonin Artaud, 'Voyage to the land of the Tarahumara').

4. S H O C K : In 1937, Artaud went to Ireland to return what he believed to be St Patrick's staff. On the way back he was arrested, then placed in the asylum at Rodez. They gave him electroshock therapy to treat his delusions.

5. L A M E N T : In the last year of his life, Artaud recorded Pour en finir avec le jugement de Dieu. In it, he screams through his anger, but this was silenced by authorities until its broadcast thirty years later.

6. T R A P : Artaud died on 4 March 1948, clutching his shoe. His friends stayed with his body in the asylum at Ivry-sur-Seine for three days and nights so that he wouldn't be eaten by rats. 'At this point man withdrew and fled. Then the animals ate him' (From Antonin Artaud, Pour en finir avec le jugement de Dieu).

<u>Percussion I</u>

Fibreglass clave (cl.)
Castanets (cast. 1+2)
Two wood blocks (small and large) (w.b. 1+3)
Kettle drum (tuned to indistinct low pitch) (timp.)
Two suspension coils (small and large) (susp. 2+4)
Two bongo drums (b. 1+2)
Ratchet
Maraca
Bass drum (shared)

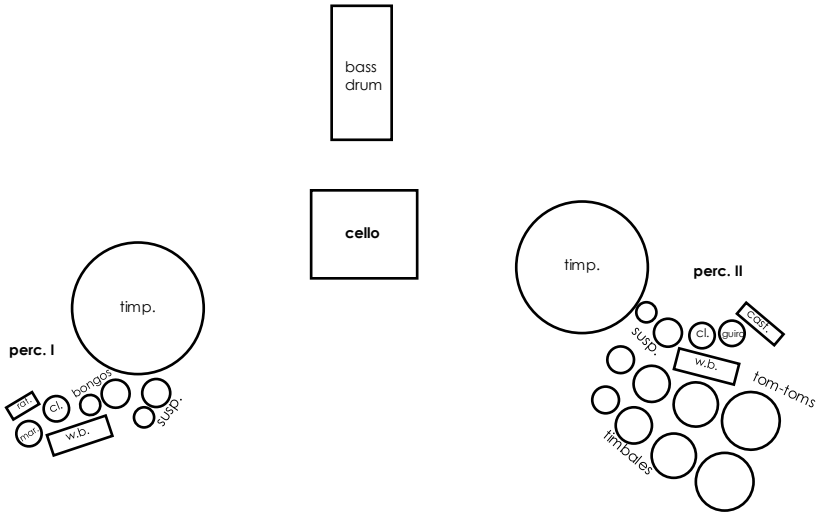
<u>Percussion II</u>

Wooden clave (cl.)
Four tom-toms (Tom. 1-4)
Two wood blocks (small and large) (w.b. 2+4)
Kettle drum (tuned to indistinct low pitch) (timp.)
Two suspension coils (small and large) (susp. 2+4)
Two timbales (timb. 1+2)
Guiro
Bass drum (shared)

Medium-hard yarn mallets should be used throughout, unless written otherwise.

Additional playing instructions for all instruments are detailed in the score.

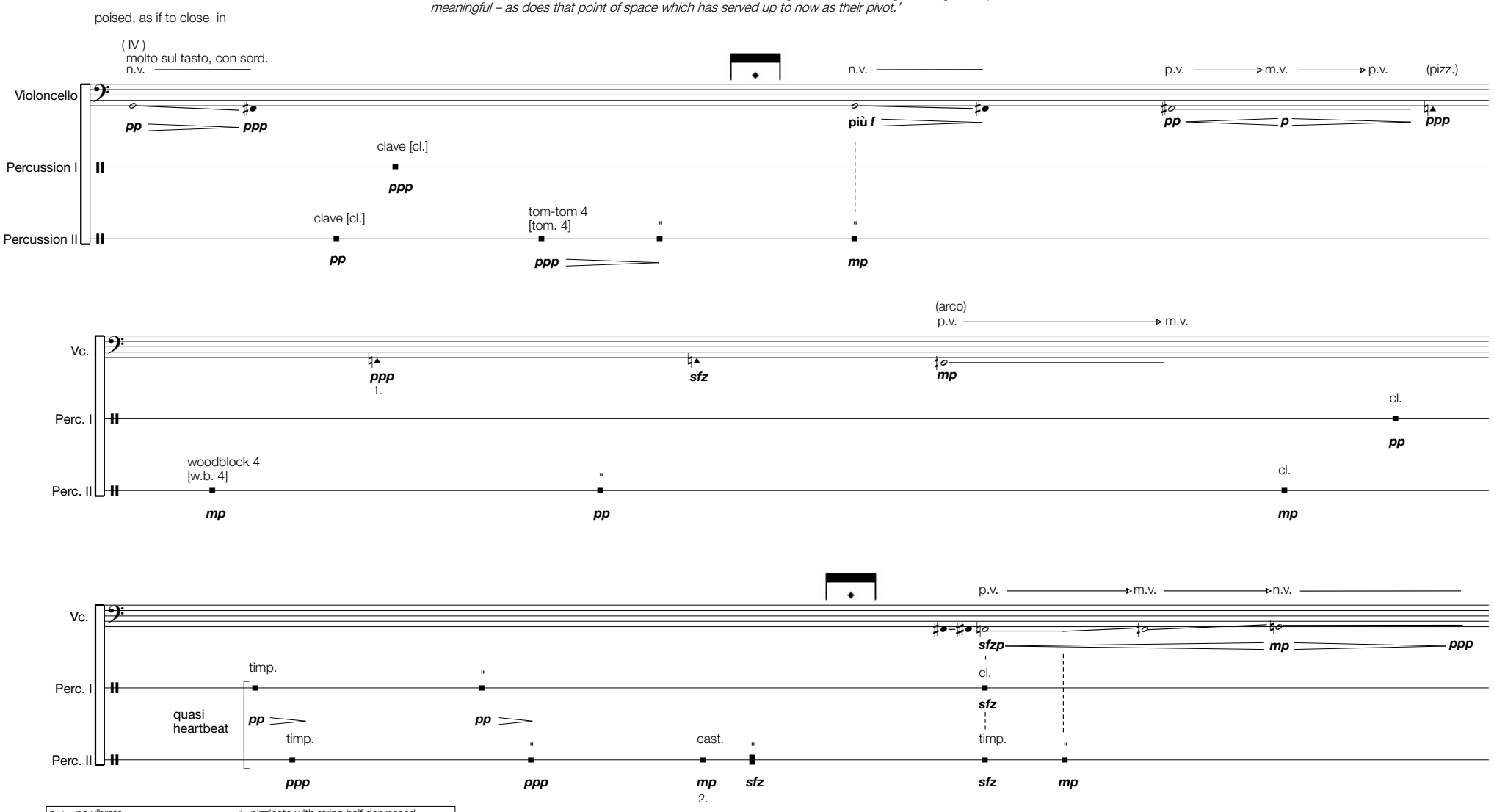
Suggested stage set up



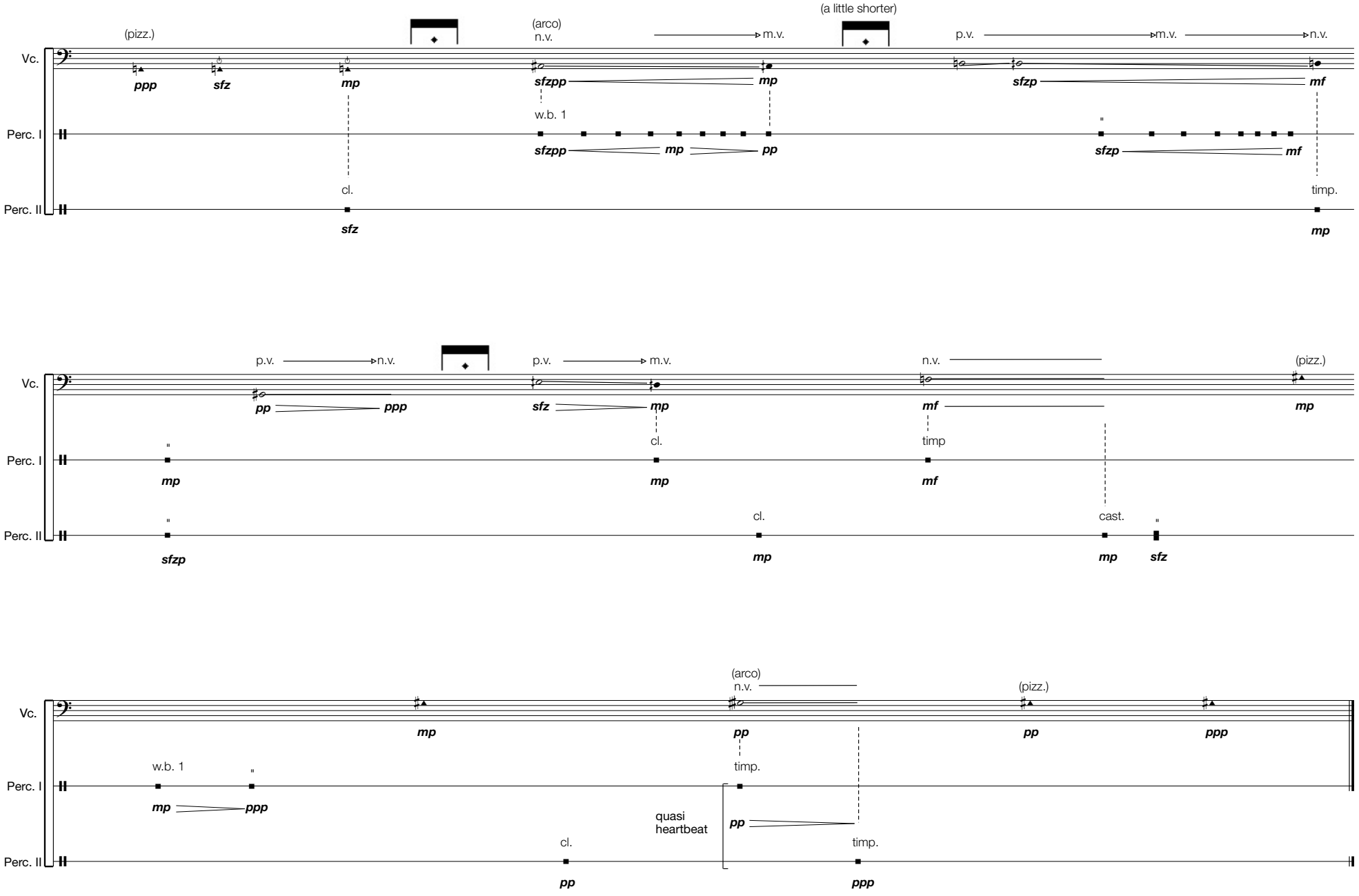
RAT-AUD

I. RAID

'The dismal sound of police whistles tears the air. A kind of painful solemnity emanates from all movements. Little by little the circle closes in. Their movements which at first glance seemed insignificant gradually become meaningful – as does that point of space which has served up to now as their pivot.'

