Composition as a Translational Process

Portfolio of Original Compositions with Critical Commentary

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List of Portfolio Materials

1) *Brumel Translated* (2019) for soprano voice, flute, B ♭ bass clarinet/B ♭ clarinet, duration approx. 6’ to 8’

   Score   Recording

   Performance: Clothworkers Centenary Concert Hall, University of Leeds, 9th December 2019, performed by Hannah Firmin (Soprano Voice), Elizabeth Wells (Flute), Benjamin Palmer (Clarinet)

2) *Sound Translations* (2019) for cello and piano, duration approx. 7’45” to 8’

   Score

3) *Remnant Echoes* (2020) for piccolo, B♭ bass clarinet, percussion, and double bass, duration approx. 20’00”

   Score   Part 1 Recording   Part 2 Recording

   Note: the recordings provided here are not actual performances, but mock examples of what a performance of the piece would entail. Due to the COVID-19 lockdown restrictions the performers were recorded separately in a studio. These recordings were then pieced together and layered.

4) *Attack Resonance Decay* (2019–2021): Cello Duet, Cello Solo, and Piano Solo, duration approx. 3’30” to 7’

   Cello Duet Score   Cello Solo Score   Piano Solo Score

   Cello Duet Recording   Piano Recording

   Performances: 1) Clothworkers Centenary Concert Hall, University of Leeds, 8th May 2019, performed by Jessica Jennings (Cello 1), Lewis Hammond (Cello 2)
   2) Clothworkers Centenary Concert Hall, University of Leeds, 6th December 2019, performed by Ian Pace (Piano)

5) *Exercices de style* (2020–2022) for any instrument/s or voice/s, and for any number of players, open duration

   Score   Clarinet Recording   Guitar Recording

   Violin Recording   Cello Recording

Performances: 1) Clothworkers Centenary Concert Hall, University of Leeds, 6th November 2021, 7:30pm, performed by Carlos Cordeiro (Clarinets)
2) Clothworkers Centenary Concert Hall, University of Leeds, 5th December 2021, performed by Hannah Firmin (Soprano Voice), Gabriel Jones (Piano), no recording available

6) *Translations for Piano* (2021) for solo piano, duration approx. 20’ to 30’
Score

7) *Pitch Rhythm Gesture* (2022) for solo B♭ bass clarinet, duration. approx. 10’ to 15’
Score

COVID-19 Notice

Please note that due to the restrictions put in place between March 2020–September 2021 as a result of the COVID-19 global pandemic, a lot of performances were cancelled and unable to go ahead. I therefore have less performances than I would have had if these regulations had not been in place throughout a large amount and key point of my AHRC funded PhD.

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Abstract

As a composer, I have always been interested in the practice of borrowing, re-composing, and the re-contextualisation of parameters or fragments from existing works, and how these can be transformed within their new setting to form innovative, creative works. This sparked an interest in examining how these works relate to their original as a linguistic translation connects to its original source. I was interested in applying linguistic and semiotic frameworks discovered in translation studies literature to the act of composition. My research question is thus 'how can concepts of translation be applied productively to a compositional environment, and what are the consequences of doing so?' Throughout this PhD I sought out key concepts within the field of translation, specifically those mapped out within Umberto Eco's *Mouse or Rat?: Translation as Negotiation*, such as translatability, carrying across and betrayal, foreignisation, domestication, and faithfulness. I utilise these notions as tools to either translate music from one period or style into another as seen in *Brumel Translated* (2019), or carry out translations across differing mediums, as seen in *Exercices de style* (2020–2022), where I translate a set of textual exercises into musical ones along with the general characteristics of the book. Further, I use these tools to timbrally and technically translate material composed for one instrument into that for another, as seen in *Sound Translations* (2019), *Remnant Echoes* (2020), and *Attack Resonance Decay* (2019–2021).

Through such pieces I explore several forms of translation recognised within linguistics and semiotic translation literature, such as Roman Jacobson's 'inter-lingual', 'intra-lingual', and 'inter-semiotic' translation. Alongside this I explore Henrik Gottlieb's 'intra-semiotic' translation, not recognised by Jakobson, and other linguistic practitioners, despite both inter- and intra-lingual translation falling into this category. Throughout this PhD I argue that the translational procedures, as seen within the practice of composition, can be documented as valid forms of translation, at least within the semiotic discipline: Gottlieb recognises such musical translation within his chapter 'Translation and semiotics' in *The Routledge Handbook of Translation Studies and Linguistics*. This discussion is delivered through a literature review, where I introduce concepts and practices of key practitioners in linguistic and semiotic translation studies. Next, I contextualise composers who claim to have employed translation within their work, along with a listing of musical processes which I recognise as translational acts, such as re-composition, borrowing, re-contextualisation, mapping and so on. I then analyse the works of this portfolio against translation studies concepts and disciplines within my critical commentaries. In the ultimate section, I discuss the consequences of using such translational techniques, and how this adapted my approach to material and structure, while pointing to key areas for potential further research in the field of music and translation.

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Introduction

The concept of 'translation' can play an important and creative part in composing music. Translation is a linguistic process that connects cultures, people and ideas and its etymology means 'to carry across'. However, there are occasions when the process of trying to convey one aspect results in the loss of another, and so an exact equivalence of the original is betrayed. This contradiction is famously recognised by the Italian pun discussed by Arthur Danto in his short essay, *Traduttore, traditore* which is translated as 'the translator is a betrayer'.[1] This contradiction can have enriching effects in creative arts where the phenomenon of translational betrayal is more readily found. This provides the basis of my research which will interrogate the structures of thinking that involve inter- and Intra-semiotic, inter- and intra-linguistic translational processes.[2] In this project I aim to use these concepts and demonstrate how they can serve as the basis for compositional thinking. I will investigate how translation can be an interdisciplinary catalyst for new creative practice. During this procedure, processes and techniques mirroring the notions of 'transport' will be developed into methodologies for composition. Specific practices which will be explored through my practice-research include self-translation, re-contextualisation/paraphrase, word for word/Morse code translation types, and referential translation. I will then examine their resemblance to the act of translation in linguistic and semiotic terms. My research question, then, is how can concepts of translation productively be applied to a compositional environment, and what are the consequences of doing so?

What follows in this document is a literature review of the area of linguistic translation studies, noting the recent shift in thinking from purely language-based approaches to semiotic thinking. This section concludes with how I reinterpret these linguistic and semiotic approaches into methods for pre- and post-compositional thinking. The next section considers the wider musical context of my research, offering examples of composers and music that either deliberately or implicitly deal with or demonstrate some aspects of translational procedure. A third section examines specifically how I have used the initial research in the area of my practice through several critically reflective commentaries. A final section concludes the outcome of this project while outlining future pieces and specific conceptual areas that could be the subject of future research.

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[1] Arthur C. Danto, 'Translation and Betrayal', *RES: Anthropology and Aesthetics*, 1, 32 (1997), 61–63.

[2] See *Part 1: Translation Studies: A Literature Review*, pp. 2–4 and '1.6 The Other Types: Intra-linguistic, Intra- and Inter-semiotic Translation', pp. 14–20 for definitions and examples of these terms. See '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for how I define them in musical terms.

Part 1 – Translation Studies: A Literature Review

Research has established that how one considers the term ‘translation’ is complex and ambiguous. In *On Linguistic Aspects of Translation*, Roman Jakobson identifies three main categories of translation: 1) intra-linguistic, 2) inter-lingual, and 3) inter-semiotic translation.[1] Jacques Derrida, however, casts doubt on the neatness of Jacobsen’s three categories by arguing that there is no such thing as a single language, and that all languages are impure: the ‘interstitial zone’ (as defined by Bartoloni) between source and target languages suggests that language itself changes every time it is translated.[2] Derrida uncovers this issue within the following statement:

> A translation puts us not in the presence but in the presentiment of what “pure language” is, that is, the fact that there is language, that language is language. This is what we learn from a translation, rather than the meaning contained in the translated text, rather than this or that particular meaning. We learn that there is language, that language is of language, and that there is a plurality of languages which have that kinship with each other coming from their being languages.[3]

Umberto Eco critiques Jakobsen’s three definitions further by querying that what he is suggesting is that translation is the same thing as interpretation. Jakobson refers to each form of translation as being an interpretation of one set of verbal signs by means of another.[4] Eco states that he agrees with Gadamer’s view that ‘every translator is an interpreter’.[5] However, Eco goes on to suggest that the notion of every interpretation being a form of translation is problematic, since interpretation is a much broader area of thought with many complex layers.[6] He makes this clear in the following example:

> […] suppose that I am following a play in a language I do not know well enough. When an actor utters something, I notice that the other people on stage (and probably also people in the audience) are laughing, so I infer that the actor said something funny. These laughs act as an interpretant of the first actor’s utterance, telling me that he told a joke; but they do not tell me what the joke was about.[7]

---

[1] Intra-linguistic Translation: ‘an interpretation of verbal signs by means of other signs of the same language’; Inter-linguistic Translation: ‘an interpretation of verbal signs by means of some other language’; Inter-semiotic Translation: ‘an interpretation of verbal signs by means of signs of nonverbal sign systems’. These definitions can be identified in Roman Jakobson, ‘On Linguistic Aspects of Translation’ in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 145.

[2] Jacques Derrida, *The Ear of the Other: Texts and Discussions with Jacques Derrida* (Lincoln: University of Nebraska Press, 1985), p. 124. Also, see Paolo Bartoloni, ‘Translation Studies and Agamben’s Theory of the Potential’, *CLCWeb: Comparative Literature and Culture*, 1, 5 (2003), 1–10 (p. 7) for a further definition of this zone.

[3] Derrida (1985), p. 124.

[4] Umberto Eco, *Mouse or Rat?: Translation as Negotiation* (London: Orion Books, 2003), p. 125, and Jakobson, p. 145.

[5] Eco (2003), p. 125.

[6] Ibid., pp. 125–126.

[7] Ibid., p. 126.

He then continues, explaining all the other levels of context which this interpretant does not offer him, such as why the other actors are laughing or what kind of joke it was and makes clear that ‘something can act as an interpretant of a given expression without being a translation of it, at least in the proper sense of the word’.[8]

In his article on Jakobson’s tripartite division, Hongwei Jia also critiques Jakobson’s model by pointing out that it does not account for semiotic translation from intangible signs into tangible signs, or vice versa, or the translation from tangible signs into other tangible signs.[9] Gideon Toury further criticises the model by pointing out its linguistic bias, and constructed his own two-way model: 1) intrasemiotic, further divided into inter-linguistic and intra-linguistic translation processes, and 2) intersemiotic translation, involving the translation from verbal to non-verbal signs.[10] However, as stated by Jia: ‘he did not take into account the role of nonverbal signs in this transformation, or that of translation activity in the broad sense from the outline of thoughts into textural presentations’, or more importantly to this project: the translation of music into music.[11] A better, but more complex model was constructed by Eco:[12]

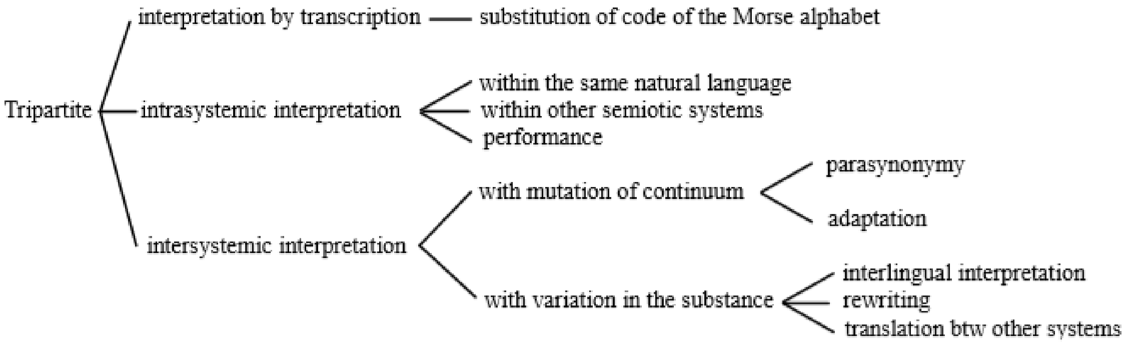
Tripartite
interpretation by transcription
substitution of code of the Morse alphabet
intrasystemic interpretation
within the same natural language
within other semiotic systems
performance
intersystemic interpretation
with mutation of continuum
parasynonymy
adaptation
with variation in the substance
interlingual interpretation
rewriting
translation btw other systems

Figure 1-1: Eco’s Tripartite Division

In this model Eco recognises translation ‘within other semiotic systems’ which allows for what I term ‘intra-semiotic’ translation: the process by which one set of non-linguistic signs are translated into those of the same non-linguistic sign system. Such a practice might involve the translation of a picture into another picture (e.g. Bacon’s *Three Screaming Popes*) or, in my case, music into music. This reconstruction of Jakobson's tripartite division, along with Jakobson's original will serve as the basic structural model for this project and will be re-thought to fit the purpose of musical translation.[13]

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[8] Ibid., p. 127.

[9] Translation from intangible signs to tangible ones: from thoughts to written text, for example. Translation from tangible signs to other tangible signs: from entities to images, see Hongwei Jia, ‘Roman Jakobson’s Triadic Division of Translation Revisited’, *Chinese Semiotic Studies*, 1, 13 (2017), 31–46 (p. 33).

[10] Gideon Toury, ‘Translation: A Cultural-semiotic Perspective’, in *Encyclopaedic Dictionary of Semiotics*, ed. by Thomas A. Sebeok (Berlin: Mouton de Gruyter, 1986), pp. 1111–1124, also see Mona Baker, ed., *Routledge Encyclopaedia of Translation Studies* (London: Routledge, 1998), p. 220, also quoted in Jia (2017), pp. 33–34.

[11] Jia (2017), p. 34.

[12] Umberto Eco, *Experiences in Translation* (Toronto: University of Toronto Press, 2001), pp.100–128.

The following part of this literature review will first discuss aspects to consider during translating: context, content, expression, form, substance and continuum. I shall focus on the following key themes within translation studies: source and target languages, equivalence, carrying across and betrayal, faithfulness, foreignisation and domestication. I will consider the following types of translation: referential, word for word, inter- and intra-linguistic, inter- and intra-semiotic translation processes as well as self-translation. The literature review will end with a discussion on how translation may be re-thought in musical terms, as well as how my musical translation may serve as an innovative addition to these ways of thinking.

1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum

The complexity of individual linguistic systems, each including their own set of rules, sentence structures, and differing vocabulary, often does not allow for the simple process by which the translator merely finds an exact equivalent for every word forming a supposed source text, as 'literal translation' seems to suggest. This is made clear by Eco in his first chapter of *Mouse or Rat?: Translation as Negotiation* where he performs an experiment using online translation databases.[14] This experiment demonstrates that, due to the computer's limited abilities, unable to put individual words into context, the translations rendered by this tool, to a degree, are incomprehensible.[15] Eco explains: 'The conclusion of my experiment is that in order to translate, one must know a lot of things, most of them independent of mere grammatical competence'.[16] Eco then goes on to discuss how 'language designs its own world view' in relation to Hjelmslev's structural semiotic model:

> According to Hjelmslev, a natural language (and, more generally, any semiotic system) consists of a plane of expression and a plane of content which represents the universe of concepts that can be expressed by that language. Each of these planes consists of form and substance and both are a result of the organisation of a pre-linguistic continuum.[17]

These complex layers of language suggest a word for word rendering of a source to be invalid, since individual words can be attached to several different meanings, as Octavio Paz explains: 'Every word holds a certain number of implicit meanings; when one word is combined with others to make up a phrase, one of those meanings is activated and becomes predominant'.[18] For this reason Paz believes that translation, in the literal sense, is not translation:

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[13] See '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for an explanation of what this diagram represents in relation to my practice.

[14] Eco (2003), pp. 10–18.

[15] Ibid., p. 15.

[16] Ibid., pp. 17–18.

[17] Ibid., p. 21; also see Louis Hjelmslev, *Prolegomena to a Theory of Language* (Madison: University of Wisconsin Press, 1969) for further explanation of these terms.

> I do not mean to imply that literal translation is impossible; what I am saying is that it is not translation. It is a mechanism, a string of words that helps us to read the text in its original language. It is a glossary rather than a translation, which is always a literary activity. Without exception, even when the translator's sole intention is to convey meaning, as in the case of scientific texts, translation implies a transformation of the original.[19]

This is supported by Arthur Schopenhauer who, when discussing the differences between languages, claims 'this difference does not leave room for a word-to-word rendering but requires that we melt down our thoughts entirely and recast them into a different form'.[20] He demonstrates this with an example:

> The translation into Latin often requires a breakdown of a sentence into its most refined, elementary components (the pure thought content) from which the sentence is then regenerated in totally different forms.[21]

Walter Benjamin's discussion of the differences in intention between words which name the same object is also a good example of where an exact equivalence is not achieved in its translation.

> The words *Brot* and *pain* "intend" the same object, but the modes of this intention are not the same. It is owing to these modes that the word *Brot* means something different to a German than the word *pain* to a Frenchman, that these words are not interchangeable for them, that, in fact, they strive to exclude each other. As to the intended object, however, the two words mean the very same thing.[22]

A similar example is demonstrated by Jakobson, when discussing the translation of the word cheese from English into Russian:

> There is ordinarily no full equivalence between code-units, while messages may serve as adequate interpretations of alien code-units or messages. The English word "cheese" cannot be completely identified with its standard Russian heteronym "сыр," because cottage cheese is a cheese but not a сыр. Russian heteronyms say: принеси сыру и творогу "bring cheese and [sic] cottage cheese." In standard Russian, the food made of pressed curds is called сыр only if ferment is used.[23]

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[18] Octavio Paz, 'Translation: Literature and Letters', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 158.

[19] Ibid., p. 154.

[20] Arthur Schopenhauer, 'On Language and Words', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 35.

[21] Ibid.

[22] Walter Benjamin, 'The Task of the Translator', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 75.

[23] Jakobson, pp. 145–146.

The above discussion reveals, in José Ortega y Gasset's words, that translation 'is an excessively demanding task'.[24] The complexity of each individual language doesn't allow for the Morse code type of translation discussed by Eco along with definitions from *Webster's dictionary*: the process by which one is 'to transfer or turn from one set of symbols into another'.[25] The following sections will discuss ways in which translators tackle these language obstacles, as well as discuss specific translation theory themes and approaches.

1.2 Source into Target and Equivalence

In linguistic translation, there is always a 'source text' and a 'target text', the latter being the translation of the original. In each case, the translator's task is to carry over the source's meaning and content to the target language. In doing so, the translator hopes to achieve 'equivalence', at least to some degree. However, it has been debated as to what extent one should seek for this equivalence, or even to what degree equivalence is possible (as discussed above).[26] After all, as Hugo Friedrich says, 'Translation is seen as a contest with the original text'.[27] From John Dryden's point of view, translation should be as literal as possible:

> All translation, I suppose, may be reduced to these three heads. First, that of metaphrase, or turning an author word by word, and line by line, from one language to another […]. The second way is that of paraphrase, or translation with latitude, where the author is kept in view by the translator, so as never to be lost, but his words are not strictly followed as his sense; and that too is admitted to be amplified, but not altered […]. The third way is that of imitation, where the translator (if now he has not lost his name) assumes the liberty, not only to vary the words and sense, but to forsake them both as he sees occasion; and taking only some general hints from the original, to run division on the groundwork, as he pleases.[28]

Dryden's strict and archaic outlook on what a good translation should convey suggests a word for word rendering of the original to be the truest form of translation. However, in a sense, this is problematic, not only for the scope of the musical translations in this project, but also since an exact equivalence between two contrasting linguistic tongues is often impossible. As Schopenhauer states:

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[24] José Ortega y Gasset, 'The Misery and the Splendor of Translation', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 94.

[25] Eco (2003), p. 9, and Merriam Webster, 'Translation', in *Merriam-Webster: Since 1828*, Dictionary <https://www.merriam-webster.com/dictionary/translation> [accessed 22 August 2019].

[26] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6.

[27] Hugo Friedrich, 'On the Art of Translation', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 13.

[28] John Dryden, 'On Translation', in Ibid., p. 17.

> Not every word in one language has an exact equivalence in another. Thus, not all concepts that are expressed through the words of one language are exactly the same as the ones that are expressed through the words of another.[29]

In Schopenhauer's opinion: 'Even in the realm of prose, the most nearly perfect translation will at best relate to the original in the same way that a musical piece relates to its transposition in another key'.[30] This approach to translation is shared by Cicero, who discusses his method of translation, not as an exact word for word rendering, but one which 'reflects the general stylistic features (*genus*) and the meaning (*vis*) of the foreign words'.[31] Cicero describes his practice of translation as translating 'the ideas, their forms, or as one might say, their shapes; however, I translate them into a language that is in tune with our conventions of usage'.[32]

Cicero's approach to translation is not that dissimilar to what Eco describes as a 'referential equivalence': 'In very simple terms a translation should convey the same things and events as the original', as opposed to Dryden's literalist view where one must remain faithful to every possible detail of the original language.[33] For Eco, the translator must decide what they believe to be the most important features of the text via their own interpretive analysis. For example, when translating a novel, 'In order to make the 'deep' story of a chapter or of an entire novel detectable, translators are entitled to change several 'surface' stories'.[34] Backing Eco's interpretive view of translation is Octavio Paz who suggests that 'in its first phase, the translator's activity is no different from that of a reader or critic: each reading is a translation, and each criticism is, or begins as, an interpretation.'[35]

Although not exactly a novel, a good example of where a referential approach to translation has been taken, can be demonstrated by Eco's discussion on how he translated Queneau's *Exercices de style* into Italian.[36] Eco explains how the word games that Queneau plays throughout this book often require him, not to simply translate what the author had written, but instead, 'to try playing the same word game, following the same rules, in another language'.[37] He explains further:

> Some exercises are clearly concerned with content (the basic text is modified by litotes, in the form of a prediction, a dream, a press release, etc.) and can be translated more or less literally. Others are concerned with expression (there are word games with anagrams, permutations by an

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[29] Schopenhauer, p. 32.
[30] Ibid., p. 33.
[31] Cicero, quoted in Friedrich, p. 12.
[32] Ibid.
[33] Eco (2003), p. 62.
[34] Ibid., p. 72.
[35] Paz, p. 159.
[36] Raymond Queneau, *Exercises in Style*, trans. Barbara Wright (New York: New Directions, 1981) is a book, originally written in French, which tells the same story 100 times through a series of reinterpretations, textural exercises and writing styles.
[37] Eco (2003), p. 77.

> increasing number of letters, lipograms, onomatopoeia, syncope, metathesis), etc. There was nothing else for it but to rewrite.[38]

Eco then goes on to discuss specific examples of how he did this along with his reasoning.[39] The vast variety, on what equivalence in a translation could look like, depending upon what the translation must convey to carry across the original's underlying features, prove to be useful models to consider. They provide possible paths in which to follow during my own musical translations.

In the above text I have discussed both the basic design of translation, where there is a source and target text, as well as ways in which a translator may choose to get from the original to the destination language. The following section focuses on how the assistance of two opposite approaches to translation can assist the translational process from source to target. I discuss how the target text can be source- or target-orientated within the translation, along with specific examples of the two practices.

1.3 'Foreignisation' and 'Domestication'

When translating a text, the translator may choose to 'move the reader toward the language of the writer' by 'foreignising' the target text or, alternatively, the translator may choose to 'domesticate' the target language and thus 'move the writer toward the language of the reader'.[40] A foreignised approach can be demonstrated by Thomas L. Short's example regarding the French saying *mon petit chou*. Eco explains, in relation to this phrase:

> If one translates literally as *my little cabbage* the expression could sound insulting. Short suggests *sweetheart* but admits that this misses the humorous contrast, the affectionate nuance and the sound of *chou* ('or even the way the lips must be shaped to make that sound'). Certainly *sweetheart* is a good example of domesticating the translation, but if the scene takes place in France I think that one should preserve the French expression. Perhaps the reader will not understand the right meaning of those sounds but they will detect something very French-like and would guess that this is how French people speak when they are in love.[41]

An example of the latter, reader-orientation style can be demonstrated with Martin Luther's exclamation:

> If I followed those Jackasses, they would probably set the letters before me and have me translate it 'out of the abundance of the heart the mouth speaketh'. Tell me, is that how any real person would speak?...What on earth is 'the abundance of the heart'?...What the mother in her house and the common man would say is something like: 'speak straight from the heart!'[42]

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[38] Ibid., pp. 77–78.

[39] Ibid., pp. 78–79.

[40] The terms 'foreignisation' and 'domestication' were adopted from Eco (2003), pp. 89–96.

[41] Short, p. 78, quoted in Eco (2003), p. 91.

[42] Luther, p. 87, quoted in Eco (2003), pp. 89–90.

Here Luther, believes that the Latin text (*Ex abundantia cordis os loquitur* from Matthew 12:34) should be translated into German, and hence domesticated. This latter process, domestication, has been widely criticised throughout the history of translation studies with claims which appear to deem the concept unfaithful to its original. Ortega y Gasset, in *The Misery and Splendour of Translation*, views the process negatively and as improper translation:

> In the first case, we do not translate, in the proper sense of the word; we, in fact, do an imitation, or a paraphrase of the original text. It is only when we force the reader from his linguistic habits and oblige him to move within those of the author that there is actually translation. Until now there has been nothing but pseudotranslations.[43]

Ortega y Gasset's statement claims that a true translation should make it clear that this is what it is, in the sense of Walter Benjamin's aphorism 'a real translation is transparent; it does not cover the original'.[44] Pannwitz seems to agree:

> Our translations, even the best ones, proceed from the wrong premise. They want to turn Hindi, Greek, English into German instead of turning German into Hindi, Greek, English. Our translators have a far greater reverence for the usage of their own language than for the spirit of the foreign works.[45]

These claims deeming a foreignised approach to translation as being the desired and more faithful of the two methods are challenged by Eco in *Mouse or Rat?: Translation as Negotiation*. Eco discusses the two approaches in relation to his own experiences as a translator, or those with translators of his own work in a sense that suggests the two methods to be equally accepted, as opposed to favouring one above the other.[46] In Eco's opinion: 'The choice between foreignising or domesticating is really a matter of negotiation'.[47]

In the above discussion the two methods are considered separate practices; however, this raises a question: what happens if one were to mix the two processes? In Schleiermacher's opinion this method is problematic:

> Either the translator leaves the writer alone as much as possible and moves the reader toward the writer, or he leaves the reader alone as much as possible and moves the writer toward the reader. Both paths are so completely different from one another that one of them must definitely be adhered to as strictly as possible, since a highly unreliable result would emerge from mixing them, and it is likely that author and reader would not come together at all.[48]

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[43] Ortega y Gasset, p. 108.
[44] Benjamin, p. 79.
[45] Pannwitz, quoted in Ibid., p. 81.
[46] Eco (2003), pp. 89–96.
[47] Ibid., p. 94.
[48] Friedrich Schleiermacher, 'On the Different Methods of Translating', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 42.

Eco claims this statement is out-dated, and out of touch with the modern texts of today. It is Eco's belief that 'to choose a target- or source-orientated direction is, once again, a matter of negotiation to be decided at every sentence'.[49] The view that a domesticated or foreignised approach can be taken on a sentence level is most appropriate for this project which aims to, like Eco, challenge Schleiermacher's narrow opinions.

1.4 Contradictions in Translation: 'Carrying Across' and 'Betrayal'

During the process of translating, such as in those instances discussed above, the translator's goal is to 'carry across' what they believe to be the key features of the original text over to the target language in order to achieve the desired equivalence discussed earlier.[50] However, in doing so, the translator often has to work at a loss, and thus certain elements are 'betrayed' in the target text. This issue is discussed in detail within Eco's chapter two (entitled 'Losses and gains') of his *Mouse or Rat?: Translation as Negotiation*. Here Eco states: 'there are cases in which, talented as they are, translators are obliged to work at a loss'.[51] Eco goes on to explain this declaration with an example of when he himself had to accept a loss in the translation of his novel *Baudolino*. In this novel Eco 'invented a pseudo-medieval North Italian language', 'inspired […] by memories of the local dialect that [he] heard as a young boy'.[52] In order to retain the essence that this invented historical dialect creates for those Italian readers of Eco's novel, the translator must aim at finding a similar slang-like language in their own tongue, which Eco claimed to be problematic:

> These pages created many problems for my translators. In the same period in England, Middle English existed, but it was a language which would be absolutely incomprehensible for a contemporary English speaker. And Baudolino did not live in England. To opt for a more modern dialect would have obliged Bill Weaver to choose a given Anglo-Saxon area, with the risk of making Baudolino speak, let's say, like Li'l Abner.[53]

Eco follows this with a list of equivalent vernaculars to his pseudo-medieval North Italian dialect, to form a similar impression in the French, German, and Spanish translations of his novel. However, he concludes that:

> In all these cases it is impossible for the foreign reader to smell any original Northern Italian vernacular fragrance. In the hands of my translators the language of Baudolino became funny, full of linguistic inventions and new coinages, but it was no longer the language of a young and illiterate Piedmontese boy. And it was impossible for them to have done otherwise.[54]

In another example, Eco discusses a case where, in order to create the same effect in the target language, the translator had to change the specific references from Eco's 'concettismo'

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[49] Eco (2003), p. 100.

[50] See '1.2 Source into Target and Equivalence', pp. 6–8.

[51] Eco (2003), p. 34.

[52] Ibid., pp. 34–35.

[53] Ibid., p. 35.

[54] Ibid.

Italian quotes to her similar styled Spanish versions, that are derived from texts of the Siglo de Oro.[55] Eco views this as a positive change to his original:

> I think that this rewriting represents an act of fidelity and that the Spanish text produces exactly the effect aimed at by the Italian original. It is true that a sophisticated reader would realise that all references are to Spanish and not Italian poetry, but the story takes place in a historical period where Northern Italy was largely under Spanish influence, and Lozano made clear 'the condition for using the material was that it was poorly known'. Moreover, Lozano made a collage of different texts, so that it was difficult even for Spanish readers to identify the sources. They were rather invited to 'smell' a cultural climate. Which was exactly what I wanted them to do when I wrote the Italian.[56]

Loss is not always perceived as a positive though, as expressed by those negative literalist's views earlier.[57] Sharing this negative take on betrayal is Ortega y Gasset who claims, when discussing the success of the German versions of his Spanish books, that this is 'because my translator has forced the grammatical tolerance of the German language to its limits in order to carry over precisely what is not German in my way of speaking'.[58] This, of course, in the sense discussed earlier, also ties in with his preference for a foreignised approach to translation.[59] This strict approach to translation, mentioned by Gasset here, suggests that having the reader stumble through reading a Spanish orientated German translation, is better than the possibility of any of his original language to be betrayed. In opposition to this view is Hans Erich Nossack, who in *Translating and Being Translated* says that to merely translate the text grammatically is not enough: 'to repeat once more: a translated book that is merely grammatically correct is hardly more than a mannequin draped in the colours of a foreign country. There is no breath of life'.[60]

An interesting case where, in order to successfully translate an Italian saying into English, one must say more, is discussed by Jakobson. Paradoxically, he uses the Italian pun discussed in the introduction: 'Traduttore, taditore', which translates as 'the translator is a betrayer' in order to discuss betrayal:

> If we were to translate into English the traditional formula *Traduttore, taditore* as "the translator is a betrayer", we would deprive the Italian rhyming epigram of all its paronomastic value. Hence a cognitive attitude would compel us to change this aphorism into a more explicit statement and to answer the questions: translator of what messages? betrayer of what values?[61]

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[55] Ibid., p. 58.

[56] Ibid., p. 59.

[57] See Dryden's quote in '1.2 Source into Target and Equivalence', pp. 6–8 and Pannwitz in '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[58] Ortega y Gasset, p. 112.

[59] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[60] Hans Erich Nossack, 'Translating and Being Translated', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 230.

[61] Jakobson, p. 151.

As evidenced in the above discussion, despite the underlying concept that the translator must remain 'faithful' to the original text, while working within the strict confinements that this practice proposes, the translator, in all efforts to remain true to the source, will also have to betray.[62] In the next section, then, this underlying view that the translator must remain faithful will be discussed.

1.5 Faithfulness

Historically, the notion of remaining faithful to the original when carrying across the key features from a source text over to the target text has been/is crucial to the validity of the translation. However, to what degree should, in Friedrich's words: these 'translators find themselves constantly restricted by those language boundaries and by the pressing necessity to remain, as closely as possible, faithful to the original text'?[63] For Henry Schogt, the translator must decide what elements are vital to the translation:

> The translator has to decide whether to maintain the cumbersome element, to replace it, or to leave it out. His choice will often depend on the public he is translating for. His role as encoder in the target language after decoding the source language puts him in the position that Prieto describes, where the precise form of the message is adapted to presumed knowledge and background of the receiver and, one might add, in some instances to his expectations.[64]

This is not dissimilar to the approach described by Eco earlier in the document, where the translator, depending on what the main point to be carried across is, negotiates the features which go/don't go into the translation.

In opposition to Schogt, in the sense that he puts a lot of emphasis on the translator's decisions being made in relation to the receiver, Benjamin claims quite the opposite: 'No poem is intended for the reader, no picture for the beholder, no symphony for the listener'.[65]

Paz's view, when discussing the translation of poetry, is a rather interesting outlook on what a translation should look like in relation to its original:

> The result is a reproduction of the original poem in another poem that is, as I have previously mentioned, less a copy than a translation. The ideal of poetic translation, as Valéry once superbly defined it, consists of producing analogous effects with different implements.[66]

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[62] This is later demonstrated in my own musical translations where in order to translate the original material into different target forms, some original features are lost to fit the new confinements of the target language, and to retain the most important features: see '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26, and '3.2 Brumel Translated (2019)', pp. 56–64, for some examples.

[63] Friedrich, p. 11.

[64] Henry Schogt, 'Semantic Theory and Translation Theory', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 201.

[65] Benjamin, p. 71.

[66] Paz, p. 160.

This statement suggests that, in the translation of poetry, the translator produces a new poem that is relative to the original, but not necessarily an exact copy, or word for word rendering of it. Hence, faithfulness, in this scenario, means to create a similar effect as the original poem, in terms of its meaning and impression, but not to reproduce it in its entirety.[67] This ties in with Benjamin's statement:

> On the other hand, as regards the meaning, the language of a translation can – in fact, must – let itself go, so that it gives voice to the *intentio* of the original, not as reproduction but as harmony, as a supplement to the language in which it expresses itself, as its own kind of *intentio*.[68]

Here, like Paz, Benjamin suggests that the translator may/should not remain faithful to the specific language of the original, so long as they carry across its intention. What is also thought-provoking about Benjamin's statement is how he regards the translation to form an intention of its own. Paz pushes this idea further by claiming that creation is on the same level as translation:

> Translation and creation are twin processes. On one hand, as the works of Baudelaire and Pound have proven, creation is often indistinguishable from translation; on the other hand, there is constant interaction between the two, a continuous, mutual enrichment.[69]

Claiming that translation is a creative process would be seen as problematic to an older theoretician such as Dryden, who claims that, when translating, he aims to remain as close to his author as possible: by 'taking all the materials of this divine author' he 'endeavoured to make Virgil speak such English as he would himself have spoken, if he had been born in England, and in this present age'.[70] However, as discussed earlier with Eco, the style of translation to be used is a matter of negotiation, that depends upon both the purpose of the translation, and the message which is to be carried across.[71] This runs hand in hand with how literal/faithful one must be to the original. For instance, if one were translating a manual explaining the mechanics of an airplane control system, a more or less literalist approach should probably be undertaken, in order to avoid confusion and a potential incidence of death. Contrariwise, the translation of poetry can be achieved via a more referential approach, in the sense discussed earlier.[72] Translating poetry cannot only be about translating meaning, as Paul Valéry explains:

> This is because the finest verses in the world are trivial or senseless once their harmonic flow has been broken and their sonorous substance altered as it develops within the time peculiar to their

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[67] This ties in nicely with the outcome of my musical translations which, like poetry, result in more of a reproduction of the original work in another work, see '3.2 Brumel Translated (2019)', pp. 56–64.

[68] Benjamin, p. 79.

[69] Paz, p. 160.

[70] Dryden, p. 26.

[71] See '1.3 'Foreignisation' and 'Domestication'', pp. 9–10.

[72] See '1.2 Source into Target and Equivalence', pp. 6–8.

> measured movement, and once they have been replaced by an expression of no intrinsic musical necessity and no resonance.[73]

In poetry, the form and style are equally important features to be carried across, and thus to remain faithful one must consider these elements too. For this reason, Yves Bonnefoy believes poetry to be untranslatable: 'The answer to the question, "can one translate a poem?" is of course no. The translator meets too many contradictions that he cannot not eliminate; he must make too many sacrifices'.[74] However, Benjamin's description of a translation is at odds with Bonnefoy's sceptical view:

> For in its afterlife – which could not be called that if it were not a transformation and a renewal of something living – the original undergoes a change. Even words with fixed meanings can undergo a maturing process.[75]

Perhaps those significant changes which Bonnefoy reflects upon could be considered to have undergone the same transformation and renewal process as Benjamin suggests here.

The above discussion has drawn attention to the fact that what one considers to be faithful within a translation is diverse as well as dependent on the translation's purpose. Turning away from specific matters in translation theory, the following section will focus on specific forms of translation, such as what Jakobson terms Intra-linguistic and Inter-semiotic translation, but also the one that he doesn't recognise, but which is vital to this project: Intra-semiotic translation.

1.6 The Other Types: Intra-linguistic, Intra- and Inter-semiotic Translation

1.6.1 Intra-linguistic Translation

In the above exposition, the examples have predominantly focused on translation between two opposing linguistic systems: inter-linguistic translation (the translation of one language into another). However, translation need not be confined to this type. What Jakobson terms intra-linguistic translation, as discussed in the introduction, involves 'an interpretation of verbal signs by means of other signs of the same language'.[76] Jakobson describes an instance which demonstrates this practice in action:

> The Intralingual translation of a word uses either another, more or less synonymous, word or resorts to a circumlocution. Yet synonymy, as a rule, is not complete equivalence: for example, "every celibate is a bachelor, but not every bachelor is a celibate." A word or an idiomatic phrase-word, briefly a code-unit of the highest level, may be fully interpreted only by means of an equivalent combination of code-units, i.e., a message referring to this code-unit: "every bachelor is an

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[73] Paul Valéry, 'Variations on the Eclogues', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 116.

[74] Yves Bonnefoy, 'Translating Poetry', in *Theories of Translation: An Anthology of Essays from Dryden to Derrida*, eds. Rainer Schulte and John Biguenet (Chicago: The University of Chicago Press, 1992), p. 186.

[75] Benjamin, p. 74.

[76] Jakobson, p. 145.

> unmarried man, and every unmarried man is a bachelor" or "every celibate is bound not to marry, and everyone who is bound not to marry is a celibate."[77]

A creative example of intra-linguistic translation can be demonstrated through a poem by Bergvall. The work, titled *Via*, comprises a collation of the opening lines from Dante's *Inferno* from several English translations.[78] Throughout this poem the reader begins to notice the alterations in the language between the translations, which depend upon the different eras in which the translation was completed. Bergvall's decision not to put these translations in chronological order heightens this feature, since modern and archaic language is in constant fluctuation.[79]

A similar demonstration of the practice, although not purely intra-lingual since it collates both foreign and English translations, can be identified in *19 Ways of Looking at Wang Wei* by Eliot Weinberger.[80] Here Weinberger gives a commentary on a succession of translations of Wang Wei's (c. 700–761) Chinese poem. In doing so, although perhaps not intentional, through discussing the transformation of this short poem, Weinberger demonstrates the act of translation within the same language, as well as the 'evolution of the art of translation in the modern period' and at the same time 'the changes in poetic sensibility'.[81]

One may also consider, Queneau's *Exercices de style*, originally written in French, as a form of intra-lingual translation, in the sense that, the same story is regenerated into a series of different forms, all within the same language.[82]

Some more widespread uses of intra-lingual translation, which are used for practical reasons in our everyday life, include making 'syntactically complex and expert-sounding texts easier to read for a non-expert. The focal point here is adapting the message to a different – yet still domestic – audience'.[83] This is common when public authorities want to transmit information to their clients and voters more successfully. Alternatively, there are instances where a target text is offered as a substitute to the original. These texts are targeted at the same viewers and written in the same language, and may involve reduced versions of manuals, extended forms of magazine articles, and so on.[84] An example of a more adaptational common use of translation includes the remaking of a domestic film classic, where dated features of the script are updated and modernised.[85]

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[77] Ibid.

[78] Dante and Caroline Bergvall, 'Via (48 Dante Variations)', *Chain,* Translucinación, 10 (2003), 1–262 (pp. 55–59).

[79] We will see a similar phenomenon in my piece *Brumel Translated* where the music fluctuates between Renaissance and contemporary styles, see '3.2 Brumel Translated (2019)', pp. 56–64.

[80] Eliot Weinberger, *19 Ways of Looking at Wang Wei: With More Ways* (New York: New Directions, 2016).

[81] Octavio Paz, 'Afterword', in Ibid., p. 47.

[82] See '1.2 Source into Target and Equivalence', pp. 7–8 for Eco's discussion on his translation of Queneau's book, and '3.6 Exercices de style (2020–2022)', pp. 105–114 where I discuss my musical translation of these exercises.

[83] Henrik Gottlieb, 'Semiotics and Translation' in *The Routledge Handbook of Translation Studies and Linguistics* (Abingdon on-Thames: Routledge, 2017), p. 60.

[84] Ibid., p. 59.

So far linguistic forms of translation have dominated this discussion, however, what about translation which does not happen within the confinements of language? The next sections will examine those forms of translation which happen within other fields, such as music, art, and other non-verbal sign systems. These are labelled semiotic forms of translation.