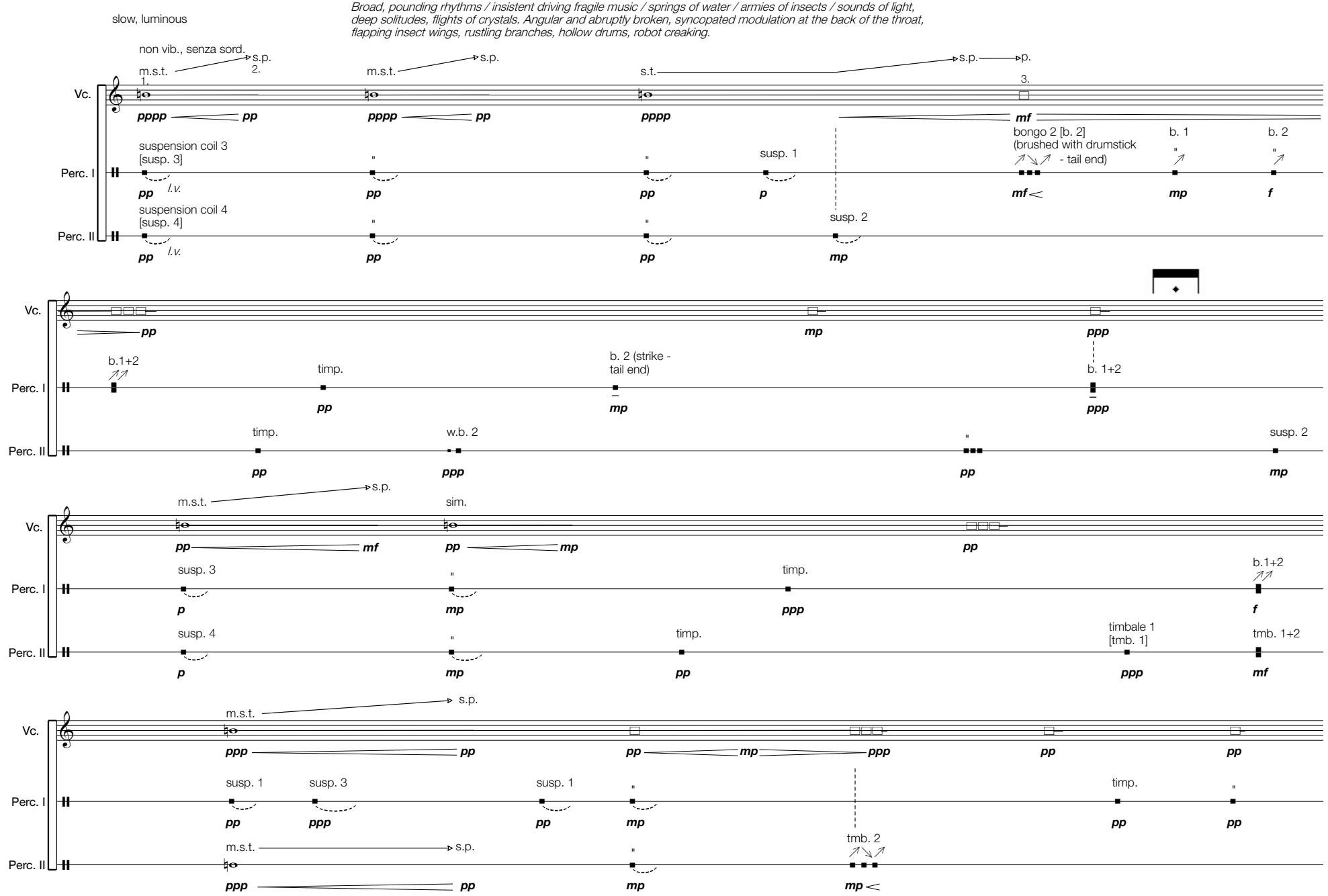


n.v. - no vibrato	1. pizzicato with string half depressed
p.v. - poco vibrato	2. If castanets are not available, this
m.v. - molto vibrato	may be played on woodblocks.

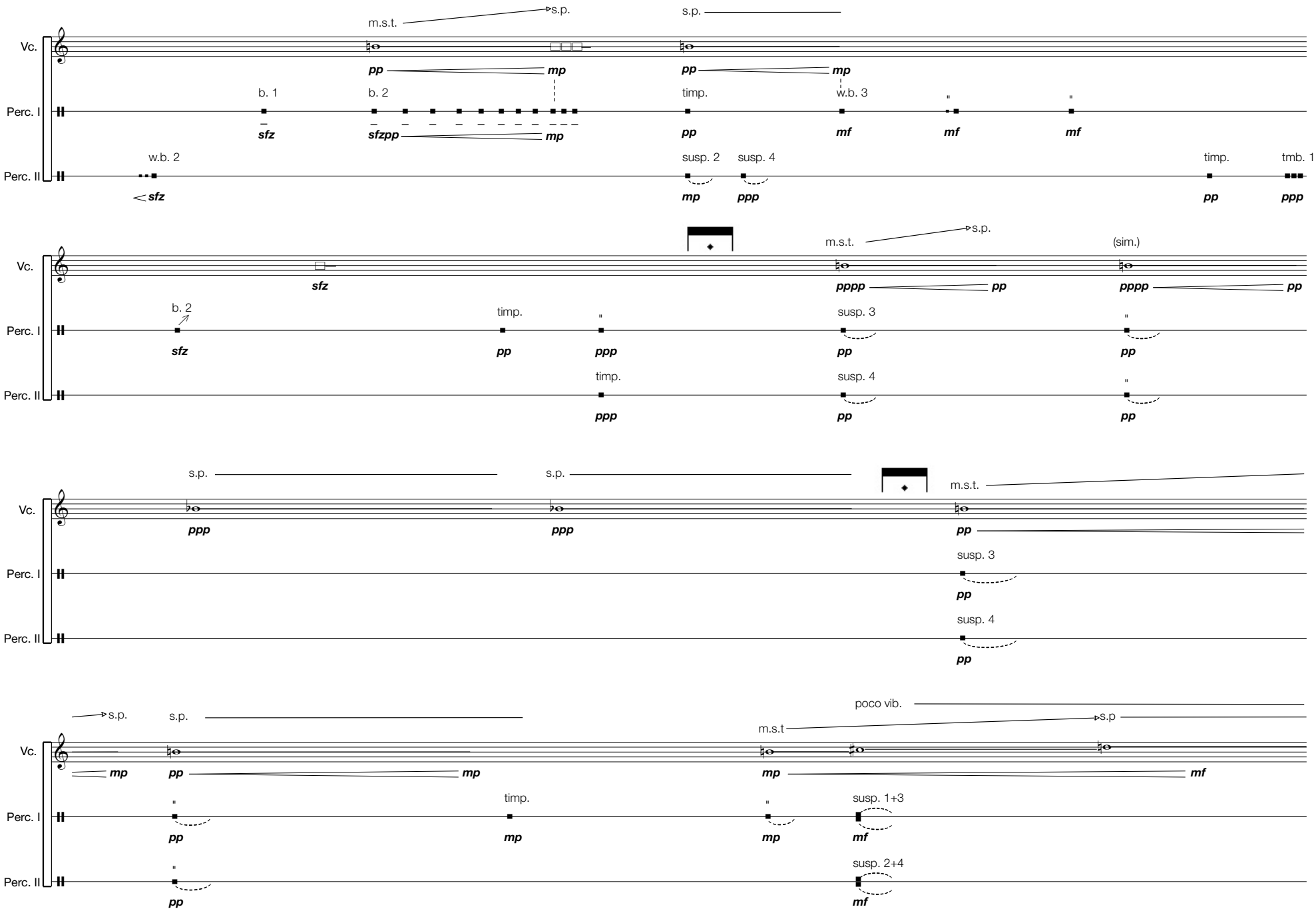

(pizz.)
(arco)
n.v.
m.v.
(a little shorter)
p.v.
m.v.
n.v.
Vc.
ppp
sfz
mp
sfzpp
mp
sfzp
mf
w.b. 1
Perc. I
sfzpp
mp
pp
sfzp
mf
cl.
timp.
Perc. II
sfz
mp
p.v.
n.v.
p.v.
m.v.
n.v.
(pizz.)
Vc.
pp
ppp
sfz
mp
mf
mp
Perc. I
mp
cl.
mp
timp
mf
Perc. II
sfzp
cl.
mp
cast.
mp
sfz
(arco)
n.v.
(pizz.)
Vc.
mp
pp
pp
ppp
w.b. 1
timp.
Perc. I
mp
ppp
quasi
heartbeat
pp
cl.
timp.
Perc. II
pp
ppp

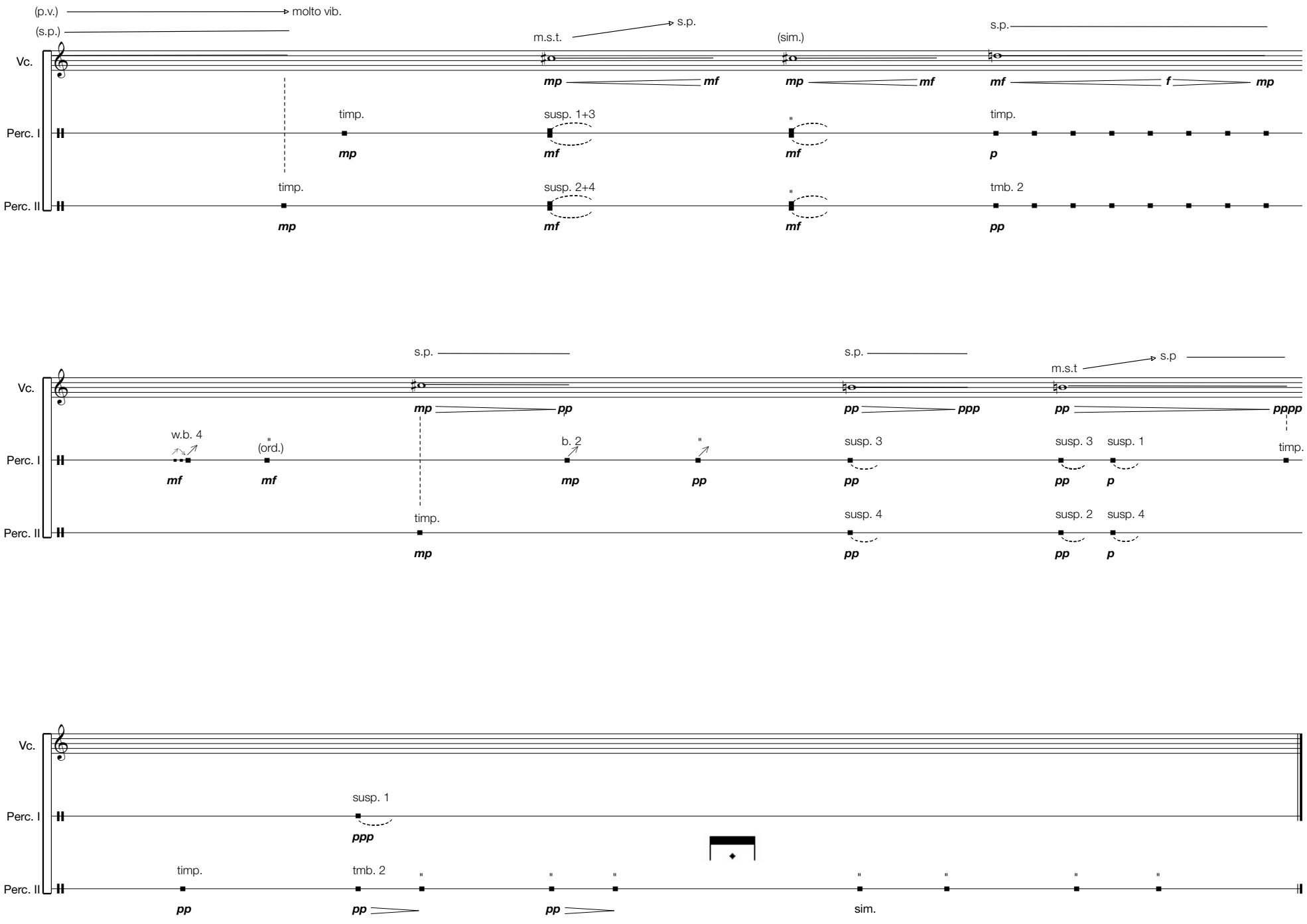
II: D A N C E

'A new physical language based on signs rather than words'. Sighing wind instrument prolongs vocal chords. Broad, pounding rhythms / insistent driving fragile music / springs of water / armies of insects / sounds of light, deep solitudes, flights of crystals. Angular and abruptly broken, syncopated modulation at the back of the throat, flapping insect wings, rustling branches, hollow drums, robot creaking.



1. m.s.t. - molto sul tasto
2. s.p. - sul pont
3. Bowing on the top of the bridge (with the bow at a 45° angle)

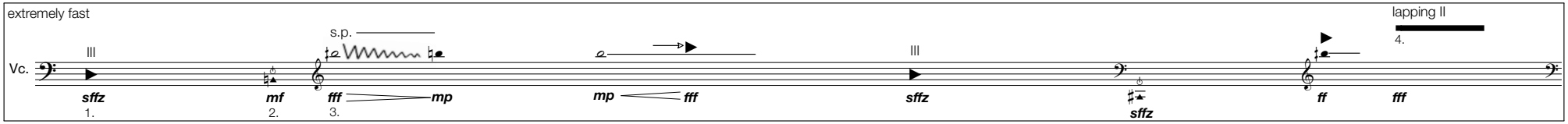

Vc.
Perc. I
Perc. II
m.s.t.
s.p.
pp
mp
b. 1
b. 2
sfz
sfzpp
timp.
w.b. 3
mf
w.b. 2
susp. 2
susp. 4
ppp
tmb. 1
(sim.)
pppp
susp. 3
susp. 1+3
susp. 2+4
poco vib.
s.p

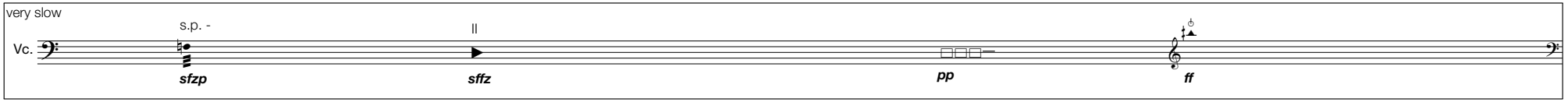

(p.v.)
molto vib.
(s.p.)
m.s.t.
s.p.
(sim.)
s.p.
Vc.
mp
mf
mp
mf
mf
f
mp
Perc. I
timp.
mp
susp. 1+3
mf
"
mf
timp.
p
Perc. II
timp.
mp
susp. 2+4
mf
"
mf
tmb. 2
pp
s.p.
s.p.
m.s.t
s.p
Vc.
mp
pp
pp
ppp
pp
pppp
w.b. 4
mf
"
(ord.)
mf
b. 2
mp
"
pp
susp. 3
pp
susp. 3
pp
susp. 1
p
timp.
Perc. I
timp.
mp
susp. 4
pp
susp. 2
pp
susp. 4
p
Perc. II
Vc.
susp. 1
ppp
Perc. I
timp.
pp
tmb. 2
pp
"
pp
"
"
sim.
"
"
"
"
Perc. II

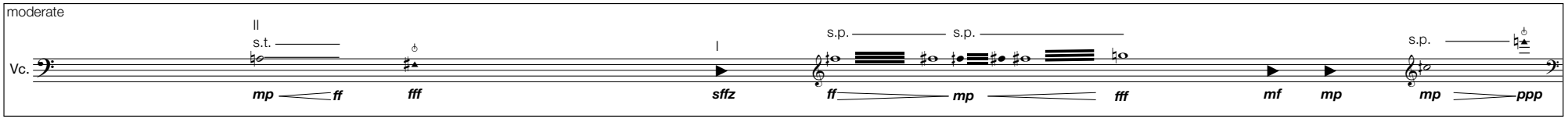
R I T U A L is made of 12 phrases in 12 tempos. The time space notation, then, is relative to the particular tempo of the phrase. Each player may chose their own order in which to play their part from each of the 12 phases, allowing then for potentially large discrepancies within the ensemble. However, the players should only proceed to their next phase once the others have got to the end of theirs. A signal for indicating the end of a phrase must therefore be decided. Nevertheless, R I T U A L should sound as a single movement. In order not to anticipate the I N T E R L U D E, players should make sure not to play the 'extremely fast' phrase all at once.

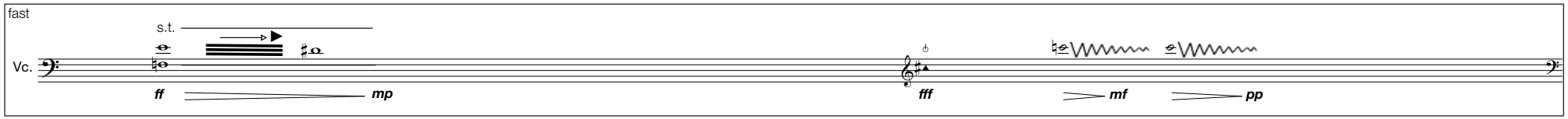
III: R I T U A L

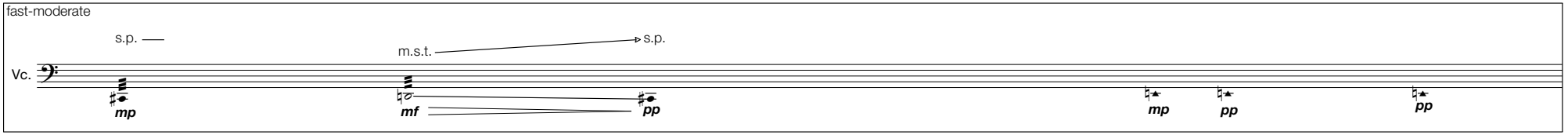
Grinding in stone basins, six hundred small bells, coyote's howl, rhythm of illness. 'An agglomeration of dazed bees caked together in a cracking and tempestuous disorder.' Four points. They grate them in the abstract. Triangular gestures. Between the two suns, twelve tempos in twelve phrases. Rasps. Circular movement. Terrible thunderous noises.