1.6.2 Intra-semiotic Translation

The linguistic models that dominate this literature review thus far, intra- and inter-linguistic translation, fall into the category of intra-semiotic translation since they demonstrate translational processes within the same semiotic sign system. The term 'sign system' means 'a disparate rule-based organisation of meaningful signs unlike any other such entity. This implies that I consider all so-called natural languages, e.g. Finnish, Xhosa and Japanese, representatives of one common system: that of vocal languages'.[86] However, Intra-semiotic translation need not be confined to that of linguistic forms of translation, or even that of translation amid verbal sources. This concept is often excluded from most conventional and earlier research in the field of translation. As discussed in the introduction of this literature review, what Jakobson doesn't acknowledge is the possibility of a translation process which need not happen within the confinements of language. This is also pointed out by Gorlée:

> In Jakobson's original terms, the translation of non-linguistic into linguistic text signs, and the translation of nonverbal signs by means of other nonverbal signs of the same or different language (or "language") is lacking.[87]

The word intra-semiotic makes possible the discussion of translation processes which happen within the same semiotic system, regardless of whether that's verbal or non-verbal. For example, the term allows for translation which happens within non-verbal sign systems such as the 're-interpretation in the form of a new musical arrangement of an existing work, for instance a jazz standard. The result is a different textual expression within the semiotic confines of performed music'.[88] In a more conventional sense, intra-semiotic translation allows for the process by which American sign language is translated into British sign language, since it remains within the semiotic sign system of signing.[89]

Jia claims that, 'as far as the broad sense of translation is concerned, any semiotic transformation is a translation process and translating activity'.[90] In his article, Jia does not only validate intra-linguistic processes of translation, but also those between intangible and tangible signs, and vice versa, as a type of translation which happens between the writer's mind and the written work.[91] Dusi also recognises intra-semiotic translation. In her article, she compares the process to intra-linguistic translation, in the sense that it is a process which happens within the same semiotic system:

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[85] Ibid., p. 57.

[86] Ibid., p. 46.

[87] Dinda L. Gorlée, 'Metacreations', *Applied Semiotics/Semiotique appliqué*, 24, 9 (2010), 54–67 (p. 58), also discussed in Jia (2017), p. 36.

[88] Gottlieb, p. 57.

[89] Ibid., p. 58.

[90] Jia (2017), p. 40.

> The field as a whole includes instances of *intralinguistic* interpretation, within the same natural language, such as synonyms, definitions, paraphrases, through an extreme case of parody, but also internal or *intrasemiotic* interpretations within non-verbal languages, for example in the musical semiotic system when a passage is transcribed in a different key.[92]

It is worth noting that Dusi excludes inter-linguistic translation from her definition of the term. Gottlieb argues that both intra- and inter-linguistic types fall under the category of intra-semiotic translation in the sense that they are all vocal languages, as discussed at the beginning of this section. Gottlieb discusses how certain semioticians tend to believe separate languages to be distinct semiotic systems of their own. For example, they define the process of language one (source) translated into language two (target source) as inter-semiotic (across two disparate sign systems).[93] Gottlieb considers this to be negative:

> I believe this is an unfortunate view, as all vocal languages use the same oral (and often written) semiotic channels. Only communication between a (deaf) sign language user and a (hearing) user of a vocal language – no matter which – represents two semiotic systems, and for that reason deserves to be labelled "intersemiotic translation".[94]

This view that the same oral (and written) semiotic channels constitute all vocal languages is the one which I adopt for this PhD project.

As mentioned previously, so far this literature review has primarily focused on intra-semiotic processes of translation (translation within the same sign system). However, what about those procedures that happen between two opposing sign systems: inter-semiotic translation? This will be discussed throughout the following section.

1.6.3 Inter-semiotic Translation

Most of the traditional models discussed above 'have included intrasemiotic translation (translation within a given sign system), and almost exclusively its subcategory interlingual translation, i.e. the transfer of verbal messages from one speech community to another'.[95]

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[91] This acknowledgment also validates what I do as a composer, since it recognises the process by which the composer's thoughts are translated into notation, see '2.8 Philosophy/Other Extra-Musical Concepts into Music', pp. 43–45 for more information on this translation type.

[92] Nicola Dusi, 'Intersemiotic translation: Theories, problems, analysis', *Semiotica*, 206 (2015), 181–205 (p. 183).

[93] See Gottlieb, p. 46 and '*1.6.3 Inter-semiotic Translation*', pp. 17–20 for a full definition and examples of inter-semiotic translation.

[94] Gottlieb, pp. 46–47.

[95] Ibid., p. 45.

Different to both inter- and intra-linguistic translation, then, in which both involve the translation process within the same semiotic sign system, being verbal language, inter-semiotic translation, as described by Jakobson, is a process which involves 'an interpretation of verbal signs by means of signs of nonverbal sign systems'.[96] However, Eco recognises that Jakobson's definition of this term does not account for 'cases like Walt Disney's *Fantasia,* where music is translated into moving images' (the translation of non-verbal signs into non-verbal signs).[97] A better definition of the term, then, would be 'the interpretation of signs in one semiotic system by means of signs of another semiotic system'. This alternative definition allows for the example mentioned by Eco as well as the translations of a novel into a film, music into a dance, or a poem into music. For example, a two-dimensional drawing of a sculpture, or when a stage play is transferred into a mime act, where the performer must enact the play through nonverbal channels of expression.[98] Similarly, the notation of a ballet 'in which choreography, i.e. complex three-dimensional movements in real time, is represented on paper'.[99]

The term also allows for more conventional types of translation, such as when verbal sources are transferred into non-verbal. For example, the translation of a written manual into one which is decodable for illiterates via exchanging all written signs for nonverbal illustrations.[100] Similarly, the translation of verbal messages into pictograms, road signs, or logos are examples of conventional uses of inter-semiotic translation. For instance, the conversion of a no entry sign (verbal) into the standard universal traffic symbol (nonverbal) of the same message.[101]

These inter-semiotic types of translation are further supported by Gottlieb, who states that 'not all translated texts use the same communicative channels as their originals'.[102] This proposes that the term translation need not be confined to those processes which happen within language and linguistics, where one language is translated into another.

Bassnett takes this notion further by suggesting that all translation should take semiotics as its starting point:

> The first step towards an examination of the processes of translation must be to accept that although translation has a central core of linguistic activity, it belongs most properly to semiotics.[103]

This suggests that translation should be thought of in semiotic terms instead of linguistics, as all sign systems fall under this category, and play a role in creating meaning, or allow for interpretation. Considering translation from this viewpoint allows the examination of other translational activities and broadens the scope for what can be considered a translational act.

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[96] Jakobson, p. 145.
[97] Eco (2003), p. 123.
[98] Gottlieb, pp. 51–52.
[99] Ibid., p. 55.
[100] Ibid., p. 54.
[101] Ibid., p. 55.
[102] Ibid., p. 46.
[103] Susan Bassnett, *Translation Studies*, 4th edn (London: Routledge, 2014), p.24.

Due to the heightened freedom that this type of translation allows, compared to the strict confinements of the traditional linguistic methods discussed above, inter-semiotic translation has been questioned and debated for decades as to whether it is truly a practice of translation or simply a form of adaption.[104] Eco claims that the practice of inter-semiotic translation is adaption and not translation. He explains: 'insofar as they are freely creative, they are not translations, since a translator has always to tame, in some way, his or her 'creative' impetus'.[105] His reasoning's for this can be demonstrated in the following example:

> It has been said that certain paintings display particular linear tensions, like the direction of dynamic forces, and that those forces can be expressed by a musical composition. Correct, and perhaps the musical interpretation can help us better to understand the deep sense of the painting. But that painting probably exhibited colours or even recognisable images, and these features are obviously lost in the musical 'translation'. I admit that by *synaesthesia* it is possible to evoke colours through sounds, but no musical piece can allow one to recognise that the inspiring painting was a particular Miró or a particular Matisse.[106]

This view is both discussed and challenged by Nicola Dusi in her article 'Intersemiotic translation: Theories, problems, analysis'. Here, in relation to translatability and faithfulness, Dusi explains how equivalence in translation would be better thought of as similarity rather than sameness.[107] This view can perhaps account for those lost features, such as the painting's colours, described by Eco in the above example. Evoking the colour through sound offers a similarity to the original, but this is most definitely not the same thing. Dusi's later statement, in relation to faithfulness being relative, backs this idea further:

> An important point in the current discussion is therefore the need to choose which translation-transposition criteria are to be considered pertinent, not only in the process that is underway but also in the comparative analysis. An intersemiotic translation can be defined as *successful or faithful* if it maintains a *relation of coherence* with the enunciative choices of the source text, a relationship that operates across various levels of the target text.[108]

Here Dusi is suggesting that, so long as the specific translation criteria to be followed are set out prior to the translation process, inter-semiotic translation can be considered in a similar way to other translation types.

Eco's belief that adaption is not a translational act is further argued by Henrik Gottlieb, who yields a distinction between conventional and adaptational types of translation, and acknowledges both acts as rational forms of translation:

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[104] See '1.5 Faithfulness', pp. 12–14, for example, but this strict view of translation is discussed throughout.
[105] Eco (2003), p. 170.
[106] Ibid., p. 159.
[107] Dusi (2015), p. 189.
[108] Ibid., p. 190.

> I believe it necessary to distinguish between adaptational and conventional intersemiotic translation. The defining feature here is the degrees of freedom available to the translator. In other words, processes that follow conventional procedures, e.g. for transforming written music (i.e. notes) into performed music, are termed "conventional translations", while processes in which the translator is not bound by existing "conversion tables" are named "adaptational translations".[109]

This view allows for many of the translational processes within this PhD and will be considered substantially when reflecting on my pieces throughout my critical commentaries. Further, Gottlieb recognises musical acts as forms of translation as opposed to those forms discussed above which are heavily linguistic and conventional based.

How Paz views translation a creative act, in the sense discussed earlier, where he claims 'translation and creativity to be twin processes', is also useful to this way of thinking about translation.[110] At the same time, this is at odds with Eco's opinion that inter-semiotic translation is not translation due to its heightened creativity.[111] Paz develops this view by claiming that 'all texts are originals because each translation has its own distinctive character. Up to a point, each translation is a creation and thus constitutes a unique text'.[112] This assessment also complements the next section which suggests that the act of self-translation produces second originals.[113]

All the practices of translation discussed so far involve an author and a separate translator, however, what about situations where the author is also the translator of the work? And how does this affect the underlying rules of translation discussed above? The next section will focus on the practice of self-translation.

1.7 Self-Translation

Self-Translation is the act by which the author translates their own work into another known language, alternative to their native tongue. This is the most notable difference to the conventional notion of translation, where the translation is completed by a separate translator. Another key feature that differentiates the process is the author's ability to write the translation concurrently the original work, they may, of course, not choose this path. This latter method of self-translation was often the one carried out by Samuel Beckett, who would frequently write the same play in different languages simultaneously. An example of where Samuel Beckett adopted this practice is provided by David Levey in *Samuel Beckett and the Silent Art of Self-Translation*:

> This simultaneous bilingual approach can be seen as early as the 1940s. If we look at the manuscript of *Watt* written during the war years while in hiding in Roussillon, we see a man at a mental crisis

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[109] Gottlieb, pp. 51–52.

[110] See '1.5 Faithfulness', pp. 12–14, and Paz, p. 160.

[111] Eco (2003), p. 170.

[112] Paz, p. 154.

[113] See '1.7 Self-Translation', pp. 20–21.

> point of acute bilingual tension. The novel is an often frenzied, comical exploration of the English language, replete with unusual puns, inversions, word games. It is interesting to note however, that the marginal notes in the original manuscript are written in French, indicating that even during this period of early artistic development Beckett was already assuming his unique bilingual approach.[114]

The fact that the translation of the original is undertaken by the author raises questions about the translation's fidelity. Unlike the way that a standard translator's work is judged against the author's work, Levey suggests that:

> The author's own translation is not open to criticism, improvement or debate, as the writer is the only one qualified to know what he wanted to say and how he wanted to express it. That's indisputable! ... isn't it?[115]

This matter is also discussed by Alyson Waters, who claims that, in opposition to how a standard translator promises to have provided a faithful interpretation of an author's work, 'self-translators typically claim the exact opposite not loyalty but freedom – or, in Raymond Federman's words – "irresponsibility"'.[116] For this reason, it is often argued that self-translated works are not simply translations, but second originals, since the author has written it first-hand.[117]

Another advantage to self-translators is the access which the author has to their original ideas; these may include sources which they consulted during writing the original, previous drafts of the work, their planning.[118] This is unlike the standard translator who has to construct their own meaning from the original, without aids to the author's original intentions.[119] Although, as Verena Jung acknowledges, this idealistic impression of self-translation is not true of authors who translate their books years after they were originally composed: who 'have to read it again and may not even completely understand their own motivation for choosing certain passages, certain examples or a certain style'.[120]

The following section will focus on how the above translation theories and practices, including self-translation, are interpreted as a framework for music composition practice.

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[114] David Levey, 'Samuel Beckett and the Silent Art of Self-translation', *Pragmalinguística*, 3–4 (1995–96), 53–61 (p. 58).

[115] Ibid., p. 55.

[116] Quote from Alyson Waters, 'Interview with Raymond Federman: Pour commencer, parlons d'autre chose', *Sites*, 2, 5 (2001), 242–248 (p. 242), as discussed in Rainier Grutman and Trish Van Bolderen, 'Self-Translation' in *A Companion to Translation Studies*, eds. by Sandra Bermann and Catherine Porter (Chichester: John Wiley & Sons, 2014), p. 330.

[117] Ibid., p. 330.

[118] Ibid., p. 329.

[119] Ibid.

[120] Verena Jung, *English–German Self–Translation of Academic Texts and its Relevance for Translation Theory and Practice* (Frankfurt: Peter Lang, 2002), p. 29, also discussed in Grutman and Bolderen, p. 329.

1.8 A Re-interpretation of the Key Concepts in Translation for Composition

In this PhD I will test the boundaries of linguistic translation in the form of musical composition and observe how these ideas carry over to this new mode. Conversely, I do not feel it necessary to limit my practice to the strict confinements of pure linguistic translation and will explore the theories and methods of semiotic translation also, including adaptational forms, to widen the scope of this project's methodology. Consequently, my version of translation predominantly demonstrates the practice of semiotic translation, as described by Jia, Dusi, and Gottlieb in their articles discussed above. These articles embrace other modes of transformation, alternative to, and outside of those which occur in the linguistic discipline. Below is my method for how I have redefined translation theory and methodology in musical terms.

1.8.1 Construction of a New Translation Model

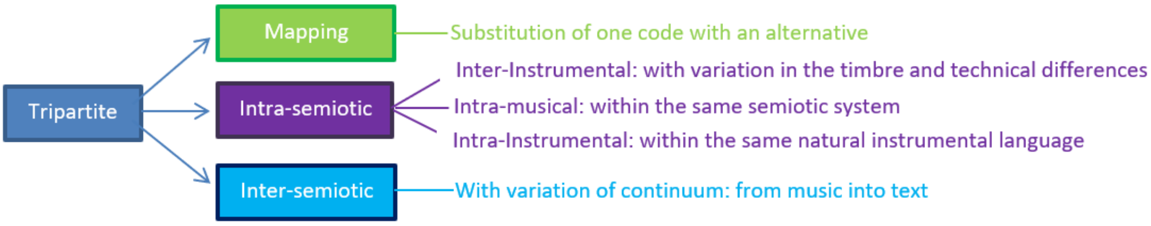
Tripartite
Mapping
Substitution of one code with an alternative
Intra-semiotic
Inter-Instrumental: with variation in the timbre and technical differences
Intra-musical: within the same semiotic system
Intra-Instrumental: within the same natural instrumental language
Inter-semiotic
With variation of continuum: from music into text

Figure 1-2: Musical Tripartite Division

Using ideas from both Eco's tripartite diagram and Jakobson's translation model, discussed in the 'introduction' of this literature review, I constructed my own musical translation model (see Figure 1.2). The term 'Inter-semiotic', allows for the translational processes which happen across two or more different semiotic systems. Inter-semiotic processes include the translation of a text into a musical language or vice versa, or from music into film, a painting into music, and so on. This practice involves the translation across two different mediums/continuums as opposed to remaining within the same sign system, as discussed with intra- and inter-linguistic translation that remain within verbal sign systems.

The Intra-semiotic category comprises 'Intra-musical' translation which might involve a translation from one piece of music into another, a translation across musical styles, the translation of a compositional idea which is re-contextualised into something new (e.g. saying the same idea in a different way). Here, the key point is that the translation remains within the same semiotic mode/sign system. This category also allows for what I term 'Inter-instrumental' translation, which involves the translation from one instrumental language to another (e.g. from cello into flute). This might involve transferring one instrument's techniques into those for another, for example, as first demonstrated in the critical commentaries section with a short transcription exercise of my MMus work, *Rock Formation* (2017) for mixed quartet into a standard string quartet.[121] This practice resembles the process of inter-linguistic translation, since the translation occurs within the same semiotic system of written music as opposed to within verbal sign systems, however, the instrumental language changes. My term 'intra-instrumental' translation also fits into this grouping, which defines a translation within the same instrumental language (e.g. from cello into cello, as discussed within my *Attack Resonance Decay* commentary). This process mirrors intra-linguistic translation where sources are reworded or re-contextualised within the same natural language.

I have chosen to keep 'Mapping' separate (as Eco does in his diagram): the term represents Eco's Morse code translation where, as with the Morse alphabet, one symbol is substituted for another. In music this could be one musical technique substituted for another, for example. My reasoning for keeping this separate is that, unlike the forms of translation mentioned above, the resultant material doesn't always (although it can) convey the same message as the original. When words, phrases, or even graphs are substituted for "exact" equivalents, this often results in inconsistencies between definitions and meaning. Similarly, the mapping of graphs, contours, and letters to musical parameters often doesn't result in an obvious translation of such sources, at least not to the listener. Such processes and issues are discussed later within the musical context section. Below are some definitions along with examples of where you can find such translational techniques within this PhD.

1.8.2 Key Terms

Inter-linguistic Translation: in linguistics this term specifies a translation across linguistic systems. This resembles the process in music where one instrument's material is translated into material for another. Such a process also falls under the umbrella of intra-semiotic translation (see definition below). This process is discussed within my *Sound Translations* (2019), *Remnant Echoes* (2020), *Attack Resonance Decay* (2019–2021), and *Translations for Piano* (2021) commentaries in relation to the transference of techniques, timbres, and material belonging to one instrument into those/that for another: inter-instrumental translation.[122]

Intra-linguistic Translation: in linguistics, this term specifies a translation that occurs within the same natural language. This resembles the process where music is translated into music: intra-musical translation, or intra-instrumental translation where material for cello is translated into alternative material for cello, or clarinet into clarinet. This term similarly falls under the umbrella of intra-semiotic (see definition below) since the process still occurs within the same semiotic system of written music. This procedure is examined in *Pitch Rhythm*

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[121] See '2.7 Transcription', pp. 41–43 and '3.1 *Rock Formation* Transcription Exercise (2018)', pp. 52–55.

[122] See '3.3 Sound Translations (2019)', pp. 65–78, '3.4 Remnant Echoes (2020)', pp. 79–96, '3.5 Attack Resonance Decay (2019–2021)', pp. 96–105 and '3.7 Translations for Piano (2021)', pp. 114–132.

Gesture (2022), where material for B♭ bass clarinet is continually translated into a series of target languages, however, remaining within the clarinet language. *Attack Resonance Decay* explores the translation of material for two cellos into that for one.[123]

Inter-semiotic Translation: the interpretation of signs in one semiotic system by means of signs of an alternative semiotic code. For example, the translation of literature into music, or a painting into a dance. This process is investigated in the *Exercices de style* (2020–2022) commentary, where I discuss the translation of Queneau's book of textual exercises by the same name into a musical work.[124]

Intra-semiotic Translation: the interpretation of signs in a semiotic system by means of signs from the same semiotic code. This is discussed in my *Brumel Translated* (2019) commentary in relation to my translation of fragments from Brumel's Kyrie into their target languages: intra-musical translation. This is similarly explored in *Translations for Piano*, where musical ideas from my organ work are adapted and re-contextualised for piano.[125] That said, most of my musical translations fall under the umbrella of intra-semiotic translation, since they happen within the confinements of written music.

Self-translation: in its musical form I consider this procedure to be self-borrowing as widely utilised by Xenakis in his pre-compositional practice.[126] Later in this document, I discuss how I used this compositional tool in my own musical works. For example, in *Translations for Piano* (2021) I discuss the self-translation of my organ work, *Resonant Voices* (2017) into a piano solo.[127] Here, also includes a discussion on the act of self-translation and how it relates to my musical practice.

Translatability: as we will see in the commentaries, I compare the translatability of language to the way in which instrumental techniques are translated into those for another instrument. This is notably explored in *Sound Translations*, and *Remnant Echoes*, where an exact equivalent timbral or technical effect is often not possible in the target instrumental language.[128]

Source and Target Texts: in musical terms the source text equals the original musical material, and the target text is equivalent to the target musical language. This notion is discussed throughout the 'Critical Commentaries', for example, in *Brumel Translated* a series of fragments from Brumel's Kyrie were translated into my own derived target musical language, that is, my composition. In *Translations for Piano*, ideas and features from my organ work, *Resonant Voices* (source text) are translated into a piano solo (target text).[129]

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[123] See '3.8 Pitch Rhythm Gesture (2019–2021)', pp. 132–142, and '3.5 Attack Resonance Decay (2019–2021)', pp. 96–105.

[124] See '3.6 Exercices de style (2020–2022)', pp. 105–114.

[125] See '3.2 Brumel Translated (2019)', pp. 56–64, and '3.7 Translations for Piano (2021)', pp. 114–132.

[126] See '2.4 Re-contextualisation; Paraphrase and Borrowing', pp. 35–38.

[127] See '3.7 Translations for Piano (2021)', pp. 114–132.

[128] See '3.3 Sound Translations (2019)', pp. 65–78, and '3.4 Remnant Echoes (2020)', pp. 79–96.

Carry Across/Betrayal: this contradiction is discussed throughout the critical commentaries, in relation to the elements retained/lost during the process of my musical translations.[134] Betrayal, in my view, is not seen as a negative here, but rather something which must be allowed for to retain the most prominent features of the original in the translation. See *Pitch Rhythm Gesture*, for example, where features gradually disappear to allow for a transformation into a specific target language based on a single parameter (pitch, rhythm, or gesture).[130]

Equivalence: in relation to my musical translations, equivalence is either referential or functional.[131] This is demonstrated with some specific score examples within my commentaries (see *Exercices de style*, for example).[132] My translations, in general, do not seek to be literal equivalents of their originals, although this approach is explored within section two of my piece, *Sound Translations*, where the piano's techniques are directly mapped to those of the cello.[133]

Foreignisation: in musical terms, I conceptualise this as the process by which 'the listener is moved toward the original composer, instrument, or work'.[134] Such an approach might be taken during the practice of re-composition or re-contextualisation, as demonstrated within my piece *Brumel Translated*. However, this notion is discussed throughout my critical commentaries.[135]

Domestication: the opposite of foreignising a musical work during re-composition/re-contextualisation or other musical forms of translation, a domesticated translation 'moves the original composer, instrument, or work toward the listener/new musical language', at least metaphorically. This is discussed at length within my *Brumel Translated* commentary or with *Exercices de style*, where I discuss how I domesticate the exercises to better suit the musical target language, as opposed to Queneau's original French exercises. This notion is also discussed throughout my critical commentaries.[136]

Faithfulness: I consider this concept in music to relate more to the type of faithfulness described by Dusi, as discussed above, where it retains a '*relation of coherence* with the enunciative choices of the source text'.[137] In *Brumel Translated*, the specific translation criteria to be followed was set out prior to the translation process. After which, considering the musical context the original Brumel fragment was to be translated into, I transformed the extract into its designated target language, while remaining faithful to the musical language in which I was to translate. A similar approach was taken in *Pitch Rhythm Gesture*, where the original source is gradually translated into one of three key target languages (pitch, rhythm, or gesture).[138]

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[129] See '3.2 Brumel Translated (2019)', pp. 56–64, and '3.7 Translations for Piano (2021)', pp. 114–132.
[130] See '3.8 Pitch Rhythm Gesture (2022)', pp. 132–142, however, this notion is discussed throughout the *Critical Commentaries*.
[131] See '1.2 Source into Target and Equivalence', pp. 6–8 for a definition and examples of referential translation, and '3.3 Sound Translations (2019)', pp. 70–77 for a definition of functional equivalence along with an example.
[132] See '3.6 Exercices de style (2020–2022)', pp. 105–114.
[133] See '3.3 Sound Translations (2019)', pp. 65–70.
[134] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.
[135] See '3.2 Brumel Translated (2019)', pp. 56–64, and *Part 3: Critical Commentaries* in general.
[136] See '3.2 Brumel Translated (2019)', pp. 56–64, and '3.6 Exercices de style (2020–2022)', pp. 105–114.

In summary, I will take ideas from the above translation studies practitioners and philosophers, such as Jakobson and Eco, and use their ideas and approaches to translation as a catalyst to compose a series of musical works. I will use methods such as foreignisation and domestication as creative tools when writing these works, to examine how successful this way of thinking is within the disciple of music as opposed to linguistics and other semiotic forms of translation. For example, in *Brumel Translated* I use this technique on a phrase level. I decide whether to foreignise or domesticate these sources from Brumel's Kyrie, depending on the target language it is to be transferred into, and the meaning that I aim to carry across to the target work. A similar approach is taken to all my pieces within this PhD to achieve various effects. Similarly, all pieces explore concepts such as source and target texts, carrying across and betrayal, equivalence, faithfulness, and translatability, which are discussed throughout my critical commentaries. Sometimes these pieces challenge the strict archaic views expressed above. In *Sound Translations* and *Pitch Rhythm Gesture* I translate a translation as opposed to the original—something which Benjamin disapproves as translation due to how loosely the original meaning is supposedly attached to the translation.

In order to examine such ideas, I use musical processes such as transcription, arrangement, re-composition, re-contextualisation, and mapping techniques to compose my music. For example, in *Brumel Translated*, I re-compose fragments from Brumel's Kyrie, by extracting them from their renaissance context, and either applying them directly, or adapting them into a contemporary classical style in the target musical work. I first analysed the key features of Brumel's original and carried these over to my musical target language. In my critical commentaries, I then analysed this process within a translation studies context to examine their success and connection to translation theory. This approach was taken to all works within this PhD. In the next section I provide a written account on historical musical practices which can be deemed as translational procedures, even if this was not the original intention of these processes and techniques. To support my views and ideas I refer to research by semiotic practitioners, such as Dusi, Jia, and especially Gottlieb, who acknowledge these more adaptational forms of translation.

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[137] See '1.6.3 Inter-semiotic Translation', pp. 17–20.

[138] See '3.2 Brumel Translated (2019)', pp. 56–64, and '3.8 Pitch Rhythm Gesture (2022)', pp. 132–142.

Part 2 – Musical Context: Translation in Music

Translation Studies research has uncovered multiple threads which can be considered translational procedures in both pre- and post-compositional ways. These include mapping, re-composition, arrangement/orchestration, re-contextualisation and self-borrowing, transcription, the composer's translation of a philosophical idea or other extra-musical concepts into a musical form, live translation in performance, the interpretation of (some!) graphic scores and resonant/material translations. In the following section I will explain these musical procedures and how they can be re-thought in a translational manner.

2.1 Musical Mapping

As with literal translation where one word is substituted for another, 'mapping', in a musical sense, is a pre-compositional device that involves the composer in a process of assigning one set of symbols to another.[1] An example of this method may be where the composer allocates parts of a text to instrumental techniques, pitches or rhythmical material. This method could be used as a way of depicting the effects of a text in instrumental writing, the text forming the basis of the composition. Helmut Lachenmann's *"…Zwei Gefuhle…," Music Mit Leonardo* (1992) for two speakers and small orchestra foregrounds the use of spoken text as the basis of the instrumental writing. The orchestra imitates the act of speaking these texts, and in doing so produces a creative response to the act of translating from the medium of speech-sound into instrumental sound. As a result, language is 'carried' into the instrumental writing, but it is 'betrayed' by the inability of the instruments to reproduce human speech.

Such issues of betrayal when mapping are discussed by Scott McLaughlin in his article on chaos theory and the problems with mapping. Similar to those problems discussed by Eco during literal, morse code forms of linguistic translation, McLaughlin recognises similar inconsistencies when mapping data to musical parameters:

> There are several aesthetic issues that arise with literal mapping. Whereas musical metaphor is clearly a question of representation, with literal mapping it is not so clear. In Beethoven's Symphony no.3 "The Pastoral", there are clear musical references to the countryside, such as the oboe melody that sounds like a cuckoo. This case is clearly representational, the listener will never confuse the oboe with an actual cuckoo. In the case of literal mapping the representation is not as obvious. The contour of a mountain range can be sketched on graph paper and the relative dimensions scaled and applied to a melodic pattern, does this melody represent the mountain? does the composer intend the listener to associate the melody with the mountain? or is it simply that the contour registered in the composer's mind as a suitable melodic shape?[2]

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[1] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6 for a definition of mapping in linguistic terms.

[2] Scott McLaughlin, 'Composers and Chaos: A Survey of Applications of Chaos Theory in Musical Arts and Research' in *Handbook of Applications of Chaos Theory*, 1st edn (London: Chapman and Hall, 2016), pp. 8–9.

This is an example of where the target text is not a literal equivalent of the original data, but instead an extreme adaptational form of it. The mountain's contour has been mapped to specific pitch content but does not represent the consistency of the mountain through its sound world. Despite a lot of the original features being betrayed, it is still a translation of this data into its new musical form, since the target language does not require that the composer depicts mountainous sounds.

During a translation experiment with translator, Craig Dworkin, Christian Wolf constructed a piece, *Taking Chances* (1969).[3] The translation processes used to compose this work are described as follows:

> "Taking Chances" [sic] is the translation of part of an essay by the composer Christian Wolff. Each letter of the source text was translated either into its note name equivalent (for the first seven letters) or a quarter-note rest (for any other letters). Duration and articulation were determined by where the letter came in a word and where the word came in a sentence; the essay's punctuation determined accidentals. Dynamics are left to the performer. The left-hand line was created from the second half of the essay in a similar manner, but taking the spatial distribution of letters as the basis for the score.[4]

This is an example of a word for word/Morse code style translation, since every aspect of the text has been directly substituted for a musical representation, which is not necessarily an exact equivalent of the original element of the text. For example, accidentals are not equivalents of punctuation, musical articulation might have been a fitting alternative.

In James Dillon's *L'évolution du vol* (1993), what Michael Spencer terms a 'paradigmatic' relation between the double bass and drum techniques, is present:

> [A] different stylistic reference, this time to North African drumming with two sets of four small drums and a bass drum which are played with the fingers. […]. However, the indications to play the drums at the centre and the edge (and with gradual transitions between these two states) can be linked to the double bass writing in movement VII.[5]

Here Spencer is suggesting that these 'micro-level paradigmatic cells of texture, often involving rapid changes in performance technique' are, at different points, dispersed among different instruments in ways which suggest a kind of mapping of one instrumental technique to another.[6] In this case the drum's tremolo which is to be executed using the fingers, is mapped to the double bass' bow tremolandos. The motion from the edge to the centre of the drum is mapped onto the cello's movement from molto sul ponticello to molto sul tasto. These can therefore be considered as translations of the performer's motions when executing these techniques, as well as timbral and technical transitions from one instrument to another.[7]

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[3] Christian Wolf and Craig Dworkin, 'Taking "Taking Chances"', *Chain,* Translucinación, 10 (2003), 234–239.

[4] Ibid., p. 239.

[5] Michael Spencer, '*Dillon's L'evolution du vol: an Evolution of Stylistics or a Flight from National Identity?*', in *Musica Scotica: 800 Years of Scottish Music, Proceedings from the 2005 and 2006 Conferences*, eds. by Heather Kellsall, Graham Hair, Kenneth Elliott (Glasgow: The Musica Scotica Trust, 2008), p. 88.

[6] Ibid., p. 85.

Alternatively, a technique which has been widely used for centuries, involving allocating specific pitches to letters, in the sense of a musical cryptogram, could be deemed a mapping process. An early example is Bach, who used cipher techniques, often based on his own name (B-A-C-H=B natural), to compose musical themes and motifs for a number of his pieces, including *The Art of Fugue* (1740s): he would then use these themes/motifs within the larger context of a work. A similar process was used by Schumann in the *Abegg Variations* (1829–30), and Berg in both his *Lyric Suite* (1926) and Violin Concerto (1935). For example, in the former work, Berg used the initials of both his name (A. B.) and Hanna Fuchs-Robettin's (H. F.) as a cipher (A=A, B=B♭, H=B, F=F). Shostakovich uses the following letters: D=D, Es=Eb, C=C, H=B natural (signifying his initials: D. SHO) to compose certain motifs in his Eighth String Quartet (1960). In his large organ work, *Méditations sur le Mystère de la Sainte Trinité* (1969), Olivier Messiaen created an entire musical alphabet: each letter attached to a specific pitch, duration and octave (see Figure 2.1).[8]

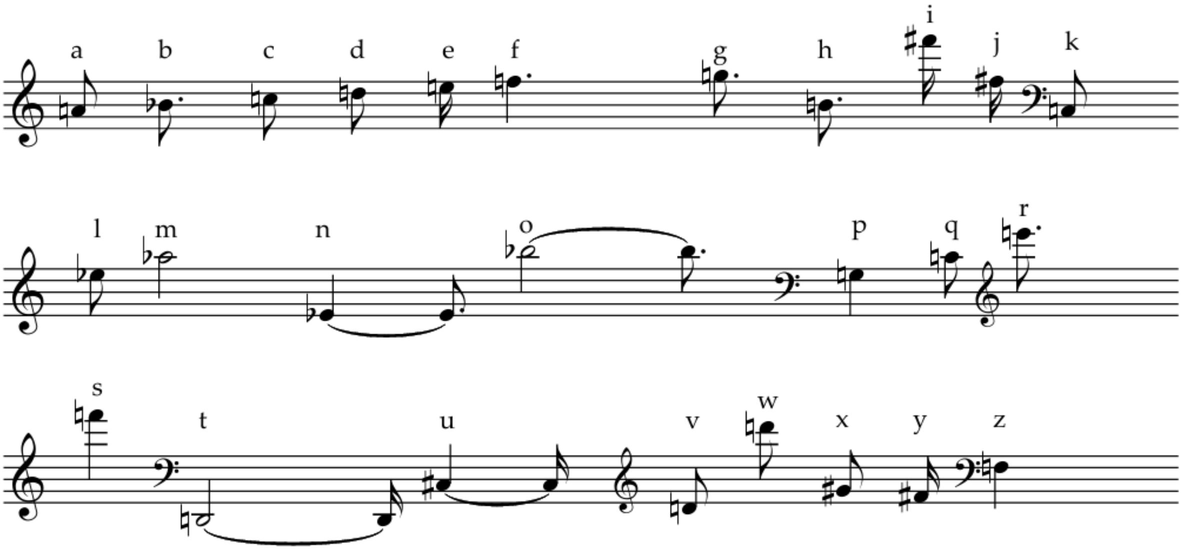

Figure 2-1: Messiaen's Cipher

More recently, although in some ways more like the earlier examples, Elliott Carter wrote a piece using Boulez's name as a cipher: *Réflexions* (2004). A modern example of cipher use during pre-composition is discussed by Mauricio Carrasco in relation to James Rushford's work, *Egyptian Love Poem in Nihilist Cipher* (2014) which uses a Nihilist Cipher, 'a cryptic system used by Russian Nihilists in order to organise terrorist attacks against the tsar during the late nineteenth century'.[9] He explains:

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[7] This is similar to the type of translation in Liza Lim's work, in the sense that it is a translation across instrumental families: see '2.9 Translation as Performance', p. 46. This translation can also be considered inter-instrumental, see '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for a definition of this term, and '3.3 Sound Translations (2019)', pp. 65–78 for some examples of where I explore a similar type of translation.

[8] Figure from Olivier Messiaen, 'Liner notes' to *Méditations sur le Mystère de la Sainte Trinité pour orgue,* performed by Almut Rößler, organ, CD (Schwann AMS Studio, schwann-studio 702/703, 1973).

> Rushford uses the Nihilistic Cipher to codify al-Nawâdji's love poem: the composer encrypts the text by using different techniques such as the Polybius square, plaintext and the use of keywords, arriving at seven different vocal effects: closed mouth hum, closed mouth "S" (short), closed mouth "K", closed mouth "T", closed mouth tongue click, open mouth "P" ("pop" sound), open mouth "P" with breathy exhalation.[10]

Alongside the process of musical encryption, musical practices which have been carried out for centuries, such as arrangement and orchestration, can also be seen in the light of translation.

2.2 Arrangement and Orchestration

Musical processes that might be likened to the notion of Jakobson's intra-lingual: my intra-musical translation, are 'arrangement' and 'orchestration'.[11] Arrangement involves '[t]he adaption of music for a medium different from that for which it was originally composed, for example the recasting of a song or a symphony as a piano piece, or an orchestral overture as an organ piece. Such a process involves more than that of *transcription since many effective passages in the original would sound much less so in another medium'.[12] The act of arranging an orchestral piece for piano or a work for voice and piano into a large ensemble arrangement invites numerous new ideas on the arranger's part which transform the piece strikingly.

In his book, *Listen: A History of Our Ears,* Peter Szendy discusses arrangement in ways which correspond with key concepts of translation.[13] He mentions Stokowski's orchestrations of Bach's organ works such as *Toccata and Fugue in D minor* (1703–07) and how Stokowski describes his reasoning for undertaking the task as 'trying to give the same impression of the music, to transmit the same message, the same inspiration, through the modern orchestra'.[14] By doing so, Stokowski believed that he was widening Bach's audience, since not only would church-goers now listen to this music but also the thousands who attend symphony concerts. Despite Szendy's negative stance on Stokowski's view of the function of his arrangements, asserting that Stokowski's arrangements for 'such a swollen orchestra' couldn't possibly be deemed to have carried across the 'same message' and 'same inspiration as in Bach', Stokowski's impetus for undertaking the arrangement mirrors the process of translation in that he aims to remain 'faithful' to the original. However, in this scenario perhaps some of the original meaning and inspiration is betrayed by the dense timbral body of the orchestra.[15]

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[9] Mauricio Carrasco, 'New Melodramatic Voices in James Rushford's *Egyptian Love Poem in Nihilist Cipher*' in *Monodrama and Music Theatre as Transformative Artistic Experiences, From a Performative to an Embodied Acting Musician/Guitarist* (Melbourne: The University of Melbourne, Unpublished Thesis, 2018), pp. 58–62.

[10] Ibid., pp. 59–60.

[11] See '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for a definition of intra-musical translation, resembling intra-semiotic translation.

[12] Alison Latham, *Oxford Dictionary of Musical Terms* (Oxford: Oxford University Press, 2004), p. 12. Also see p. 131 for a definition of orchestration: [t]he art of combining instruments and their sounds in composing for the orchestra, or, more simply and practically, the act of scoring a sketch or an existing work for orchestral forces. By extension, the term may also be used in the context of music for chamber forces or even for chorus or solo piano, since the basic concerns of orchestration–with balance, colour and texture–are common to music of all kinds.

[13] Peter Szendy, *Listen: A History of Our Ears* (New York: Fordham University Press, 2008), pp. 35–68.

[14] Stokowski, quoted in Szendy, p. 37.

Later, Szendy goes on to discuss Liszt's piano arrangements of Beethoven's *Pastoral Symphony* (1808) and Berlioz's *Symphonie Fantastique* (1830). He mentions Liszt's inclusion of all the orchestral instruments within the piano score as a means to create 'a sense of longing for its many instruments', and how his doing so creates a certain 'plasticity' in these works that allows the listener, while hearing these piano reductions, to notice what is missing as they imagine these original instruments.[16] Szendy suggests:

> The body that shapes transcription is thus *plastic*. As is also (I had suggested this about Bach-Stokowski) our listening to an arrangement, torn between two parallel lines, one present and the other ghostly or spectral: our listening is stretched, stretched to breaking point like a rubber band, between the transcription and the original. That is to say, here, in Liszt, between the piano score and the orchestral score.[17]

What is interesting about this remark is how it situates itself alongside what Benjamin believes a translation should convey:

> It is not the highest praise of a translation, particularly in the age of its origin, to say that it reads as if it had been originally written in that language. Rather, the significance of fidelity as ensured by literalness is that the work reflects the great longing for linguistic complementation. A real translation is transparent; it does not cover the original, does not block its light, but allows the pure language, as though reinforced by its own medium, to shine upon the original all the more fully.[18]

Liszt's inclusion of these instrument names within his score, in combination with his decision to title his piano arrangements 'piano score' instead of 'score for piano' was 'in order to make more obvious the intention to follow the orchestra step by step'.[19] Liszt's piano score 'is thus a kind of orchestral score for piano'.[20]

The way that Liszt describes the piano's capabilities of taking on an entire orchestral mass provides an interesting interpretation of the notion of what is 'carried across' or 'betrayed' in the process of translation between linguistic texts, or in this case between instrumental bodies:

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[15] Szendy, p. 37.
[16] Ibid., pp. 56–58.
[17] Ibid., p. 58.
[18] Benjamin, pp. 79–80.
[19] Liszt, quoted in Szendy, p.57.
[20] Szendy, p.57.

> By the unlimited development of its harmonic power, the piano tends more and more to assimilate to itself all orchestral compositions. In the space of its seven octaves, it can produce, with few exceptions, all the features, all the combinations… and leaves to the orchestra no other superiorities (although these are, it is true, immense) than those of the diversity of timbres and the effects of the massed forces.[21]

When transferring an orchestral score into a solo piano one, the timbral density of the orchestra is betrayed by the piano's incapability of producing such complex sonorities. Similarly, despite its wide range that allows for the rich harmonies of the orchestra to be carried across, due to the complex and dense textures that an orchestra offers compared with the capabilities of the pianist's two hands, the piano medium still results in some harmonic betrayal. In these circumstances, the arranger/translator must compromise and decide what is most important. Liszt achieves this in parts of his *Pastoral Symphony* arrangement by simply adding an ossia stave with an alternative version. Here 'Liszt has in a way compensated for the impossible by multiplying the possibilities'.[22] Conversely, his inclusion of instrumental names allows for much interpretation on the part of the performer: perhaps these instrumental indications may prompt the pianist to play each line in the style of the instrument written above, thus bringing it closer to the original.[23]

The above discussion highlights that such a historical and conventional musical practice can be viewed as a translational process, which is reinforced by Szendy's vision. When arranging or orchestrating the arranger's aim (like linguistic translator) is to carry across the character and detail of the original composer's work into its new context and instrumentation. This process is examined later within my work *Attack Resonance Decay*, where my piece for two cellos is arranged into pieces for various instruments.[24] Following on from arrangement and orchestration, the next section will examine a more adaptational process of musical translation, known as re-composition. Like arrangement, re-composition takes an existing piece of music and transforms it into something new, however, such a process often results in a translation which is less related to the original than that of an arrangement. Further, a re-composition may take a few fragments or parameters of a work and reform those into a new composition as opposed to every detail of the original.