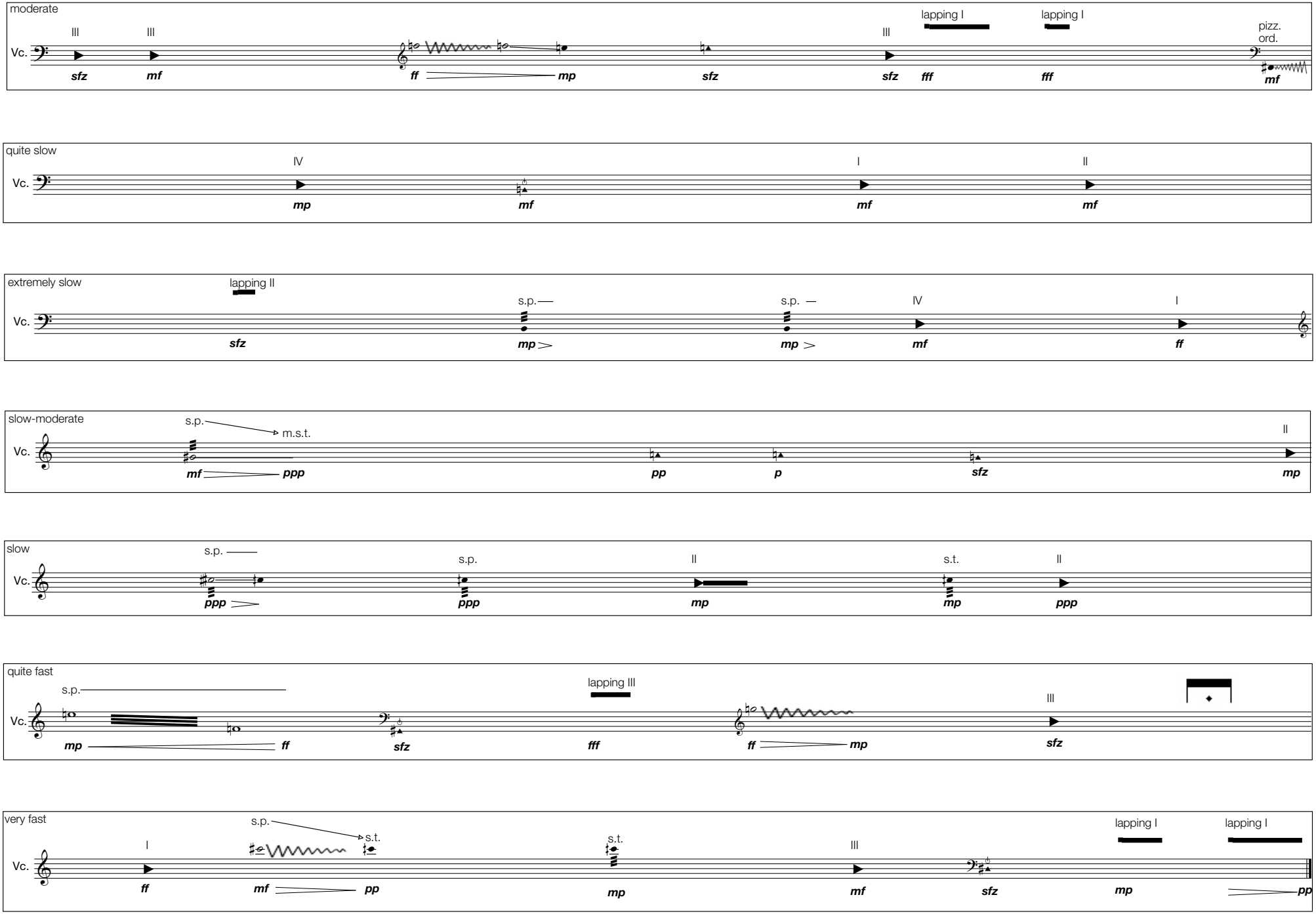






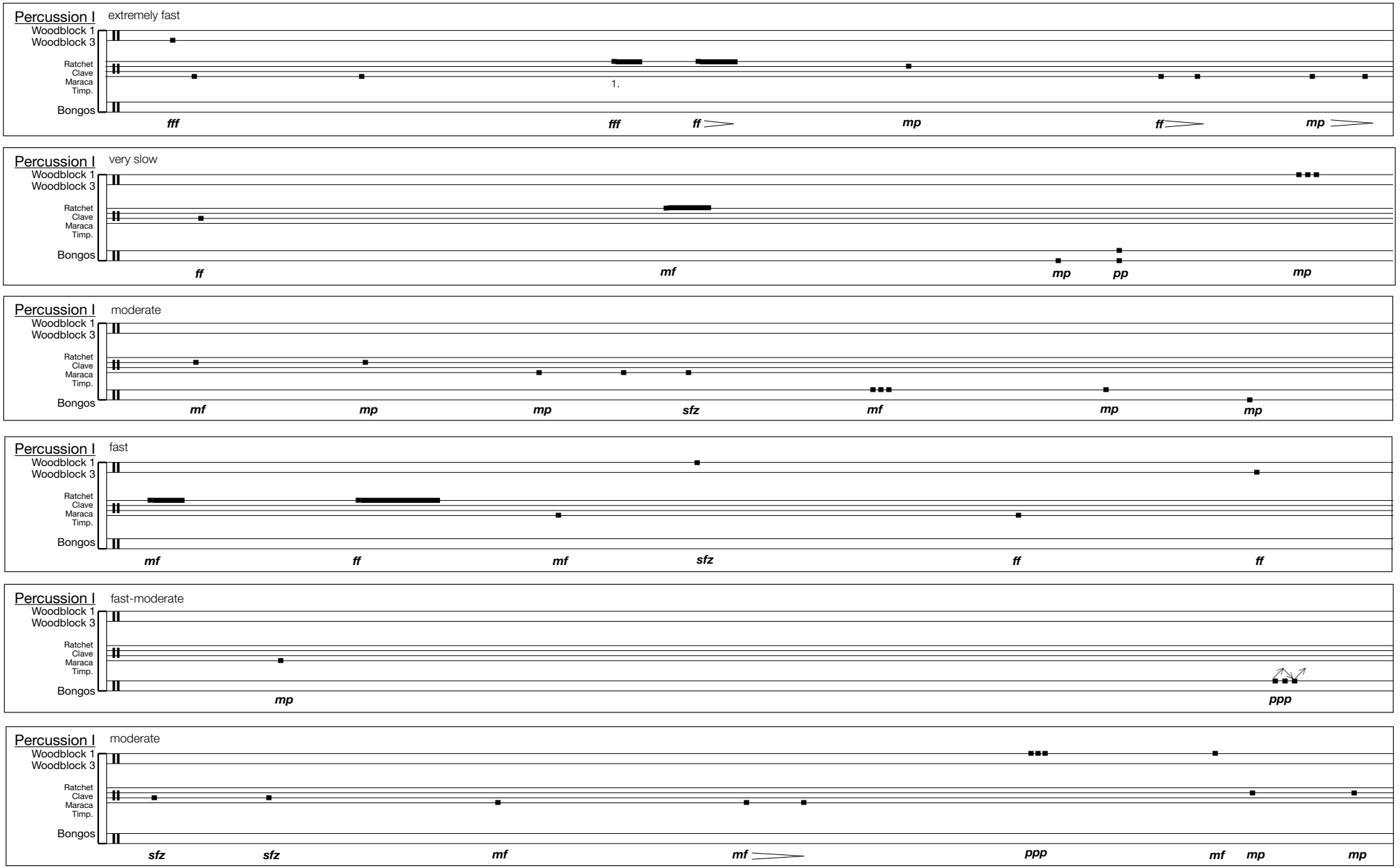


1. Extreme bow pressure. When it is presented without a notated pitch, all strings should be muted
2. Bartók pizz. with string half depressed
3. Wide vibrato, focusing in on the following pitch
4. If the lapping will not sound, these may be replaced by sustained bow pressure on the muted string

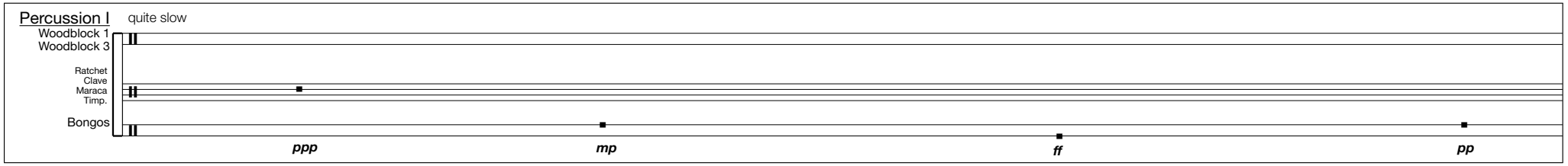

moderate
Vc.
III
III
sfz
mf
ff
mp
sfz
III
sfz
lapping I
fff
lapping I
fff
pizz.
ord.
mf
quite slow
Vc.
IV
mp
mf
I
mf
II
mf
extremely slow
Vc.
lapping II
sfz
s.p.
mp
s.p.
mp
IV
mf
I
ff
slow-moderate
Vc.
s.p.
m.s.t.
mf
ppp
pp
p
sfz
II
mp
slow
Vc.
s.p.
ppp
s.p.
ppp
II
mp
s.t.
mp
II
ppp
quite fast
Vc.
s.p.
mp
ff
sfz
lapping III
fff
ff
mp
III
sfz
very fast
Vc.
I
ff
s.p.
s.t.
mf
pp
s.t.
mp
III
mf
sfz
lapping I
mp
lapping I
pp

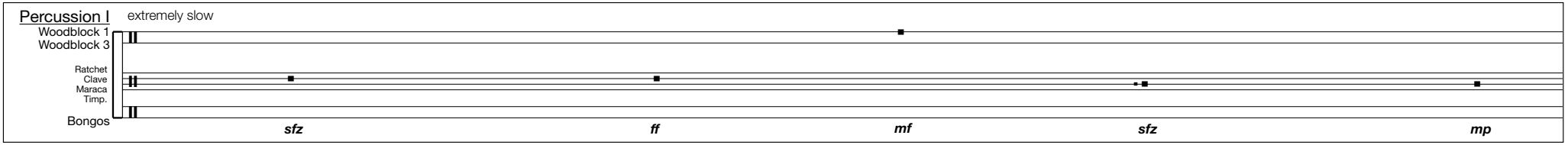
III: R I T U A L

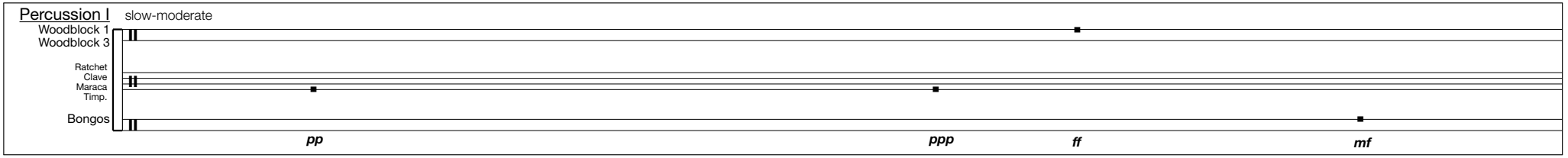
Grinding in stone basins, six hundred small bells, coyote's howl, rhythm of illness. 'An agglomeration of dazed bees caked together in a cracking and tempestuous disorder.' Four points. They grate them in the abstract. Triangular gestures. Between the two suns, twelve tempos in twelve phrases. Rasps. Circular movement. Terrible thunderous noises.

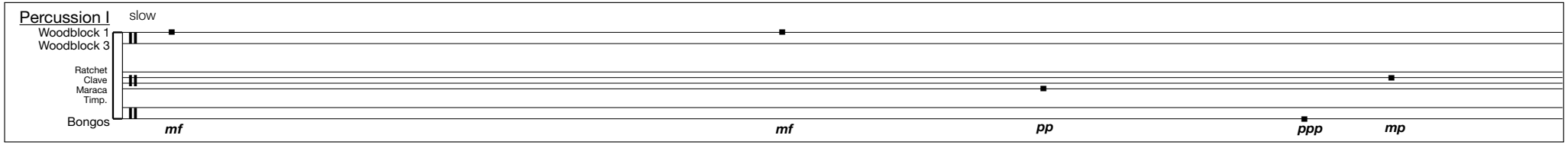


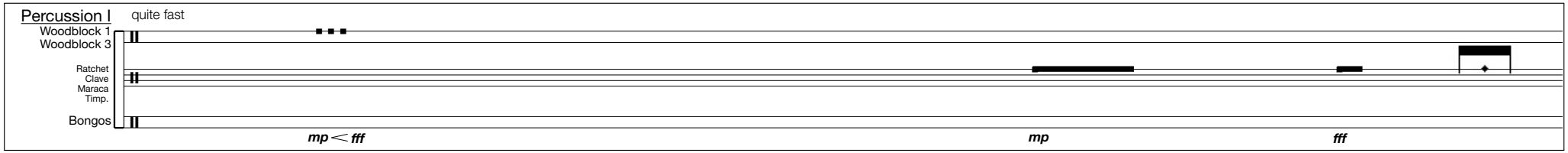
1. If a ratchet is not available, it may be replaced with a guiro played with a metal scraper

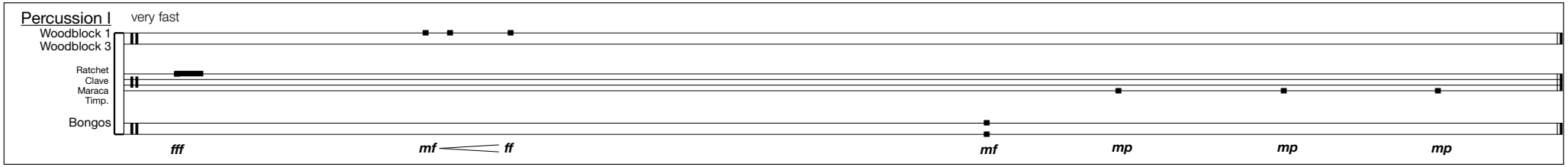

Percussion I
quite slow
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
ppp
mp
ff
pp


Percussion I
extremely slow
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
sfz
ff
mf
sfz
mp


Percussion I
slow-moderate
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
pp
ppp
ff
mf