2.3 Re-composition

'Re-composition' is a term adopted by Joseph N. Straus to name the post-compositional method by which a composer takes an element or elements of an existing work (possibly their own) and uses that as the basis for a new composition.[25] This/these element/s are then transformed into a new form within the context of the new work. In his article Straus describes this practice within the context of twentieth-century music:

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[21] Liszt, quoted in Szendy, p.59.

[22] Szendy, p.58.

[23] See Brendel's comment in Szendy, pp. 57–58.

[24] See '3.5 Attack Resonance Decay (2019–2021)', pp. 96–105.

[25] Joseph N. Straus, 'Recompositions by Schoenberg, Stravinsky, and Webern', *The Musical Quarterly*, 3, 72 (1986), 301–328 (p. 301).

> MANY twentieth-century works absorb and modify compositions from earlier periods. The resulting "recompositions" are often works of surprising originality. They paradoxically reflect the characteristic elements of twentieth-century musical structure even as they appear most immersed in the past. The most interesting recompositions involve the imposition of a new, idiomatically post-tonal musical structure onto an intact tonal model.[26]

Such a process enables composers to 'create new works by recomposing older ones', effectively recycling old material and remoulding it into something original.[27] Sometimes, the material might retain enough of the original's stylistic trace to be recognisable, such as Stravinsky's neoclassical compositions, like *Pulcinella* (1920) which references eighteenth century music.[28] In other cases, the original may be unrecognisable, as with Evan Johnson's re-compositions of renaissance music, such as *qu'en joye on vous demaine* (2017) which is based on a piece by Guillaume DuFay, but where the original source is almost impossible to identify aurally.[29]

This compositional method most resembles what Jakobsen defines as intra-linguistic translation: what I term intra-musical, since it is a translation within the same language/semiotic system (written music).[30] Michael Finnissy's *Gershwin Arrangements* (1975–88), *Verdi Transcriptions* (1972–88), and *GFH* (1985–86) were composed using similar transformative processes which are discussed in *Uncommon Ground: The Music of Michael Finnissy*.[31] Despite Ian Pace's use of the term 'transcription' to describe Finnissy's compositional practice in these works, the extreme adaptions made to their original sources suggest that what Finnissy was doing, in my view, is re-composition and not simply transcribing music written for one set of instruments for piano.[32] For example, the dense texture and rich atonal harmonies that surround and overshadow the original melodies of Gershwin's songs in Finnissy's arrangements, transform these sources significantly, creating a melancholic mood of what are quite energetic and cheerful songs.

James MacMillan often recomposes, while at the same time self-borrowing (a term discussed at length in the next section). For example, the piano part in *After the Tryst* (1988) is a re-composed version of the harp part from the concluding section of *Búsqueda* (1988) for chamber orchestra.[33] Further, some, though not all of the violin part from the duo, is a re-composition of sections of the bass clarinet part, also from the final section of the larger work.[34] Another example of MacMillan's self-borrowing is the re-contextualising of his brass interjections from *Búsqueda* (1988) into the orchestral work *The Confession of Isobel Gowdie* (1990).[35] Michael Spencer takes fragments from a work by Antoine Brumel and re-composes them into new material in various ways in *Message from Aiwass II* (2003) for piano, cello, and percussion. For example, sometimes he takes pitch content from the Brumel and makes it unrecognisable by lengthening the duration and playing the material on the cello as high harmonics, or more obviously, taking the cadence points from the renaissance composer's music unchanged in the piano, but juxtaposing these with his own original microtonal material in the cello and complex rhythmic material in the percussion.

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[26] Ibid.

[27] Ibid.

[28] This could be deemed a foreignised musical translation, in the light of this project, see '1.3 'Foreignisation' and 'Domestication'', pp. 8–10, and '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 25–26 for definitions of these terms in both their linguistic and musical forms. For some musical examples of the two practices, see '3.2 Brumel Translated (2019)', pp. 56–64.

[29] This could be deemed a domesticated musical translation, in the light of this project, see Ibid.

[30] See '1.6.1 Intra-linguistic Translation', pp. 14–16 and '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for definitions of these terms.

[31] Henrietta Brougham, Christopher Fox and Ian Pace, ed., *Uncommon Ground: The Music of Michael Finnissy*, (Farnham: Ashgate, 1997), pp. 74–98.

[32] See Ibid. Also see '2.7 Transcription', pp. 41–43 for both my own and other definitions of transcription.

Many of Patricia Alessandrini's works could also be considered re-compositions, in the sense that she often takes existing pieces of music from the past and reinvents them by manipulating the original material: time-stretching it, reversing it, or superimposing it onto another piece of music. In *Forklaret Nat* (2012), for example, Alessandrini takes both halves of Schoenberg's *Verklärte Nacht* and folds it over on itself by reversing the second half and superimposing it onto the first half.[36]

As mentioned in the previous discussion, re-composition can be used as an innovative tool to create new pieces from past works. It can also be seen as a highly translational process as previous compositions (original sources) are analysed and transformed into another musical world (target language). This form of musical translation will be discussed in further detail in the 'Critical Commentaries' section with examples from my piece, *Brumel Translated* (2019).[37] There I explore the concepts of foreignisation and domestication, carrying across and betrayal while transforming what I believe to be the main characteristics of Brumel's Kyrie from his *Missa Dominicalis* (original source) into a new piece for soprano, flute and clarinet (target language).

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[33] Listen from 21'13" of James MacMillan, 'Búsqueda', on *Visitatio Sepulchri* and *Búsqueda*, Scottish Chamber Orchestra, cond. by Ivor Bolton/James MacMillan, CD (BMG Classics, 09026 62669 2, 1994), and all of James MacMillan, 'After the Tryst', on *Evelyn Glennie: Veni, Veni, Emmanuel, Music of James MacMillan*, Evelyn Glennie, CD (CATALYST, 09026 61916 2, 1993).

[34] Listen from 22'10" of *Búsqueda*, and all of *After the Tryst*. What is interesting about the work's pre-compositional practice is how it crosses over with arrangement, in the sense that it is partly a piano reduction. The original piano part could also be considered to have been re-contextualised (discussed later), in the sense that the piano part has been repositioned into a duet with the violin.

[35] Listen from circa. 5'00" of *Búsqueda*, and James MacMillan, 'The Confession of Isobel Gowdie', on *The Confession of Isobel Gowdie, Tuireadh, The Exorcism of Rio Sumpúl*, cond. by Osmo Vänskä, CD (BIS, 1169, 2002).

[36] See Patricia Alessandrini, 'Reinventing instrument to reinterpret the past and question the present: Patricia Alessandrini in conversation with Nicholas Moroz', in *Explore Ensemble*, Explore! <http://explore-ensemble.com/patricia-alessandrini> [accessed 18 August 2019].

[37] See '3.2 Brumel Translated (2019)', pp. 56–64.

It is worth noting that the act of re-contextualisation can be seen a subcategory of re-composition, since re-contextualisation is the act of placing a fragment or feature (such as pitch or rhythm) within a new context or saying something in a different way. The distinction between the two terms lies in the level of transformative approaches applied to the original material. This said the two processes overlap to a degree and can sometimes be hard to isolate. This related process along with musical borrowing will be discussed in the following section.

2.4 Re-contextualisation; Paraphrase and Borrowing

Further concepts relating to re-composition, though referring to more specific practices, are re-contextualisation and/or paraphrase. In music, the composer may take part of a piece and place it into a new context. Another example would be the act of taking the same idea for a work, but setting it in a different way like paraphrase, where a sentence is rephrased or reiterated in differing words, often to explain the point further. Distinguishing both terms is the level of meaning attached to the resultant text. Like textual re-contextualisation, as fragments of music are extracted from their original setting and distributed in an opposing context, they often lose their original meaning and purpose, the new work or context redefining them. Alternatively, a simple paraphrase often purely says the same thing in a different way, which sometimes provides further explanation of the first. Both processes, however, like re-composition, involve converting the original idea into something new.

Borrowing, on the other hand is a practice where someone takes material from either another composer's work (as seen in the work of Berio, where he extracts multiple musical and textual quotations from others works), or their own work (self-borrowing), and places them/it into the new musical context. This term is identified by Benoit Gibson in his article dedicated to Xenakis' self-borrowing practice. He describes the practice as:

> Self-borrowing implies choices about the selection and the insertion of materials. Xenakis can select a passage in its entirety or isolate a layer, an instrument or a group of instruments: strings, brass, woodwind, percussion, etc. These layers, once removed from their original context, become independent entities. They can be exhibited alone or combined with other layers.[38]

He classifies two types of self-borrowing: those that are simple which he terms 'elements' and 'object' self-borrowings, and those which are less obvious and thus transformed in some way (simple repetition, permutation, remix, micro-montage and mode of playing).[39]

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[38] Benoit Gibson, 'Self-borrowing in the Instrumental Music of Iannis Xenakis', in *Definitive Proceedings of the "International Symposium Iannis Xenakis"*, eds. by Makis Solomos, Anastasia Georgaki, and Giorgos Zervos (Athens: Online Publication, 2006), p. 1. Also see subheadings throughout the article for definitions of what each of these terms mean.

[39] Ibid.

Xenakis' practice of 'self-borrowing' in his works, through the use of montage techniques at the pre-compositional stage, is identified by Gibson and is an example of the first type of musical re-contextualisation. A direct instance of this can be found in Xenakis' *Antikhthon* (1971), at bars 93–95 specifically (cello part), where Xenakis places the same glissandi pattern used in *Nomos Alpha* (1965–66) for solo cello into a new musical landscape. The violins, violas and double basses form a sustained chord that slowly transforms from ordinary pitches into harmonics. Gibson describes the transformation of the fragment in its new context:[40]

> The oppositions field—cloud, ordered—ataxic, ascending—descending and sound-points—sliding sounds, that characterized *Nomos Alpha's* macroscopic sound complexes, do not apply in *Antikhthon*. In the latter, the element, taken in its entirety, is combined with another layer and prolonged by a loop.[41]

This is an example of where Xenakis merely places the self-borrowed element from an earlier work into its new context, un-adapted.[42] Later in his article, Gibson identifies examples of where Xenakis' self-borrowings are made less perceptible by means of a transformative process. In *Kyania* (1990) for orchestra, Xenakis extracts a unit from the end of his *Akea* (1986), subdivides it into small fragments, permutates them and then imbeds/re-contextualises the transformed passage within its new context: the woodwind, trombones and strings are provided with the chords that were originally played by the piano in *Akea*, 'while the other brass instruments draw the counterpoint originally played by the strings'.[43]

Another composer who frequently self-borrows material for subsequent works is Marc Yeats. This is particularly the case with his polytemporal works, *the heaven that runs through everything* (2018), and *[…] which constantly generates a pulviscular cloud […]* (2019), the former including eighty or more independent lines. When displaced from their original placement and setting, and repositioned in this mass texture, these pre-existing materials originating from numerous works, which have either preserved their original form, or have been transformed temporally, rhythmically, pitch wise, time stretched, transposed, voice reconditioned, are unrecognisable. Yeats describes how, due to the recursive nature of his self-borrowing practice, the same excerpts of material are transformed multiple times as they are continually re-contextualised in new works.[44] In this sense, these borrowed materials are continually given a new life and form, and by the time they reach a possible fifth generation of transformation, their notational qualities are quite distant from their original form. A similar continual transformative process is explored within my piece *Pitch Rhythm Gesture*

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[40] Ibid., p. 1.

[41] Ibid., p. 2.

[42] This example can also be viewed as a foreignised translation, since Xenakis has retained the originals stylistic trace, see '1.3 'Foreignisation' and 'Domestication'', pp. 8–10 for a definition.

[43] Gibson, pp. 6–7. This example can also be viewed as a domesticated translation, since Xenakis has transformed this pre-exiting passage to fit the new context, see '1.3 'Foreignisation' and 'Domestication'', pp. 8–10 for a definition.

[44] Personal communication with the author.

(2022) where I explore what happens when a translation is repeatedly translated and analyse it in relation to the original.[45]

Luciano Berio's*, Sinfonia* (1968–69) contains a significant number of borrowings, though this time not self-borrowings; instead, he collates a wide selection of sources from other musical works and texts and re-contextualises them at various points throughout his work. The third movement is particularly busy with quotations; while Gustav Mahler's Scherzo movement from his *Resurrection Symphony* (1888–1894) forms a backdrop, various fragments from Monteverdi to Stockhausen are weaved in and out of the texture, sometimes overshadowing the Mahler and at other times blending with it.[46] Among the musical fragments are textual references from Beckett's *Unnameable* which, like the Mahler, serves as the underlying text. Aside this, he places quotes from James Joyce's *Ulysses* and Paul Valéy, among other literature, along with asserting recognisable slogans or even score indications.[47] In doing this, 'as a composer fond of engaging in different listening experiences, Berio embroiders the pre-existing fragments in a new context, and this gives a totally new experience in perception'.[48]

An example of the latter form of borrowing and re-contextualisation can be found in a piece written for my MMus degree, *The Real and the Imagined* (2018) for orchestra. This work involves the translation of ideas from Xenakis' *Psappha* (1975) for solo percussion into complex orchestral textures: I was interested in exploring how these ideas transform when transferred into a new context. A notable example of re-contextualisation/borrowing can be identified in the string section of rehearsal letter B, and the tutti section at E. Here I have applied the short motivic passage at bars 460–630 of *Psappha* into the context of an orchestral section (strings) or the entire orchestra (See *Psappha* score and Appendix A, pp. 162–168).[49] The texture in these sections (B and E) also alternates between two conflicting types of materials/textures in a similar fashion to the Xenakis (See *Psappha* score and Appendix A, pp. 162–168). The new setting of this material within chordal structures, transforms the Xenakis dramatically.

Examples of where a composer has taken musical passages or parameters (such as pitch) from music of the past and adapted them within the pre-compositional method can be found in numerous works of Maxwell-Davies. In his paper, Richard McGregor, draws attention to Davies' persistent practice of borrowing from other works, which he then paraphrases into a new form:

> Davies's pre-compositional method normally involves taking the pre-existing source, whatever it might be, often a plainsong but equally it might be any predominantly melodic/thematic source, such as the tune *Cumha Craobh nan Teud* in the Strathclyde Concerto no. 4 (1990), or the Ban and

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[45] See '3.8 Pitch Rhythm Gesture (2022)', pp. 132–142.

[46] Ho Kar Man, *The Correlation Between Music and Text in Luciano's Berio's Sinfonia (1968–9)* (Hong Kong: The Chinese University of Hong Kong, Unpublished Thesis, 2000), pp. 54–59.

[47] Ibid., p. 59.

[48] Ibid.

[49] Iannis Xenakis, *Psappha* (Paris: Éditions Salabert, 1975).

> Haydn already mentioned for Strathclyde no 5. The pitch sieving […] process he uses, which usually removes repeated pitches and often adds accidentals, essentially creates a paraphrase of the original idea, which is then rolled out across the various Transposition and Transformation processes created for works up to *Ave Maris Stella* of 1975, and after that work into magic squares. The magic square creates both pitch and rhythmic matrices which have elements of both the *cantus firmus* and isorythmic techniques of early music without belonging strictly to either process. The permutating numeric series based on 9, of which this is an example from *Ave Maris Stella* is effectively a variant of a regularly repeating *talea*. The permutating pitch patterns from the same 9 base are therefore a variant of a regularly repeating *color*.[50]

Not unlike re-composition and arrangement, both types of musical re-contextualisation resemble Jakobsen's intra-lingual translation process in that like re-wording/paraphrasing which occur within the same natural language, both Xenakis and I are expressing these ideas in a different way within the same semiotic system of written music. Perhaps in a similar way to the multiple English translations of Dante's poem in Bergvall's *Via*, where she juxtaposes lines from various English translations (old to modern) of the original poem to demonstrate how language changes with each translation.[51]

Self-borrowing can also be considered as self-translation, in the sense discussed earlier, since both practices are carried out by the author themselves.[52] All three practices, as well as self-translation are explored in my work *Translations for Piano* (2021), where I take the ideas and methods from my organ work *Resonant Voices* (2017) and re-contextualise/re-compose them into something new, as I restate the same concepts in a number of different contexts via a series of fourteen short translations. In the following section I discuss a branch of re-contextualisation known as pastiche, which can also be considered a type of paraphrase.

2.5 Musical Pastiche; Paraphrase

'Musical pastiche', is the act by which a composer imitates the musical style of another composer, musical work, or period, usually from the past, and is in part, a subset of re-composition and re-contextualisation.[53] Perter Silberman describes it as 'an imitation of earlier music in which the composer writes in an older style'.[54] A further explanation of the term is provided by Frederic Jameson who describes the process, while also distinguishing it from parody:

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[50] Richard McGregor, 'The Persistence of Parody in the Music of Peter Maxwell Davies', in *Musica Scotica: 800 Years of Scottish Music, Proceedings from the 2005 and 2006 Conferences*, eds. by Heather Kellsall, Graham Hair, Kenneth Elliott (Glasgow: The Musica Scotica Trust, 2008), pp. 79–80.

[51] See '1.6.1 Intra-linguistic Translation', pp. 14–16 for more information on the poem, and Dante and Bergvall (2003), pp. 55–59 for the actual poem.

[52] See '1.7 Self-Translation', pp. 20–21.

[53] Latham's definition, p. 137: ''Imitation', 'parody'; not the same as pasticcio. A work written partially in the style of another period'.

[54] Peter Silberman, 'John Harbison's Use of Music of the Past in Three Selected Compositions', *Gamut: Online Journal of the Music Theory Society of the Mid-Atlantic*, 1, 6 (2013), 143–192 (p. 159).

> [T]he imitation of a peculiar or unique style, the wearing of a stylistic mask, speech in a dead language: but it is a neutral practice of such mimicry, without parody's ulterior motive, without the satirical impulse, without laughter, without that still latent feeling that there exists something normal compared to which what is being imitated is rather comic.[55]

Similar, but not identical to pastiche is the act of paraphrase, which in a musical sense, is the use of an existing phrase or section from a pre-existing work within a different context and/or piece.[56] In its new context, this inserted musical element may remain in its original form or be transformed in some way.[57] In this sense, a musical pastiche may be considered a form of musical borrowing (discussed formerly), as well as a re-contextualisation or paraphrase. However, what distinguishes it from such practices is pastiche's distinct purpose to imitate a particular style, as opposed to merely re-contextualising fragments from previous works to give them a new life and/or purpose. A famous example of musical pastiche is 'Prokofiev's Classical Symphony, written in a modified eighteenth century style but lacking the satirical outlook of some of Prokofiev's other works'.[58]

Leonard Bernstein translates, or transports at least, different styles of music into his compositions, most notably in *West Side Story* (1957), but his *Prelude Fugue and Riff's* (1955) is a further example, where he references classical musical forms within an otherwise jazzy setting. Another example is where Peter Maxwell Davies pastiches eighteenth century music in the seventh song of *Eight Songs for a Mad King* (1969).[59] Similarly, his uses of a honky-tonk piano in *St Thomas Wake* (1969), and *Vesalii Icones* (1969) could be perceived as pastiche. Indeed, in *Vesalii Icones* '[q]uotation and parody abound, ranging from banal popular music to Renaissance sacred polyphony, suggesting that nothing is necessarily what it seems to be and that one thing can turn into another, including its apparent opposite'.[60] A composer famous for his use of pastiche is John Harbison. The practice is prominent within a number of his jazz influenced works, most notably his opera *The Great Gatsby* (1999). Here, he intersperses numerous jazz styles between those which are written in Harbison's post-tonal style. Silberman reflects:

> Many of Harbison's jazz-influenced works contain pastiche passages written in various jazz styles that contrast with surrounding non-jazz sections. These passages are never written in a contemporary jazz style but instead imitate earlier styles, often big band swing, perhaps expressing nostalgia for the popular music of Harbison's childhood. Notable examples of his jazz pastiches occur in *The Great Gatsby*. The opera retains the novel's setting in 1920s Long Island. Most of the opera's music is written in Harbison's post-tonal idiom, but the 1920s are evoked by an on-stage

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[55] Frederic Jameson, 'Postmodernism and Consumer Society', in *The Anti-Aesthetic: Essays on Postmodern Culture*, ed. Hal Foster (Port Townsend: Bay, 1983), p. 114.

[56] Latham's definition, p. 135: 'In the 19th century the term was applied to works based on existing melodies or pieces, often used as virtuoso showpieces. The supreme master of this type of recomposition was Liszt, who wrote numerous piano paraphrases of Italian operas and even of Wagner's operas'.

[57] This process can be compared with that of paraphrase in linguistics, see '1.6.1 Intra-linguistic Translation', pp. 14–16 and '1.6.2 Intra-semiotic Translation', pp. 16–17 for some examples of this translation type.

[58] Silberman, p. 160.

[59] McGregor, p. 74.

[60] Robert P. Morgan, *Anthology of Twentieth-Century Music* (New York: WW Norton & Company, 1992), p. 427.

> jazz band and a radio (whose broadcasts are performed by the pit orchestra) that play pastiches of popular songs of the time.[61]

In summary, the practice of pastiche has been explored by composers for centuries to incorporate and imitate prominent musical styles of the past within their compositions. Alike re-contextualisation and paraphrase, the process can be thought of as a practice of translation in the sense that the composer acts as translator to transmit these past musical styles into a modern setting, carrying over such stylistic features into the target work to successfully evoke these characteristics to the listener. A further historical practice which is somewhat similar to the re-composition and paraphrasing methods discussed previously is the musical practice of variation. Here a musical idea is developed into further material and ideas which are presented throughout the work. This topic will be discussed in the next section.

2.6 Variation

A compositional technique that can be associated to the practice of translation, and which is also a subset of re-contextualisation is 'variation'. Variation, in musical terms, is a 'form founded on repetition, and as such an outgrowth of a fundamental musical and rhetorical principle, in which a discrete theme is repeated several or many times with various modifications'.[62] This practice resembles the process of translation in that an original idea is adapted into a new musical idea/language, relating to the original. Sometimes this relationship is obvious (as with a foreignised translation) and at other times masked by the new musical language (domesticated).[63] Alike re-contextualisation, the same idea is expressed in various ways within the same musical work.

Notable works that execute this method include Mozart's *Ah, vous dirai-je, Maman* (1785), where the original melody is decorated and transformed in a number of ways throughout the work to create further material from a single idea. Similarly, Arvo Pärt's *Fratres* (1977) presents a set of variations which are decorated in diverse ways, played in different octaves, varied in articulation, and adapted via instrumental techniques (notably harmonics). Andrew Lloyd Webber takes Paganini's 24th Caprice and uses it for the theme of his *Variations* (1978) for cello and rock band. Throughout these variations Paganini's theme is exposed and disguised to varying degrees as Lloyd Webber deploys it in several settings and alongside other musical ideas and backdrops.

Variation is a form of translation since it mirrors the notion of transportation, however, what distinguishes the two practices is the composer's approach to creating the variation. For example, if the theme or original's purpose is merely serving as an incentive for further material, without any intention to remain faithful to its original detail (as in the examples above) then it is simply variation and not a pure form of translation. In contrast, musical translations, as found throughout the works of the portfolio for this PhD project, take these original musical forms and aim to remain faithful to specific details within their target languages. For example, in *Remnant Echoes* (2020), I translate material written for one instrument into several translations for another with the aim to depict the original fragments instrumental techniques and characteristics in the new instrumental language, while remaining as faithful as possible to the original detail. In *Attack Resonance Decay* (2019–2021) I translate an original work for two cellos into a cello solo and piano solo, while also remaining faithful to the original timbres, techniques, and effect of the original. My *Exercices de* style (2020–2022) on the other hand, closely resembles the process of variation through its numerous re-contextualisation's of the same musical exercise. However, it's motivation to translate Queneau's book by the same name from written French text into musical notation along with all its characteristics, style, and humour is what determines the work a translation and not a straightforward set of variations.

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[61] Silberman, p. 160.

[62] Elaine Sisman, 'Variations', in *Grove Music Online* (2001) <https://doi.org/10.1093/gmo/9781561592630.article.29050> [accessed 15 April 2025].

[63] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10 for definitions of these terms.

Thus far, with the exception of musical encryption, the translational processes discussed have involved the act of translating music already notated into other musical target languages. In contrast, the next section will examine the act of transcription where performed music is notated. Additionally, it will also explore the process where a piece for one instrument is translated into that for another.

2.7 Transcription

'Transcription', in general, is the practice by which one notates something that previously didn't exist in a textual/notated form, as in the sense of Jazz transcriptions.[64] Messiaen's transcription of birdsong is a good example of this type of transformation in music, where he would record birdsong and then transcribe it into musically notated motifs and gestures like those heard in *Catalogue d'oiseaux* (1956–58) for solo piano. This is a translation which involves the transformation of the sound of nature into an instrumental one and hence is a form of inter-semiotic translation: birdcall to musical signs.[65] For this reason, the practice of transcription involves a translational process that happens across differing semiotic systems, such as the transference of spoken word into written music, or the act of notating performed music. Such processes are discussed below.

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[64] 'In Jazz the act of fixing in notated form music that is entirely or partly improvised, or for which no written score exists; also, the resulting notated version itself. The term is also applied to the traditional practice of memorizing and reproducing a recorded improvisation without necessarily notating it', see Mark Tucker, 'Transcription (ii)', in *Grove Music Online* <https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-2000454700?rskey=PDSFvT> [accessed 25 August 2019].

[65] This is an example of what Jia defines as the translation process from an intangible sign (bird call) into a tangible sign (musical notation), see '1.6.3 Inter-semiotic Translation', pp. 17–20 for some other examples of inter-semiotic translation and a definition.

The transcription of speech rhythms into those which are musical is another example of this form of translation and can be found in Peter Ablinger's *Voices and Piano* (1998). Here Ablinger transcribes the metre of speeches by artists such as Bertolt Brecht and Morton Feldman into musical rhythms for the piano. The piano part is then played simultaneously with the recordings of these speeches. The combination of these sources allows both the meaning and narrative to be carried over to the listener; without both, much of these original recordings would be 'betrayed' by the piano's inability to produce human speech.

Another example of musical transcription can be demonstrated by a composition exercise, involving seven composers in creating a score to accompany Joseph Clayton Millis' audio recording, *Sifr* (2015). Each composer had to listen to the recording and create a score which they thought represented the music they were hearing; in this sense the sound recording becomes a ''score' for composition'.[66] This resulted in a series of seven very different scores:

> [Patrick] Farmer's instructions (along with graphics and definitions) are in tiny print on business-sized cards and come with a magnifying glass. [Adam] Sonderberg's score is a single page graphic with a grid of numbers associated with each ten-minute interval. [Michael] Pisaro's *Drip Music No. 13* is a text score in the line of George Brecht, combining a fictional scenario and specifics of the sounding work within 100 words. [Sarah] Hughes' text plays between association, quotation, and direct (though very general) instructions. [Sylvain] Chauveau's is a photograph. [Ryoko] Akama's clear but open instructions are engulfed by a mediation on a specific locality in Paris. Jonathan Chen's stack of six cards presents the work in layers, breaking it apart into specific attributes that are still quite variable to the decisions of the performer.[67]

Despite the extreme diversity in notational representation between the scores produced by the above composers, they are all in response to the Millis recording. This demonstrates the multiplicity of possibilities available when translating a text into an alternate language. It reinforces the notion that there is never one set way in which something can be translated, due to interpretation and differing grammatical structures and vocabularies, as discussed earlier.

In musical terms, however, transcription is sometimes considered the act of transcribing a piece written for one instrument, for another (violin into clarinet), or an ensemble of instruments into another instrumental grouping. A translation which occurs within the semiotic signs of written music: intra-semiotic translation, as opposed to those inter-semiotic practices discussed above. This latter definition is often confused with a very similar process: arrangement. The only thing differentiating the two terms is the varying degrees to which aspects change in the process of these acts: transcription is a more direct rendering of the ideas and features notated for one or more instrument/s into another/others.[68] Arrangement on the other hand involves more interpretive and adaptive processes which could involve reharmonisation, and the addition or extraction of instruments or textural layers. This latter example is demonstrated in a short transcription exercise I did at the beginning of this PhD, which involved the transference of my MMus piece *Rock Formation* (2017) for mixed quartet (baritone voice, trumpet, trombone and bass clarinet) into a standard string quartet (see Appendix D, pp. 184–191 for the full transcription, and the critical commentaries section for a discussion of the exercise).[69] That said, the two processes often overlap as demonstrated in my work *Attack Resonance Decay*.[70] Although this work set out to explore transcription, often I must adapt the material more than anticipated to incorporate the lack of technical and timbral equivalences in the new instrument/s. For this reason, the work could be seen to alternate between transcription (conventional) and arrangement (adaptational) types of translation.

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[66] Jennie Gottschalk, *Experimental music since 1970* (New York: Bloomsbury, 2016), p. 188.

[67] Ibid.

[68] Latham's definition, p. 191: '[a] term used interchangeably with *arrangement. Transcribing, however, is copying a composition while changing layout or notation (e.g. from parts to full score), whereas arranging is changing the medium (e.g. from piano quartet to full orchestra)'.

This section has explored the translational processes that happen when performed music is converted into written notation, or those which occur within written music. However, what about the practice of a composer merely notating the ideas within their mind onto paper, or the act of interpreting philosophical ideas into musical ones? These processes will be considered in the following section.

2.8 Philosophy/Other Extra-Musical Concepts into Music

The transference of philosophical or other extra-musical concepts into a musical form falls into the category of inter-semiotic translation, where textural ideas or other artistic forms are transformed into musical notation.[71] This type of translation occurs when a composer takes a philosophical idea, reinvents this concept into a musical idea for a work, and then translates/transcribes it onto the page. An example of this is Michael Spencer's *Ungrund series* (2009–13) which takes concepts from Jakob Boehme's thinking to inform different aspects of the compositional act. For example, on a structural level, in his piece *Ungrund I* (after Boehme) for various ensembles, the notation of the ungrund or abyss that exists between 'before time' and the 'start of time' is represented by various pitch and rhythmic materials presented in a particular way (sometimes in metric notation, sometimes in space-time notation) in the opening section as 'before time'. In the final two thirds of the piece the same pitch and rhythmical material is re-presented but in a sparse, drawn-out fashion. Thus, Boehme's idea of ungrund containing the same material but in different, unrecognisable forms is parallel in Spencer's piece.[72]

Similarly, Spencer's *Intervolve* (2008) for accordion and double bass deals with Foucault's notions of power relations and the 'panopticon' through various notational approaches. This is achieved using very specific and complex metric pitch and rhythmic material alongside relatively free time and space notation. This notation becomes freer and more ambiguous as the piece progresses, culminating in a final section consisting of only text instruction. Spencer has argued in an RMA conference presentation that the power relations between the composer and the performers (and possibly between the two performers themselves) shift significantly across the piece.[73] In part, this is because the performers have significantly more agency in the time-space notation sections, but also, in the final text instructions, the composer is at once very specific (in some ways) with his directions but at the same time incorporates ambiguity (see Figure 2.2, for example).[74]

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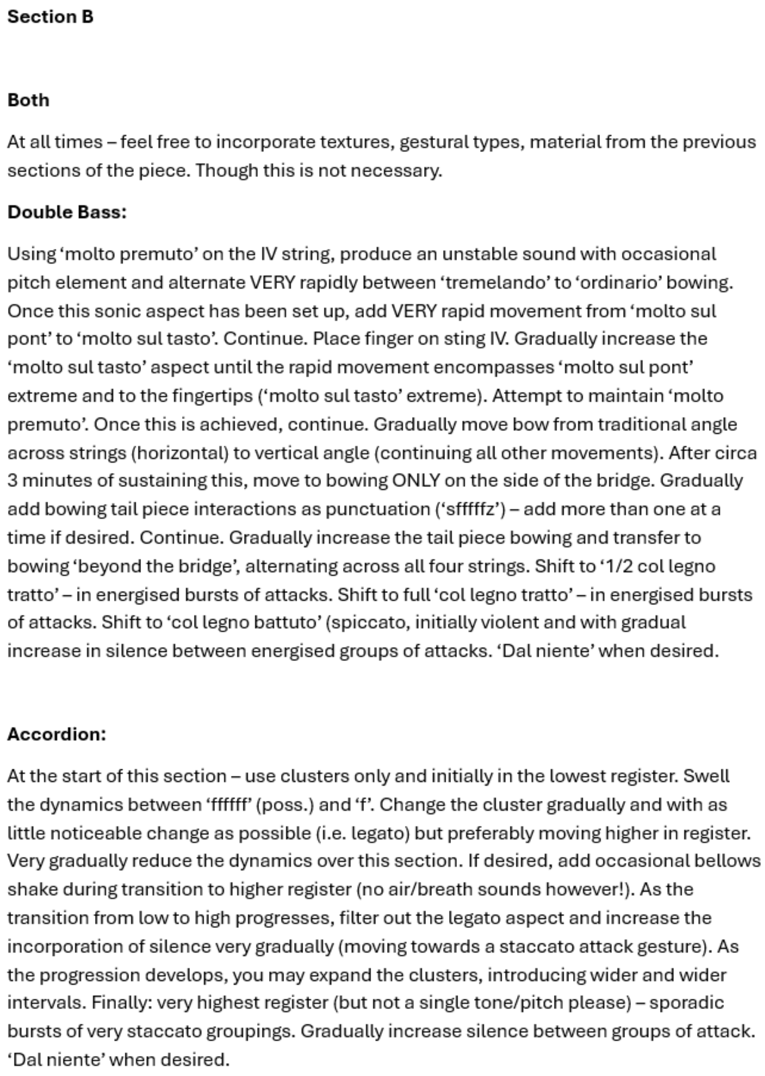
[69] See '3.1 *Rock Formation* Transcription Exercise (2018)', pp. 52–55.

[70] See '3.5 Attack Resonance Decay (2019–2021)', pp. 96–105.

[71] See '1.6.3 Inter-semiotic Translation', pp. 17–20, for a definition.

[72] Michael Spencer, *Ungrund Series* (Leeds: University of Leeds, Unpublished Score, 2009–13).



Section B

Both

At all times – feel free to incorporate textures, gestural types, material from the previous sections of the piece. Though this is not necessary.

Double Bass:

Using 'molto premuto' on the IV string, produce an unstable sound with occasional pitch element and alternate VERY rapidly between 'tremelando' to 'ordinario' bowing. Once this sonic aspect has been set up, add VERY rapid movement from 'molto sul pont' to 'molto sul tasto'. Continue. Place finger on sting IV. Gradually increase the 'molto sul tasto' aspect until the rapid movement encompasses 'molto sul pont' extreme and to the fingertips ('molto sul tasto' extreme). Attempt to maintain 'molto premuto'. Once this is achieved, continue. Gradually move bow from traditional angle across strings (horizontal) to vertical angle (continuing all other movements). After circa 3 minutes of sustaining this, move to bowing ONLY on the side of the bridge. Gradually add bowing tail piece interactions as punctuation ('sfffffz') – add more than one at a time if desired. Continue. Gradually increase the tail piece bowing and transfer to bowing 'beyond the bridge', alternating across all four strings. Shift to '1/2 col legno tratto' – in energised bursts of attacks. Shift to full 'col legno tratto' – in energised bursts of attacks. Shift to 'col legno battuto' (spiccato, initially violent and with gradual increase in silence between energised groups of attacks. 'Dal niente' when desired.

Accordion:

At the start of this section – use clusters only and initially in the lowest register. Swell the dynamics between 'ffffff' (poss.) and 'f'. Change the cluster gradually and with as little noticeable change as possible (i.e. legato) but preferably moving higher in register. Very gradually reduce the dynamics over this section. If desired, add occasional bellows shake during transition to higher register (no air/breath sounds however!). As the transition from low to high progresses, filter out the legato aspect and increase the incorporation of silence very gradually (moving towards a staccato attack gesture). As the progression develops, you may expand the clusters, introducing wider and wider intervals. Finally: very highest register (but not a single tone/pitch please) – sporadic bursts of very staccato groupings. Gradually increase silence between groups of attack. 'Dal niente' when desired.

Figure 2-2: Text instructions towards the end of Spencer's *Intervolve* (2008) incorporating both preciseness and ambiguity at the same time

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[73] Micheal Spencer, 'Intervolve – Where is the Panopticon? – "do not ask me who I am and do not ask me to remain the same…"', *Lancaster University Music Analysis Conference* (Lancaster: Lancaster University, Unpublished Paper, July 2011).

[74] Michael Spencer, *Intervolve* (Leeds: University of Leeds, Unpublished Score, 2008).

In other cases, however, a composer might derive their musical stimuli from a poem or an artwork. For example, Brian Ferneyhough uses Giovanni Battista Piranesi's artwork and Gilles Deleuze's writings on Francis Bacon's paintings as extra musical stimuli for his *Carceri d'Invenzione* cycle (1981–86).[75]

Related to this translation type, Busoni discusses the notion of a composer's imagined musical ideas being translated from his/her mind onto the page:

> Notation is itself the transcription of an abstract idea. The moment that the pen takes possession of it the thought loses its original form. The intention of writing down an idea necessitates already a choice of time and key. The composer is obliged to decide on the form and the key and they determine more and more clearly the course to be taken and the limitations. Even if much of the idea is original and indestructible and continues to exist this will be pressed down from the moment of decision, into the type belonging to a class. The idea becomes a sonata or a concerto; this is already an arrangement of the original. From this first transcription to the second is a comparatively short and unimportant step. Yet, in general, people make a fuss only about the second. In doing so they overlook the fact that a transcription does not destroy the original; so there can be no question of loss arising from it. The performance of a work is also a transcription, and this too – however free from the performance it may be – can never do away with the original. For the musical work of art exists whole and intact before it has sounded and after the sound has finished. It is, at the same time, in and outside of time.[76]

The process discussed by Busoni, can be considered a translation from non-tangible signs into those that are tangible, in the sense discussed above, by Jia.[77] If, then, we consider the re-interpretation of philosophical ideas into those which are musical, this involves a three-part translation process: philosophical text (tangible sign) into thoughts in the composer's mind (intangible sign), and then transcribed back onto a page in the form of musical ideas/notation (tangible sign). In this view, the compositional process, in part, could be considered an act of transcription, since the musical material did not formerly exist before the composer 'transcribed' his/her ideas from their mind onto the page.

If the transference of conceptual musical ideas from the composer's mind, and into notation can be considered a translational act, is it practical to consider a performer's interpretation of a composer's written notation into sound an act of translation? This idea becomes more complex when one considers the decoding of graphically notated music. This will be discussed in further detail in the following section.

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[75] I explore a similar type of translation within *Exercices de style* (2020–2022), where I use Queneau's book by the same name as a stimulus, see '3.6 Exercices de style (2020–2022)', pp. 105–114.

[76] Ferruccio Busoni, *The Essence of Music and Other Papers*, trans. by Rosamond Ley (New York: Dover, 1965/1987), quoted in Henrietta Brougham, Christopher Fox and Ian Pace, eds. *Uncommon Ground: The Music of Michael Finnissy* (Farnham: Ashgate, 1997), p. 74.

[77] See '1.6.3 Inter-semiotic Translation', pp. 17–20 for a definition of what this involves along with examples.

2.9 Translation as Performance

Translation as performance is a live translation which can only be realised during the act of performing the work. This could involve the translation of environmental sounds into those which are musical, the act of interpreting a graphic score, and even the transference of written music into performed sound. These are all forms of inter-semiotic translation since the semiotic mode changes between one source to another (for example, written musical notation into performed music, or nature sounds into instrumental ones, etc.). Like many other practices discussed throughout this chapter, these processes are not usually considered as translational acts, however, within the field of semiotic translation, they are recognised by practitioners such as Gottlieb as valid forms of translation.

This type of translation is evident in the fourth movement of Liza Lim's *Extinction Events* and *Dawn Chorus* (2017). In this excerpt, a pre-prepared snare drum must try to play the cello's part, first playing after the cello has played (as if the snare drum is being taught to sound like the cello) and then simultaneously. As the snare drum attempts to play the cello's material, certain aspects are carried across, such as rhythm and some techniques, but at the same time many aspects are betrayed. For example, the snare drum's lack of pitch variation and inability to attain certain techniques leads to a loss of these features in the percussive target language. This is an example of where equivalence, within the target language, cannot be achieved due to the distance between the two 'linguistic'/instrumental systems.[78] The transference of material from one instrumental system to another could, in a metaphorical sense, be considered to imitate the processes of inter-lingual translation. The way that instruments are characterised and differentiated by their physical sound production can be seen to mirror how human languages are differentiated by their use of specific subsets of the resonant and articulate zones of the vocal cavity. In Lim's piece this analogy is intensified by the fact that the translation is across two fairly distant instrumental families/sound worlds: pitched to un-pitched.

Ed Cooper's *Places/Place* (2018) is another work which involves a translational process within live performance. The piece comprises a set of text instructions informing the players to listen to various field recordings of nature soundscapes and translate them into musical material. In this work, each performer engages in a process of live translation as they transform the sound recordings (which they listen to through headphones) into musical material. This is similar to the act of a linguistic interpreter that mediates between two different languages.

In some cases, the interpretation of graphic scores could also be considered a translational act, when involving a high level of decoding and realisation of graphic symbols in performance. Cardew's *Solo and Accompaniment* (1964) or Stockhausen's *Plus Minus* (1963) fall into this category. In each of these works the composer's notation is accompanied by instructions on realisation and interpretation. Caroline Lucas's *[Un-named Map Series]* (2009–12) is a more extreme example. The high level of openness prevalent in the score requires the performer to engage in a translational process (with limited instructions to aid the interpretation) concerning the transformation of pictorial notations into musical material.[79] Bussotti's *pièces de chair II* present another level of difficulty, although, 'some are in specific and fairly traditional notational systems; others include patches of suggestive graphics; some are dense, difficult to read "portraits" of notation; but none are really what is normally called "pure graphics," as all are based to some extent on musical symbols in a way typical of Bussotti's work'.[80] The lack of recordings of Bussotti's work makes an interpretation of his scores even more difficult.[81]

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[78] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6 for some linguistic examples, and '3.3 Sound Translations (2019)', pp. 70–78, where I discuss equivalence in relation to my own musical translations.