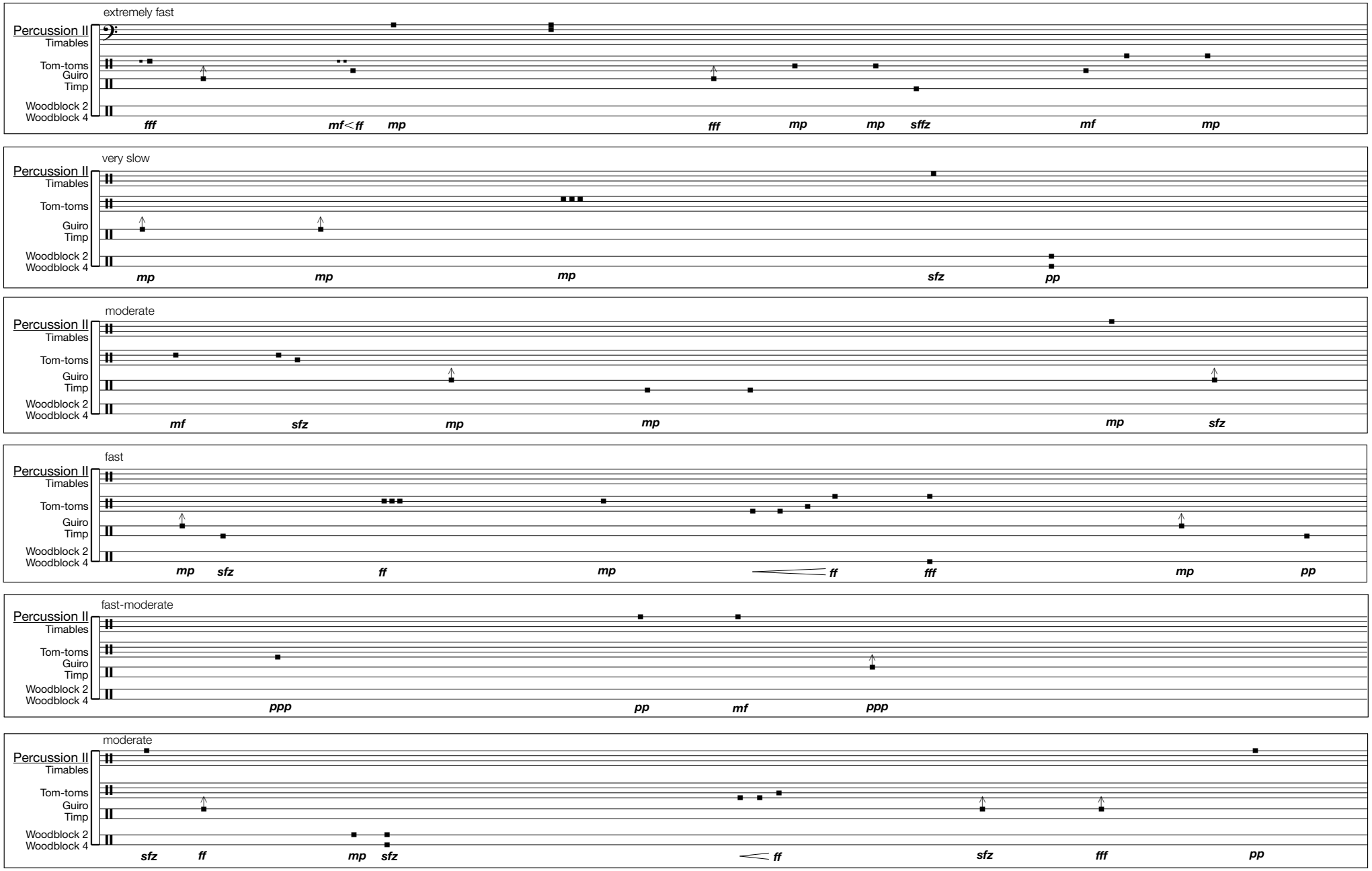

Percussion I
slow
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
mf
mf
pp
ppp
mp

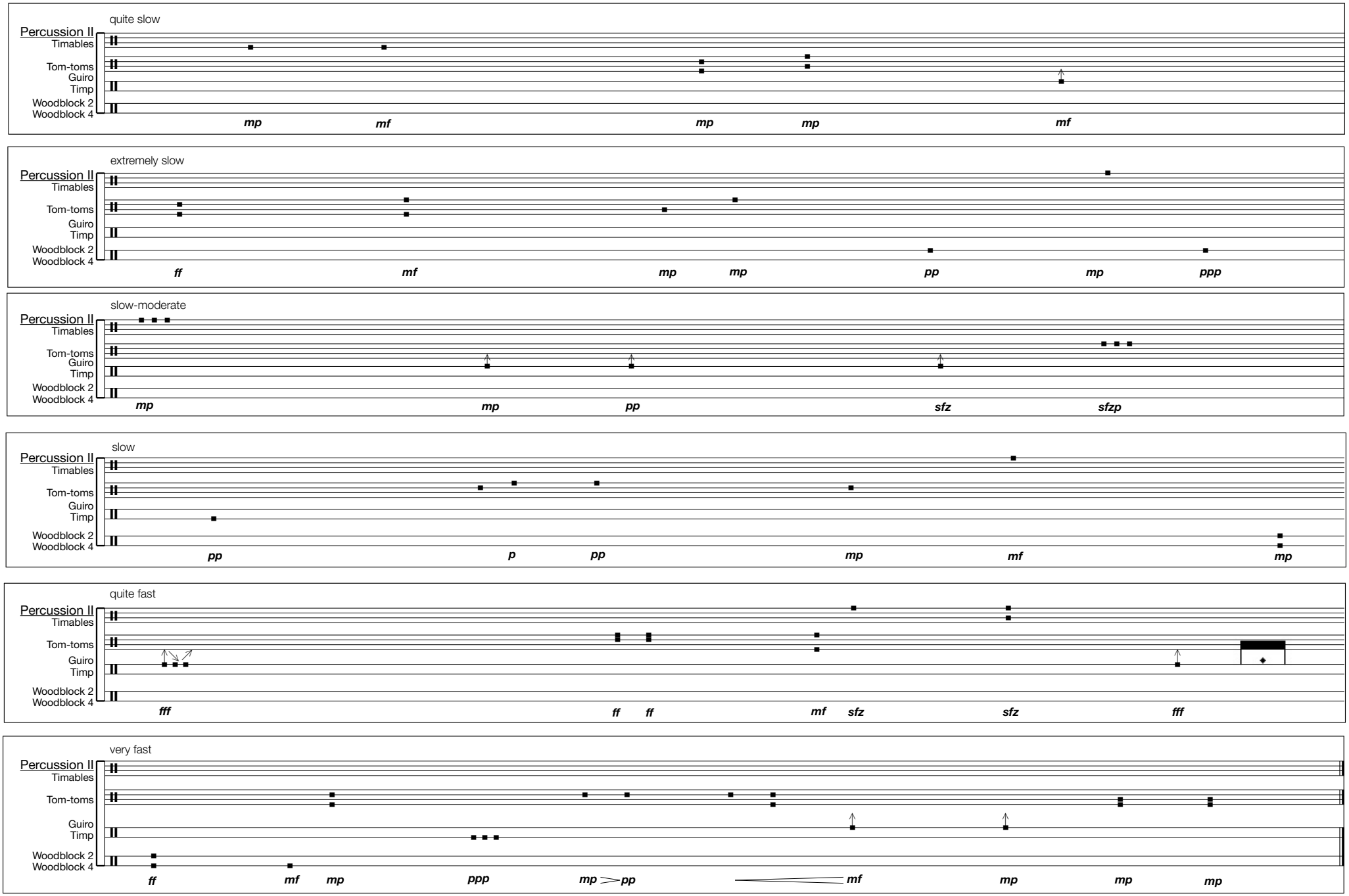

Percussion I
quite fast
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
mp
fff
mp
fff


Percussion I
very fast
Woodblock 1
Woodblock 3
Ratchet
Clave
Maraca
Timp.
Bongos
fff
mf
ff
mf
mp
mp
mp

III: R I T U A L

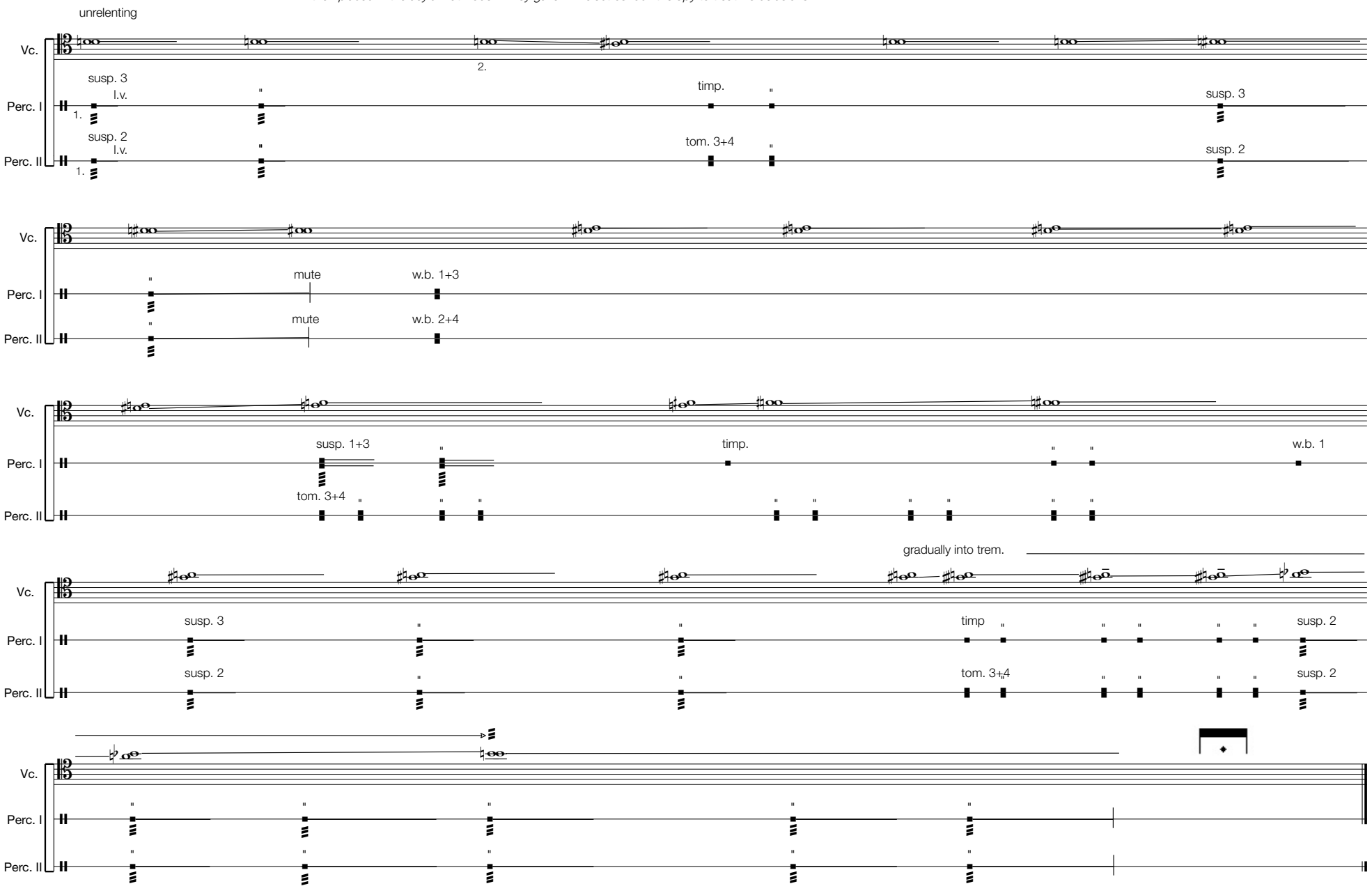
Grinding in stone basins, six hundred small bells, coyote's howl, rhythm of illness. 'An agglomeration of dazed bees caked together in a cracking and tempestuous disorder.' Four points. They grate them in the abstract. Triangular gestures. Between the two suns, twelve tempos in twelve phrases. Rasps. Circular movement. Terrible thunderous noises.




quite slow
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
mp mf mp mp mf
extremely slow
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
ff mf mp mp pp mp ppp
slow-moderate
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
mp mp pp sfz sfzp
slow
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
pp p pp mp mf mp
quite fast
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
fff ff ff mf sfz sfz fff
very fast
Percussion II
Timables
Tom-toms
Guiro
Timp
Woodblock 2
Woodblock 4
ff mf mp ppp mp pp mf mp mp mp

IV: S H O C K

In 1937, Artaud went to Ireland to return what he believed to be St Patrick's staff. On the way back he was arrested, then placed in the asylum at Rodez. They gave him electroshock therapy to treat his delusions.