A performer's interpretation of a composer's work could be deemed a possible act of translation. As with the standard translator, who engages in the process of translating a linguistic source, the translator/performer must first analyse the original text/score to decide what they believe to be the most significant features to be carried into the target text/performance. Even in conventionally notated works, where this process is more literal, merely transferring the notes on the page into sound, exactly as written by the composer can be considered a transformative process, as the performer engages in an act of interpretation (adding phrasing, articulation, dynamics). This translation type is recognised by Gottlieb who believes the process of transferring written music into sound and vice versa to be a conventional act of translation: 'transforming written music (i.e. notes) into performed music, are termed "conventional translations"'.[82] Gottlieb later iterates:

> As with other types of conventional translation, there is some leeway of interpretation – not only when working from written to performed music, but also when trying to translate (notate) live music to paper.[83]

In semiotic translational terms, the written notation is considered one sign system, and the performed sounds another. Thus, the transference of these notations into sound can be thought of as a translational process, however, in the conventional sense since 'the direct link between source and target texts is obvious, and criteria for evaluation are easily established'.[84] As with linguistic translation where there are set rules on how one can translate a given text in order to render its meaning into the target language, the performer is bound by the confinements of the composer's instructions.

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[79] See Lauren Redhead's blog on her process of interpreting the work for more detail on the work and its realisation in performance: Lauren Redhead, 'Interpreting Graphic Notation: Caroline Lucas' [Unnamed Map Series]', in *Lauren Redhead*, Blog <https://weblog.laurenredhead.eu/post/46600313326/interpreting-graphic-notation-caroline-lucas> [accessed 10 July 2019].

[80] Paul Attinello, 'Hieroglyph, Gesture, Sign, Meaning: Bussotti's *pieces de chair II*' in *Perspectives in Systematic Musicology* (Los Angeles: University of California Press, 2005), p. 219.

[81] Ibid., pp. 219–220.

[82] Gottlieb, p. 51.

[83] Ibid., p. 55.

[84] Ibid., p. 52.

Since the arrival of graphic notation and text scores, however, this interpretive procedure has become more complex as the performer, for these notations to be transferred from the page into sound, engages in a process of decoding. Like a linguistic interpreter, the performer must act as mediator between the score and the audience as they translate/interpret the composer's written notation into sound which the audience can hear and understand.[85]

For these reasons, and supporting Gottlieb's opinion, just as the transcription of performed music can be considered a translational act, the act of performing written music can also be considered a translational process. This is regardless of whether it is graphically or conventionally notated, however, the first would be considered a more adaptational form of translation. This is due to how things change with each new reader as they carry over what they believe to be the most important features to the audience.

While the examples above display elements of translational processes, it's not my assertion that these composers were deliberately starting out with translation theory as a pre-compositional design. Kagel, on the other hand, in his essay 'Translation–Rotation', does claim that he is undertaking translation. M. J. Grant describes Kagel's translational mapping of these shapes onto musical staves:

> The techniques Kagel outlines begin from the extension of the traditional two-dimensional linear notation […], leaving the possibility of translating this larger configuration in ways loosely related to the techniques of transposition and inversion, but more abstractly. The figure can be stretched to alter the temporal relationships between the notes, or to suggest particular dynamic emphasise, or it may be abstracted from the temporal order of the stave and hence from direct motion, and rotated around one of its points.[86]

Despite Kagel's claim, he is in fact carrying out mathematical translation only and not translating in the linguistic sense of the term. My works, discussed below, set out to explore linguistic and semiotic translation from the outset; in this sense they are musical translations. I use translational approaches such as foreignisation or domestication to either 'move the modern listener toward the original composer' or to 'move the original composer toward the modern listener' (see *Brumel Translated*), or where I have depicted specific translation types, such as referential, or word for word translations (see *Sound Translations*).[87]

I do not claim to have addressed all musical practices which can be considered acts of translation within the tight confinements of this musical context section, but instead those which stood out as translational processes within music. Similarly, it would not be possible to address all these areas, in great depth, within this PhD, since each area would need to be addressed in a full PhD of their own. However, I mention them here for completeness, and to provide a wider picture of how musical practices can be viewed in linguistic and semiotic translational terms.

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[85] Attinello, p. 221.

[86] M. J. Grant, *Serial Music, Serial Aesthetics: Compositional Theory in Post-War Europe* (Cambridge: Cambridge University Press, 2001), p. 183, also on this page is a figure showing how Kagel maps these shapes onto a stave.

[87] See Schleiermacher quote in '1.3 'Foreignisation' and 'Domestication'', pp. 9–10.

Throughout this PhD I take several of these musical processes and use them as translational models to compose music, in combination with methods borrowed from translation studies, as demonstrated in the following section. For example, *Sound Translations* (2019) explores the mapping of techniques from cello to piano and vice versa to explore the discrepancies that occur between the two instruments and their technicalities. This simulates the difficulties that arise in translation when trying to find an equivalent word in another language. *Attack Resonance Decay* (2019–2021) applies translation studies techniques such as carrying across and betrayal or domestication and foreignisation to the act of transcription (in the musical sense) and arrangement, to explore what is lost or retained during this process. Similarly, these translation methods are applied to my exploration of re-composition, re-contextualisation, and borrowing within *Brumel Translated* (2019), and *Translations for Piano* (2021).

The key musical processes explored throughout this PhD, then, include re-composition, re-contextualisation, and borrowing, as well as musical mapping, transcription, and arrangement. The following section provides detailed examples of how and where these procedures are explored within a translation studies context.

Part 3 – Critical Commentaries

In this section I discuss my pieces which specifically take themes and methods from translation studies, specifically those constructed from Eco's concepts in *Mouse or Rat?: Translation as Negotiation* and Jakobson's tripartite division and use them as an impetus to compose. I begin the commentary with a discussion of a short transcription exercise which involved converting my MMus piece, *Rock Formation* (2017) for baritone voice, trumpet, trombone, and bass clarinet into material for string quartet. My aim here was to explore what is lost or retained when translating techniques and material written for voice, brass and woodwind into that for strings. This exercise led to other pieces which explore transcription, notably *Attack Resonance Decay* (2019–2020). In the main portfolio there are seven pieces in total, one of them being a book of one hundred small pieces that replicate the textual exercises within Queneau's original of the same name. Works explore themes discussed above, such as foreignisation and domestication, carrying across and betrayal, and faithfulness, as discussed in the literature review. They also investigate translation types, inter- and intra-linguistic translation, inter- and intra-semiotic translation, and self-translation. These are reformulated into musical equivalents of such terms: inter-/intra-instrumental and intra-musical translation, which in turn fit into the category of intra-semiotic translation (within the same semiotic system of written music as opposed to vocal languages). Alternatively, *Exercices de style* explores inter-semiotic translation: the translation process by which the semiotic system of the target text differs from that of the original (for example, the transference of a written linguistic text into a musical work). This is employed via transferring Queneau's linguistic exercises into a series of musical exercises that explore the many ways in which music can be expressed. This models how Queneau reiterates the same story in as many ways as possible to explore the possibilities of the French language.

Aside linguistic themes of translation, I explore musical processes such as re-contextualisation, re-composition, mapping, transcription, arrangement, and consider the transference of written music into performed music as a translational process. This is achieved via an exploration of ideas from semiotic practitioners, notably Gottlieb, to help recognise these practices as translational activities. In *Brumel Translated*, I explore the depths of re-contextualisation and re-composition as I extract features from Brumel's *Missa Dimonicallis* and transform them into/apply them directly to a contemporary classical setting. Similarly, *Translations for Piano* explores these practices via taking the compositional foundations of my 2017-piece, *Resonant Voices* for organ, and reworking them to create a piece which works for piano, while successfully re-contextualising ideas from the organ work into their new setting. In *Sound Translations* piano techniques are mapped to cello techniques, and vice versa to examine how accurately one instrument can depict the sounds and technicalities of the other. *Remnant Echoes* touches upon the notion of live translation as the musicians are provided with several translations which they must choose from based on their perception of another instrument's material. *Attack Resonance Decay* explores more conventional practices of translation such as the transcription and arrangement of an original work for two cellos. *Pitch Rhythm Gesture* considers the levels of adaptation in translation, and how this affects its ability to be recognised as a translation. In turn, this challenges Benjamin's negative view that you can't have a translation of a translation.[1] See Figure 3.1 for an overview of the types of translation and musical processes represented throughout this portfolio.

WORK	**INTRA-INSTR.**	**INTER-INSTR.**	**INTRA-MUS.**	**INTRA-SEMIOTIC**	**INTER-SEMEOTIC**	**SELF-TRANS.**
BRUMEL TRANSLATED			√	√		
SOUND TRANSLATIONS		√	√	√		
REMNANT ECHOES		√	√	√		
ATTACK RESONANCE DECAY	√	√	√	√		√
EXERCICES DE STYLE			√		√	
TRANSLATIONS FOR PIANO	√	√	√	√		√
PITCH RHYTHM GESTURE	√		√	√		√

WORK	**MAPPING**	**TRANSCRIPTION**	**ARRANGEMENT AND ORCHESTRATION**	**RE-COMPOSITION**	**RE-CONTEXTUALISATION**	**TRANSLATION AS PERFORMANCE**
BRUMEL TRANSLATED				√	√	
SOUND TRANSLATIONS	√					
REMNANT ECHOES						√
ATTACK RESONANCE DECAY		√	√			
EXERCICES DE STYLE					√	√
TRANSLATIONS FOR PIANO				√	√	
PITCH RHYTHM GESTURE						√

Figure 3-1: Translation types and processes explored through music

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[1] See Benjamin, p. 82, and '3.3 Sound Translations (2019)', p. 77.

As shown above, all works explore intra-musical translation since all translations throughout this PhD focus on the processes that occur within the confinements of written music. Most works demonstrate intra-semiotic translation: a translation type that happens within the same semiotic system (e.g. written music, vocal languages, sign language). The exception being *Exercices de style* which investigates a more adaptational translation type where a book of linguistic exercises is translated into an anthology comprising those which are musical: inter-semiotic translation (a translation across semiotic systems). Other works explore inter-/intra-instrumental translation (translation across differing instruments or within the same instrumental language), and self-translation (where I translate my own material for another instrument or setting). Figure 3.1 reveals the types of musical processes which I deploy as translational methods via thinking of them in a translational light. In the following section I display a short exercise which assisted me in the process of reconsidering my compositional practice in terms of linguistic and semiotic translational thought.

3.1 *Rock Formation* Transcription Exercise (2018)

At the beginning of this PhD, I embarked on a small project to get myself into thinking of such musical processes from a translation point of view (see Appendix D, pp. 184–191 for the full score). The exercise explores the process of transcription, as discussed earlier, in a translational sense, via examining what is lost and retained when transcribing a piece from my MMus degree, *Rock Formation* (2017) for baritone voice, trumpet, trombone and bass clarinet for a standard string quartet. I began the process with an analysis of the key features that form the character and style of the work, as well as instrumental techniques, timbres and the ranges of the four instruments. Below I discuss these features and characteristics in detail, as well as how I carried these into the target language of a string quartet.

When examining the opening bars of *Rock Formation*, a notable feature that characterises the fragments are the uncomfortable ranges in both the baritone voice and trombone parts (see Figure 3.2). In order to retain this feature in the string quartet version, I chose to put the first violin part (originally the baritone line) in a challenging range for a violin (see Figure 3.3). Similarly, the viola (originally the trombone part), and cello (originally the bass clarinet) parts have been swapped. Placing the cello (a low bass instrument like the trombone) in an extremely challenging range is more effective in creating the same struggle which the trombone faces when playing in a range out of its comfort zone (see Figures 3.2 and 3.3).

In *Rock Formation*, the baritone voice is vastly different in timbre compared to the other instruments in the ensemble. This is often the case when a voice is included in a work as it seems to dominate the texture. To single out the first violin part, I used either a different bow position or vibrato in the first violin, while the other instruments have a different bow pressure or use no vibrato (see Figure 3.3).

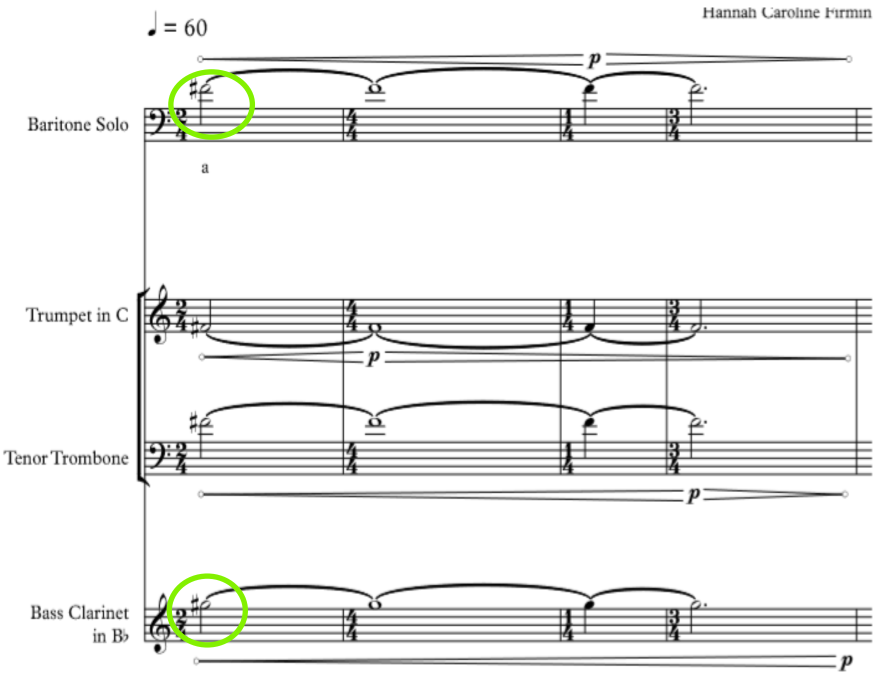
♩ = 60
Hannah Caroline Firmin
Baritone Solo
a
Trumpet in C
Tenor Trombone
Bass Clarinet in B♭
p

Figure 3-2: Uncomfortable ranges in *Rock Formation*

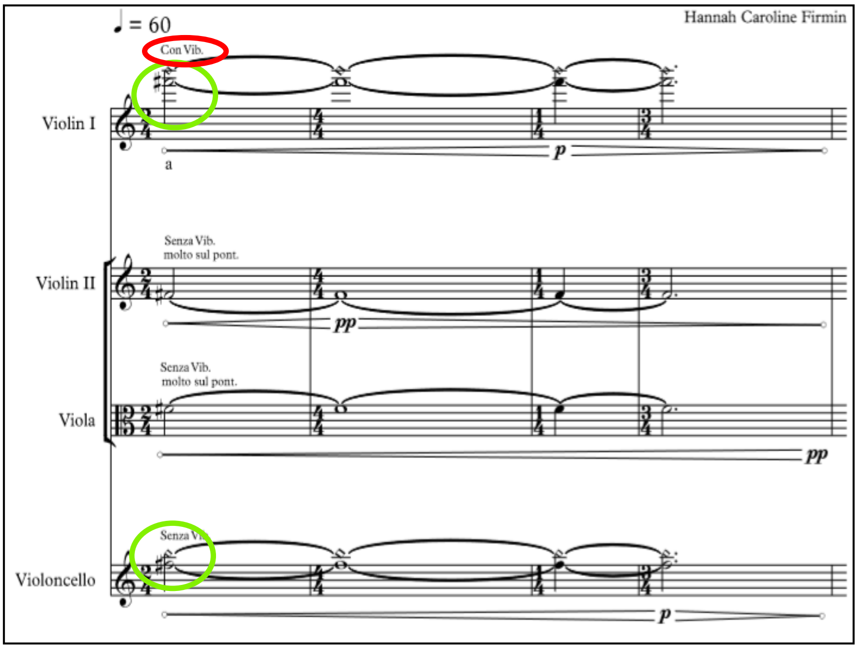
♩ = 60
Hannah Caroline Firmin
Con Vib.
Violin I
a
p
Senza Vib.
molto sul pont.
Violin II
pp
Senza Vib.
molto sul pont.
Viola
pp
Senza Vi
Violoncello
p

Figure 3-3: String quartet version of *Rock Formation*, violin and cello placed in uncomfortable ranges, and violin part with different timbre compared to the other instruments

(GREEN: uncomfortable range; RED: violin timbre)

In another transcription of a fragment, I was faced with the task of translating the effect of a whispa mute into the second violin part (trumpet part of the original version—see Figure 3.4). To simulate the exceptionally quiet, timbral effect that this mute has on the trumpet's sound production within the new confinements of the string quartet, I notated a harmonic (See Figure 3.5). Moreover, I maintained the transition from flutter tongue to ordinary playing through notating a tremolo to ordinary bowing transition.

A second feature in the original fragment is the use of the 'wahwah' effect: a technique specific to brass instruments that can also be simulated/achieved by the voice when covering and uncovering the mouth with the hand. In order to create this effect with string instruments I notated a fluctuation between harmonic and non-harmonic pressure while executing either pizzicato or arco to simulate the same dipping in volume levels that occur with the voice and brass instruments, in the original (see Figures 3.4 and 3.5). A consequence of this decision is the two-octave leap that occurs while switching between harmonic and non-harmonic pressure, as opposed to the sustained pitch that can be achieved by the 'wahwah' effect with both brass instruments and the voice. The sound quality of this alternative technique is also more fragile, as well as less determinate than the original 'wahwah' technique.

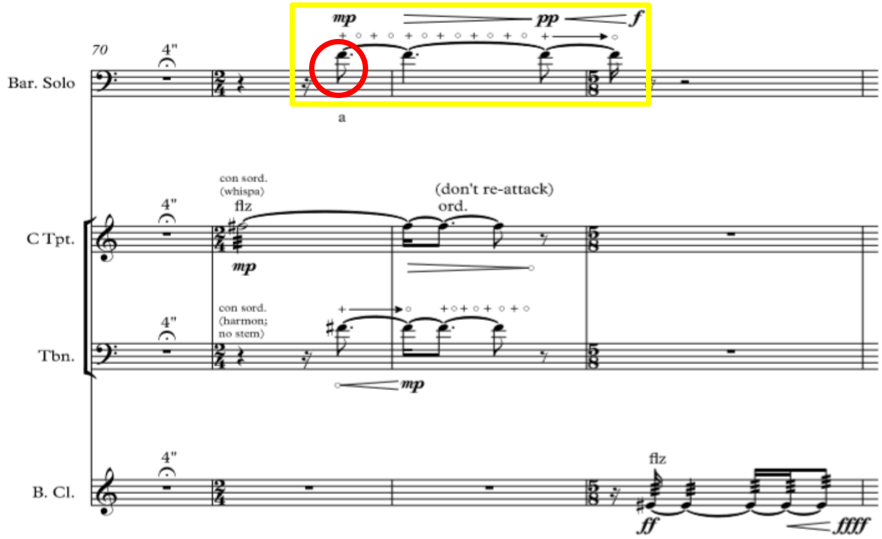

Figure 3-4: String translation of the whispa mute, and of the 'wahwah' effect

(GREEN: whispa mute; YELLOW: wahwah effect; RED: loss of high range)

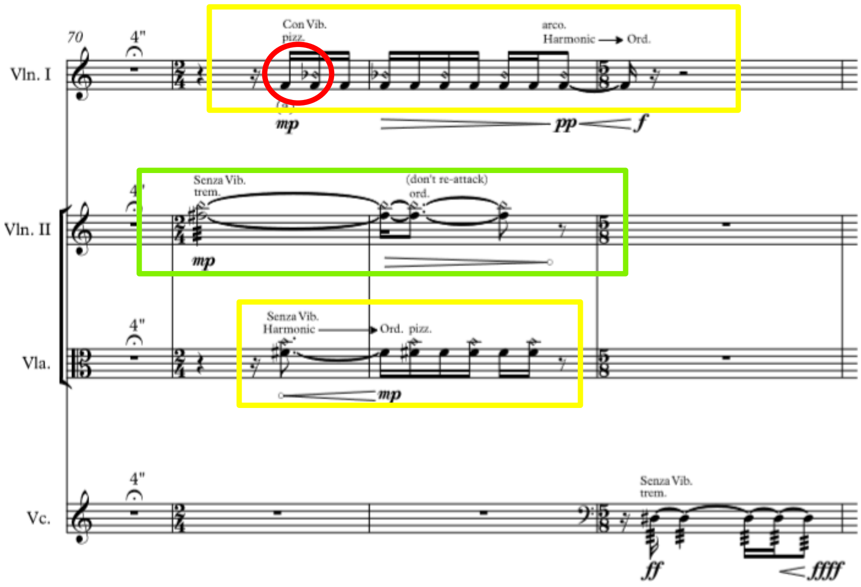

Figure 3-5: String translation of the whispa mute, and of the 'wahwah' effect, and loss of the demandingly high baritone range present in the original

(GREEN: whispa mute simulation; YELLOW: wahwah effect; RED: loss of high range)

I would also like to draw attention to the loss of the demandingly high baritone range, present in the original. This is a result of my decision to keep the second violin part as the highest pitched instrument, like the trumpet that it's modelling in the original version (See Figures 3.4 and 3.5). This is a demonstration of where, in order to retain one feature, another is betrayed, as discussed earlier with an example by Eco.[2]

Executing this exercise provided me with an interesting insight into the difficulties that arise when aiming to transfer material composed for one instrument into that for another. These proved to be similar to the discrepancies that occur when translating one language into another, as the translator is faced with two opposing linguistic systems with differing grammatical structures, and lack of synonyms/equivalent words between dialects. I also recognised the creative impetus that thinking in this way provides, as I sought out new ways of expressing these passages in a new instrumental setting. In the next section I explore the creativity evoked when using less conventional approaches to translate music, such as re-contextualisation and re-composition in my work *Brumel Translated* (2019).

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[2] See Eco (2003), pp. 34–35, where Eco discusses the loss of the Northern Italian essence of his invented language in order for his translators to find a similar slang-like language in their own tongue. I also discuss this in '1.4 Contradictions in Translation: 'Carrying Across' and 'Betrayal'', pp. 10–12.

3.2 Brumel Translated (2019)

Written for soprano voice, flute and B♭ bass/B♭ clarinets, *Brumel Translated* (2018–2019) comprises four short movements. Each movement explores various forms of translation by taking small details such as pitches, durations, cadence points, and compositional techniques from Brumel's mass, *Missa Dominicalis*, specifically the Kyrie, and translating them into various target languages: a stream of semiquavers, a glissandi line, plainchant, tri-chords and even multiphonics are some examples. I will demonstrate some instances of where I execute this within the work, below. At times the material is distorted (domesticated, in the sense outlined above), disguising the original source, and at other times the translation is made audible (foreignised).[3] This type of musical translation can be thought of as re-composition. However, the work also explores re-contextualisation, in that it takes scraps of material from pre-existing sources: Iannis Xenakis, Michael Spencer and, of course, the Brumel (which I will discuss further throughout this commentary), and directly places them into new textural settings.[4]

3.2.1 Technique/Context

Before translating an original text into a target language, the translator must first analyse the original and decide what the main ideas and features in the text are as well as, in Umberto Eco's terms, work out its 'possible world':

> Once one knows the meaning of the uttered words, one determines states of a possible world (which can be either the world we are living in or the one described by a novel), and asserts that in a given spatiotemporal situation certain things or certain events can happen.[5]

From examining Brumel's Kyrie, I came to notice that its most prominent characteristics on a macro-level include canonical textures, strong cadence points, its modal harmonies and held drone-like notes, all representative of the Renaissance period (Eco's 'world' from the quotation above).[6] These are the features that, in all my translations, I aim to retain in the target languages sketched out by *Brumel Translated*.[7] Discussed below are some specific examples of where and how I have achieved this using translational processes: domestication and foreignisation, while pointing out the elements which are carried across/betrayed during the transition from source to target.[8] All the translations below can be thought of as what Jakobson terms intra-linguistic translation, however, in the form of intra-musical or intra-semiotic translation practices.[9]

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[3] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10 for clarification of the two terms.

[4] The piece was workshopped in February 2019 by the Love Music ensemble and was performed in December 2019 by Hannah Firmin (Soprano), Elizabeth Wells (Flute), and Benjamin Palmer (B♭ Clarinets).

[5] Eco (2003), p. 62: here Eco is discussing this notion in relation to 'referential equivalence' as opposed to literal equivalence.

[6] See Andrea Angelini, 'Performance Practice of the Renaissance Music', in *Andrea Angelini* <http://www.andrea-angelini.eu/renaissance-music-performance-practice/> [accessed 23 August 2019], and J. Peter Burkholder, Donald Jay Grout, Claude V. Palisca, *A History of Western Music* (New York: WW Norton & Company, 2014), pp. 151–160, for more information on the musical characteristics of the period, and Owain Sutton, *The Mass Music of Antoine Brumel* (Manchester: University of Manchester, Unpublished Thesis, 2002) for more information on musical traits specific to Brumel's masses.

[7] To my knowledge, the *Missa Dominicalis* has not been recorded; so, what I am carrying over is unlikely to be attributed by a listener to the specific Brumel original. In this sense, it is tropes and stylistic signs that foreignise the target language, albeit ones that do come from an actual Renaissance source.

3.2.2 Micro Details

In the soprano part of the first movement, a series of pitches, in their original order have been extracted from section one of Brumel's soprano line (see Appendix B, p. 169), and translated into a line of plainchant by removing their specified rhythmic values (see the soprano part of *Brumel Translated*).[10] Here, the style of the original Brumel has further been implemented in the target form through my use of small phrases which have pauses at the end of each one.[11] These correspond to the strong cadence points in the original. In this example, Brumel's soprano line is the original source, and the plainchant evocation is the target language. In the process, the key features have been carried across to the target source, such as pitches and cadence points. However, in its new form the rhythm has been betrayed due to the nature of the target language: to convey plainchant characteristics. Plainchant is often characterised by a more flexible approach to rhythm, which is generally more relaxed than in later western traditions. Thus, in order to achieve this impression, the precise rhythmic elements present in the Brumel had to be omitted.

This is not to say that rhythm was not present in plainchant. In fact, the three fundamentals which characterise its sound include rhythm, ornamental neumes and voice production.[12] Consequently, I do not claim to have produced a line of plainchant true to its historical origins, but rather one evoked by modern recordings of chant which continue 'to flow along undaunted, in the smooth, dignified Solesmes sound 'that we have all come to associate with chant''.[13] However, the approach which I have taken most resembles an equalist approach where '[r]hythmic flow is determined by the text: accented syllables receive the stress, and for this reason the method is often referred to as 'accentualist'. The free rhythm reflects the oratorical nature of the chant'.[14] In melismatic passages 'the first note of composite neumes receives the stress'. In order to depict this target form I have grouped the pitches into melismatic passages via slurs which predominantly correspond with the syllables of the text. However, they are not true to the melismatic neumes in original plainchant where pulses are divided into groups of twos and threes'.[15] My indication of vocal style in movement one of the soprano part aims at evoking the 'high (or bright), sweet and clear' quality associated with the performance practice of plainchant.[16]

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[8] See '1.4 Contradictions in Translation: 'Carrying Across' and 'Betrayal'', pp. 10–12 for clarification of the terms mentioned here.

[9] Intra-linguistic: a translation within the same language, hence my intra-musical version of this process involves the translation of one musical form/style into another. This could also be termed intra-semiotic translation since it is a translation of signs from one semiotic system into a differing set of signs within the same sign system of music.

[10] Barton Hudson, ed., *Antoine Brumel: Opera Omnia II*, *Corpus Mensurabilis Musicae* (Münster: American Institute of Musicology, 1970), pp. 24–26.

[11] See '1.2 Source into Target and Equivalence', pp. 6–8 for a definition of 'target form' known as the 'target text' in linguistic translation.

[12] Lance W. Brunner, 'The Performance of Plainchant: Some Preliminary Observations of the New Era', *Early Music*, 10, 3 (1982), 316–332.

[13] Ibid., p. 317.

[14] Brunner, pp. 318–319.

This translation is an example of a musical pastiche, as discussed previously in the musical context section, since it imitates the style of plainchant to the audience even though it is not an actual example of plainchant in the literal sense. This said, the entire work can be said to imitate stylistic traces of the renaissance period due to its strong modal influences.

A similar translation process can be identified in the opening flute passage of movement four (see page 14 of score) where the same soprano line discussed above appears in another form. This time the line is translated into a stream of semiquavers which have been formed into a partita style passage, with two conflicting voices separated by range and technique. In this translation the pitches and some cadence points have been retained. The rhythms and original contour, however, have to be omitted in this target setting, and hence are lost.

Unlike the examples above, sometimes these pitch sequences are less perceptible and, to some degree, distorted in the translation. A situation such as this appears in the flute part of movement three, bars 73–82. Here, the soprano line from Brumel's section three, in its original order, is quarter-tonally adapted via a rule: every three to five pitches move the pitch up or down a quartertone. The translation results in a blurred version of the original, which still, however, retains the initial stylistic trace via its canonical impression, and in bars 73–76, a staggered version of the original cadence points. However, the source rhythm is once again betrayed to fit the target form.

In movement four, bars 98–111, both Brumel's rhythm and pitch material have successfully been carried into the translation. Here a section of Brumel's soprano line, section three (see Appendix B, bars 39–45, p. 171), has been extracted and transported into a series of glissandi points which happen over the original duration sequence. The original is quasi perceptible here, but the clarity of the pitches and rhythm are blurred: the continuous sliding motion of the glissandi makes these features less traceable. However, the features retained in this fragment, along with those discussed above, are the original text, metre, contour, and range, bringing this translation closer to its original.

At points in the translation, Brumel's original rhythm has been retained but compressed/expanded into different note groupings or shorter or longer rhythmic values. A simple example of this can be identified in movement three of *Brumel Translated*, where the original pitch and duration sequences from Brumel's alto part, section three (see Appendix B,

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[15] Ibid., p. 319.

[16] Isidore of Seville (*d* 636), quoted in Ibid., p. 325.

p. 171), have been compressed into quintuplets (see bars 73–82): this is probably one of the most audible translations, since all factors have been retained – durations, pitches, contour and text. A far more masked translation, however, is present in the clarinet part of the same movement (see bars 73–82). This line takes the bass part from Brumel's Kyrie, section three (see Appendix B, p. 171), and transports it into a mixture of much shorter and slightly longer durations. Sometimes, however, the duration remains identical to the original (see the first duration in Appendix B, bar 39, p. 170 in relation to the first multiphonic's duration in bar 73 of *Brumel Translated*, for example). Due to the practice of diminution and augmentation being performed on small sections of Brumel's sequence, the original rhythm is hardly recognisable in its translation.

The multiphonic equivalents of certain pitches from the original sequence (see bar 73, for example) further disguise Brumel's material in this translation. The rule for translating these pitches into multiphonics was that the pitch being transported from the original Brumel must appear somewhere in the multiphonic, though not necessarily as the fundamental. Due to the substantial changes that this target form required, a lot of the original has been betrayed during the transition: some pitches, original rhythmic values, the text and even some of the original contour. This is an example of where I domesticated the translation via the addition of extended techniques such as multiphonics, along with the more complex rhythmic groupings that resulted from my use of diminution. Consequently, as with a domesticated translation, 'the original composer has been brought towards the modern listener' as opposed to 'the modern listener being moved towards the original composer's style'.[17] It is therefore unclear that it is a translation to the listener/reader and it might well seem as though it had been originally composed/written in this musical/linguistic language: a second original.[18]

A domesticated approach has also been taken with the translation of Brumel's Christe Eleison text, second section (see Appendix B, p. 170) into a series of extended vocal techniques: isolated/grouped spoken and sung consonants/vowel sounds, rolled 'R's', glissandi, along with the more simplistic disjointed text configurations (see movement two of *Brumel Translated*). Although someone who is familiar with the original sacred text may recognise it, the text, completely transformed, loses its original connotations and clarity in the target language.

3.2.3 Borrowings; Re-contextualisation

In certain sections of *Brumel Translated* 're-contextualisation' is used as a compositional tool to insert pre-existing fragments of material into a new context, often quite foreign to the musical style from which the extract originates. This first occurs in the first movement where small phrases of Brumel's section one soprano line are placed among the much more avant-garde flute and clarinet parts. This is a good example of where a foreignised musical quotation has been placed in an otherwise domesticated translation. Indeed, it is similar to the Eco example discussed earlier, where in order to avoid the loss of its original funny connotations and nuance, he expresses the need to directly place an un-translated French expression into its English translation.[19] A similar effect is produced in movement three (bars 73–82) where Brumel's section three alto line is placed in another quasi-modern setting.

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[17] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10, and Schleiermacher, p. 42.

[18] See '1.7 Self-Translation', pp. 20–21 for some examples of what can be considered a second original.

The re-contextualisation of this sacred text into its non-religious and modern setting can also be considered an act of foreignisation. My retaining of its melismatic setting, from the Brumel is a further act of foreignisation, which brings this musical translation closer to its source. This aspect moves the listener towards the original composer, as opposed to moving the original composer toward the modern listener, as does the domesticated approach to the Christe Eleison text in movement two (discussed earlier). However, the text loses its original meaning and connotations when placed against the flute and clarinet's modernised material, alienating the sound world of the first movement.[20] This approach was deliberate, since I wanted to create a translation which mixed foreignised and domesticated material. This challenges Schleiermacher's statement, discussed earlier, that the two translation approaches can't be combined.[21] My musical translations of Brumel's Kyrie have demonstrated that a mixture of the two approaches is possible, at least with semiotic/non-linguistic translations. Retaining this text along with its often-melismatic setting, does however, carry another aspect of the Brumel into the target work, bringing this musical translation closer to its source.

Movements one and four of *Brumel Translated*, include musical extracts from other contemporary works, such as Iannis Xenakis' *Rebonds A* (1987–89) for solo percussion and Michael Spencer's *Message from Aiwass II* (2003) for percussion, cello and piano.[22] An example of the Xenakis can be identified in the fourth movement (see bars 83–92), where bars 1–8 of *Rebonds A* (see score) are used to create a canonical texture.[23] Despite it being a direct rhythmic quotation inserted in its original form, its repositioning within this new context, along with the addition of pitches and melodic contour, its faster tempo and canonical layering, the original Xenakis is barely traceable in the translation. Here, the original rhythm has been domesticated to fit the canonical context of the target source.

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[19] See '1.3 'Foreignisation' and 'Domestication'', p. 8, and Eco (2003), p. 91.

[20] In my translation my intention was to emphasise the sounds of these words (such as their vowel sounds, and in movement two, their consonants), and not to carry over the text's original religious connotations of forgiveness.

[21] See '1.3 'Foreignisation' and 'Domestication'', p. 9, and Schleiermacher, p. 42.

[22] I chose these particular fragments from both these composers' works on the basis that they both have a relation to either the translational practices of re-contextualisation and re-composition and/or to Brumel. For example, Xenakis has a reputation for self-translation within his works, as discussed in '2.4 Re-contextualisation; Paraphrase and Borrowing', pp. 35–38, and *Message from Aiwass II* is, in part, also a re-composition and re-contextualisation of a work by Brumel.

[23] See Iannis Xenakis, *Rebonds* (Paris: Éditions Salabert, 1987–1989).

Within movement one, bars 1–5, a portion of Michael Spencer's *Message from Aiwass II*, percussion part (see score), has been re-contextualised.[24] Here the original rhythm of bars 1–6 has been directly transplanted into the flute part, however, this time it is more perceptible in the translation. In fact, the addition of pitch material and accents further enforce the rhythm, making it sharper and crisper than in its original context, where the percussion isorhythm is more ambiguous, giving it a general shape, but not the pronounced and pointillistic contour that it has in *Brumel Translated*. The slight decrease in tempo in the re-contextualisation further transforms the rhythm's original identity, while also allowing more time for each duration to sound.

In addition to musical excerpts, sometimes compositional techniques are borrowed. In order for them to fit the new purpose and context of my musical target languages they are re-worked ('re-worded') so that they generate the type of material required of the specific translation. Movement two was composed using a technique which Michael Finnissy used to compose *G.F.H.* (1985).[25] Taking the opening of Handel's *Trio Sonata op. 1 No. 1* as his point of departure, Finnissy splits the melody into seven pitch cells each containing three pitches.[26] From these, via use of transformative techniques such as inversion, retrograde, and transposition, he derives further cells.[27]

This technique was used to form the entire chordal texture of movement two of *Brumel Translated*. However, the technique is used to compose vertical harmonies, as opposed to Finnissy's horizontal lines (see Figures 3.6 and 3.7), and has also been used in combination with my own generated sequences to determine the range of each instruments' pitch (see Figure 3.8) and their durations (see Figure 3.9).[28] Since this target language required Brumel's soprano line, section two to be translated into a series of tri-chords, a musical language quite distant from its original horizontal form, the Brumel is scarcely audible in the target work. Hence it has not been possible to successfully retain much detail: the original rhythms, melodic contour and text are lost in translation. This is another example of where the original material has been domesticated in order to move the original composer toward the new contemporary style of *Brumel Translated*. However, as Ian Pace remarks in *Uncommon Ground*: 'It is Finnissy's belief (which I share) that after even the most radical of transformations, a kernel of a source's intrinsic characteristics, however small, will continue to be present in a work which has been created from that source'.[29] Brumel's pitch sequences produce a sound-world relating back to the Renaissance, and this stylistic trace will always be detectable to a degree no matter how disguised it is within the new context.

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[24] Michael Spencer, *Message from Aiwass II* (Leeds: University of Leeds, Unpublished Score, 2003).

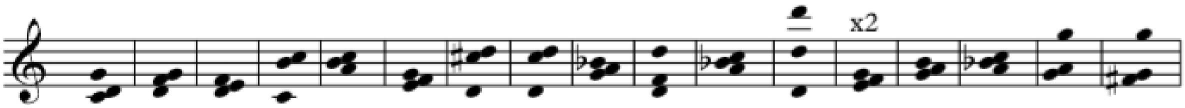
[25] Henrietta Brougham, Christopher Fox and Ian Pace, *Uncommon Ground: The Music of Michael Finnissy* (Farnham: Ashgate, 1997), p. 78.

[26] See Finnissy's pitch cells made from Handel's original melody in Ibid., pp. 81–82.

[27] See Finnissy's pre-composition materials as well as the text explaining Finnissy's workings in Ibid., pp. 78–82.

[28] See musical example of Finnissy's work containing contrapuntal lines composed via the technique discussed above in Ibid., pp. 79–80.

[29] Ibid., p. 80.



(These do not represent the actual voicings of the tri-chords as they appear in the score).

Figure 3-6: My divisions of Brumel's section two, Soprano line into cells containing three pitches each

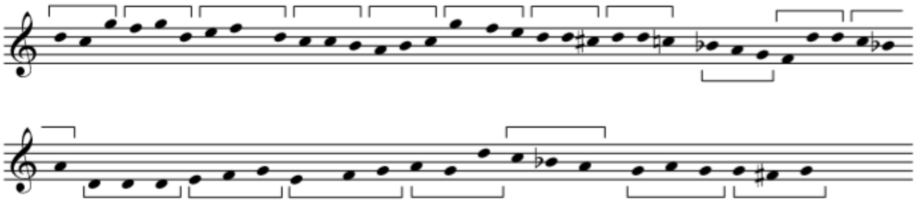


Figure 3-7: Demonstration of how these cells were converted into tri-chords

Soprano: 6 → 4 → 5

Flute: 5 → 6 → 4 → 7

Clarinet: 3 → 5 → 2 → 4

(The numbers relate to the octave in which to position the pitch: the soprano part = 6th octave → 4th octave → 5th octave, for example. When impracticalities occurred during following the sequence, e.g. a specific pitch wasn't possible for the specified instrument in the octave generated by the sequence I adapted the pitch into a different range accordingly).

Figure 3-8: Devised sequences to decide the range of each instrument's pitches

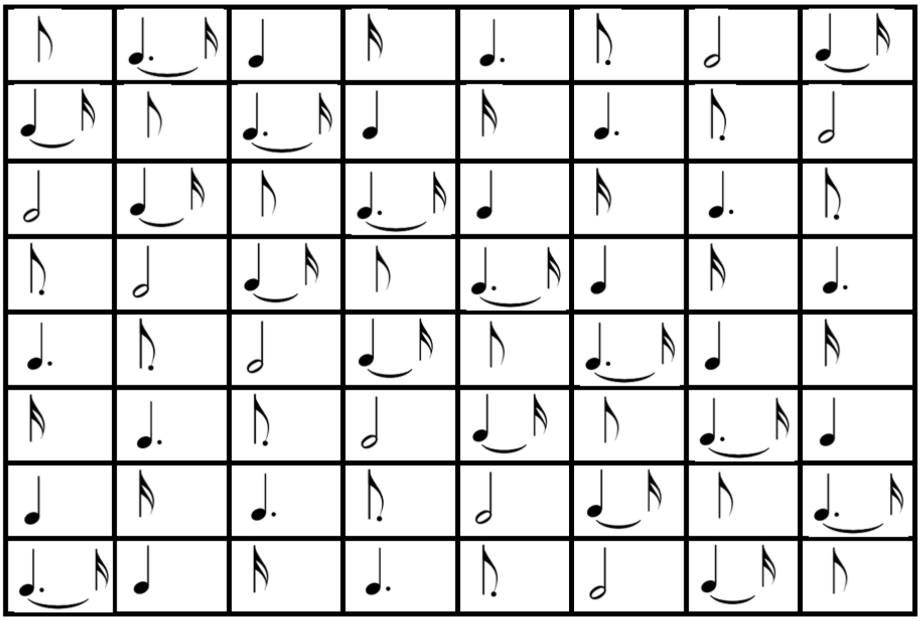


Figure 3-9: The system that generated my rhythmic sequences

In all the cases above I set my own target language, and my goal is to transport the Brumel, or at other points, Xenakis and Spencer, through post-compositional techniques such as re-contextualisation, into these target forms (see Figure 3.10).

Source	**Target Language**
Brumel's section one soprano line	Plainchant evocation (movement one, soprano part)
Brumel's section two Christe Eleison text and soprano line	Extended vocal techniques (soprano part, movement two) and tri-chords (all parts, movement two)
Brumel's section three bass line	Multiphonic sequence with diminished and augmented versions of Brumel's rhythm (clarinet part, bars 73–82)
Brumel's section one soprano line	Stream of semiquavers in two-part texture (flute solo, page 14 of score)
Brumel's section one soprano, alto and bass lines + Xenakis' *Rebonds A* rhythm (bars 1–8)	Canonic texture (bars 83–92)
Brumel's section three soprano line	Glissando line (soprano part, bars 98–111)

*This is only indicative of some of the types of target languages which I translated fragments of Brumel's Kyrie into.

Figure 3-10: Source into Target

3.2.4 Macro Details: Texture and Form

Throughout the entire form of *Brumel Translated,* the textures in each individual movement are used in different ways to either blur (domesticate) and expose (foreignise) the original within the target musical language. For example, in movement three, even though all three parts are made up entirely of pitches from the third section of Brumel's original (sometimes adapted in some way), the independent nature of the parts combined makes it hard to trace the original. The original is therefore domesticated in the target text to fit the new contemporary musical style of this movement. In contrast, in the fourth movement (see bars 83–92) comprising the soprano, alto and bass lines from Brumel's Kyrie, first section, the original musical language can be clearly traced through its canonical texture that makes the harmonies more prominent and reminiscent of the Renaissance style. This translation takes a foreignised approach, since 'the modern listener has been moved towards the original composer'. In fact, the resulting material of the fourth movement is the closest translation to its source in the entire work.

One could argue, however, that using Brumel's modal harmonies in *Brumel Translated* is an act of foreignisation in itself. This is emphasised in movements one and two, since both soprano parts are the closest translations to the original melody/harmony in the Brumel. The more contemporary sounding backdrop of the flute and clarinet parts emphasise the peculiarity of these modal sequences. The low drone notes in the clarinet part of movement one fit with the style of the plainchant (see bars 1–7). These drone notes also reflect the long durations in the opening six bars of Brumel's tenor part, section three (see Appendix B, p. 171).

Overall *Brumel Translated* comprises a mixture of domesticated and foreignised translations that challenge Schleiermacher's statement discussed in the literature review.[30] I have used musical processes such as re-composition and re-contextualisation as translational tools to extract parameters and features from Brumel's Kyrie and insert them either directly or adapted into the target work. Prior to translating the original Brumel, I analysed its key features in order to carry across its fundamental stylistic attributes to the target source as Eco recommends. Despite the more adaptational processes carried out during the translational stages, it is clear that the work is a translation of the Brumel due to the strong stylistic traces that link back to the renaissance period. Contrary to this, in the next commentary, I will discuss the discrepancies that occur when directly mapping the techniques of one instrument to those for another.

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[30] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

3.3 Sound Translations (2019)

Sound Translations (March–April 2019) is a work for cello and piano that uses mapping techniques to plot the sounds of the cello onto the piano and vice versa. My objectives when writing this piece were to investigate whether sounds, timbres, or techniques can be transferred onto another instrument and, if so, how closely this can be achieved. This is explored through three defined and contrasting sections: 1) glissandi translations/mappings; 2) sequences of extended techniques with motivic interjections; 3) motivic translations across instruments. The idea was inspired by the fourth movement of Liza Lim's *Dawn Chorus and Extinction Events* (2018). Here, a prepared snare drum (with a string through the middle and a bow attached) attempts to play the cello's material, as if the cello is teaching it how to play these short passages. In doing so, elements are either carried across (such as rhythm) or betrayed (pitch/glissandi).[31]

3.3.1 Technique/Context

In the opening chapter of *Mouse or Rat?: Translation as Negotiation*, Eco describes Morse code translation as involving 'the process of *transliteration*, that is, of substituting letters of a given alphabet with letters of another one, and letters are meaningless'.[32] Eco then goes on to discuss the problems with this type of translation, since mapping ignores the expression and content planes (discussed in the literature review), as well as the importance of context when translating. He states that 'translation does not only concern words and language in general but also the world, or at least the possible world described by a text'.[33] A translation process which mirrors the notion of word for word translation, where one word is substituted by another, occurs in section two of *Sound Translations*, which I discuss in detail later in this commentary. In contrast to this robotic form of translation, the first and third sections explore the looser approach of what Eco terms 'referential translation'. However, all three sections of the work demonstrate musical versions of what Jakobson terms inter-linguistic translation (or translation proper): from one language to another. This conception is symbolized in the way that these translations happen between instrumental languages: I name this type of translation inter-instrumental. This definition involves the translation of one instrument's material into that for another, which I will discuss later in this commentary.[34] Eco describes such a process in relation to transcribing Bach's Solo Cello Suites (1717–23) for recorder:

> [T]he melodic line is transported point by point from one instrument to the other, without variations, but the same does not happen with the chords. The bow of the cello can be drawn across more than one string at the same time, while with a recorder one can play no more than one note

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[31] See '2.9 Translation as Performance', p. 46 and Liza Lim, *Extinction Events and Dawn Chorus* (Paris: Ricordi, 2017).

[32] Eco (2003), p. 9.

[33] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6 and Eco (2003), p. 16.

[34] See '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–26 for more explanation of the term.

> at a time. The solution is ‘to translate’ a given chord into an *arpeggio*: the soloist plays several notes one after the other very rapidly so to create the aural impression of performing all of them at the same instant.[35]

Eco then moves on to discuss the timbral differences between the two instruments and how audible this is to the listener in regard to the above example.[36]

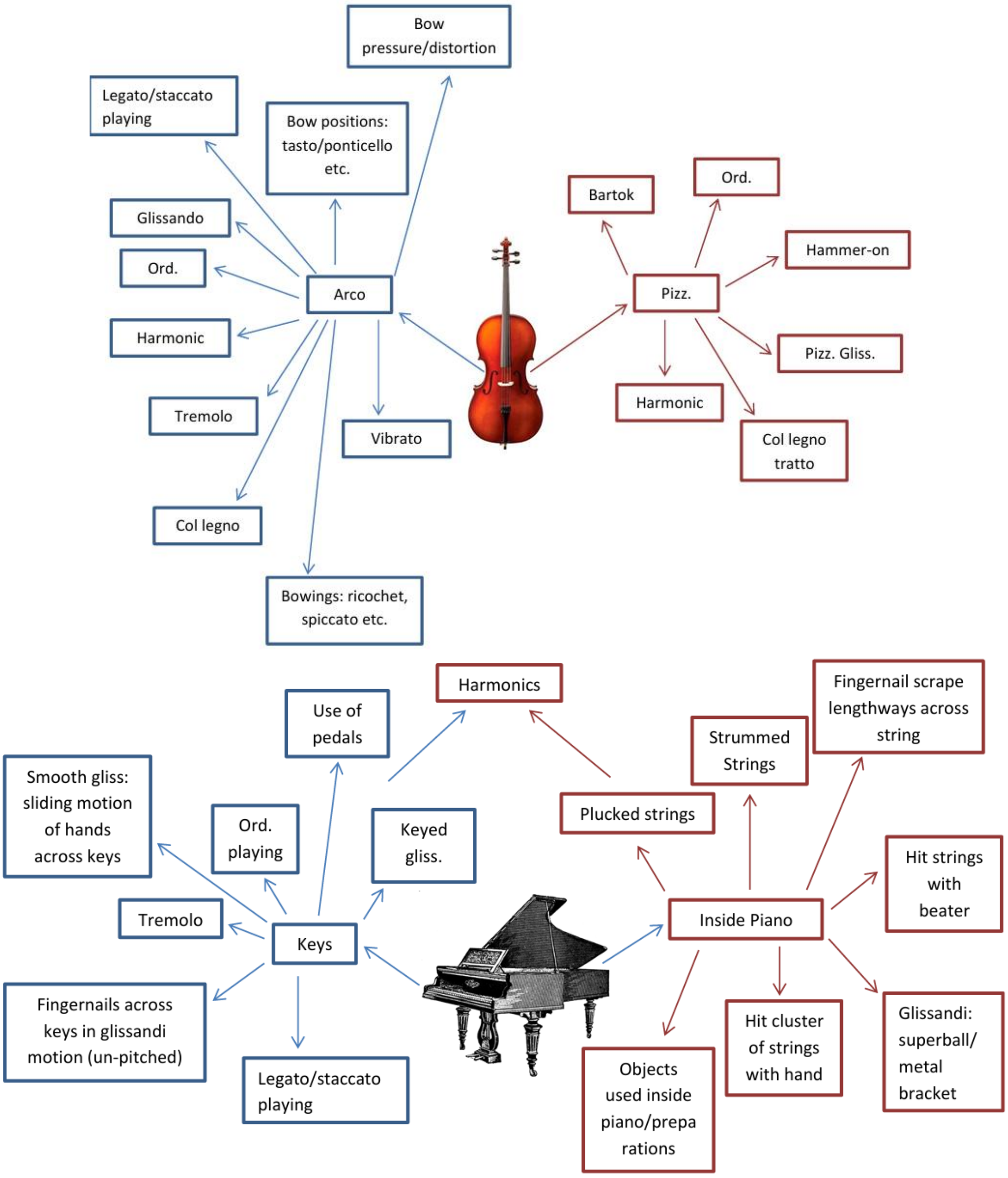
Bow pressure/distortion
Legato/staccato playing
Bow positions: tasto/ponticello etc.
Glissando
Ord.
Arco
Harmonic
Tremolo
Vibrato
Col legno
Bowings: ricochet, spiccato etc.
Bartok
Ord.
Hammer-on
Pizz.
Pizz. Gliss.
Harmonic
Col legno tratto
Harmonics
Use of pedals
Fingernail scrape lengthways across string
Strummed Strings
Smooth gliss: sliding motion of hands across keys
Ord. playing
Keyed gliss.
Plucked strings
Hit strings with beater
Tremolo
Keys
Inside Piano
Fingernails across keys in glissandi motion (un-pitched)
Legato/staccato playing
Objects used inside piano/preparations
Hit cluster of strings with hand
Glissandi: superball/ metal bracket

Figure 3-11: Diagram showing the techniques attainable by either the cello or piano

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[35] Eco (2003), p. 131.

[36] Ibid.

In the first instance, as with the cello and snare drum in Lim's work, the cello and piano have extremely different characteristics: those which are timbral or to do with the execution of technique, not to mention that they are from different instrumental families. To manage this issue, I sketched out a diagram of all primary techniques, from the most basic to the more complex, that are possible on each instrument along with their individual qualities (see Figure 3.11). According to their similarities in sound and technique, I then considered ways that these techniques could be mapped to each other (see Figure 3.12). This diagram formed the starting point for my inter-linguistic (inter-instrumental) translations.

Piano	**Cello**
Tremolo on one pitch: continuous sound like bowing motion	Arco
Keyed notes	1) Pizzicato: percussive effect similar to the hammers hitting the strings when keys are depressed 2) Sforzando notes: attack which quickly dies away similar to piano attack/decay
Keyed Harmonic	Plucked Harmonic
Glissandi: keyed, hand slide across keys, strum strings, superball/metal bracket slid across string	Glissandi
Attack string with metal bracket and then slide lengthways across string	Pizzicato glissandi
Fingernail scrape lengthways across string	Bow pressure/distortion
Hit string repeatedly with beater (notes which accel. or rit.)	Ricochet bowing

*Displayed above are only some examples of how cello techniques can be mapped to piano techniques and vice versa.

Figure 3-12: Possible ways of mapping the techniques

The first section explores the different ways a glissando, a straightforward technique to execute on the cello, can be transferred onto the piano. While the cello introduces this technique, attempting to achieve a similar seamless motion, the piano begins to interject intervallic glissandi (see bars 2–12, for example) using a metal wall bracket on the middle strings of the piano, which is slid away from and toward the performer to create upward/downward pitched glissandi. Once the technique is established, the piano part begins to execute long phrases of this glissandi method (see bars 24–36).

The piano then develops different methods to create a similar effect through the use of a superball mallet (see bar 37). Though more prominent, the sound production of the superball glissandi can be, at times, less determinate and continuous than the previous technique. This instability demonstrates the imperfection of equivalencies between instrumental languages, in a similar way to the discrepancies that occur when trying to find an exact equivalence between two linguistic systems.[37] This type of translation resembles Jakobson's inter-lingual translation (my inter-instrumental) because the cello's material is being transferred over to the piano, and hence across instrumental dialects as opposed to those which are linguistic.

This section is representative of what Bartoloni terms the 'interstitial zone': the zone between two languages, where the act of translation happens/becomes audible.[38] In his article Bartoloni describes this space:

> I believe that the time is ripe to propose a further theoretical shift which rather than occupying itself with what is at the beginning or the end of the process of translation, investigates the area in-between the original and the translation, that zone in which two languages and two cultures come together and fuse in a kind of cross-fertilization where their distinctive traits are blurred and confused by the process of superimposition. It is the zone, which in the course of this article I have called "interstitial" and "potential," where the original is no longer itself, having experienced already the departure from its point of inception, and where the translation is not yet completed, being still in the process of reaching its "home". The "potential" zone is neutral and defies the clear definition of "home" as a given set of accepted cultural values and tastes. It lies in-between, in the mid-way and as such is characterized in equal measure by the memories of the origin and the expectations of the arrival, by the features of the known (the original) and those of the "becoming" (the translation). It is the zone in which source and target cultures melt and generate a culture under way which resembles, yet it is also markedly different from them.[39]

As the piano searches to find its closest equivalence of the cello's material, the impurities of language, which Bartoloni examines are exemplified. Here the two instrumental languages crossover and combine in a similar way to how Bartoloni describes the in-between stages of translations, where two cultures combine into one as the translator scrambles to find a way to express the ideas and nuances of one culture for an opposing culture. In this process the two cultures often overlap as one culture is imposed on another culture's language. Derrida furthers this belief with his view that the similarities and crossovers between linguistic tongues make it impossible to have a pure translation. This notion is examined in detail later within my *Pitch Rhythm Gesture* commentary, where the impurities between languages are reflected in the inability to separate musical parameters.[40] In a similar way to how languages influence one another, musical parameters interlink to create certain effects. Trying to isolate them as distinct features proves to be problematic.

Thus far, with the intention to make this translation process audible to the listener, a single technique (glissandi) is drawn out over the space of approximately three minutes. Firstly, through the piano's mimesis of the cello's glissandi line (bars 24–36). Secondly, through the piano's repetitive reproduction of the technique (bars 2–12, metal bracket and bars 37–56 and 78–88, superball). On the contrary, the section that follows relates more to Eco's notion of a Morse code or word for word translation type. In such translation, one symbol equals another, or one word is transported into another, without paying any attention to the expression or content planes discussed earlier.[41] As a consequence of this, the translation is often inaccurate, similar to the computer generated translations discussed by Eco where the computers inability to contextualise words creates imprecisions.[42] When out of context, the meaning of individual words become uncertain, and the resulting translation is often incomprehensible and unfaithful to its original.

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[37] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6.

[38] See *Part 1: Translation Studies: A Literature Review*, p. 2.

[39] Bartoloni, p, 7.

[40] See '3.8 Pitch Rhythm Gesture (2022)', pp. 132–142.

This uncertainty is explored in section two of *Sound Translations* by directly mapping a specific cello technique on to one which the piano can execute. The piano material aims to be equivalent to the cello's (see Figure 3.13) but is often unsuccessful. This process is attained by the punchy unison rhythm amid the duet (see bars 89–92). As with word for word translations, where one word is substituted for another, the instruments, along with their versions of the techniques are placed side by side, creating a hypothetical synonymy where both forms of the word are heard simultaneously. Sometimes quasi-equivalence is achieved through the techniques, as with the unison glissandi in bar 89, or the sequence of corresponding techniques in bars 91–92: exaggerated vibrato vs. tremolo; bow distortion vs. fingernail on string; and pizzicato vs. plucked string. Often, however, the instruments' techniques fail to correspond (see bar 99): here repeated beater hits (the equivalent of the cello's ricochet bowing) are paired with the cellos glissando and following harmonic. This, along with the robotic rhythms attached to these techniques, is a representation of the inaccuracies that arise during the process of computer-generated translations. The robotic and systematic rhythms churn out material, sometimes the techniques are appropriately matched and at other times bear no resemblance whatsoever within the context of my musical system.

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[41] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6 for more information on this type of translation along with Eco's negative views on the practice, and Eco (2003), p. 9.

[42] See Ibid., and Eco (2003), pp. 10–18.

Cello	**Piano**
a. Glissandi (pizz. gliss. or ord.)	a. Superball, metal bracket, strummed glissandi
b. Trill/Ricochet	b. Trill inside piano/beater hits on string
c. Tremolo	c. Tremolo on string
d. Scratch tone/distortion	d. Fingernail scrape lengthways on string
e. Pizzicato	e. Pluck string
f. Ord. Bowing/playing technique	f. Hit cluster of strings with hand

Figure 3-13: Direct mappings of cello techniques to piano techniques used in section two of *Sound Translations*

In a broader sense, even when executing a similar sounding technique such as the unison pizzicato and plucked string in bar 111, or even the same technique (see harmonic passage at bars 101–107) the timbral and technical differences of the two instruments do not permit precise equivalence. These instances reflect the inaccuracies that happen when searching for an exact equivalent word in an alternate language.[43] In such cases, the nearest translation of the word/s, or in my case, instrumental technique/s, must be sought in the target language.

In the work's concluding part, the two instruments attempt to imitate one another's techniques/characteristics through a series of short motifs (see bars 183–185 of piano part and bars 187–190 of the cello line, for example). Here the cello tries to perform a similar effect to the piano's tremolo inside the piano. This section begins with a series of short phrases/motifs either written for cello or piano, which are then translated into a series of motifs for the other instrument (see Figures below). These translations do not aim to translate specific details (such as rhythm, for example) but instead seek a referential equivalence, like that which Eco discusses in relation to the transference of coral colours in his novel *The Island of the Day Before*. Here Eco emphasises the importance for his translators to create the same 'plurality of colours' of coral through a 'plurality of colour terms' as does the original, even if the specific colours have to change.[44] Below is a discussion of how I followed this translational model for my motif translations, which 'convey the same things and events as the original'.

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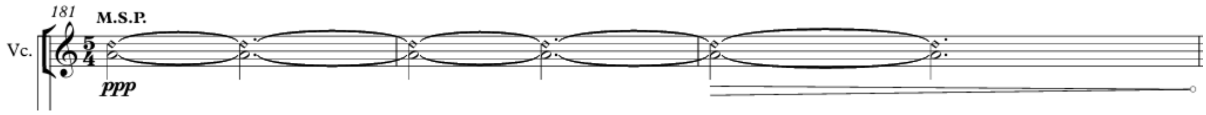
[43] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6.

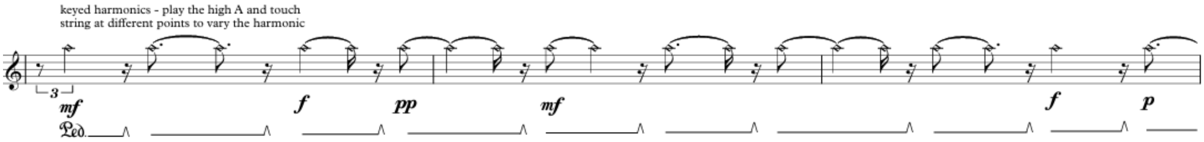
[44] Eco (2003), pp. 68–71.

Sometimes, however, content changes have been made to allow their most important features to be carried across.[45]

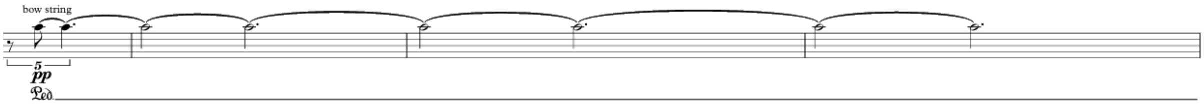
3.3.2 Source Motifs along with their Translations


181
M.S.P.
Vc.
ppp

Original Cello Motif (bars 181–183)


keyed harmonics - play the high A and touch string at different points to vary the harmonic
3
mf
f
pp
mf
f
p
Ped.

a) Piano translation 1 of the cello original; harmonic (bars 206–209)


bow string
5
pp
Ped.

b) Piano translation 2 of the cello original; long sustained ‘A’ pitch in treble clef (bars 209–212)

Figure 3-14: Translation 1

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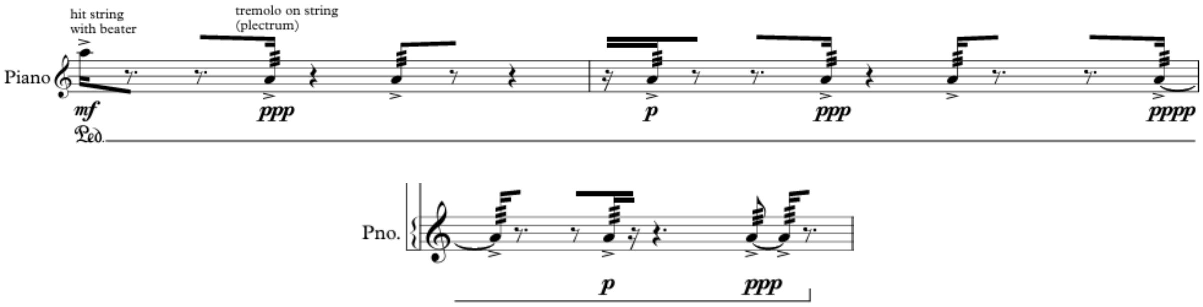
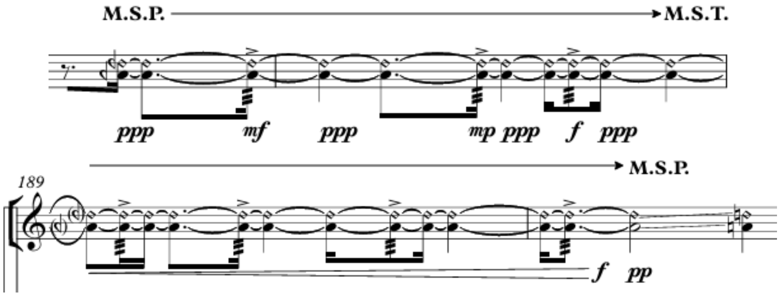
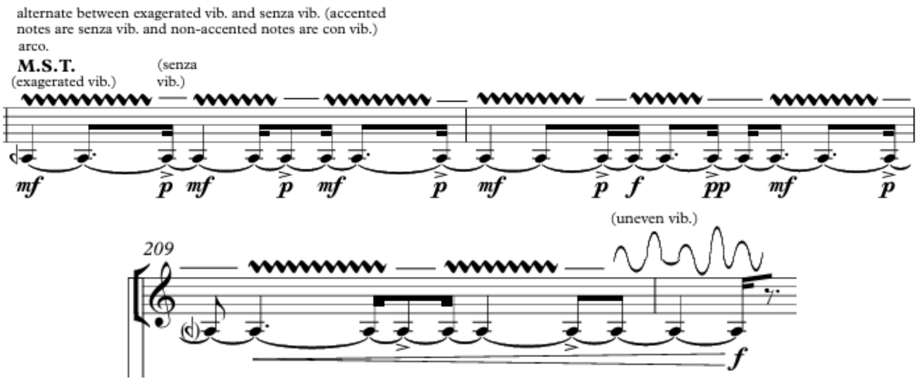
[45] Ibid., p. 62.


hit string with beater
tremolo on string (plectrum)
Piano
mf
ppp
p
ppp
pppp
Pno.
p
ppp

Original Piano Motif (bars 183–185)

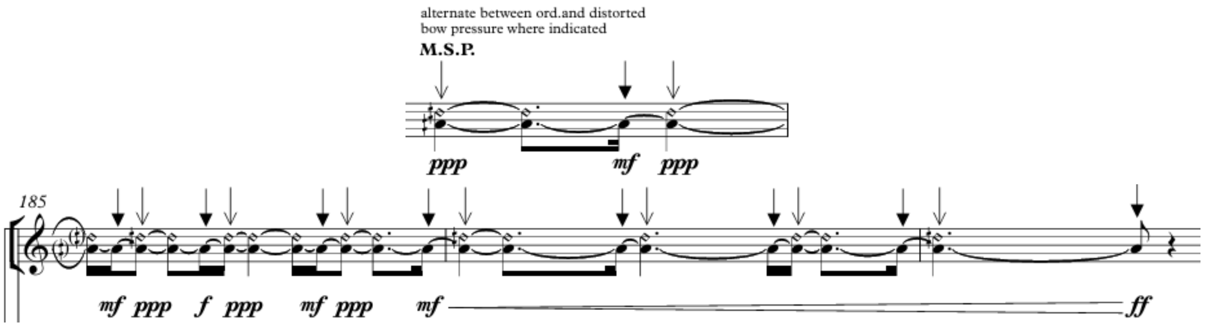

M.S.P.
M.S.T.
ppp
mf
ppp
mp
ppp
f
ppp
189
M.S.P.
f
pp

a) Cello translation of the piano original; all treble clef (bars 187–190)

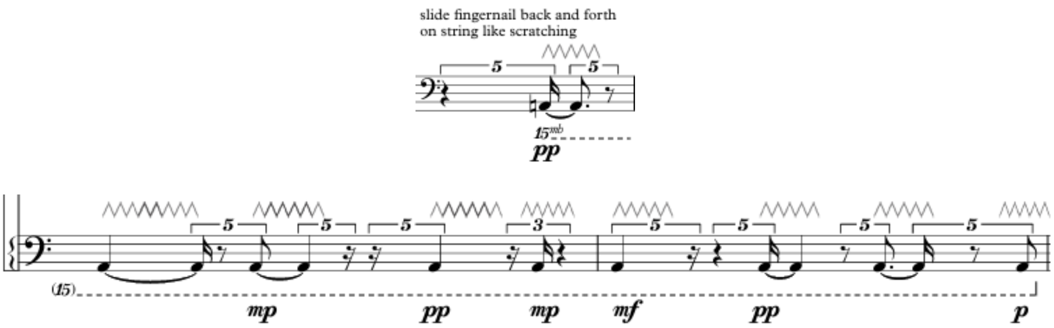

alternate between exagerated vib. and senza vib. (accented notes are senza vib. and non-accented notes are con vib.)
arco.
M.S.T.
(exagerated vib.)
(senza vib.)
mf
p
mf
p
mf
p
mf
p
f
pp
mf
p
209
(uneven vib.)
f

b) Second cello translation of piano original/cello translation; all in treble clef (bars 207–210)

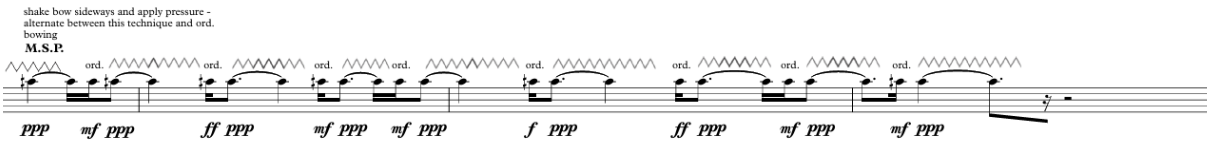
Figure 3-15: Translation 2


alternate between ord.and distorted
bow pressure where indicated
M.S.P.
ppp
mf
ppp
185
mf ppp f ppp mf ppp mf
ff

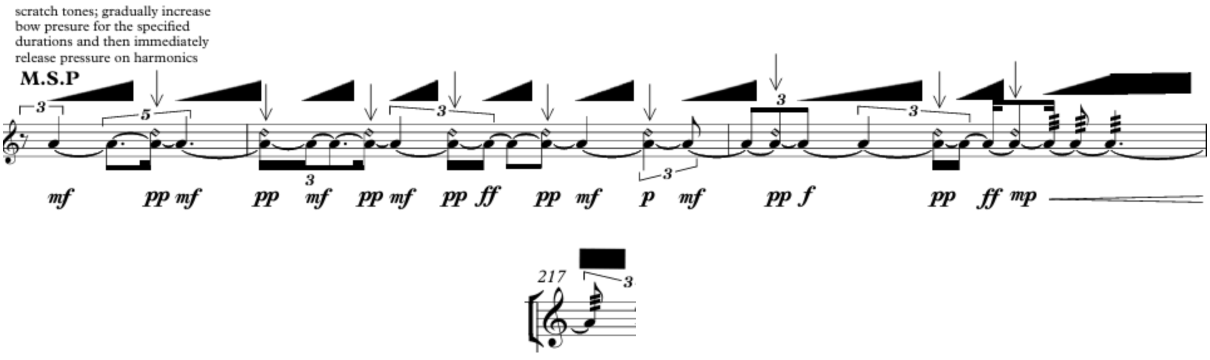
Original Cello Motif; all in treble clef (bars 184–187)


slide fingernail back and forth
on string like scratching
5
5
15mb
pp
(15)
3
mp
pp
mp
mf
pp
p

a) Piano translation of the cello's original (bars 188–190)

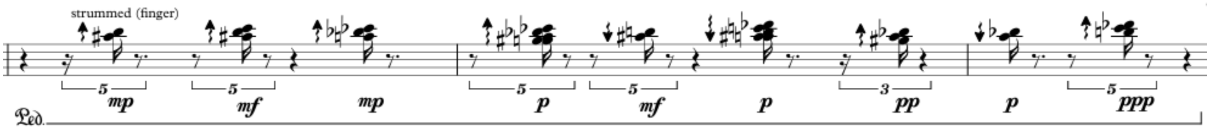

shake bow sideways and apply pressure -
alternate between this technique and ord.
bowing
M.S.P.
ord.
ppp mf ppp ff ppp mf ppp mf ppp f ppp ff ppp mf ppp mf ppp

b) Cello translation of the piano translation above (bars 193–196); in treble clef

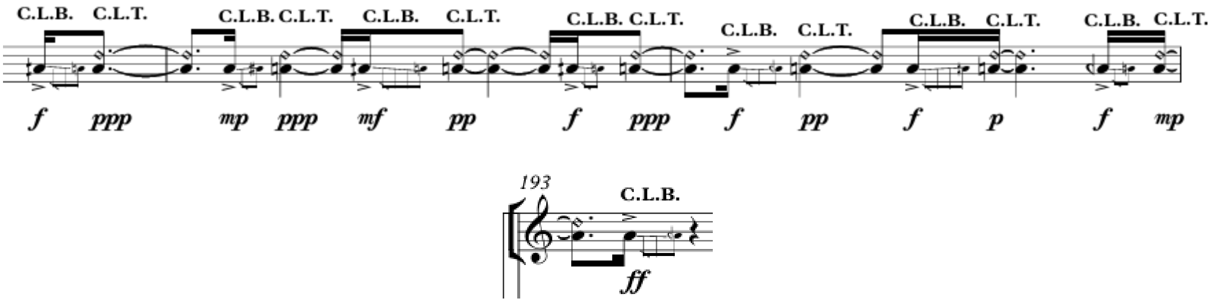

scratch tones; gradually increase
bow presure for the specified
durations and then immediately
release pressure on harmonics
M.S.P
3
5
mf pp mf pp mf pp mf pp ff pp mf p mf pp f pp ff mp
217

c) Cello translation of the original cello motif (bars 214–217)

Figure 3-16: Translation 3

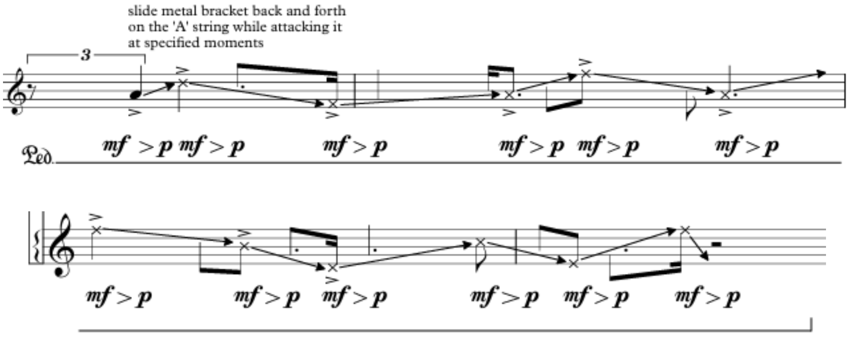

strummed (finger)
5
5
5
5
3
5
mp
mf
mp
p
mf
p
pp
p
ppp
Ped.

Original Piano Motif; all in treble clef (bars 186–188)

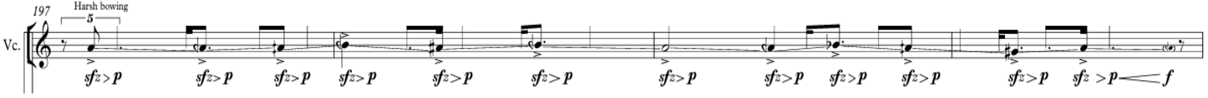

C.L.B.
C.L.T.
C.L.B.
C.L.T.
C.L.B.
C.L.T.
C.L.B.
C.L.T.
C.L.B.
C.L.T.
C.L.B.
C.L.T.
C.L.B.
C.L.T.
f
ppp
mp
ppp
mf
pp
f
ppp
f
pp
f
p
f
mp
193
C.L.B.
ff

a) Cello translation of the piano original; all in treble clef (bars 190–193)

Figure 3-17: Translation 4

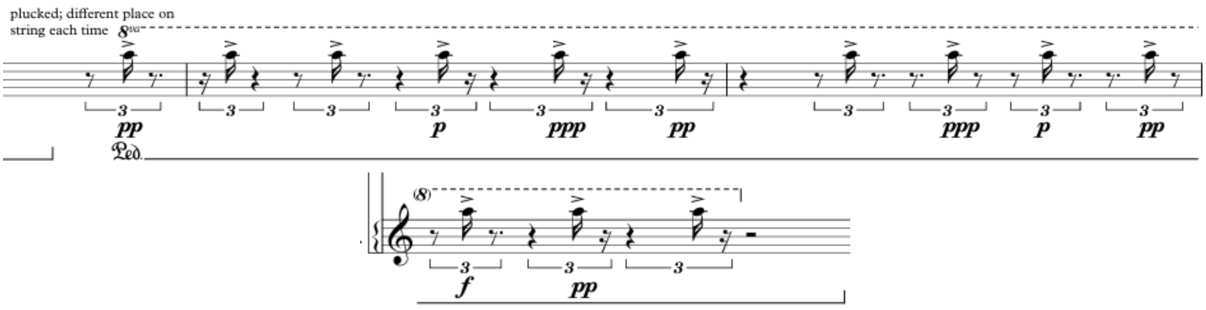

slide metal bracket back and forth
on the 'A' string while attacking it
at specified moments
3
mf > p
mf > p
mf > p
mf > p
mf > p
mf > p
Ped.
mf > p
mf > p
mf > p
mf > p
mf > p
mf > p

Original Piano Motif (bars 191–194)

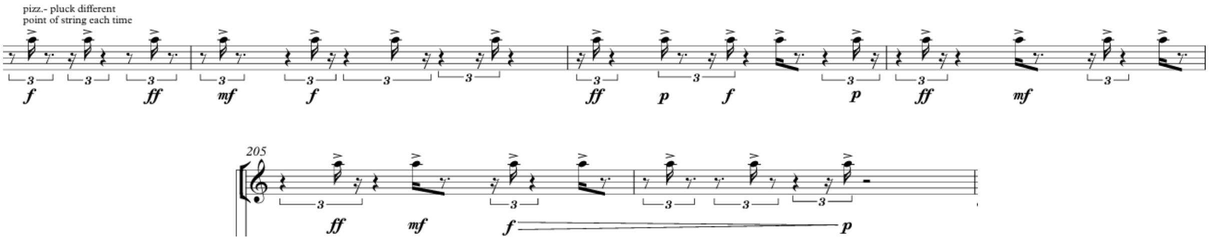

197
Harsh bowing
5
Vc.
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
sfz > p
f

a) Cello translation of piano original (bars 197–200)

Figure 3-18: Translation 5

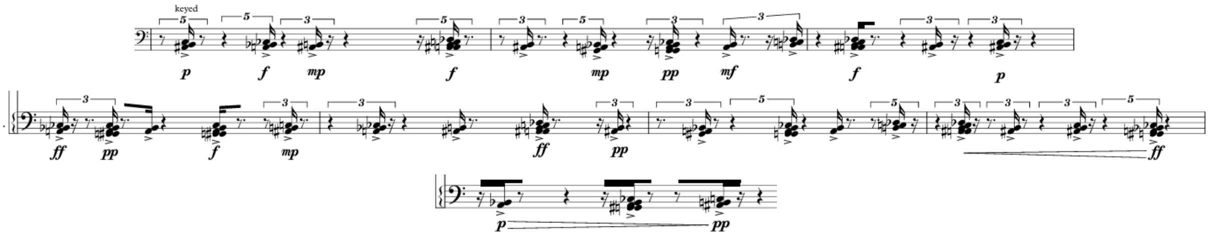

plucked; different place on string each time
8va
Ped.
pp
p
ppp
pp
ppp
p
pp
(8)
f
pp

Original Piano Motif; all in treble clef (bars 194–197)

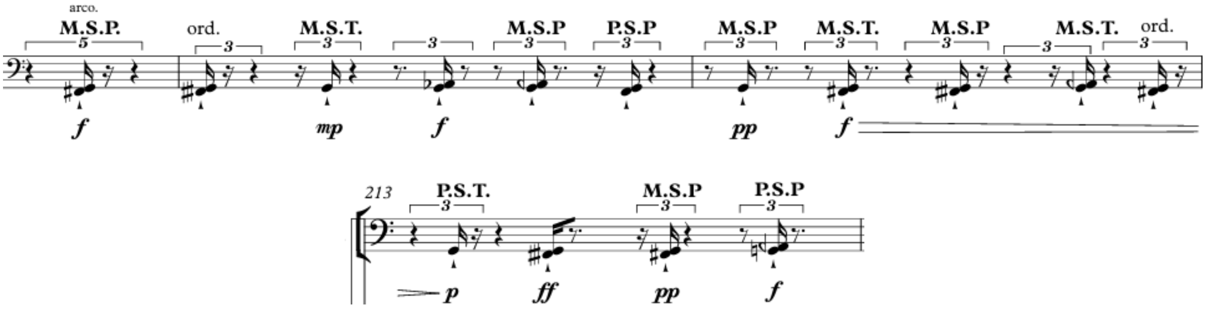

pizz.- pluck different point of string each time
f
ff
mf
f
ff
p
f
p
ff
mf
205
ff
mf
f
p

a) Cello translation of piano original; all in treble clef (bars 201–206):

Figure 3-19: Translation 6


keyed
p
f
mp
f
mp
pp
mf
f
p
ff
pp
f
mp
ff
pp
ff
p
pp

Original Piano Motif (bars 198–205)


arco.
M.S.P.
ord.
M.S.T.
M.S.P
P.S.P
M.S.P
M.S.T.
M.S.P
M.S.T.
ord.
f
mp
f
pp
f
213
P.S.T.
M.S.P
P.S.P
p
ff
pp
f

a) Cello translation of piano original (bars 210–213)

Figure 3-20: Translation 7

In each case, when translating these fragments, my aim is to carry across the underlying features of each original motif which, of course, above all, is their technical and timbral effect. Figure 3.16: Translation 3 is an example of where sacrifices had to be made in order for the main features to be carried into the target motif. The main characteristics in the cello original include the alternation between harmonic and non-harmonic pressure, alongside the switch between ordinary and distorted bow pressure, as well as the increasing and decreasing dynamic levels on the pitch 'A' quartertone sharp. In the piano translation, the sound quality of the harmonic is betrayed due to the instrument's inability to produce a continuous harmonic. Further, to retain the distortion technique, which, in the translation is achieved via a scratching motion being performed on a bass string (A), the harmonic quality must be surrendered. Here, the alternation between harmonic pressure and distortion, as seen in the cello original, had to be sacrificed to retain what I believe to be the most important feature of the two. The durations have also had to be adapted in the piano translation. Due to the impracticality of the short bursts of distortion, as seen in the original, being audible when performed on a piano string, the durations have been lengthened, betraying the short semiquavers. Conversely, the short rests, which take the place of these short actions, interrupt the production of the technique in a similar way to how the surges of distortion interrupt the flow of the held harmonic in the original. The alternating loud and quiet dynamic levels are retained.

Despite the translations discussed above not being exact equivalences of their original, and the fact that some aspects from their originals have been betrayed, they more importantly demonstrate what Eco describes as a 'functional equivalence':

> [T]he aim of a translation, more than producing any literal 'equivalence', is to create the same effect in the mind of the reader (obviously according to the translator's interpretation) as the original text wanted to create. Instead of speaking of equivalence of meaning, we can speak of *functional equivalence*: a good translation must generate the same effect aimed at by the original.[46]

My translations aim to 'create the same effect in the target language (according to my interpretation) as the original wanted to create'.[47] These target motifs serve as functional equivalents of their source motifs; in that they intend to convey the same technique (or at least provide a similar impression of it) in the other instrument.

Interestingly some originals have two translations, or translations that contain relative aspects in order to demonstrate features that the other translation couldn't retain. An example of the first situation can be demonstrated with translation three, which has a second translation, or a translation of its translation (see Figure 3.16, b). This is a cello translation of the piano version: the cello performs a pressured bow shake which aims to simulate a similar scratchy quality to the one created when a fingernail is used on a bass piano string. Short, ordinarily bowed pitches replace the short moments of silence in the piano version, bringing it closer to the original cello version. The technique is also executed on the same 'A' quartertone sharp from the original cello motif: the piano translation fails to achieve this due to its inability to play quartertones.

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[46] Eco (2003), p. 56.

[47] Ibid.

Sound Translations challenges the traditionalist view that a translation of a translation is impossible, as expressed by Benjamin: 'Translations, on the other hand, prove to be untranslatable not because of any inherent difficulty, but because of the looseness with which meaning attaches to them'.[48] This view of translation is language based, and fails to consider the translation of a translation in the case of intra-semiotic based transformations. My above examples have, however, proved that this is possible in a musical context. This concept is explored further within my 2022 work, *Pitch Rhythm Gesture.*

An example of where two translations are related can be demonstrated with translation one (see Figure 3.14; Translation 1). In this instance, the first translation (a) executes the harmonic aspect of the original, but, due to the piano's inability to sustain pitches indefinitely (at least without the use of tools such as e-bows which then wouldn't allow for the harmonic), fails to achieve its continuity. The second translation (b) provides the held 'A' pitch in the original by using fishing wire to bow the string, but the harmonic quality is betrayed. These two translations work together to retain as many features from the cello original as possible.

3.3.3 Borrowings; Re-contextualisation

In specific sections of the piece, techniques which were used to generate durational sequences in previous works have been reused to create rhythms within a new context. This happens in section two where the same rhythmic grid used to compose the durations in movement two of *Brumel Translated* (see Figure 3.9 in *Brumel Translated* Commentary, p. 63), is used to generate the robotic rhythmic impression needed to demonstrate the computer generated/word for word translations discussed earlier.[49] These rhythms paired with the rapid changes in technique create a completely different impression in this new setting, however, they do bear a perceivable resemblance (see Figure 3.21).