1. Suspension coils should be played with metal beaters throughout

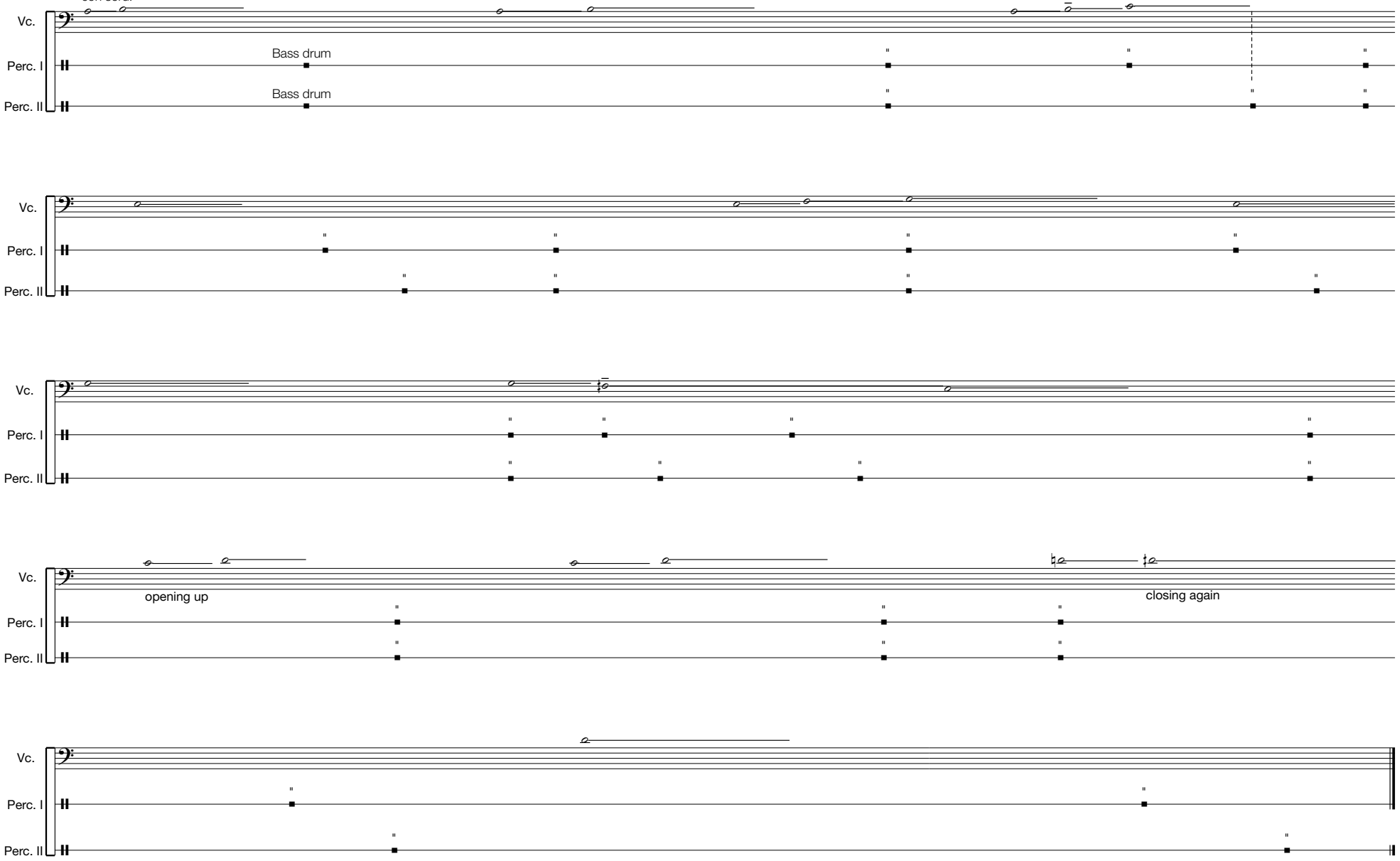
2. Glissandi should begin as soon as the first pitch is sounded

V: L A M E N T

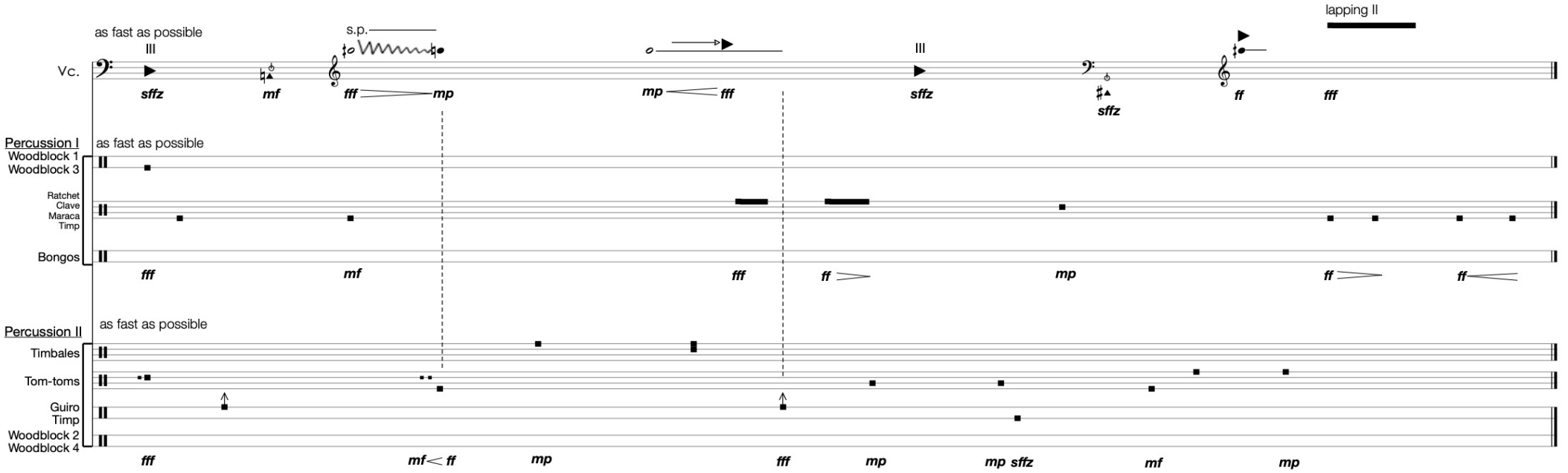
quiet, distant

con sord.

In the last year of his life, Artaud recorded Pour en finir avec le jugement de Dieu. In it, he screams through his anger, but this was silenced by authorities until its broadcast thirty years later.