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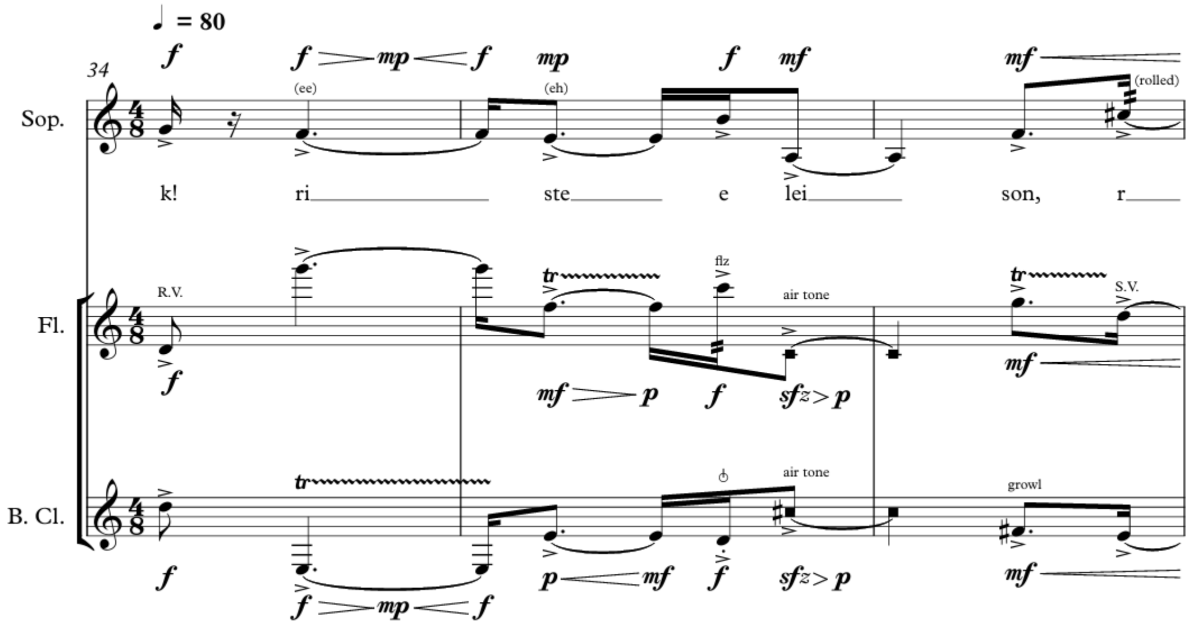
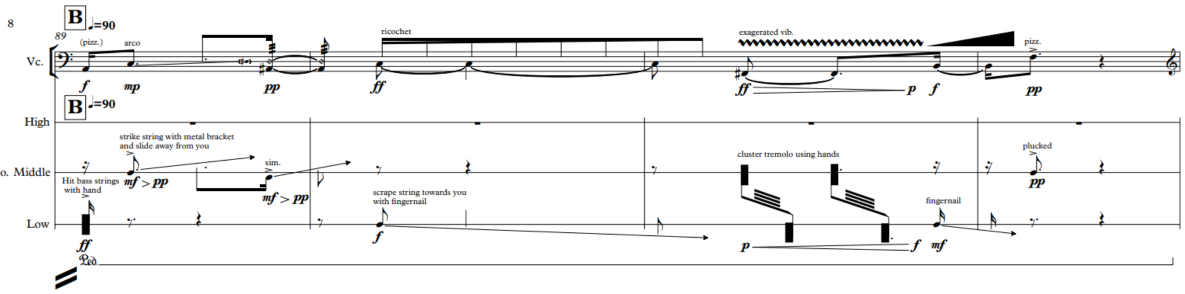
[48] Benjamin, p. 82.

[49] See '3.3 Sound Translations (2019)', pp. 65–70, and '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6.


♩ = 80
34
Sop.
Fl.
B. Cl.
f
f mp f
mp
f
mf
mf
(ee)
(eh)
(rolled)
k!
ri
ste
e
lei
son,
r
R.V.
flz
air tone
tr
S.V.
mf p
f
sfz p
growl
p mf
f mp f

(*Brumel Translated*, bars 34–36)


B
♩=90
8
89
(pizz.)
arco
ricochet
exagerated vib.
pizz.
Vc.
f
mp
pp
ff
p
High
Pno. Middle
Low
strike string with metal bracket and slide away from you
sim.
Hit bass strings with hand
mf > pp
scrape string towards you with fingernail
cluster tremolo using hands
fingernail
plucked
Ped.

(*Sound Translations*, bars 89–92)

Figure 3-21: Re-used rhythms from *Brumel Translated* in *Sound Translations*

Overall, *Sound Translations* explores two contrasting forms of translation. Firstly, that of mapping or word for word translation where one word or instrumental technique is exchanged for another. Secondly, functional and referential equivalence where the translation aims to achieve the same events and function as the original. In both cases, however, aspects are betrayed due to the timbral and technical differences of the two instruments. Like *Brumel Translated*, with this latter form of translation, I analysed the sound world of these original fragments and aimed to carry these across to the target instrumental language. This practice is in turn what I define as inter-instrumental translation. Referential and functional equivalence are explored in more depth within the following commentary, where, similar to *Sound Translations*, fragments composed for one instrument are timbrally and technically adapted into material for an opposing instrument.

3.4 Remnant Echoes (2020)

Composed for piccolo, B♭ bass clarinet, percussion and double bass, *Remnant Echoes* is a more extensive exploration of the inter-instrumental (Jakobson's inter-linguistic) translation process examined in section three of *Sound Translations*.[50] In this section fragments of material are referentially translated from cello into piano and vice versa. As discussed previously, this involves a translation process which happens when one instruments characteristics are carried over to another instrument.[51] This is a particularly interesting exercise when translating material for an instrument from one family into an instrument from another (e.g. strings into woodwind), or from pitched into unpitched instruments (clarinet into woodblocks) where the technical possibilities can be disparate. For this reason, I chose instruments which are diverse via either their family, timbre, range, and technical capabilities to best explore how the material changes with each instrumental translation. Consequently, as with *Sound Translations*, a referential approach to translation is required to successfully transfer the distinct qualities of each instrument into an opposing instrumental language, as discussed previously along with examples from Eco.[52]

Inter-instrumental and referential translation are examined through two contrasting movements. The first comprises fast, busy, and loud material, and the second slow, static, quiet, and harmonic material. Each instrumental part comprises two sets of material: 1) the player's main material; 2) the translations paired with cue sheets that contain passages from another instrument's score. All performers are to play their material independently, ignoring the other players, until they hear a fragment from their cue sheet played by the specified instrument. When one of these fragments are heard, the player must finish what they are doing before turning the page to the translations of the fragment which they identified. The performer must then choose to translate their perception of this fragment into one of two or three options, dependent on what they feel is the closest translation to what they heard the other instrument play. All players thus have individual parts only, and there is no main score. The work consequently explores a live choosing reliant on the performer's perception of an opposing instrument's fragment. This is similar to how a live interpreter (in linguistics) listens to the person whom they are to translate and directly translates them on the spot. However, the work doesn't demonstrate a purely live translation since the performer is only choosing from several options, and not directly translating every aspect of what they heard (e.g. timbre, characteristics, techniques, dynamics, pitches etc.) directly—those aspects have already been translated for them.

I will now go on to discuss specific examples of where I have translated material for one instrument into material which works for another, while trying to retain as much of the original detail as possible, at least in a referential sense. In keeping with previous discussions in this commentary, I will discuss common translational themes such as foreignisation and domestication, losses and gains, and faithfulness and betrayal.

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[50] See '3.3 Sound Translations (2019)', pp. 65–78.

[51] See '1.8 A Re-interpretation of the Key Concepts in Translation for Composition', pp. 22–23 for a definition of what inter-instrumental translation involves.

[52] See '3.3 Sound Translations (2019)', pp. 65–78, and '1.2 Source into Target and Equivalence', pp. 6–8 for a definition and examples of referential translation.

One example of where I have translated the piccolo's air-tone to ordinary tone transitions for double bass can be seen in Figure 3.22, a. Here I have depicted the air tone by notating ponticello bowing instead to create a similar unstable and air-like sound with the double bass. However, the ponticello bowing adds more pitch to the tone from the outset than an air-tone, and thus the almost pitch-less quality of the air-tone is slightly betrayed. In another translation of the same fragment (see Figure 3.22, b), the double bass transitions from a lightly muted string to an unmuted string. This brings the translation closer to the original in that this technique forms a quality closer to the air sound. However, less pitch is heard when the string is muted than in the flutes air-tones. In translation three (see Figure 3.22, c) these air-tone transitions become gradual progressions from harmonic pressure to ordinary pressure. This is effective, however, not as air-like as the muted string technique, and the pitch changes octave during the transition. The static pitches in the original are hence lost. In all translations the durations, pitches, and dynamics are retained, bringing them closer to the original, and thus foreignising the translation.[53]

Another example of where I have translated the double bass's harmonic glissandi for percussion can be seen in Figure 3.23, a. Here the double bass' glissandi have been translated into material for timpani drums. The performer is to strike each pitch once and then use the pedal to bend the pitch. For this to be possible on the timpani drums, the intervals must be decreased considerably, and consequently the original intervallic relations, and original pitches are lost in translation. However, the rhythm is retained. In the next translation, for vibraphone (see Figure 3.23, b), the same attack points have been carried across to create pitch bends with a superball mallet. The durations of the glissandi are betrayed, due to the nature of the technique, and the vibraphone's incapability of sustaining long glissandi over specific durations. Similarly, the delicate, and subtle sound of the harmonic technique is lost; to create glissandi on vibraphone, you must strike the key first, creating a harsher attack. The pitches and intervals, however, are retained. In the bass drum translation (see Figure 3.23, c) the pitches are, of course, betrayed, along with the glissandi, but the rhythm is retained. Here the glissandi are depicted by sliding a superball mallet (in the direction of the arrows) across the drums surface, which creates a slight illusion of glissandi. It does not, however, achieve the same seamless slide between pitches that a double bass is capable of. The harmonic technique here is strongly betrayed, since the superball technique is extremely harsh, and distorted sounding. All three instances are examples of domesticated translations. In order to make the original material for double bass playable on percussion, this fragment suited to strings, is bought closer to the target language of the percussion family.[54]

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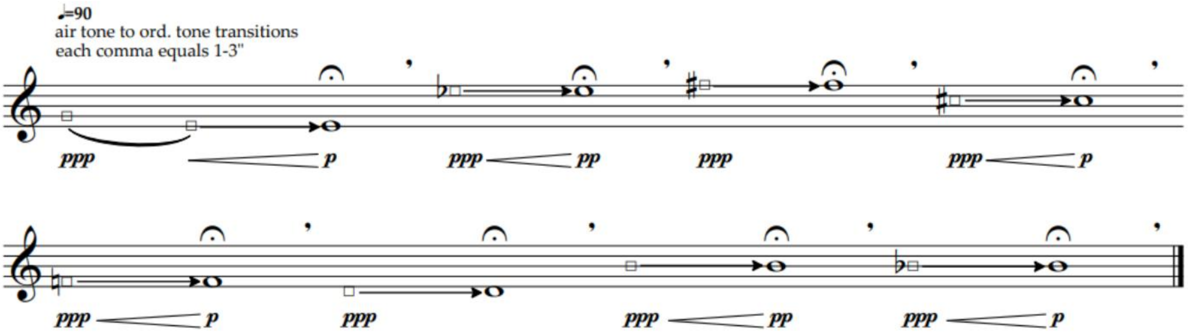
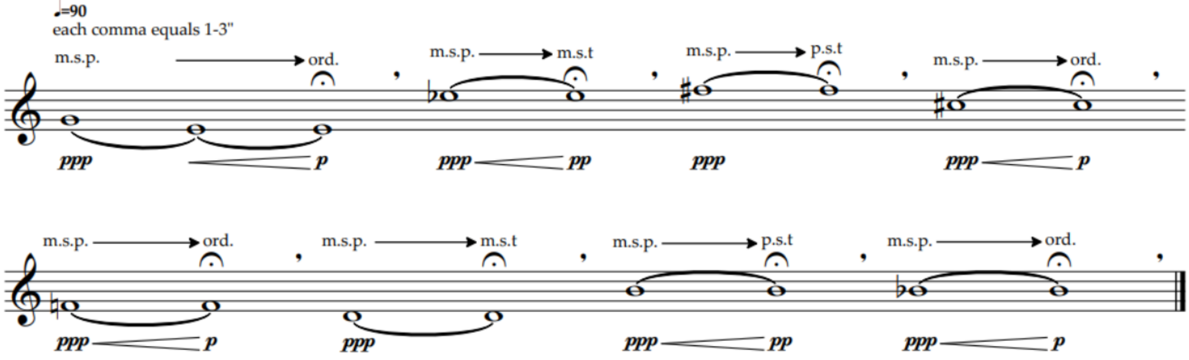
[53] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[54] Ibid.

In another instance, the double bass's glissandi contour was translated into material for clarinet. In the first translation (see Figure 3.24, a), the glissandi become a fast run of notes that create a similar contour. Although this depicts a fast transition through pitches, the smooth, sliding transitions are lost, and pitches become more defined, bringing the translation further away from the original. Perhaps, a chromatic slide between these pitches would have proved a more accurate interpretation. In the next translation (see Figure 3.24, b), the glissandi contour becomes a ten second fragment of the teeth on reed technique. This usually does create a fluctuation between pitches; however, it is uncontrolled, and hence the original contour is betrayed. Translation three (see Figure 3.24, c) requires the clarinettist to fluctuate between intervals less than a tone, using a lip bending technique. This translation is closer to the original than the previous translation, since the glissandi is more controlled and seamless. However, the intervals must be decreased considerably for this technique to be effective and achievable on clarinet, and therefore the original contour is still lost. Here, the first two translations can be considered domesticated as in these new target languages, the original is hard to trace. In contrast, the third simulates the motion of the original more accurately, bringing this target language closer to the double bass fragment, foreignising the translation.

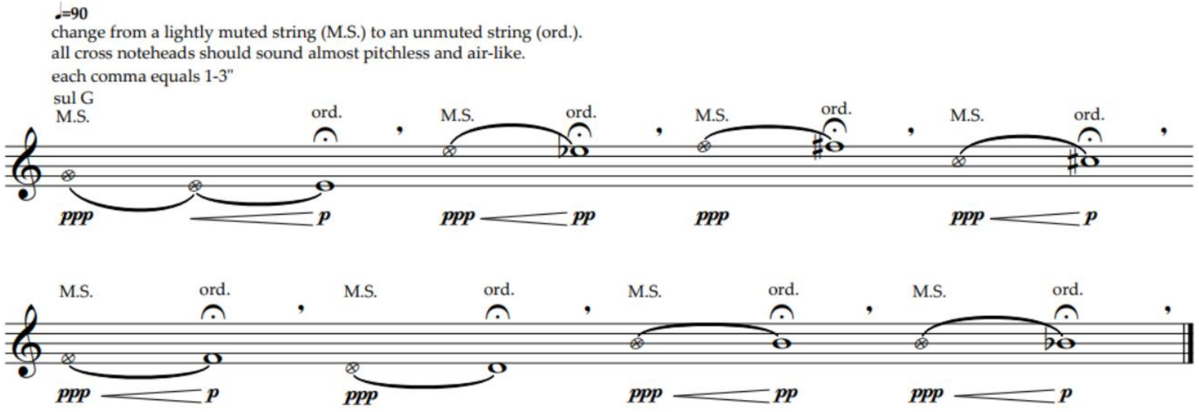

♩=90
air tone to ord. tone transitions
each comma equals 1-3"
ppp
p
ppp
pp
ppp
ppp
p
ppp
p
ppp
ppp
pp
ppp
p

(Original piccolo fragment; part two)

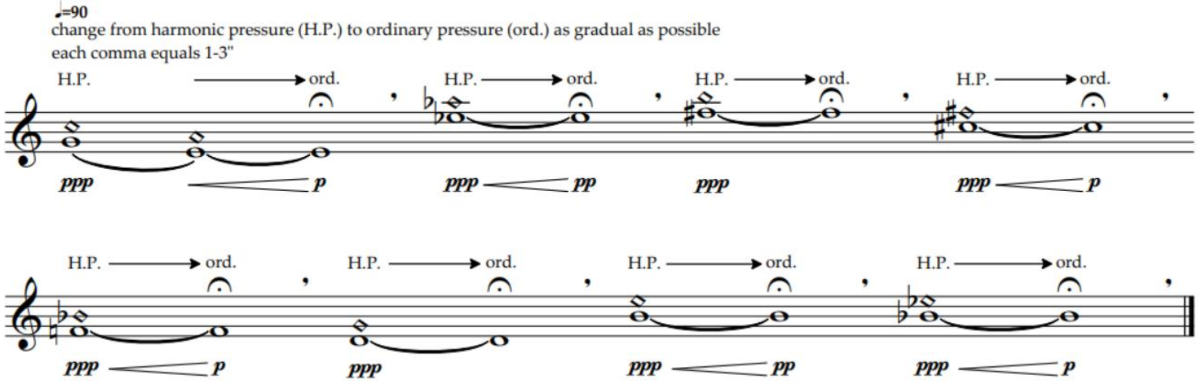

♩=90
each comma equals 1-3"
m.s.p.
ord.
m.s.p.
m.s.t
m.s.p.
p.s.t
m.s.p.
ord.
ppp
p
ppp
pp
ppp
ppp
p
m.s.p.
ord.
m.s.p.
m.s.t
m.s.p.
p.s.t
m.s.p.
ord.
ppp
p
ppp
ppp
pp
ppp
p

a) (DB Translation 1; molto sul ponticello to ordinary bowing/poco sul tasto)

Figure 3-22: The piccolo's air to ordinary transitions along with the double bass' translations

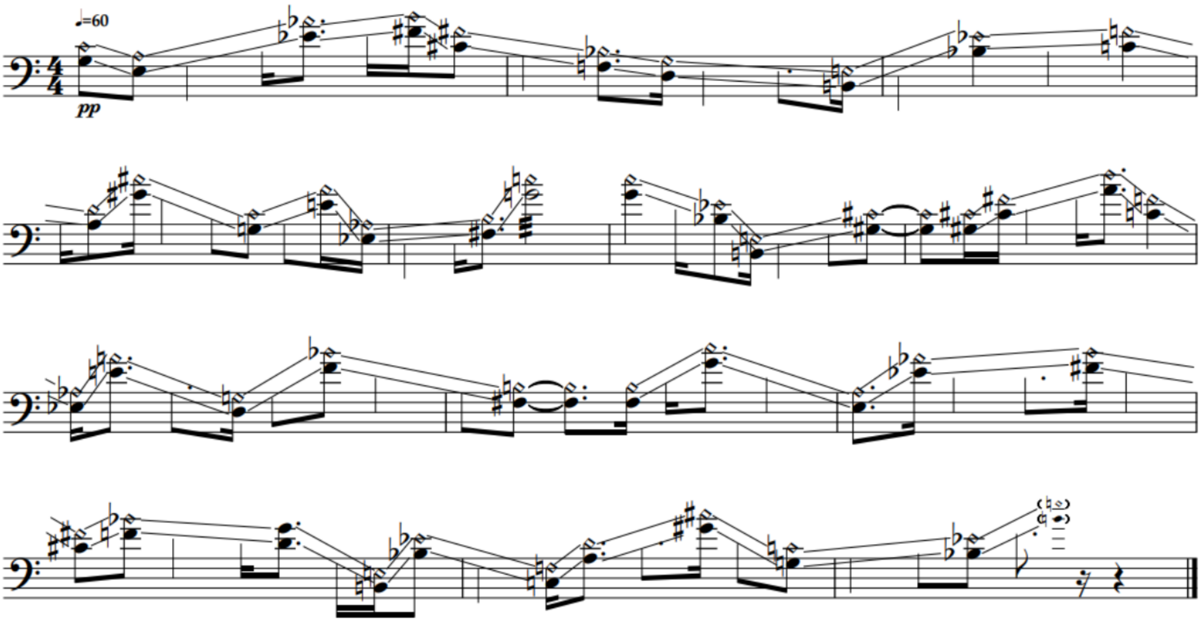

♩=90
change from a lightly muted string (M.S.) to an unmuted string (ord.).
all cross noteheads should sound almost pitchless and air-like.
each comma equals 1-3"
sul G
M.S.
ord.
ppp
p
pp

b) (DB Translation 2; lightly muted to unmuted string)

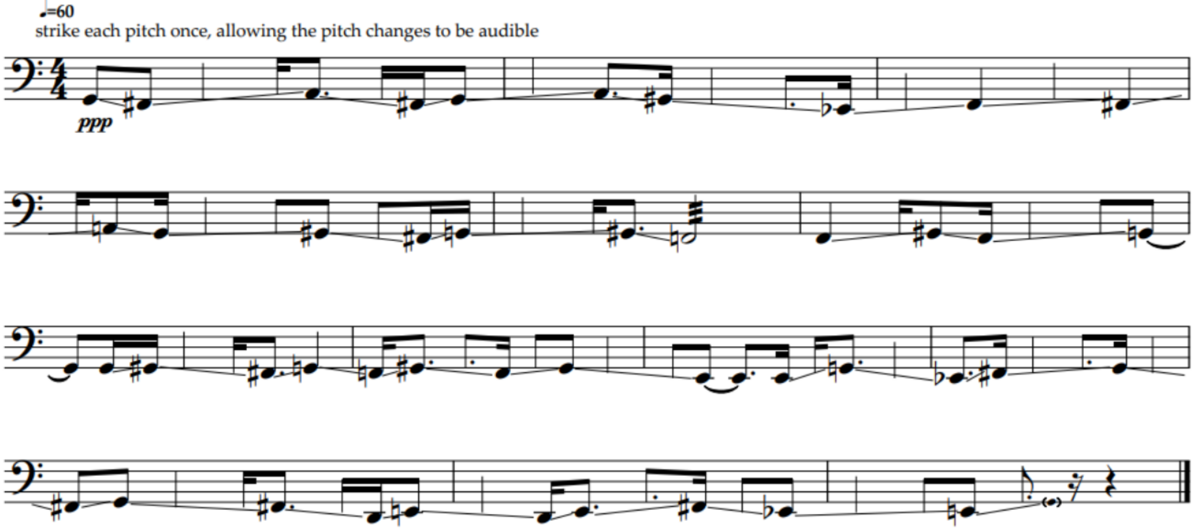

♩=90
change from harmonic pressure (H.P.) to ordinary pressure (ord.) as gradual as possible
each comma equals 1-3"
H.P.
ord.
ppp
p
pp

c) (DB Translation 3; harmonic to ordinary pressure)

Figure 3-22: Cont.

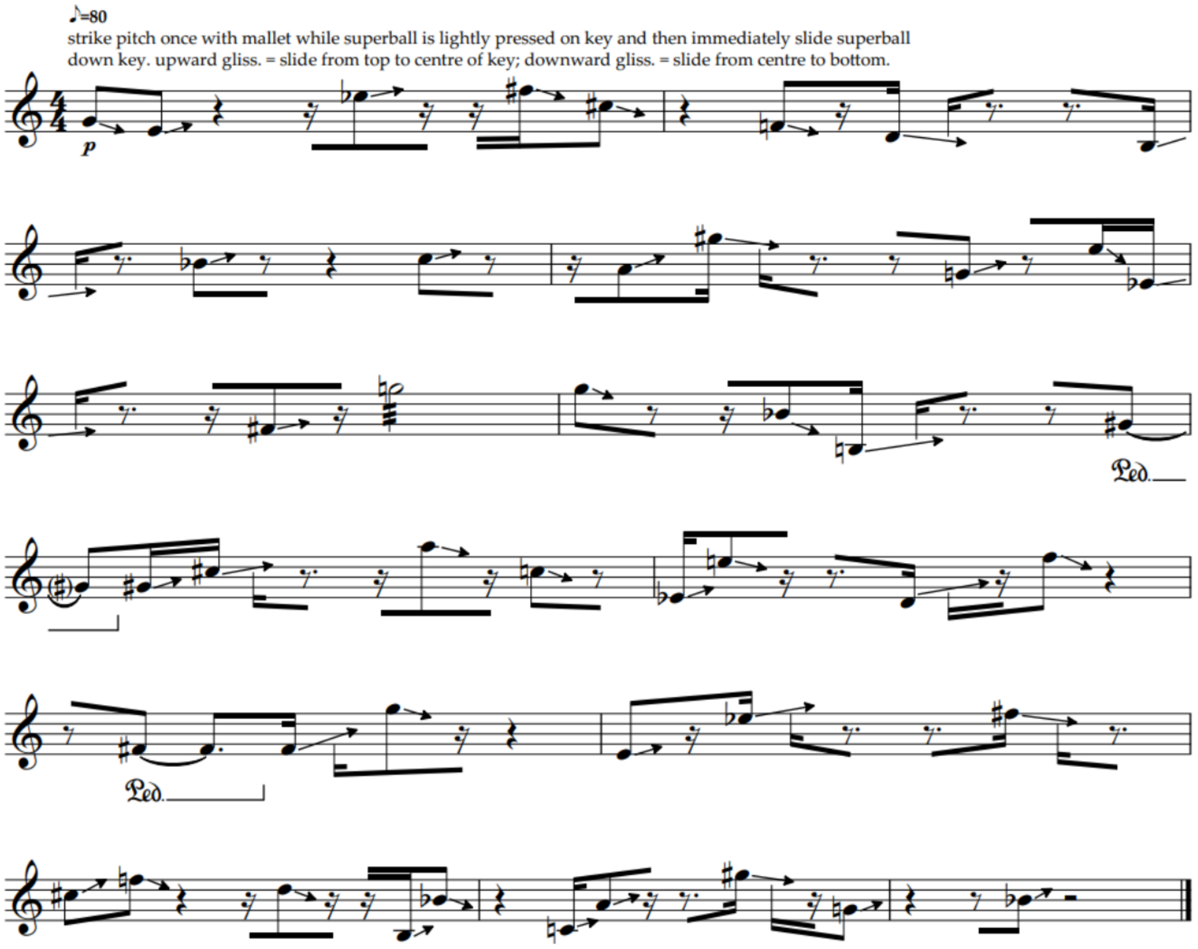


(Original double bass fragment; part one)

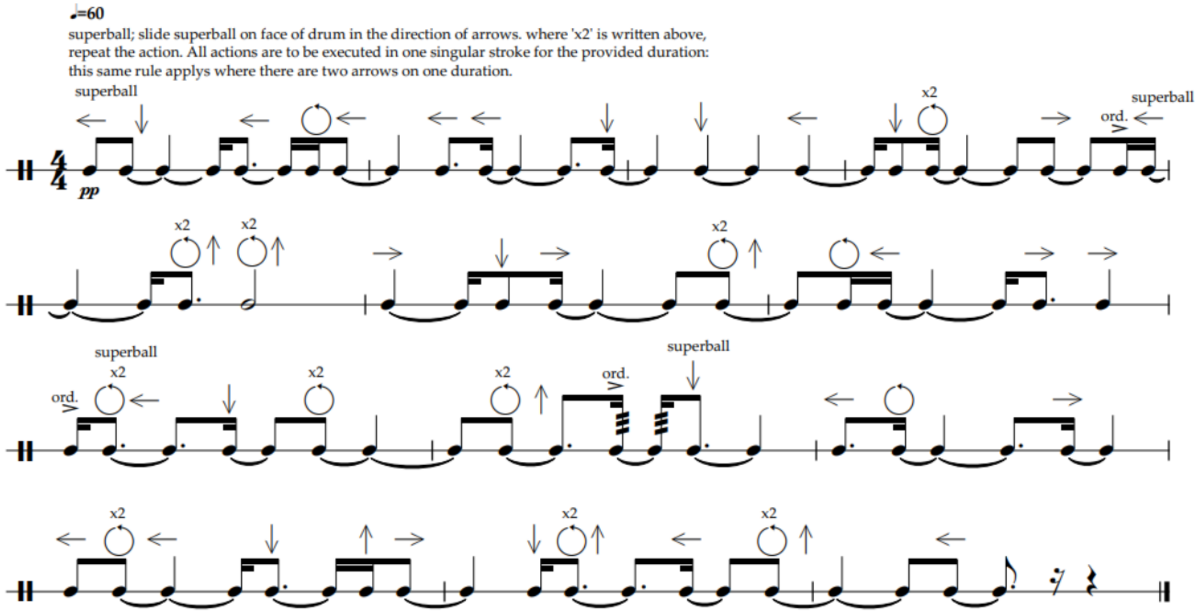

♩=60
strike each pitch once, allowing the pitch changes to be audible
ppp

a) (Translation 1; Timpini drum pitch bends)

Figure 3-23: The double bass's harmonic glissandi along with the percussion translations

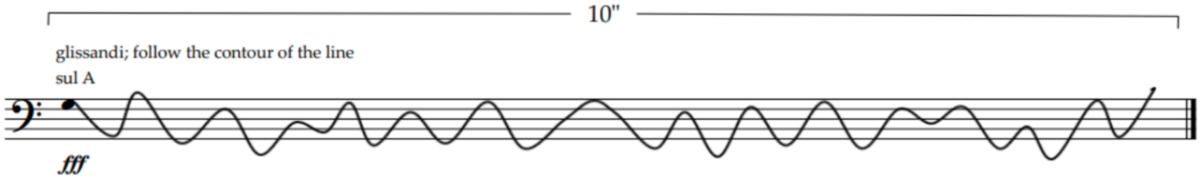

♪=80
strike pitch once with mallet while superball is lightly pressed on key and then immediately slide superball down key. upward gliss. = slide from top to centre of key; downward gliss. = slide from centre to bottom.
p
Ped.
Ped.

(b) (Translation 2; vibraphone pitch bends with superball mallet)

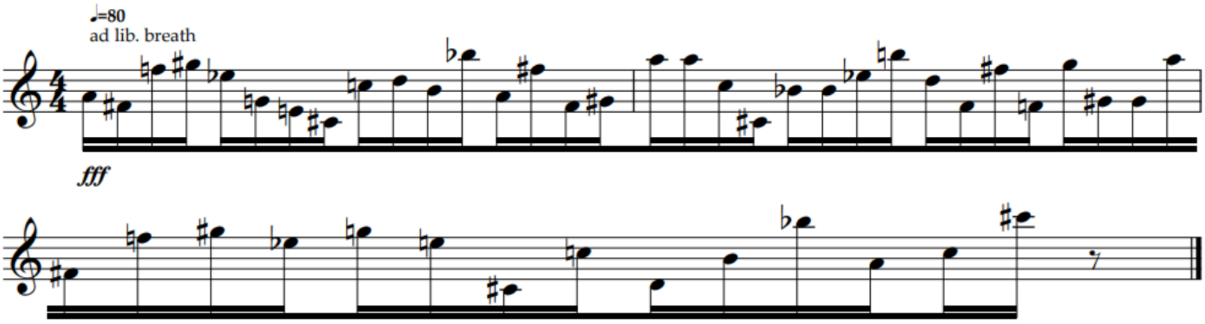

♩=60
superball; slide superball on face of drum in the direction of arrows. where 'x2' is written above, repeat the action. All actions are to be executed in one singular stroke for the provided duration: this same rule applies where there are two arrows on one duration.
superball
pp
x2
ord.
superball
x2
x2
x2
ord.
superball
x2
x2
x2
ord.
superball
x2
x2
x2

(c) (Translation 3; bass drum

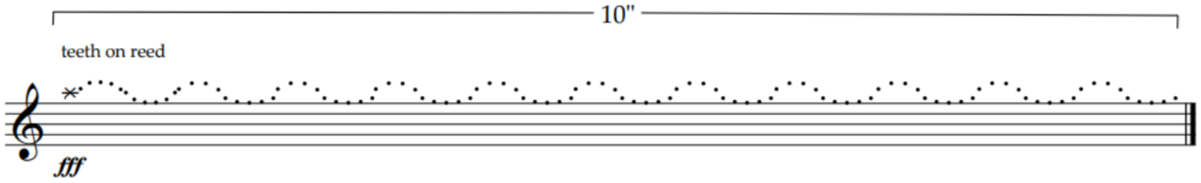
Figure 3-23: Cont.


10"
glissandi; follow the contour of the line
sul A
fff

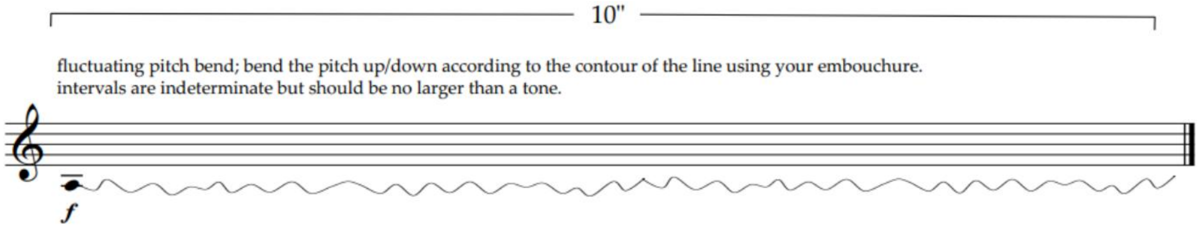
(Original double bass fragment; part one)


♩=80
ad lib. breath
fff

a) (Clarinet Translation 1; smooth run of notes)


10"
teeth on reed
fff

(b) (Clarinet Translation 2; teeth on reed)


10"
fluctuating pitch bend; bend the pitch up/down according to the contour of the line using your embouchure.
intervals are indeterminate but should be no larger than a tone.
f

(c) (Clarinet Translation 3; embouchure pitch bend)

Figure 3-24: The double bass's glissandi contour along with the B♭ bass clarinet translations

Another translational aspect demonstrated by *Remnant Echoes* is translatability, and the multiplicity of possibilities available when translating between languages, or in my case, instruments. As discussed earlier in my literature review, there is never one set way in which something should be translated. This is due to certain words holding different meanings when translated into the target language, different grammatical systems, or even a lack of differentiation between words that mean alternative things in different contexts.[55] For example Eco states:

> There is no exact way to translate the Latin word *mus* into English. In Latin *mus* covers the same semantic space covered by *mouse* and *rat* in English – as well as in French, where there are *souris* and *rat*, in Spanish (*ratón* and *rata*) or in German (*Maus* and *Ratte*). But in Italian, even though the difference between a *topo* and a *ratto* is recorded in dictionaries, in everyday language one can use *topo* even for a big rat – perhaps stretching it to *topone* or *topaccio* – but *ratto* is used only in technical texts.[56]

As a result, there are multiple ways in which a translator might translate a given text. Their job is to decide the one they perceive to be most accurate for what they are trying to achieve with the translation. To highlight this concept, I have translated specific fragments into two, or three versions (sometimes more), allowing the performer to choose live, dependent on what they think they perceived. Alternatively, this also provides a notated account of how a fragment can be translated in several ways within the score. For example, the woodblock strikes in Figure 3.25 are translated into three different translational possibilities for bass clarinet. The first one being a series of key clicks (on the loudest possible key) in the same rhythm as the original (see Figure 3.25, a). In this translation the dynamic changes are lost, since key clicks are very quiet. These dynamics are retained in the second translation (see Figure 3.25, b) when attached to a sequence of slap tongue. These referential translations are further examples of foreignised translations, since the clarinet is brought closer to the woodblock original through use of percussive techniques. In contrast, the third translation (see Figure 3.25, c) has been domesticated via more conventional and pitched material, suited to the clarinet. Here, the dynamics are betrayed again to achieve the sforzando to piano attacks (on Eb) which aim to depict the short and crisp attacks on the woodblock. This translation is the furthest from the original since too much pitch is added, the rests are betrayed, and the sforzando to piano attacks are less percussive than the key clicks, and tongue slaps. These three translations do, however, represent three ways in which the same fragment can be translated. In turn, this demonstrates the varied and diverse approaches to translating one thing into another, and the difficulties that come with this.

In a further example, the bass drum's accented attacks and superball slides (see Figure 3.26) are translated into three separate versions for double bass. In the first translation (see Figure 3.26, a), these events are translated into a series of scratch tones that occur in the same rhythmic pattern. Here the percussive nature of the drum is carried across, due to the harsh and abrupt sound of a scratch tone, along with one singular repeated sound. The bass drums pitch, however, is lost, along with its resonance. In the second translation (see Figure 3.26, b), the accented strikes become ordinary pizzicato, and the superball strikes become pizzicato glissandi. This is effective in that there is a stronger contrast between the two techniques, however, it is still not quite as disparate as switching between ordinary strikes and superball slides, since these create very different timbres. Pitch is also added; hence the bass drum's mono pitch is betrayed. I believe the third translation to be the most accurate (see Figure 3.26, c). Here the disparate timbres are carried into the target language via alternating between pizzicato and distorted arco attacks, while also allowing the strings to resonate through the space as in the bass drum original. There is also one singular pitch throughout the fragment. Rhythm is retained in all translations. This example further reinforces the difficulties involved when translating between two differing languages. Although they are all valid attempts at translating the bass drum's fragment, none of them achieve the meticulous equivalence discussed in the literature review.[57] They do, however, remain faithful to the alternating and percussive gestures of the bass drum through referential equivalencies.

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[55] See '1.1 The Structure of Language and its Translatability: Context, Expression, Form, Substance, Continuum', pp. 4–6.

[56] Eco (2003), p. 32.

An interesting case, where a similar fragment from the piccolo, clarinet, and double bass parts is translated for percussion can be seen in Figure 3.27. In translation one (see Figure 3.27, a), the pulsating fragment is translated into bowed and struck vibraphone attacks on Eb. This translation is closest to the piccolo in that it shares the same note, has a similar high-pitched timbre, and gives the impression of a seamless, held pitch, in one breath. The small glimpses of flutter tongue are depicted by tremolos—the closest technique achievable in the new instrumental language—as a result the delicacy of the original is betrayed here. The following translation (also for vibraphone), alternates between ordinary strikes and tremolos held in the pedal throughout (see Figure 3.27, b). This is again most similar in pitch and timbre to the piccolo's version; however, its seamlessness is betrayed by the slight dips in dynamics as the pitch decays after being struck. Translation three (see Figure 3.27, c) displays alternating superball slides and tremolos. Unlike the previous versions, this translation seems to closely resemble the double bass part both rhythmically and timbrally. The tone of the bass drum is low and mellow like the double bass, and the seamless motion of bowing is reflected in both the superball slides and tremolos. The pitch, however, does slightly deviate due to the superball technique's effect, and thus the singular pitch pulsations are betrayed. The fourth translation (see Figure 3.27, d) most closely resembles the clarinet version, since it shares the same rhythm, and the hand tremolos translate the growls, while the hand rubs imitate the sustained pitch. Although tremolos create a similar effect in the new instrumental language, it doesn't carry across the harsher texture of a clarinet growl (especially when executed with the fingers), and hence this detail is betrayed, along with the dynamics. The last translation (see Figure 3.27, e) translates the piccolo's rhythm into a mix of rests and tremolos. Due to the held notes being replaced by rests, the seamless nature of the original is betrayed, however, the tremolo intervals are retained.

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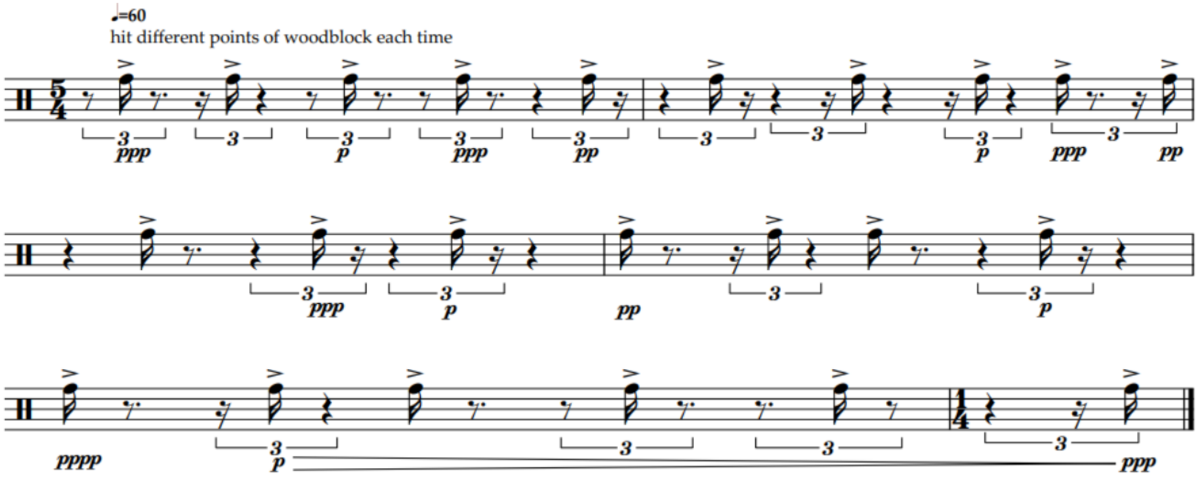
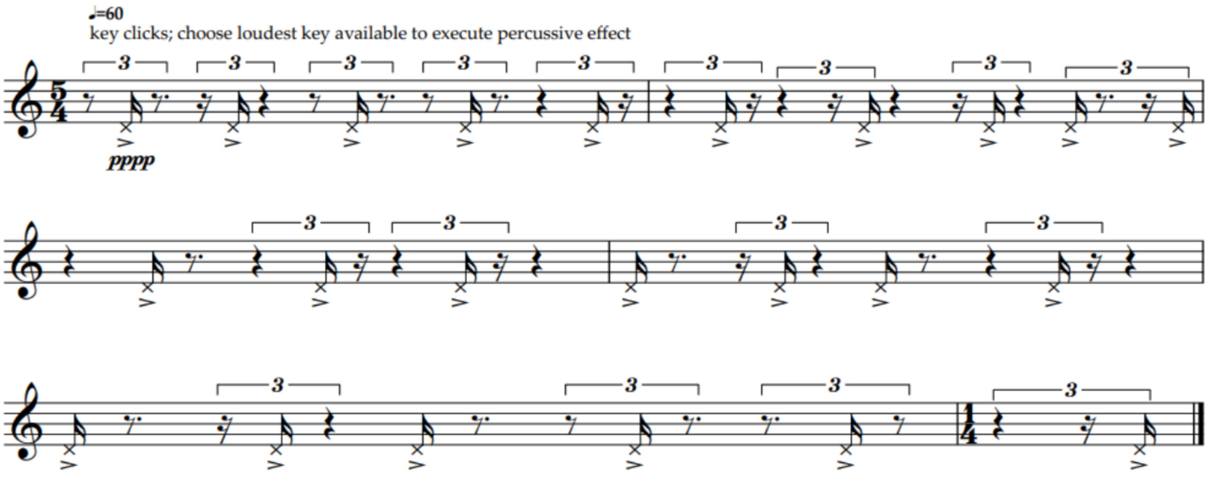
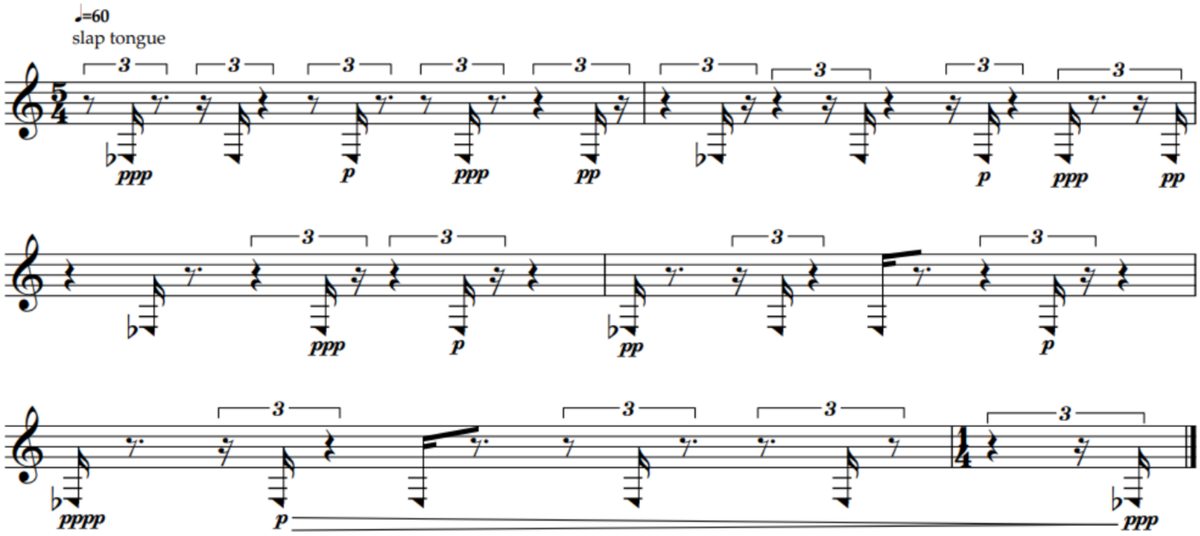
[57] See '1.2 Source into Target and Equivalence', pp. 6–8, and *Part 1: Translation Studies: A Literature Review*.


♩=60
hit different points of woodblock each time
ppp
p
ppp
pp
p
ppp
pp
ppp
p
pp
p
pppp
p
ppp

(Original woodblock strikes; part two)

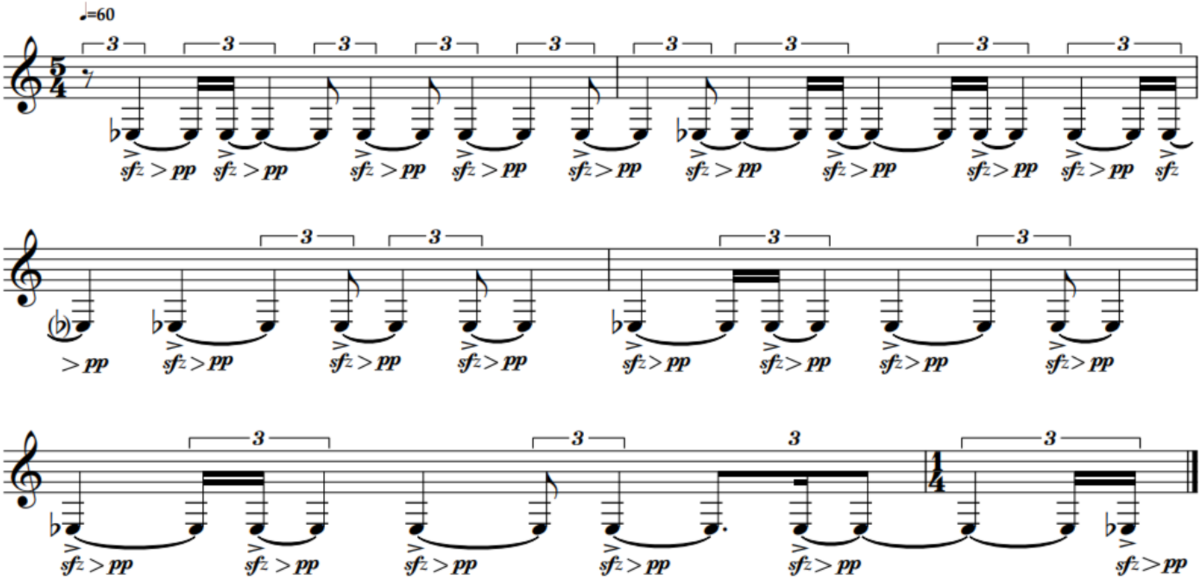

♩=60
key clicks; choose loudest key available to execute percussive effect
pppp

a) (Clarinet Translation 1; key clicks)


♩=60
slap tongue
ppp
p
ppp
pp
p
ppp
pp
ppp
p
pp
p
pppp
p
ppp

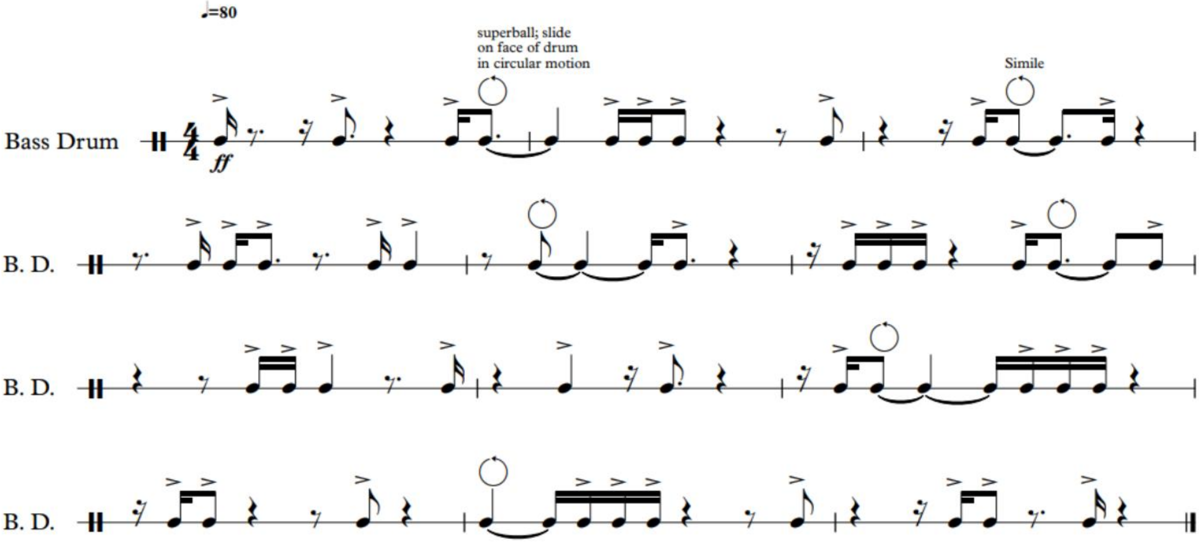
(b) (Clarinet Translation 2; slap tongue)

Figure 3-25: The woodblock strikes along with the B♭ bass clarinet translations


♩=60
3
sfz > pp
sfz

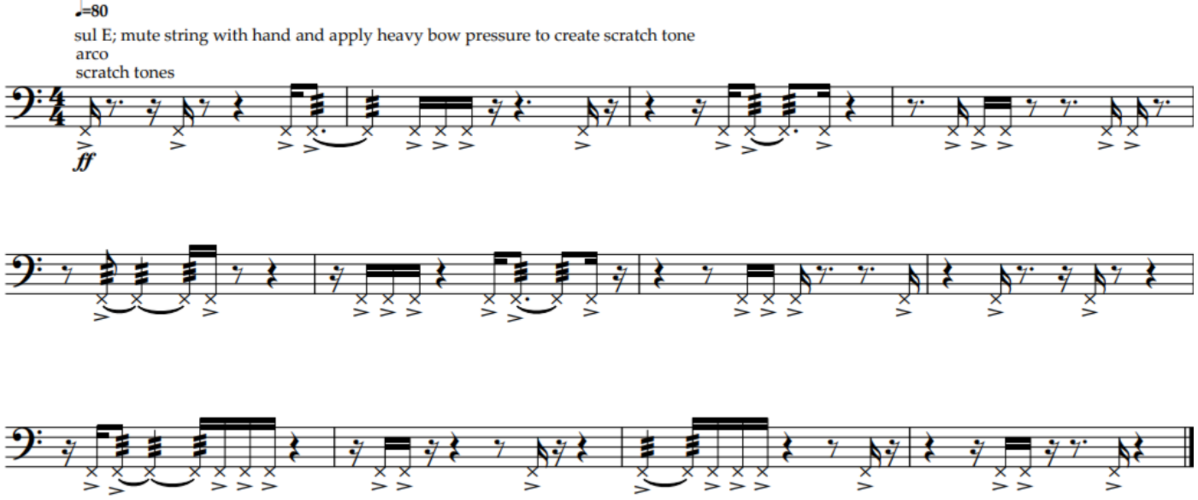
(c) (Clarinet Translation 3; sforzando attacks)

Figure 25: Cont.

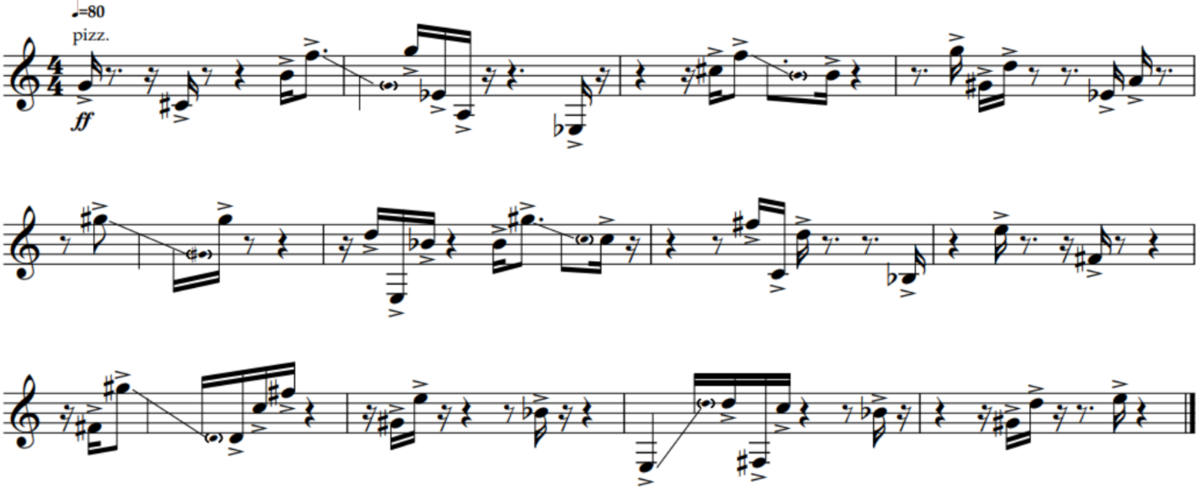

♩=80
superball; slide on face of drum in circular motion
Simile
Bass Drum
B. D.
ff

(Original bass drum accented attacks and superball slides)

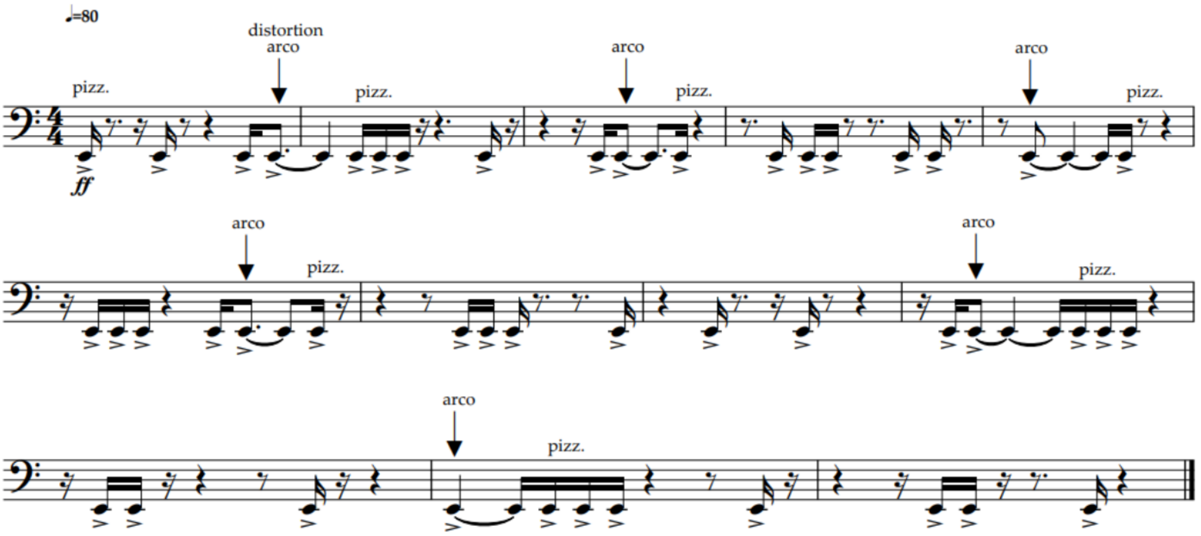
Figure 3-26: The bass drum's accented attacks and superball slides, along with the double bass translations


♩=80
sul E; mute string with hand and apply heavy bow pressure to create scratch tone
arco
scratch tones
ff

a) (DB Translation 1; scratch tones)

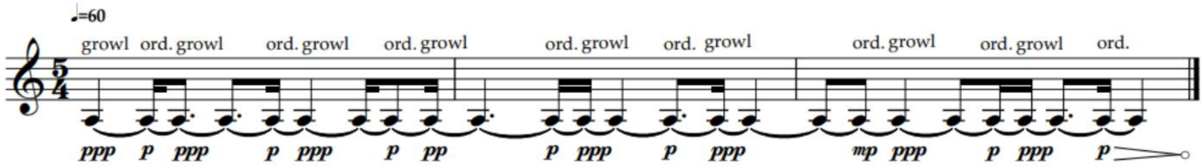


b) (DB Translation 2; accented strikes = ordinary pizzicato and the superball strikes = pizzicato glissandi)

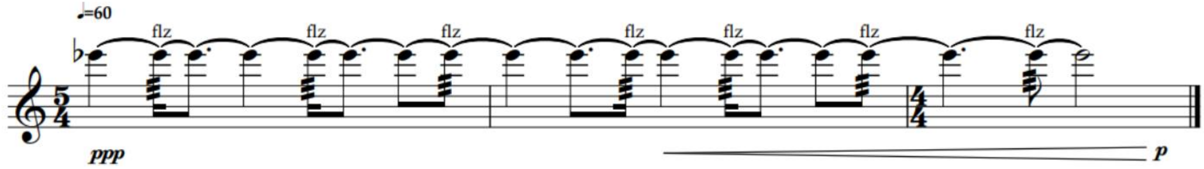

♩=80
pizz.
distortion
arco
pizz.
arco
pizz.
arco
pizz.
ff
arco
pizz.
arco
pizz.
arco
pizz.

c) (DB Translation 3; pizzicato and distorted arco attack)

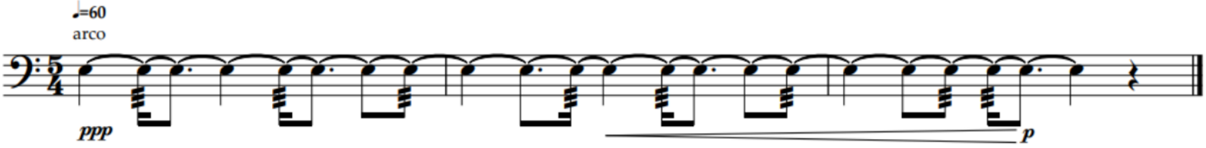
Figure 3-26: Cont.


♩=60
growl ord. growl ord. growl ord. growl ord. growl ord. growl ord. growl ord. growl ord.
ppp p ppp p ppp p pp p ppp p ppp mp ppp p ppp p

Bass Clarinet in B♭

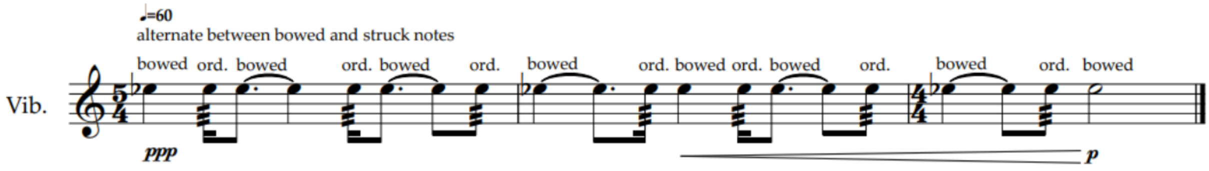

♩=60
flz flz flz flz flz flz flz
ppp
p

Piccolo

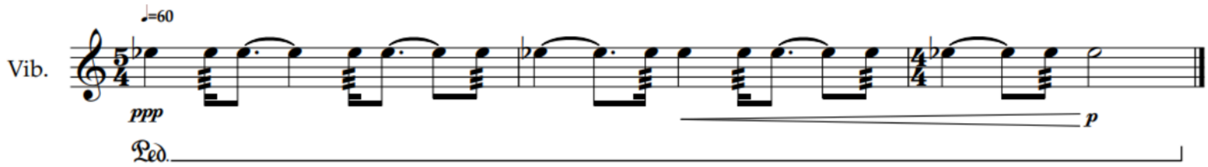

♩=60
arco
ppp
p

Double Bass

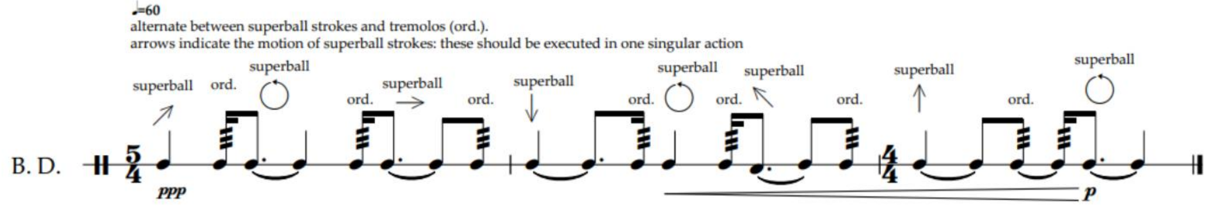
(Original pulsating fragment heard in clarinet, piccolo, and double bass)


♩=60
alternate between bowed and struck notes
bowed ord. bowed ord. bowed ord. bowed ord. bowed ord. bowed ord. bowed ord. bowed
Vib.
ppp
p

a) (Translation 1; bowed and struck vibraphone attacks, piccolo trans)

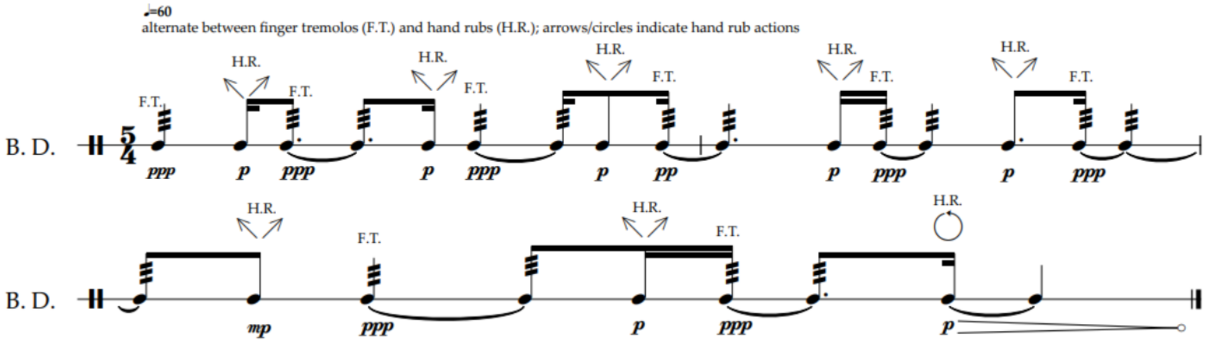

♩=60
Vib.
ppp
p
Ped.

(b) (Translation 2; alternation between ordinary strikes and tremolos held in the pedal, piccolo trans)

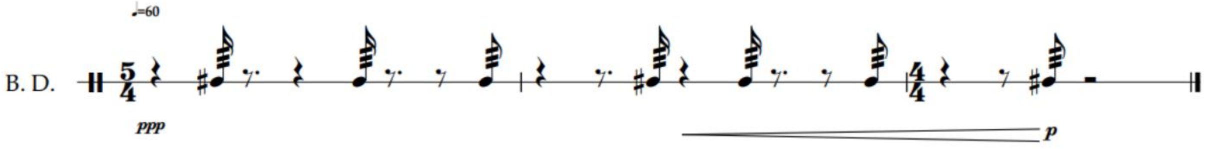

♩=60
alternate between superball strokes and tremolos (ord.).
arrows indicate the motion of superball strokes: these should be executed in one singular action
superball ord. superball ord. superball ord. superball ord. superball ord. superball ord. superball ord. superball
B. D.
ppp
p

(c) (Translation 3; BD alternating superball slides and tremolos, DB trans)

Figure 3-27: A case where a similar fragment from the piccolo, clarinet, and double bass parts is translated into various percussion instruments


♩=60
alternate between finger tremolos (F.T.) and hand rubs (H.R.); arrows/circles indicate hand rub actions

(d) (Translation 4; BD hand tremolos = growls, hand rubs = sustained pitch, cl. Trans)



(e) (Translation 5; mix of rests and tremolos, piccolo trans)

Figure 3-27: Cont.

Aside from the inter-instrumental translations, during the work's pre-compositional stages, a twelve-tone sequence from Webern's *Drei Lieder* series of art songs for soprano was extracted and re-contextualised into a series of target languages. This is similar to how I translated elements of Brumel's *Missa Dominicalis* in *Brumel Translated* (2019).[58] For example, these pitches were translated into a melodic contour, glissandi points, chords, and so on. In section two, specific pitches are extracted and translated into pulsating patterns on a singular pitch. These are then distributed across the instrumental parts to create chordal harmonies reminiscent of the original intervallic relations (see Part Two of the instrumental scores). Certain target languages blur the original, bringing it closer to the new language and domesticating the material.[59] In other cases, the original is more audible in the translation, bringing the target language closer to the original and foreignising the material.[60] For example, when translating Webern's pitches (see Figure 3.28) into a series of microtones (see Figure 3.29), the original pitches and intervallic relations are betrayed, making it hard to perceive any original traces, domesticating the translation. The contour and dynamics of the original fragment, however, are retained. Similarly, when translating the pitches into a series of multiphonics (see Figure 3.30), the original is almost inaudible. Although the core pitch remains within the multiphonic, it is hard to perceive it as part of Webern's sequence since it no longer holds its harmonic relations, again domesticating the translation. In contrast, translating Webern's original pitches into the melodic contour (see Figure 3.31) simply involved extracting them from the original durations and placing them in their new context, bringing this fragment very close to the original sound world of Webern's work. This is an example of a foreignised translation, since the target language has been brought closer to the original sound world. Equally, the air tones in Figure 3.32 are another example of a foreignised translation since the technique allows the original pitches to be audible in their new form.

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[58] See '3.2 Brumel Translated (2019)', pp. 56–64.
[59] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.
[60] Ibid.

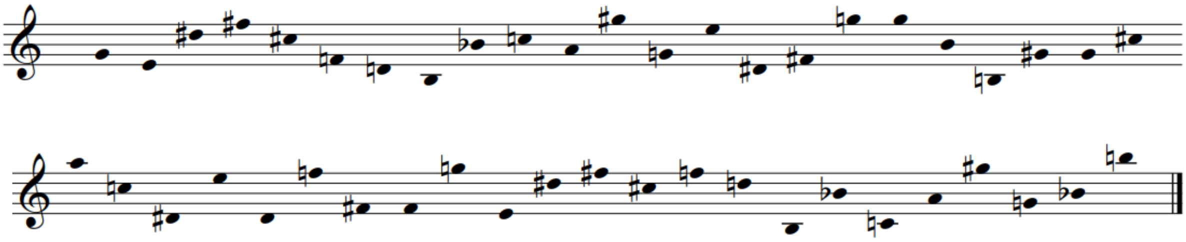

Figure 3-28: Webern's original pitch sequence as seen in *Drei Lieder*, soprano line

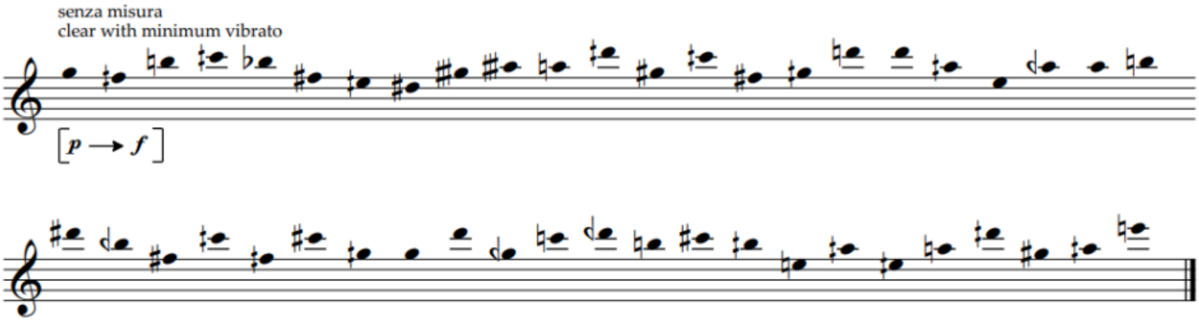

Figure 3-29: Webern's pitches into a microtonal sequence (piccolo, Part 1)

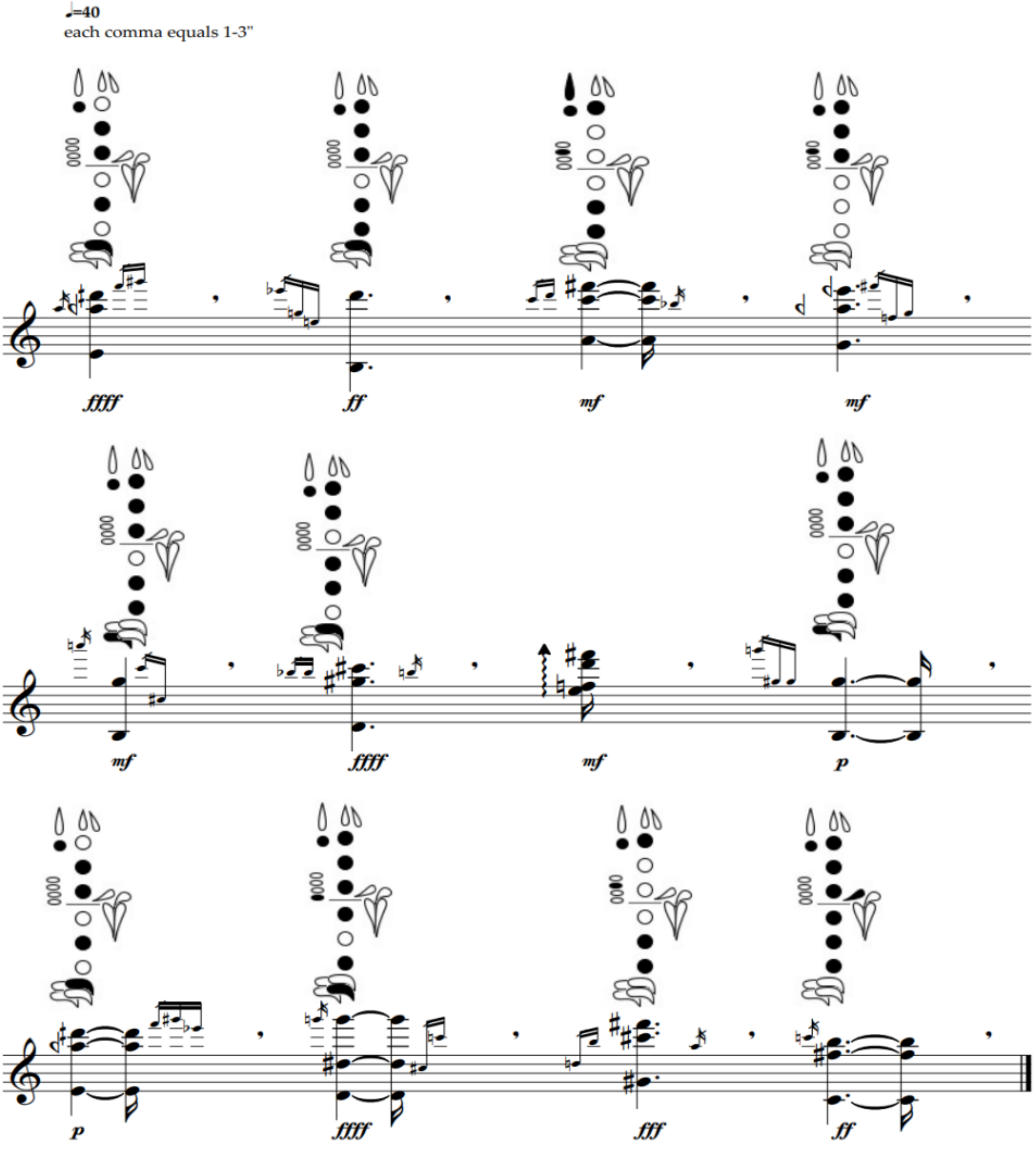
♩=40
each comma equals 1-3"
ffff
ff
mf
mf
mf
ffff
mf
p
p
ffff
fff
ff

Figure 3-30: Webern's pitches into multiphonics (B♭ bass clarinet, Part 1)

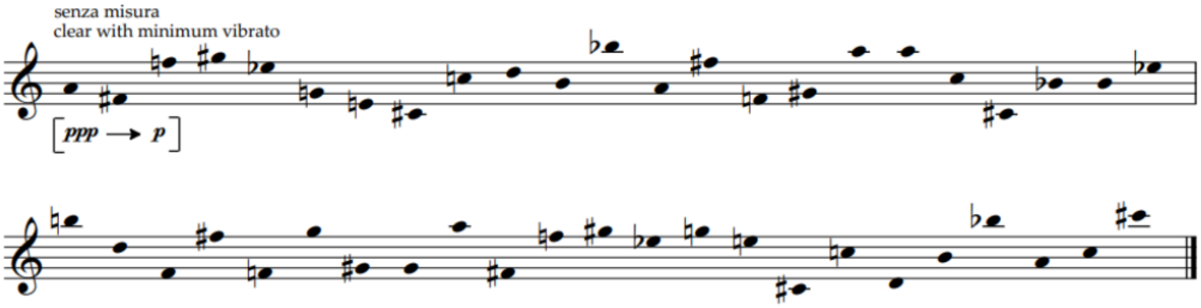

Figure 3-31: Webern's pitches into a melodic contour (B♭ bass clarinet, Part 2)

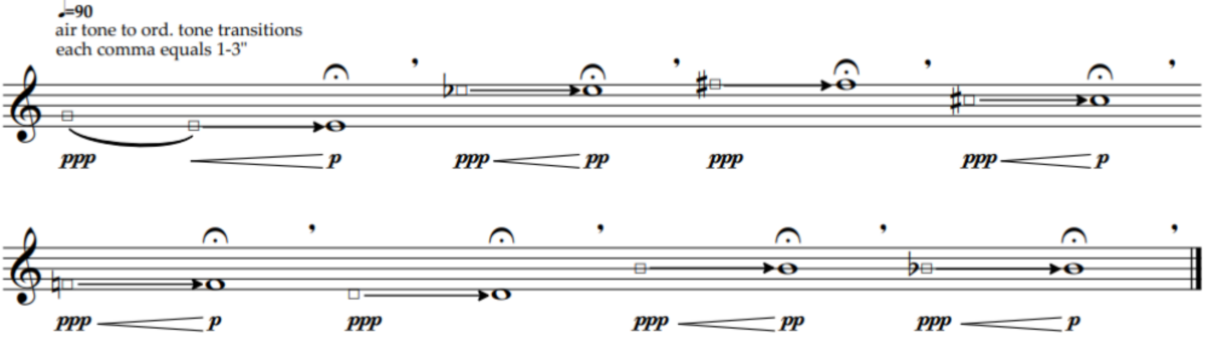

Figure 3-32: Webern's pitches into air tones (piccolo, Part 2)

To conclude, the above cases demonstrate that it is almost impossible to achieve the same effect on another instrument. Their timbral and technical languages often don't permit this, in a similar way to how different languages lack an exact equivalent of the same word or phrase. For this reason, with each translation, I have sought out the most accurate and appropriate techniques to try and achieve similar effects in the new instrumental language, while also demonstrating the differing possibilities of translating one thing. However, as established above, this has resulted in a mixture of faithfulness and betrayal, often within the same translation. For example, to translate the piccolo's air to tone transitions for double bass, I had to betray one aspect in order to remain faithful to something else. To achieve the air-like texture with a muted string, the faint pitches of the original air tones are betrayed (see Figures 3.22 and 3.22, b). In another example, I had to betray the original pitches and their intervallic relations to remain faithful to the double basses' smooth glissandi points (see Figures 3.23 and 3.23, a). This said, all translations remain faithful to their originals in a referential sense, in how they demonstrate the techniques and qualities of the original instrument in the target language through creating similar effects. For example, in the instance discussed earlier, the bass drum's accented attacks and superball slides are translated into fragments for double bass through the alternating and percussive gestures (see Figure 3.26). Aside referential translation, translatability, faithfulness/betrayal, and loses and gains, the work demonstrates two layers of translation, the first being the re-contextualisation of Webern's pitches into a series of target languages, and second, the translation of these fragments into those for other instruments. Thus, the translational processes for *Remnant Echoes* were mainly carried out in the compositional stages of the work. Conversely, at times, these may also be perceptual as the audience listens to the same material echoed in various ways by different instruments. In opposition to these more adaptational forms of translation, the following section investigates such concepts in a more conventional manner through an exploration of faithfulness, betrayal, foreignisation and domestication while transcribing material for two cellos into that for solo cello or piano.

3.5 Attack Resonance Decay (2019–2021)

Attack Resonance Decay is series of works all based on the same original material. The work entails an exploration of sound, specifically how each singular note emerges in space through its attack, resonance, and decay. Like *Sound Translations* (2019) and *Remnant Echoes* (2020), the work explores how these sounds change as they are translated into various instrumental languages. The work includes a cello duet, cello solo, and piano solo, the cello duet being the original version, and the two subsequent pieces translations. The work was inspired by Eliot Weinberger's *19 Ways of Looking at Wang Wei* (2016) which comprises 19 versions of a Chinese poem by Wang Wei. The book displays the original poem along with its translations into modern Chinese, English, French, Spanish, and so on.[61] In the same way that Weinberger demonstrates how the poem changes and transforms with each translation, *Attack Resonance Decay* aims to show the development and changes to the original material as it is translated from a work for two cellos into different instrumental languages, including those which have similar timbres and characteristics to those which are from distant instrumental worlds.

Translations include almost direct renderings (or at least this is the aim), where the instrumental language in the target text is the same as that in the original (e.g. flute into flute or cello into cello): Intra-instrumental translation (Jakobson's intra-linguistic). Alternatively, there are referential translations, where the specific techniques must change in order to suit the new medium. For example, inter-instrumental translation (Jakobson's inter-linguistic), where the instrumental language of the original is different to that in the target text (flute into cello or cello into piano). Both processes, however, occur within the same semiotic system: language/music (intra-semiotic translation).[62] Aside from inter-/intra-instrumental translation, *Attack Resonance Decay* also demonstrates the process of self-translation (a concept explored within *Translations for Piano*), since each version is a translation of my own original material.[63]

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[61] Eliot Weinberger, *19 Ways of Looking at Wang Wei: With More Ways* (New York: New Directions, 2016).

[62] See '1.6.2 Intra-semiotic Translation', pp. 16–17.

[63] See '1.7 Self-Translation', pp. 20–21, and '3.7 Translations for Piano (2021)', pp. 114–132.

The translational processes explored within this work are close to transcription, and/or arrangement as discussed previously in this document.[64] Specifically, the type of transcription where music for one instrument or a group of instruments is translated for another instrument or grouping.[65] However, there is a crossover between transcription and arrangement due to the varying levels of adaptation with each translation. For example, when translating from two cellos (source text) into piano (target text), the timbral qualities, and technical capabilities of the two languages are diverse. Thus, higher levels of adaption are needed to find alternative techniques which simulate the cello's effects. Similarly, when translating a piece for two instruments into an excerpt for one voice, some material is betrayed in translation due to the inability for a single voice instrument to perform two individual parts at once. Despite this, if the source text (two cellos) is translated into a solo cello piece (as seen later), the timbral and technical qualities remain the same, while the material is condensed into one voice. Even with this adaption, it is clear that one is a translation of the other. In his article, Gottlieb discusses these varying degrees of adaptation through a distinction of both conventional and adaptational translation (as discussed in my literature review). He defines conventional translation as one which 'uses some degree of conversion of the source text en route to the target text'.[66] Additionally, he explains adaptational translation to be 'found whenever the existence and reception of one text triggers the production of another based on the first. The resulting text will relate to the original in a way which is more detached and less predictable than in conventional translation'.[67] He later provides an example of the two practices, beginning with adaptational translation:

> A well-known exponent of this type is re-interpretation in the form of a new musical arrangement of an existing work, for instance a jazz standard. The result is a different textual expression within the semiotic confines of performed music. (In contradistinction to this, transposing a piece of music is conventional […]).[68]

Despite these clear-cut distinctions between the two practices, a translation does not need to be bound to one or the other type. Gottlieb deliberates:

> [T]hese two counterparts are not poles at each end of a line; rather, they constitute two halves of a cline ranging from zero degrees of freedom (as in intralingual transliteration […]) to almost total freedom, as when music is translated into moving pictures.[69]

Attack Resonance Decay plays on these varying degrees of freedom, not necessarily by choice, but due to the nature of translation, and the diversity within instrumental languages and their differing capabilities. For example, an exact equivalent of a technique executed on a clarinet, might not be possible on a violin. I believe this work to sit somewhere between conventional

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[64] See '2.2 Arrangement and Orchestration', pp. 30–32, and '2.7 Transcription', pp. 41–43.

[65] See '2.7 Transcription', pp. 41–43.

[66] Gottlieb, p 52.

[67] Ibid.

[68] Ibid., p. 57.

[69] Ibid., p. 52.

(transcription) and adaptational translation (arrangement), since the original stylistic traces of the cello duet remain in all the resulting translations. However, often adaptions are made to compensate for the new medium.

The next section will provide a commentary on a selection of translations, focusing on common themes such as foreignisation and domestication, carrying across and betrayal, as well as discuss the original and its most prominent features. It will also introduce Gottlieb's notion of 'infrasemiotic' translation, and the difficulties that arise during this semiotic translation type.

3.5.1 The Original (For 2 Cellos)

The original piece for two cellos is a short excerpt which sets out to explore different types of attack, resonance (both natural and artificial), and decay. This is achieved through a combination of frequent dynamic changes, instrumental techniques such as ordinary and Bartok pizzicato (using different fingers/fingernails—see letters: 't', 'f', and 'fn' in bars 34 and 35 and the 'performance directions'), various bow positions, directions, and pressures (e.g. ponticello, tasto, ordinary, circular, distorted, harmonic), as well as a use of a mixture of dampened/un-dampened strings (see bars 11–16). Different types of attack are explored through use of a combination of fingernail (fn) and finger (f) pizzicato, as well as bowed notes (see bars 33–40, for example). Most of the resonance and decay explored here are natural as the pitches are allowed to sound through the space and decay naturally. Towards the end of the piece (see Figure 3.33), cello one models the resonance and decay, while cello two forms the attacks via a mixture of pizzicato (thumb, finger, ordinary) and bowed attacks. The artificial resonances stem from these attacks in multiple ways through use of techniques (bow positions, vibrato, distortion, and so on), while the decay is simulated through various dynamic markings (crescendos, decrescendos, and varying levels).