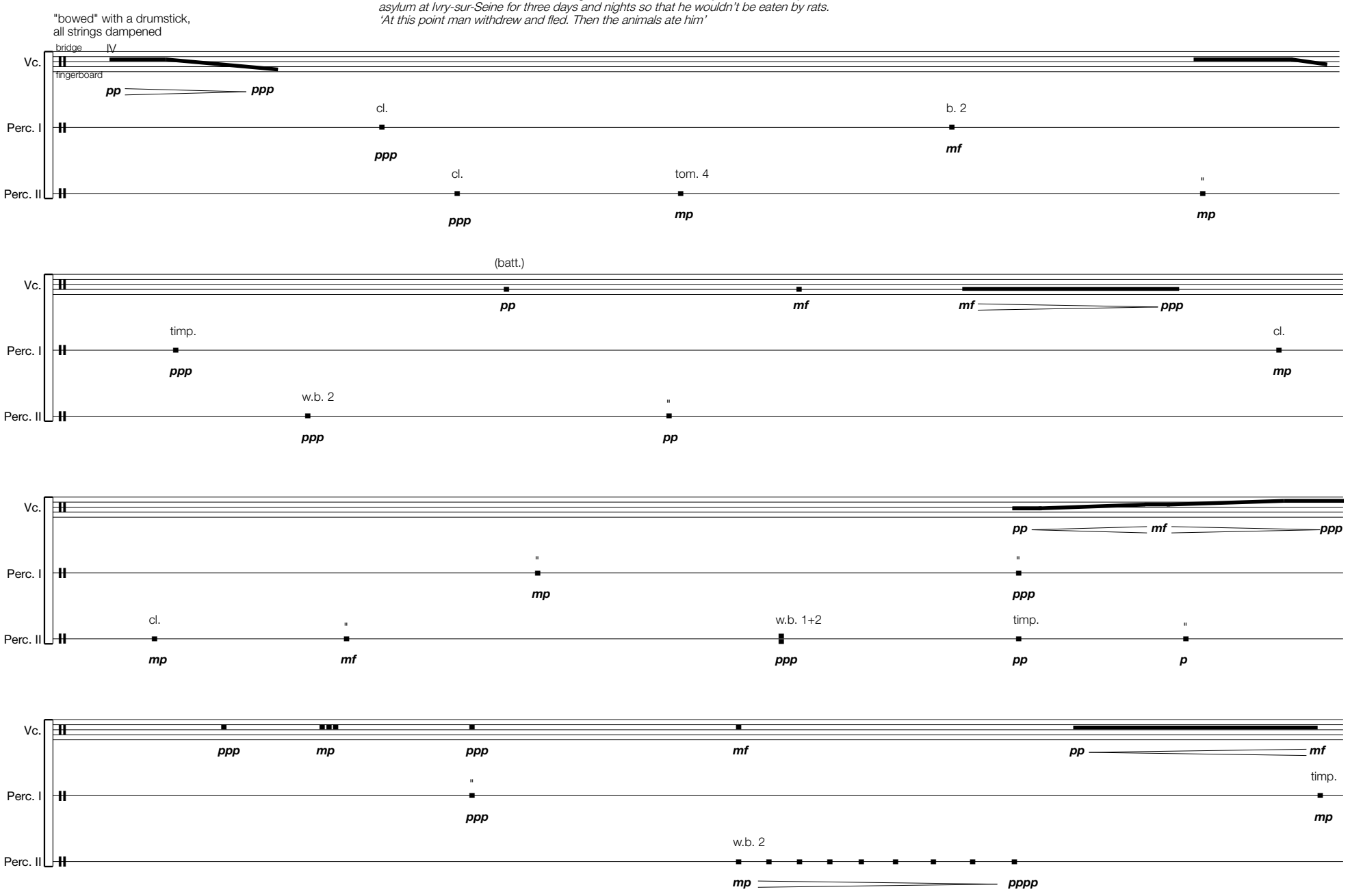


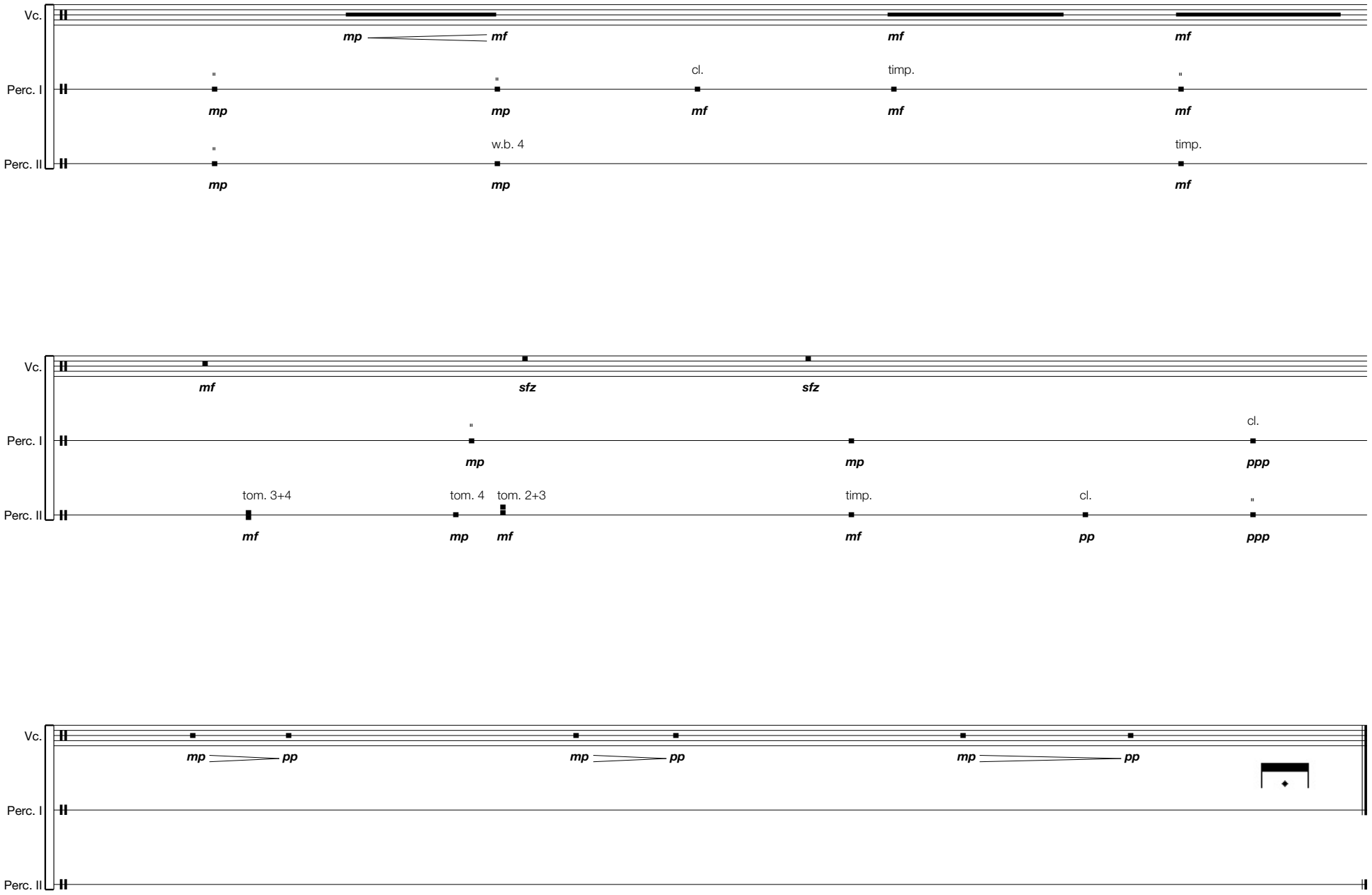
INTERLUDE:
POUR EN FINIR AVEC LE JUGEMENT DE DIEU



VI: T R A P

Artaud died on 4 March 1948, clutching his shoe. His friends stayed with his body in the asylum at Ivry-sur-Seine for three days and nights so that he wouldn't be eaten by rats. 'At this point man withdrew and fled. Then the animals ate him'




Vc.
mp
mf
mf
mf
Perc. I
"
mp
"
mp
cl.
mf
timp.
mf
"
mf
Perc. II
"
mp
w.b. 4
mp
timp.
mf
Vc.
mf
sfz
sfz
Perc. I
"
mp
mp
cl.
ppp
Perc. II
tom. 3+4
mf
tom. 4
mp
tom. 2+3
mf
timp.
mf
cl.
pp
"
ppp
Vc.
mp
pp
mp
pp
mp
pp
Perc. I
Perc. II

Once a horse was noisy

Installation: tape and screen-printing

Duration: 9’58’’ (looped)

2017

In 1909, the Italian artist Filippo Tommaso Marinetti called for a new kind of art that could celebrate the speed, dynamism, and violence of the modern age. ‘We affirm’, he wrote, ‘that the world’s magnificence has been enriched by a new beauty: the beauty of speed. A racing car whose hood is adorned with great pipes, like serpents of explosive breath—a roaring car that seems to ride on grapeshot is more beautiful than the Victory of Samothrace.’[1]

He called this new art Futurism, a name that makes explicit his intention to dislocate from the past. ‘We want to free this land from its smelly gangrene of professors, archaeologists, ciceroni and antiquarians,’ he went on to say, ‘We will sing of great crowds excited by work, by pleasure, and by riot; […] we will sing of the vibrant nightly fervor of arsenals and shipyards blazing with violent electric moons; […] factories hung on

clouds by the crooked lines of their smoke; […] deep-chested locomotives whose wheels paw the tracks like the hooves of enormous steel horses.'[2]

In 1913, Luigi Russolo, a disciple of Marinetti, published *The Art of Noises*. Here, he argued that the sounds of the conventional orchestra could no longer satisfy the modern ear. Not only had people become too accustomed to them but, more importantly, they could not adequately reflect the sonic environment in which they had newly found themselves. He began to build his intonarumori: an orchestra of new instruments which, through levers, membranes and horns, could explore their new world, a world that, according to Russolo's descriptions, resonated with the sounds of railroads, iron foundries, textile mills, sounds of warfare, engines and, curiously, a horse trotting.[3]

It wasn't just these two. Umberto Boccioni, the "blazing comet" and author of *Futurist Painting: Technical Manifesto* in 1910, chose the horse as the subject of much of his work: in *Elasticità*, for instance, or *Dinamismo di un cavallo in corsa* (both of 1912), but I think most interestingly in *La città che sale* (1910), a ten-foot wide painting that shows the construction of a new city, an appropriate image of Futurism. But the city is eclipsed by horses in the foreground.

The horse also figures in Boccioni's descriptions of urban experience. Inserted into his account of the dynamism and chaos of the tram, for instance, is a strange and poignant line: 'And sometimes on the cheek of the person we are speaking to on the street we see a horse passing by at a distance'.[4] More poignant still: during a cavalry exercise in 1916, his horse (named Vermiglia after the central horse of *La città che sale*) was spooked by a passing lorry. Boccioni fell and sustained injuries that would kill him the next day.

My installation, *Once a horse was noisy* for tape and screen-printed image, explores this surprising recurrence of the horse in Futurist visions of modernity, and asks whether the horse might in fact have betrayed a kind of nostalgia.

The material of the tape is solely derived from the sound of a horse's single hoofbeat. Again, I looked to spectral analysis as a way to get inside the sound, and used the dominant frequencies to inform the tuning of a resonator through which the hoofbeat, looped, is transformed into clearly audible pitches. As well as a resonator, the tape also features three different delay systems, whose reverb content, pitch content, and speed shift throughout the piece. As with my treatment of the sound sources in the tape for *How many eyes*, this emerged through a process of listening to what the sound itself suggested.

The Futurists' alignment of the sight and sounds of a horse with the sights and sounds of the industrial age means that something of what a horse once was is lost. A horse could never sound the same again – its sound is either assimilated into the sounds of industry or, indeed, where once it was among the noisiest things, now its noise is drowned out by the machine. I wonder whether the reason that children are so interested in drawing horses is because they still have some of this original awe – a horse must seem so huge to a child, so impressive, possibly even quite scary. In time, though, this too is lost; this piece reflects on this, on a broader sense of the melancholy of looking back, while still looking forwards.

The installation should be mounted in a gallery space with white walls. The tape is played on loop through two speakers that face one of the walls, on which is screen-printed a child's drawing of a horse. Please see the design below.

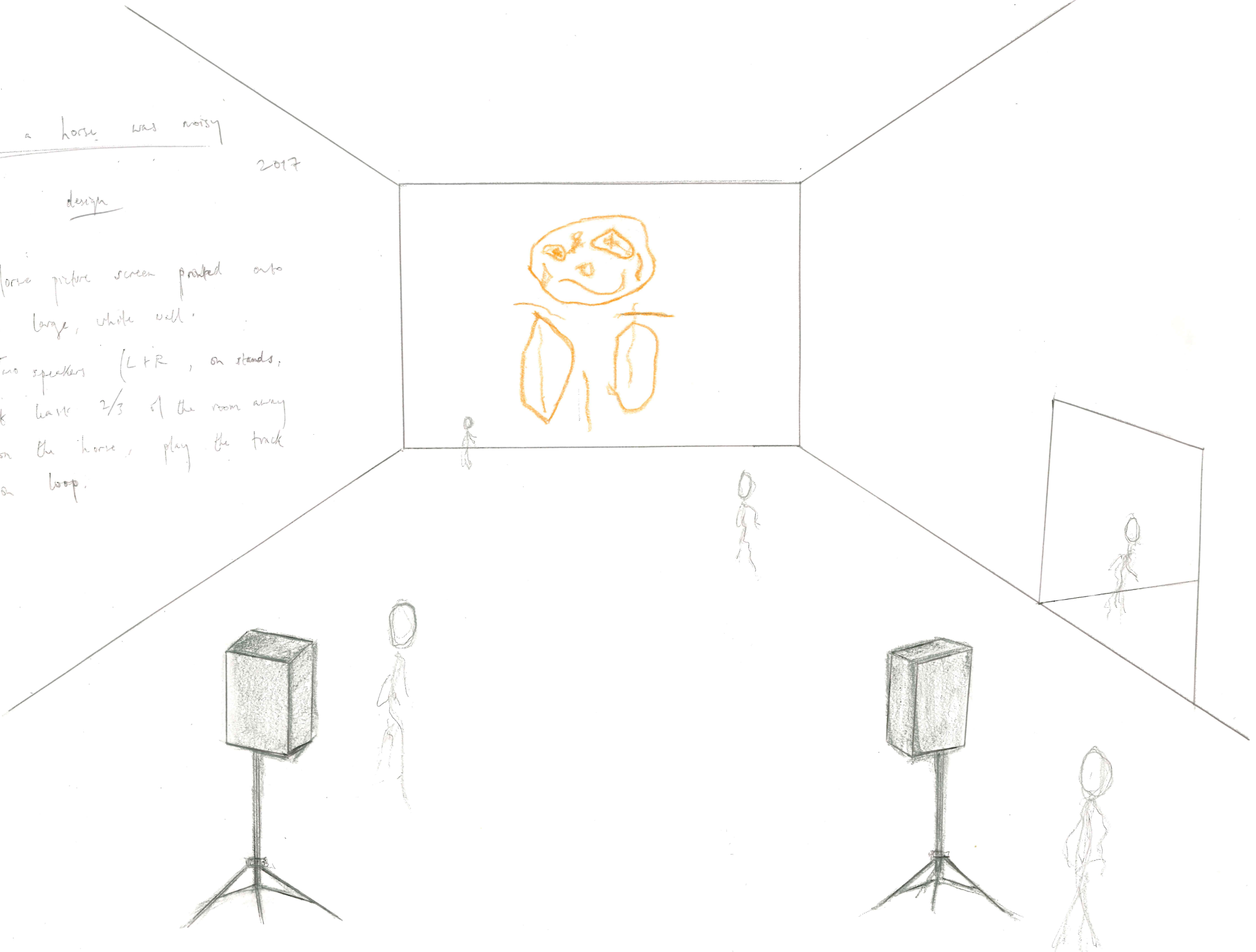
Once a horse was noisy

2017

design

Horse picture screen projected onto a large, white wall.

Two speakers (L+R, on stands, at least 2/3 of the room away from the horse, play the track on loop.



References

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[1] Filippo Tommaso Marinetti, ‘The Founding and Manifesto of Futurism’, in Umbro Apollonio, *Futurist Manifestos* (London: Tate Publishing, 2009), 21.
[2] Ibid., 22.
[3] Luigi Russolo, *The Art of Noises*, tr. Barclay Brown (New York: Pendragon Press, 1986), 23-30.
[4] Hugh Edwards, ‘Umberto Boccioni’, *The Art Institute of Chicago Quarterly*, 52:2 (1958), 26.

into Westfield auger

Installation: grain silo, grain, and tape.

Duration: 103 minutes (looped)

2017 and 2019

When someone falls into a large quantity of grain, it is very difficult for them to get out. Often, it is impossible, and they drown inside the grain.

This happened to Arthur Mason on his father's farm in 2014 when, unsupervised, he walked across the grain in a silo to try and push it down into the auger. Following the inquest into Arthur Mason's death, the Principal Investigator of the Health and Safety Executive stood outside the court and said:

We tend to view grain in the benevolent light of the fruit of the harvest, for this reason we might not always appreciate just how dangerous it is when it is stored in bulk. Grain may behave like quicksand with liquid-like properties and it may develop void spaces. Once anyone starts to sink it is extremely difficult to stop becoming engulfed even if help is immediately at hand.[1]

There is a strange and tragic beauty here which speaks to something much older. Grain is symbolic of life and death: the ancient Egyptian god/goddess Neper/Nepit was the deity of grain, but also formed part of Osiris, the ruler of the dead; the Babylonian god Dagan, the god of grain and fertility sits as one of the judges in the afterlife; the arid summers of ancient Mesopotamia were thought to be caused by the yearly death of Tammuz, the god of shepherds and of vegetation. I think this delicate balance is still capable of sparking an atavistic sense of fear.

In 2017, I was asked by Tandem Festival to create a site-specific performance installation in a disused grain silo (pictured below). On visiting the farm in which the silo stood, I discovered that the site was very close to a late-Neolithic/early-Bronze Age burial mound. My thoughts went to developing a piece that could explore the life-death balance that grain embodies.

The original performance was for live electronics, solo performer, and two piles of grain. The sounds were created through live transformations of a recording of grain being released from a silo through an auger (made by Westfield) – I find the resonances between “auger” and “augur” extremely interesting. There are ten tracks: tracks one to six were passed through “oil barrel” reverb and six different formant filters to bring out a kind of vocal quality; tracks seven to ten were passed through “storage space” reverb and resonators to bring out

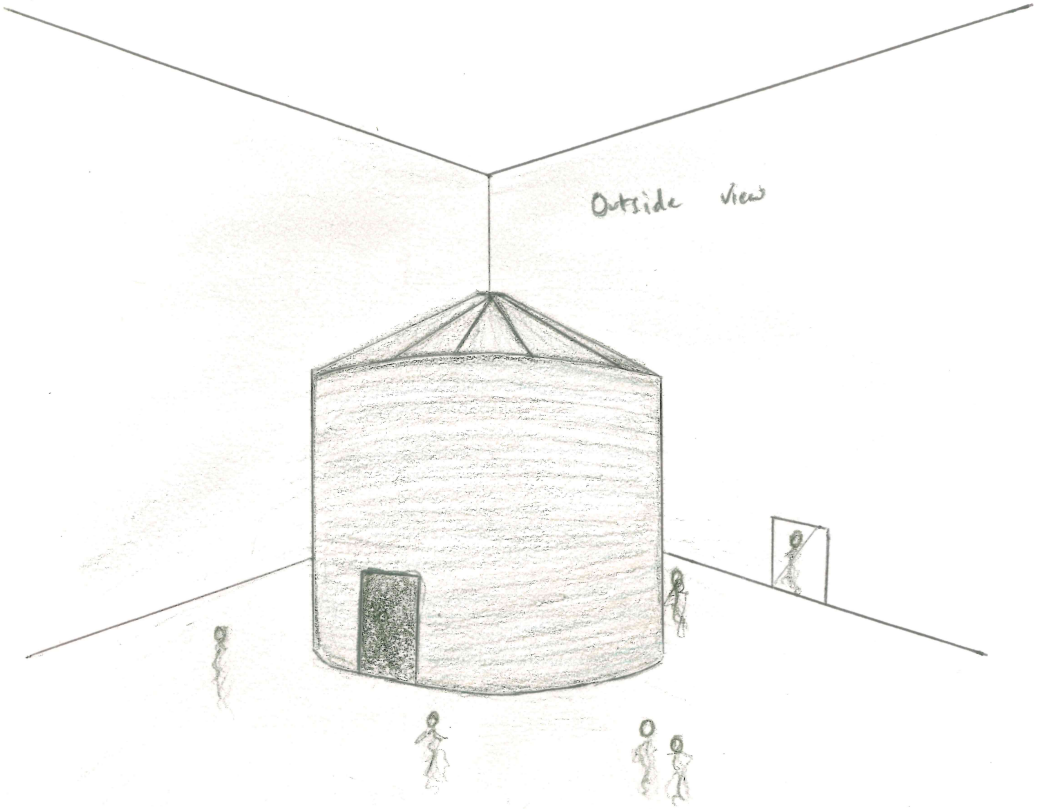
overtones, introduced in the second half of the performance. I made these transformations live over the space of about an hour and three quarters, during which the performer sat in the centre of the silo before two piles of grain, slowly moving the grains from one pile to another.

Grain silos, as objects, can be quite beautiful even before one considers any symbolism that might be attached to them, and they also have very interesting acoustic properties. So I have since turned the piece into an installation. As indicated in the design below, the installation consists of an actual grain silo in a gallery space that is dimly lit, but not so dim as to cause any hazard. The sounds, recorded from the original performance, are played on a loop into the silo through two speakers, mounted high up and as inconspicuously as possible. The floor of the silo is covered in grain, which is arranged in two mounds. People can move around the silo freely and are free to interact with the grain in any way they like.

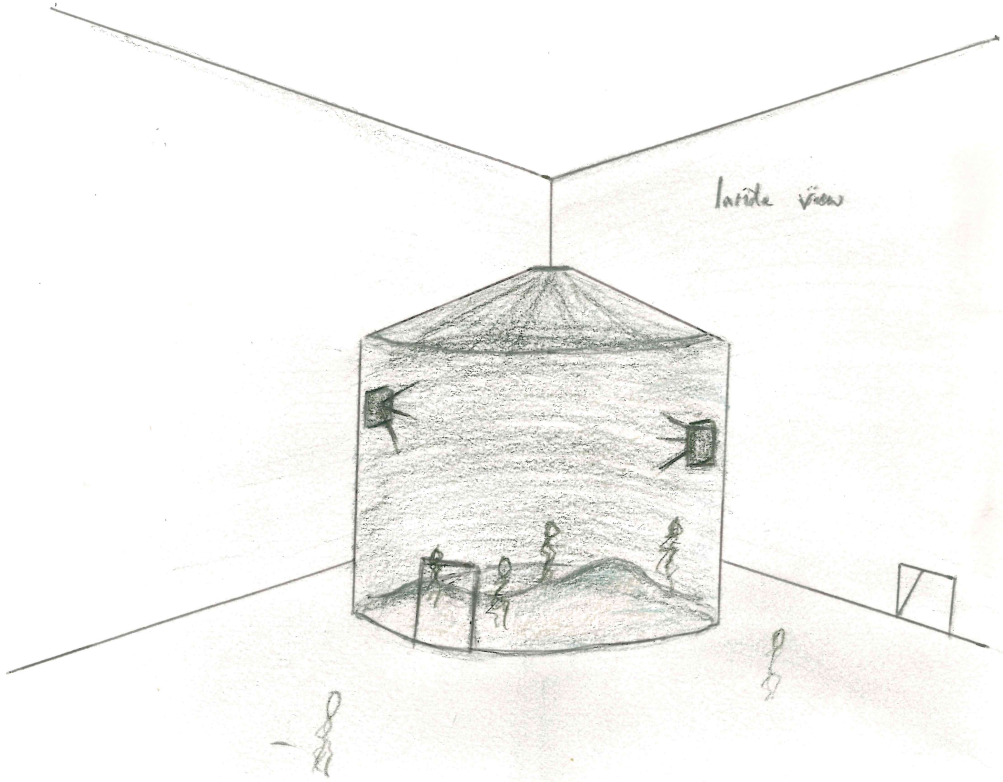
Into Westfield auger 2017

design

A grain silo in a large gallery space, dimly lit. Roof hatch opened to let in a small amount of light. Two wireless speakers (L+R), mounted inside the silo, high up on the walls, play the track on loop.



The floor of the silo is covered in grain (preferably wheat), arranged in two large mounds.



References

[1] *Watton and Swaffham Times*, 'This was Arthur's life and his joy': Farm Business fined £50,000 over Norfolk grain silo death of owner's son' https://www.wattonandswaffhamtimes.co.uk/news/this-was-arthur-s-life-and-his-joy-farm-business-fined-50-000-over-norfolk-grain-silo-death-of-owner-s-son-1-4926820, accessed 13th April 2019.

Thermi

Fixed media electroacoustic composition

Duration: 8’16’’

2016

In 2011, I visited the Greek island of Lesbos, staying outside a village called Thermi, named after the thermal springs that can be found in the area. A few minutes from Thermi are the ruins of the Sarlitza Palace Hotel, a once famous spa hotel built under Ottoman rule in 1909. Not long after, the Sarlitza Palace Hotel was abandoned but it stands there still, looking out to sea as it crumbles away.

It is very difficult not to want to explore abandoned space. I went inside, and found the remains of a piano, left in a corner of a room at the end of a ground floor corridor. The keys were missing, but most of the strings were still there, so I came back with my father’s mobile phone and took some recordings of the sounds made when the strings were plucked, determined to make a piece out of them.

Like a lot of things acquired on holidays, these recordings seemed rather less interesting once I had returned home; making a piece about a ruined piano began to feel a little trite. In 2015, though, my remembered images of Lesbos were drastically changed – hundreds, and then thousands, of refugees began to arrive each day on the beaches of Lesbos; hundreds, if not a thousand or more people died on the journey over the sea. Although coverage of this crisis has all but disappeared from our media, people are still there and still dying.

This unfolding tragedy motivated me to return to my recordings in 2016. I do not mean to equate, in any way, the seriousness of the refugee crisis with the closing of a hotel, but the new context of Lesbos had changed the resonance of the abandoned piano – the island had become a place of lostness.

I approached the sound source, a single plucked piano string, without any preformed ideas – this was the first time I had worked with material in this way – and let it play through various filters, allowing the sound's qualities to uncover themselves. In the end, the sound is looped through four tracks, modulated through different combinations of highly-compressed reverb, grain delays, left-right delays, and digital noise erosion. A "twanging" string, without my really noticing, started to sound like the sea and the wind, and echoes of voices seemed to emerge from this.

This year, returning to the piece for the first time since 2016, and wanting to remind myself of the Sarlitza Palace Hotel, I found some video footage of the hotel on YouTube, filmed by a small channel that makes films about the island. Incredibly, the sounds of the wind and the sea in that place, captured by the filmmaker's microphone, were nearly identical to the sound of my piece, made from something captured from a piano string, years before.

I recognise the danger of romanticising these sorts of things, but it really did seem then that something much broader was inscribed within the sound of the plucked piano string – traces of the wind and the sea, traces of the island's tragic context of lostness. By letting sounds speak, rather than trying to exercise control over them, these kinds of trace can be uncovered, opened up again as things that are alive to the changes that take place around them.