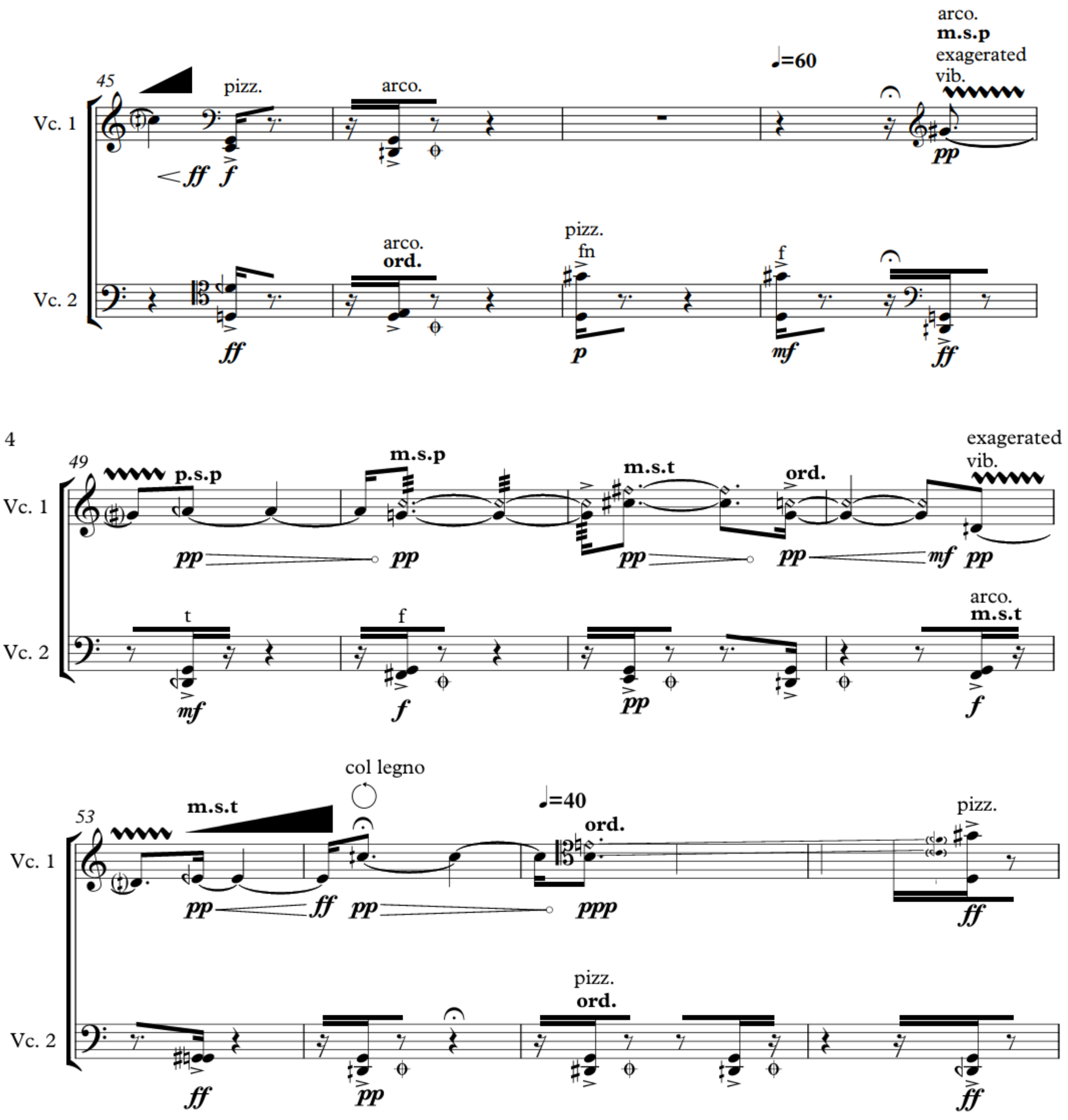
45
Vc. 1
Vc. 2
pizz.
arco.
arco.
ord.
pizz.
fn
f
♩=60
arco.
m.s.p
exagerated
vib.
ff
f
p
mf
4
49
p.s.p
m.s.p
m.s.t
ord.
exagerated
vib.
pp
mf
t
f
arco.
m.s.t
53
m.s.t
col legno
♩=40
ord.
pizz.
pizz.
ord.
ppp

Figure 3-33: Cello one models the resonance and decay, while cello two forms the attacks (Bars 45–56, Cello Duet)

3.5.2 Cello Translation

Thus far, this critical commentary has focused on translations which happen when one single instrumental line is translated into an alternative single line of material. However, when a piece for two instruments is condensed into a piece for one instrument, other difficulties arise (as discussed below). Gottlieb terms this type of translation 'infrasemiotic translation':

> [T]he term infrasemiotic translation implies that the semiotic "bandwidth" (range of activated semiotic channels) of the translation is narrower than that of the original. We see this when, for instance, a mime artist performs a piece of drama originally including spoken lines; audio-described stage plays for the blind, for instance, fall into this category as well.[70]

The process by which a work for two cellos is translated into that for one cello imitates this translation type. During this process, as quoted above, some layers of the original are betrayed in the target language. The following discussion examines the losses during this process, and how I dealt with these complications.

In order to translate material written for two cellos into material for solo cello many decisions had to be made, the first related to pitch. Throughout the original work for two cellos there are almost always three to four pitches sounding simultaneously as double stops. Initially the resolution to this was that all three/four pitches would be translated into the cello solo as strummed chords. However, as discovered in a workshop with Séverine Ballon, this was impractical and did not attain the seamless strumming motion envisioned. This led to my decision to, where necessary, omit two of the original pitches (see bars 13–16, for example), while retaining the pitches believed to sound the most prominent in the original. In other situations, such as the opening twelve bars, all three pitches from the original have been retained. This is achieved through notating a semiquaver attack, directly followed by a longer pitch to create the impression of the long pitch (imaginary resonance) seeping out from the double stop attack, as in the original.

The most significant loss in the cello translation can be found at bars 48–56: the punchy double stops in the second cello part of the original, that accentuate, and more importantly act as the attacks that the first cellos held pitches stem from, have had to be omitted for practical reasons. The effect of these held pitches (pretend resonances) occurring in consequence of the double stop attacks has thus been betrayed in the target language. This results in softer, and less abrupt material, and consequently the translation loses some of its intensity without these urgent and sharp attacks. On the contrary, the presence of the technique sequence from the original first cello part retains enough detail for the original to be audible in the translation.

Since the target language is closely related to the original (two cellos translated into one), it was possible to successfully carry across all other aspects (dynamics and techniques) directly into the target language. For example, the circular bowing, exaggerated vibrato, pizzicato, and glissandi in bars 1–8 of the original can be found in bars 1–8 of the cello translation, along with a slightly adapted version of the alternating loud/quiet dynamic markings. The translation process demonstrated by this translation is what I term intra-instrumental translation (imitating Jakobson's intra-lingual translation), since I am translating within the same instrumental language (cello).[71]

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[70] Gottlieb, p. 51.

Overall, this translation is an example of what Eco terms a foreignised translation, since the cello translation is brought extremely close to the original cello duet. Although, parts of the harmonic structure and punchy double stops have had to be omitted at various points, the fact that the translation is for the same musical instrument as the original, brings it very close to the sound world of the source text through its identical characteristics and timbral qualities.[72]

3.5.3 Piano Translation

Despite this being another example of what Gottlieb terms infrasemiotic translation (two or more channels/voices made narrower in some way), due to the piano's ability to play multiple pitches simultaneously, all pitches were successfully carried across from the original cello duet into the target language. This said, some durations and metrical aspects were adapted to better suit the characteristics of the new medium. In the opening twelve bars of the original, one cello executes the attack, while the other produces the resonance over the duration of a semibreve (see bars 1–12, cello duet). The piano is incapable of creating sustained tones as pitches naturally decay after the attack. I have thus made use of the sostenuto pedal to allow certain notes to sound through the space more effectively (see bars 1–12, piano translation). To further take advantage of this characteristic, I have transferred the original 4/4 metre into unmetered bars (equalling ten seconds each), to allow space for these natural resonances to occur and die away in their own time. In consequence, the original metrical feel is betrayed in this section, and the overall duration of the piece is lengthened considerably. Additionally, the unnatural resonances in the original are also betrayed as they become natural in the translation. This opening section demonstrates what Eco terms a domesticated translation, since the original material has been brought further away from the original, and towards the new instrumental language.[73]

A further feature which has been betrayed in the piano translation are the dynamics. Louder dynamic markings have been added to create a more dramatic effect with the piano, and to allow the sostenuto notes to resonate as effectively as possible as a result of these harsher attacks. However, the constant fluctuation between loud and quiet dynamic levels has been successfully carried across. Moreover, the dynamics are also used to create an effect of quiet artificial resonances stemming from the loud attacks, as in the original (see bars 5–7 and 50–

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[71] See '1.8 A Re-interpretation of the key Concepts in Translation for Composition', pp. 22–24.

[72] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[73] Ibid.

56, piano translation, for example). Like the example above, this is another instance of domestication. In order to suit the characteristics and nature of the piano, the original has been brought towards the target language.

One aspect which was harder to translate over to the target language was techniques. For example, the bow positions and pressures/distortion were betrayed (ponticello, tasto, ordinary, circular, and distorted): it is not possible to achieve such techniques on the piano. However, had I translated the original for the inside of the piano, perhaps I could have retained more of this detail. Conversely, I was able to retain other technical details such as glissandi which have been translated into alternative techniques: see Figure 3.34, where the cello's glissandi become a run of notes in the piano. In another section the cello's glissandi are converted into a tremolo (see bar 6 of the cello duet and piano translation). Both instances aim to represent the smooth continuous motion of a glissando. However, the seamless sliding motion and microtonal inflections that occur between the notes in the original are lost in the translation. If I had translated this for the inside of the piano there are techniques which imitate this effect such as striking the strings with a metal bracket (whilst the sustain pedal is down) and sliding up or down. However, this wouldn't allow for the diverse range of intervals and directions of glissandi achievable on a string instrument.

The air-like quality created via a dampened string in the original (bar 7) has been translated into keys scrapes in the target language (see Figure 3.35). This technique is effective in creating a pitch-less and quiet sound; however, it is more percussive than a dampened string bowed, and hence the delicacy in the original is betrayed. Alternatively, the harmonics in the original were successfully carried over to the translation since this technique is achievable on piano. This said, timbral differences occur, and the attack is harsher in the target language (see Figure 3.36). These are all examples of where the original has been foreignised in order to match the characteristics and technicalities of the cello. In doing so, a referential equivalence is achieved, however, not an exact representation.

It is worth pointing out that the act of domesticating and foreignising throughout this translation is in constant fluctuation. As with *Brumel Translated* this supports Eco's notion that foreignisation and domestication should be decided on a sentence level, as opposed to fixating on one throughout the entire translation.[74] The latter method is impractical since each individual feature (techniques, dynamics, pitches), or section of material requires a different approach.

Additionally, the number of voices from the original have been retained throughout. The two cello voices have become two separate piano parts, creating a similar duet effect. Further, as the two cellos match in timbre, the two piano parts match timbrally. For these reasons, the original can be clearly traced in the target language, and it is clear that it is a translation.

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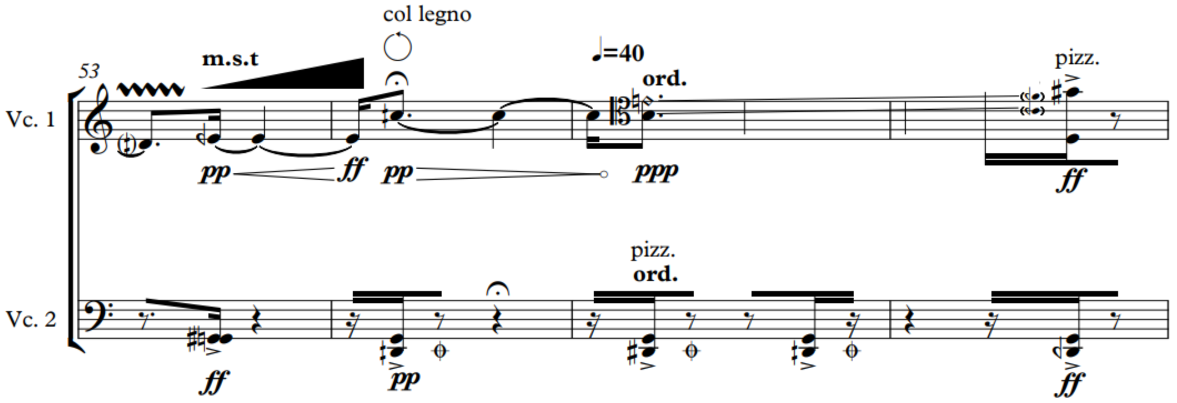
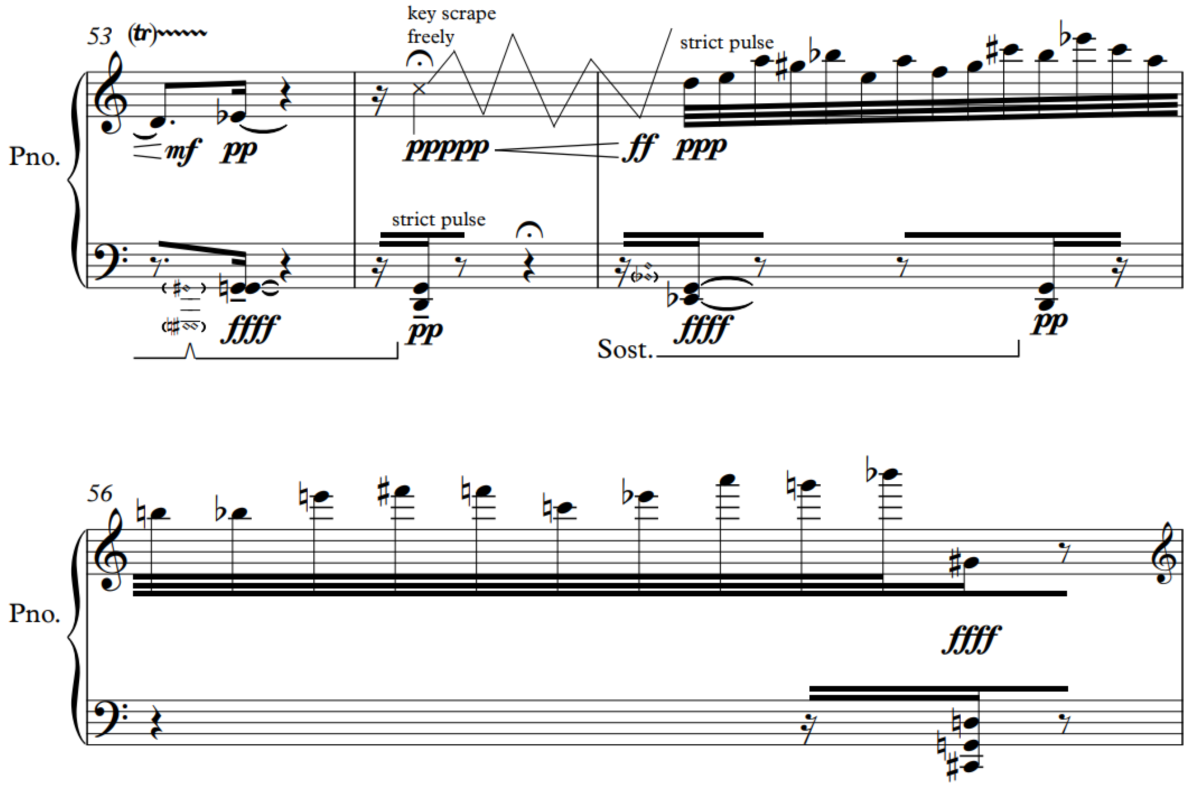
[74] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10, and Eco (2003), p. 100.

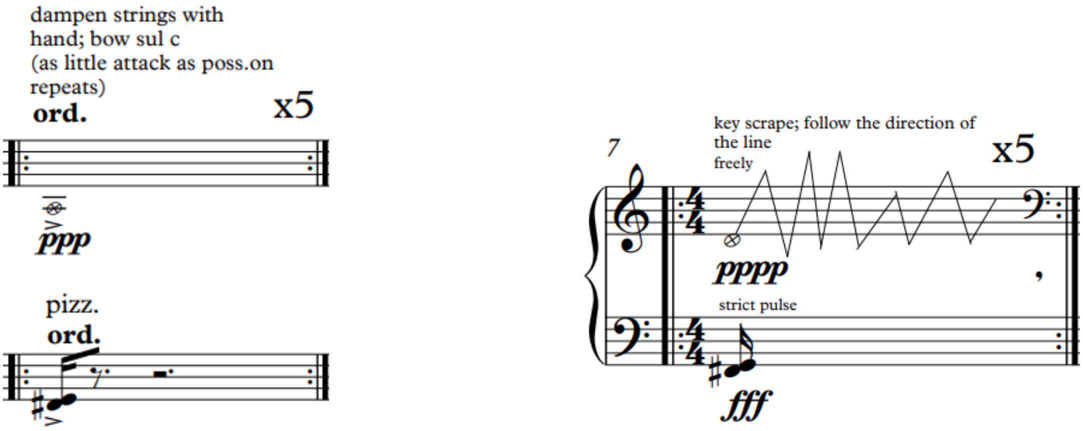

53
Vc. 1
Vc. 2
m.s.t
col legno
♩=40
ord.
pizz.
pizz.
ord.
pp
ff
pp
ppp
ff
ff
pp
ff

a) (cello duet; original)


53
(tr)
Pno.
key scrape
freely
strict pulse
strict pulse
mf
pp
ppppp
ff
ppp
ffff
pp
ffff
pp
Sost.
56
Pno.
ffff

b) (piano solo; translation)

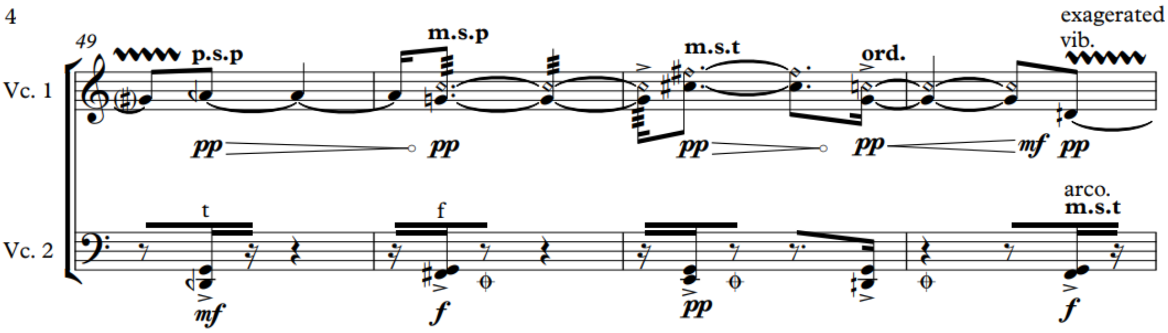
Figure 3-34: Cello’s glissandi become a run of notes in the piano translation


dampen strings with
hand; bow sul c
(as little attack as poss.on
repeats)
ord.
x5
ppp
pizz.
ord.
7
key scrape; follow the direction of
the line
freely
x5
pppp
strict pulse
fff

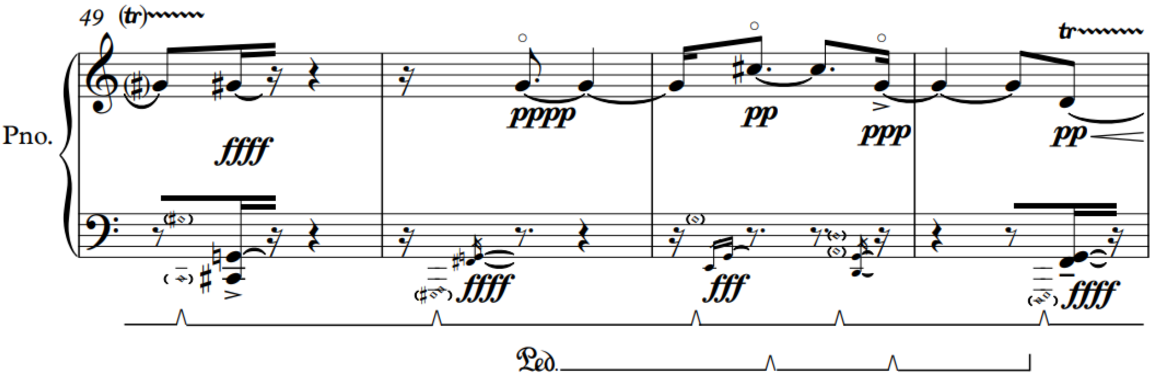
a) (cello duet; original)

b) (piano solo; translation)

Figure 3-35: Dampened string in the original (bar 7) translated into key scrapes in the target language


4
49
p.s.p
m.s.p
m.s.t
ord.
exagerated
vib.
Vc. 1
pp
pp
pp
pp
mf
pp
t
f
arco.
m.s.t
Vc. 2
mf
f
pp
f

(a) (cello duet; original)


49
(tr)
tr
Pno.
ffff
pppp
pp
ppp
pp
ffff
fff
ffff
Ped.

(b) (piano solo; translation)

Figure 3-36: Harmonics successfully carried over to the piano translation

To conclude, like previous musical translations, and even when trying to perform a conventional process such as transcription, details are betrayed in the target source due to technical and timbral differences, or the condensing of two voices into one. Such a process can be compared with the act of translating a play into a mime act—the level of communication is narrower in the target form, as discussed by Gottlieb. That said, due to the general content, structure, and stylistic traces of the original remaining in the subsequent translations, their relation is clear. As with preceding works, foreignisation and domestication techniques are used on a sentence/parametrical level according to what the target instrument is able to achieve, or the purpose of the proposed translation.

Unlike all previous discussed works, the following section explores the practice of inter-semiotic translation where one set of semiotic signs are translated into semiotic signs of another system (sign language into vocal languages, music into moving pictures). This is achieved through a transformation of Queneau's textual exercises into musical ones.

3.6 Exercices de style (2020–2022)

Exercices de style, for any solo instrument or ensemble of instruments is a piece based on Queneau's book of the same name. In the same way that Queneau's book comprises an original story, and ninety-nine re-telling's of it, this musical work comprises an original exercise, and ninety-nine translations of this original. However, the work does not aim to translate Queneau's book word for word into the musical target language but rather aims to translate over its characteristics and form into a musical setting. Unlike previous works that examine what Gottlieb terms intra-semiotic translation: a translation process which occurs within the same semiotic system (e.g. within vocal languages, or written music), *Exercices de style* demonstrates what Jakobson terms an inter-semiotic translation: a translation which happens across two differing mediums, from Queneau's written linguistic form into my written musical form.[75] This process was carried out during the initial compositional stages of the work. I took Queneau's textual ideas and humorous style and mapped the structure of the original book to its musical formation. This example of inter-semiotic translation is quite dramatic since translating textual signs into musical signs is disparate. On a micro-level, this process is not very effective, but on a macro-level proves to produce an exciting and varied translation which captures many elements of Queneau's original, as discussed below. Further, this is an example of adaptational translation, discussed previously with examples from Gottlieb, where he describes the process as a form of translation that is '(free) from conventional (bound) types of translation'.[76]

Elements that I have aimed to carry across into my translation are Queneau's visible themes and categories amongst the exercises, its comical nature, the simplicity of the main material used for this textual experiment, and of course, it's open and extensive structure. The following sections will uncover key characteristics of Queneau's book and provide some specific examples of how it has been translated into the musical target language. They will also consider the work's live translational aspects which occur because of its open notational nature. As well as traditional themes such as foreignisation and domesticated, and carrying across, and betrayal.

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[75] See '1.6.2 Intra-semiotic Translation', pp. 16–17, and '1.6.3 Inter-semiotic Translation', pp. 17–20 for a definition of intra- and inter-semiotic translation along with examples.

[76] Gottlieb, p. 50. Also see '1.6.3 Inter-semiotic Translation', pp. 17–20 for further definitions and examples.

Exercices de style by Raymond Queneau commences with a short and pointless story about a man who boards a bus and starts an argument with another man who he believes to be treading on his toes on purpose. This material is used as the basis for 99 versions that explore the French language, as stated by the English translator, Babara Wright in her preface:

> His purpose here, in the Exercises, is, I think, a profound exploration of language. It is an experiment in the philosophy of language. He pushes language around in a multiplicity of directions to see what will happen. As he is a virtuoso of language and likes to amuse himself and his readers, he pushes it a bit further than might appear necessary—he exaggerates the various styles into a reductio ad absurdum—ad lib., ad inf., and sometimes, —the final joke—ad nauseam.[77]

The pointlessness of the story is an integral part of the book, as Wright states: 'the point about the original story having no point, is one of the points of the book. So much knowledge and comment on life is put into this pointless story'.[78] If the content of the original was too dense, it may retract from the clever and varied material that he later crafts with it. Hence, I believed this to be one of the most important features to preserve in my musical translation. I have achieved this by using a twelve-pitch tone row (borrowed from *Remnant Voices* and Webern's *Drei Lieder*) for my pitch material, with a basic set of durations that expand and contract (see 'Notation' in *Exercices de style* score, p. 1).[79] The material doesn't particularly hold any significance (other than that I like the sound world of Webern's tone row), and neither do the pitches or durations concern the rest of the work. As a result, this directs the attention to how this material is manipulated in the subsequent exercises.

Another feature which appears to be characteristic of Queneau's book are the themes and categorisations that these exercises seem to belong to. Wright maps out roughly seven different categories of exercises within Queneau's original:

> The first—different types of speech. Next, different types of written prose. These include the style of a publisher's blurb, of an official letter, the "philosophic" style, and so on. Then there are 5 different poetry styles, and 8 exercises which are character sketches through language—reactionary, biased, abusive, etc. Fifthly there is a large group which experiments with different grammatical and rhetorical forms; sixthly, those which come more or less under the heading of *jargon*, and lastly, all sorts of odds and ends whose classification I'm still arguing about. This group includes the one quoted above, which is called: *permutations by groups of 2, 3, 4 and 5 letters*.

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[77] Barbara Wright, 'Preface', in Raymond Queneau, *Exercises in Style*, trans. Barbara Wright (New York: New Directions, 1981), pp. 14–15.

[78] Ibid., p.15.

[79] See '3.4 Remnant Echoes (2020)', pp. 92–93 for examples of the tone row that I used.

> Under *jargon* you get, for instance, one variation which tells the story in mathematical terms, one using as many botanical terms as possible, one using Greek roots to make new words, and one in dog Latin.[80]

My musical translation has sought musical equivalents of such categories which include, variations in notation, material, pitch translations, those written in the style of a specific composer, board game and word puzzle equivalents, and so on. Although most of the pieces aren't exact translations of Queneau's original textual exercises, they are musical equivalents. In the same way that Queneau has experimented with the French language through exercising a short story's many possibilities and forms, the target musical language has achieved a similar effect via a set of musical exercises (based on a small fragment of material) that aim to demonstrate the many ways of expressing music, while also re-telling the same musical exercise in as many ways as possible.[81] Wright took a similar approach to her English translation of Queneau's book which she believes to be more of an exploration of language in general, she states:

> I thought that the book was an experiment with the French language as such, and therefore as untranslatable as the smell of garlic in the Paris metro. But I was wrong. In the same way as the story *as such* doesn't matter, the particular language it is written in doesn't matter as such. Perhaps the book is an exercise in communication patterns, whatever their linguistic sounds. And it seems to me that Queneau's attitude of enquiry and examination can, and perhaps should? —be applied to every language, and that is what I have tried to achieve with the English version.[82]

For this matter, the translation type explored here and in my musical translation is referential as opposed to a word for word translation. Eco defines this as a translation process by which the translator coveys 'the same things and events as the original', as opposed to remaining faithful to every possible detail of the source text.[83] Referential translation allows for me to create a more effective translation of Queneau's ideas in music. A literal translation of Queneau's text into music would not provide such an interesting or successful account. It would simply result in Queneau's text set to music, which is more of a copy of the original French text as opposed to translating Queneau's book and all its features, character, and ideas over to the musical language. This is also true when translating Queneau's French text into another language. Eco discusses instances where, in order for him to create the same effects in his Italian translation of *Exercices de style*, he had to rewrite the exercise to create the desired effect Queneau was trying to express:

> Another case of rewriting is instanced by my translation of the *Exercices de style* by Queneau, where I was frequently obliged not to translate, but rather (once I understood what kind of game the author was playing), to try playing the same game in another language.[84]

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[80] Wright, p. 14.
[81] Ibid., pp. 14–15.
[82] Ibid., p. 16.
[83] See '1.2 Source into Target and Equivalence', p. 7, and Eco (2003), p. 62.
[84] Eco (2003), p. 77.

From this view, perhaps my musical translation is not so untrue to Queneau's original, in that it takes the ideas and games that Queneau created in the French language and applies them to a musical world. However, perhaps in the more adaptational sense recognised by Gottlieb. Unlike the linguistic translations of Queneau's book, where *Exercices de style* is transformed into English and Italian using more conventional methods, my musical translation requires a change in medium (e.g. from linguistic signs into musical signs).[85] Thus, all Queneau's original text is betrayed to create a musical rendition of the book's structure and design, exploring musical language in opposition to linguistic languages. I will now go on to discuss specific categories and exercises to demonstrate how I have created these desired effects and scenarios.

One feature fundamental to the way we perceive music is how it is notated. One category of exercises within my musical translation are hence those that explore notation types, such as open and graphic notation, relative pitch, space-time, guitar tab, and text notation. Here I have taken the original exercise, entitled 'Notation' (see 'Notation', p. 1), and translated it into a series of notational styles. Sometimes these notations alter the material dramatically, and others are barely noticeable. For example, 'Graphic Notation' translates the original into a series of fragments: glissandi contour, demi-semi-quaver runs, trills, and shapes (see 'Graphic Notation', p. 79). The contours were extracted from the original melody in 'Notation', and some pitches were sieved to create trills. The resulting translation holds a loose connection to the original, and consequently a lot is betrayed: similar to how Queneau's Permutations of letters and words betray a lot of the original text's coherent structure, meaning and content, as it is completely deconstructed. In contrast, 'Space-Time Notation' holds more resemblance to the original. Here I have extracted all the pitches in their original form and mapped their durations onto lines through space (see 'Space-Time Notation', p. 82). Using a ruler, I measured out each duration according to its original value (e.g. an 8-beat duration would be mapped to an 8cm line). The perceived result is close to the original, however, the precise durations are betrayed.

An example of where I have translated my original 'Notation' into a series of specific composers' styles/pieces can be found in exercises such as 'In the style of Mortan Feldman's *Projections*', 'In the style of Earle Brown's *4 Systems'*, and so on. 'In the style of Morton Feldman's *Projections*' translates the original exercise into one of Morton Feldman's graph pieces (see 'In the style of Morton Feldman's *Projections*', pp. 93–95). To achieve this, the original pitches are divided into three voices according to their range, they are then translated into relative pitch notation (high, middle, low). The set durations are translated into real time (each square measuring a second). Morton Feldman's style is applied through the direction 'to be played consistently quiet with a pure (non-vibrating) tone', and the way none of the three voices play at the same time, creating one seamless voice with contrasting timbres. 'In the style of Earle Brown's *4 Systems*' maps the original durations to measured out lines (via the approach discussed earlier with 'Space-Time Notation'), and the pitches are set relatively within the systems, according to their original range. Here dynamic and timbral indications are added by the thickness of the lines/shapes. These are further examples of where a more referential approach has been taken to create an effective account in the target language. As a result, in both instances, the pitches are betrayed (and in the Earle Brown, the original order of durations and pitches due to their scattered placement). However, the durations somewhat retain their original identity. In contrast, in 'In the style of Terry Riley's *In C*' I have mapped the original pitches onto motifs from Terry Riley's *In C*. As a result, the original sound world of 'Notation' is retained through intervallic relations, however, the original durations are betrayed. The translation is a successful imitation of the minimalist work due to the characteristic motives, however, ironically the pitches are now not in the key of C, due to the twelve-tone nature of 'Notation'. Perhaps a better approach would have been to translate the original pitches into the C major scale as well.

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[85] See '1.6.2 Intra-semiotic Translation', pp. 16–17, and '1.6.3 Inter-semiotic Translation', pp. 17–20 for discussions on degrees of adaptation in translation, and how this differs from conventional methods.

Another element of music explored through my translations is musical form. Key to many compositions is their structure, I therefore decided that another category of translations would showcase different forms such as binary, ternary, and rondo forms as well as theme and variations. For example, my 'Binary Form' exercise consists of two contrasting sections (AB). Section A consists of the first half of 'Notation' partitioned into legato phrases, played slowly at a very quiet dynamic, in the suggested key of C sharp minor (according to the accidentals). Section B displays a version of the 'All Short Durations' exercise, played fast with extreme changes in dynamic, and hints at an F minor key change. 'Theme and Variations' borrows sections of numerous exercises as its variations such as 'Double Entry; Pitches Only', 'All Short Durations', and 'Glissandi Contour', with 'Notation' being the theme. This exercise, again, mimics the tonal structures characteristic of this style. These translations are successful in that they demonstrate a playful version of their proposed forms. However, due to the chromatic nature of the original pitches, the strong key relations, characteristic of these forms are difficult to perceive, and hence betrayed.

Throughout *Exercices de style*, Queneau showcases exercises which are closely related to obvious textual forms (past, present, blurb), and at other times creates games with text (mathematical, visual, auditory exercises).[86] For this reason, in contrast to my music-based exercises, I have created exercises which are not necessarily music related. For example, I have translated 'Notation' into a wordsearch, crossword, and sudoku. 'Wordsearch' takes the first twelve pitches of 'Notation' as its main material. The performer is required to find all twenty-six musical directions regarding tempo, dynamics, range, and playing technique (see 'Wordsearch', p. 85). The performer is then to apply each direction to the twelve-note passage (the word 'highest' would indicate to play the provided musical passage in the instruments highest register) in one of three ways as stated at the beginning of the exercise:

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[86] See Queneau, *Contents*.

> 1) find all words prior to the performance and then apply the directions to the musical passage in the order which you found them, repeating the short passage with each new direction; 2) find the words during the performance, performing the short musical passage with each new direction as and when you find them; 3) play the musical passage as a continuous loop throughout the entire performance, applying each direction as you find them. You may also wish to combine directions at times.[87]

In this translation the durations and some pitches are betrayed. However, due to the prominent sound world of the pitch sequence, it is clear that it is a version of the original. 'Sudoku' maps each duration to a number from one to nine (where one is a demi-semiquaver, and 9 is a dotted breve). The performer is then to complete the sudoku, and:

> 1) play the rows from left to right or vice versa; 2) play the columns from top to bottom or vice versa; 3) to read the square diagonally; 4) focus on one of the 9 smaller squares and then gradually make your way through the other squares. Apply one of these paths to the repeated pitch sequence below.[88]

This translation is slightly closer to the original in that all durations are carried across into the target language, as well as some pitches. The original order of the durations, however, is betrayed.

All the above examples can be thought of as domesticated translations, since the ideas, characteristics, and style of Queneau's book have been translated into those which are more suited to the new musical language, as opposed to the original French version.[89]

Some exercises remain closer to Queneau's original; amid his re-telling's are exercises written in specific tenses (past, present). I translated such exercises into their musical form which, due to the non-verbal nature of music, proved to be difficult. However, to depict the past I created an exercise where the performer is to record themselves playing the material and then listen back to it as a past performance (see 'Past', p. 34). Although an interesting take on trying to depict these tenses with musical material, it does not form the same obvious and clever effect that Queneau creates for his readers with the French language. Hence, other than the general concept, a lot of meaning is betrayed in this translation.

Another instance where I have tried to translate one of Queneau's textual exercises into a musical one can be found in the final exercise, 'Mathematical'. In the way that Queneau creates a mathematical formation of his text, I have created basic sums of which their answers equal the desired durations for the pitches (see 'Mathematical', p. 114). Although, as with all the exercises in my musical translation, the textual element is lost, most importantly, the humorous and ridiculous nature of the exercise is retained as the performer works out the answers to these mathematical sums before they can play the duration.

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[87] See 'Wordsearch', p. 85 in *Exercices de style* (2020–2022).

[88] See 'Sudoku', p. 87 in Ibid.

[89] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

More accurate translations can be seen in ‘Parts of Music’, ‘Precision’, and ‘Hesitation’. In the same way that Queneau splits the components of text in his ‘Parts of Speech’ exercise, ‘Parts of Music’ categorises all its musical parts, such as pitch and duration (see ‘Parts of Music’, p. 54).[90] My ‘Precision’ and ‘Hesitation’ exercises require the performer to play the original material as proposed in their titles, however, ‘Precision’ encourages the performers accuracy by providing very precise notation (see ‘Hesitation’, p. 19 and ‘Precision’, p. 20). For this reason, ‘Precision’ is likely the most faithful to Queneau’s original exercise since it depicts an accurate account of what the performer is to play, as the reader is to recite in Queneau’s book, as opposed to merely suggesting with the title. Notationally, the same could be said for ‘Parts of Music’, as in its written form the exercises depict very similar things in both music and text. However, what moves this musical translation further away from Queneau’s original is my performance instructions which indicate how the material should be played/used; Queneau does not lead the reader in this way. Perhaps leaving the directions out would have provided a more accurate translation.

My musical translation also depicts Queneau’s character sketches through a series of four pieces named, ‘Violent’, ‘Gentle’, ‘Frantic’ and ‘Calm’, which are not exact equivalents of Queneau’s titles (‘Abusive’, ‘Biased’ etc.), but are musical versions. However, they are much more open to interpretation since they are not strictly notated like the textual exercises. Similarly, my ‘Permutation’ translations (see *Exercices de style*, pp. 99–102) give more of a coherent version than the nonsense created by Queneau’s permutating the letters of words, which again moves these translations further away from the original book. Due to the nature of music, permutations of pitches, chords, and phrases, are far less obvious and clumsy than those created by jumbled text.

Another category of exercises takes Queneau’s title ‘Interjections’ and translates this idea into a series of exercises that involve adding small utterances of technique, tremolos, or rests amid the original pitches and durations of ‘Notation’. ‘Rest Interjections 1’ replaces every fourth to seventh duration with a rest of the same length (see ‘Rest Interjections 1’, p. 48). The pitches and durations are successfully carried across to the target language here. Similarly, in ‘Tremolo Injections’ a tremolo is added to every third to fifth pitch, however, the contour has been inverted, and the original durations have been converted into durations lasting one beat or less (see ‘Tremolo Interjections’, p. 45). For this reason, the translation sits further away from the original, as more is betrayed, however, it still holds a strong connection to the original through intervallic construction. These exercises are, nevertheless, very different from Queneau’s ‘Interjections’, since they are more seamless and flowing as opposed to the abrupt sounds followed by exclamation marks in Queneau’s exercise.[91] Perhaps a more accurate translation would have been created through making the musical interjections more sporadic with silence surrounding them.

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[90] See Queneau, pp. 152–153 in relation to my ‘Parts of Music’ exercise discussed above.

[91] See Queneau, p. 191 in relation to my interjection exercises discussed above.

All the above instances are examples of foreignised translations since I have tried to bring the pieces closer to the original author's style, as opposed to bringing the original text closer to my new musical context.[92] This is especially true of the musical translations written in past and present tenses, since these are not instances you'd normally try to communicate with music. However, despite my attempts to foreignise these translations, my efforts are not always obvious to the listener. Due to the non-verbal nature of music, it proved difficult to bring such translations close enough to create the same effect that Queneau's texts do. It could have been easier if I'd brought Queneau's text into at least some of my musical translations. However, I think this would have been less effective in forming a true exploration of music, as Queneau explores the French language.

A characteristic integral to the feel and style of Queneau's *Exercices de style* is the comical, witty, and absurd nature of the exercises. I hence have striven to retain this within my musical translation. This has been achieved from the outset, starting with the performance directions. Here I have provided the performer with a very indecisive and general set of instructions which basically say that anything goes with this material, in the same way the possibilities are endless with Queneau's textual exercises.[93] This is then carried into the body of the work by the exhaustive nature of the material, e.g. translating the original exercise into multiple musical scales, or into pre-compositional techniques such as Maxwell Davies' 'Magic Square', or into a puzzle cannon, and providing references to stylistic pieces of twentieth century composers, such as John Cage's silent piece. This is further enhanced by my more dramatized exercises, where the performer is encouraged to act out the exercise, as opposed to merely playing it. For example, in the wordsearch, sudoku, and crossword exercises, the performer has the option to complete these puzzles on stage in front of the audience, which is slightly amusing as the performer interchanges between playing the material and figuring out how to solve the puzzles. Similarly, the maths exercise requires the performer to work out a series of sums to uncover the duration of each pitch. The past, present, and prognostication exercises similarly allow for this performative approach to delivering the material.

Another feature that has been successfully carried across into this musical translation is the layout and non-linear nature of the overall structure of Queneau's, *Exercices de style*. Queneau's book, comprising an original and a series of re-telling's of the same short story, allows for the reader to pick and choose which exercises to read: the reader need not read all the exercises to familiarise themselves with the books character and purpose. The open structuring of this musical translation offers that same openness to its reader/performer: an assortment of the exercises may be performed in any order, or merely one of the exercises may be executed. The performer may also choose to dip in and out of the exercises like a reader is able to dip in and out of Queneau's short texts. Consequently, as the precise form of Queneau's book depends on each reader's choice, the form of this musical translation will change with each differing soloist/group of instruments that play the work in terms of its ordering, material, timbral quality, range, and so on.

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[92] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[93] See 'Performance Directions' in *Exercices de style* Score.

Exercices de style can additionally be observed to explore live inter-instrumental (inter-linguistic) translation as the same exercises are executed by different instruments or groups of instruments, in different instrumental languages. Thus, features such as the timbre, technique, and range of an exercises will change with each different instrument or group that plays it. In the sense of how an interpreter translates live, acting as a mediator in the communication between one person and another, the performer can be seen to translate the composer's musical notations and suggestions on the spot, based on what they perceive these to be, and how they best see to translate the material to suit the new instrumental language. This is especially true of exercises where techniques are prominently involved. For example, 'Technique Interjections 1 and 2' provides the performer with five possible techniques. The score does not provide specific techniques but instead guides the performer to choose a set of techniques which range from pure pitch (1) to noise (5). This allows the performer to translate this given material for their instrument, dependent on what pitch-less techniques are possible, and so on (see 'Technique Interjections 1', p. 46 and 'Technique Interjections 2', p. 47). Similarly, exercises such as 'Glissandi Contour' will change quite dramatically with each instrumental language. The smooth glissandi that is achievable on a string instrument will be very different when executed on the piano (see 'Glissandi Contour', p. 18). In a more conventional sense, when exercises such as 'Space-Time Notation' are performed, the specific durations of the pitches will change with each interpretation, dependent on the performer's depiction of the lines in space (see 'Space-Time Notation', p. 82). This is an example of the inter-semiotic translation which Gottlieb recognises as the translation of written music into performed music, discussed earlier, since the performer is to translate the notation into sound which works in their instrument's language, while trying to remain faithful to the composer's material.[94]

In the same way that Queneau's exercises are never truly finished (due to the nature of the work: the same story re-contextualised many times), my musical translation leaves open the possibility to create further translations which experiment with musical styles, features, and themes. In his interview with Georges Ribemont-Dessaignes, Queneau discusses how he wrote the exercise over a long period of time: 'In *les Exercices de style*, I started from a real incident, and in the first place I told it 12 times in different ways. Then a year later I did another 12, and finally there were 99'.[95]

I thus don't see my book of musical translations as finite, but rather a work which I could further explore through time as new ideas arise. Further exercises could explore different singing styles (opera, recitative, classical aria), which could bring Queneau's original text into the translation. I could explore different instrumental forms such as a fugue, or various musical styles (Renaissance, Baroque, Classical). However, my musical translation at present explores a diverse range of musical themes, as well as those which are less musical. This approach successfully translates Queneau's title into a musical version that captures its character, style, and features.

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[94] See '1.6.3 Inter-semiotic Translation', pp. 17–20.

[95] Queneau, as quoted by Wright, p. 15.

In summary, *Exercices de style* examines the relationships between Queneau's original text and my musical translation. It demonstrates what Gottlieb and Jakobson term 'inter-semiotic translation' as Queneau's linguistic text is translated into musical ideas/notations. To achieve this, a high level of adaptation is required to successfully reference Queneau's ideas and characteristics through a musical anthology. In the process, the original text and all its arrangements are betrayed, however, the comical nature, style, and essence of the original are retained, making this a successful inter-semiotic transformation, at least in the semiotic field. Aside inter-semiotic translation, the work exhibits translation on a micro scale through identifying what is betrayed and retained when translating my 'Notation' exercise into its many musical and non-musical forms, and how this directs the reader towards the original (foreignised approach), or the original towards the reader (domesticated approach). A third translation is recognised in performance, as various groups or soloist reconstruct the material and tailor it to their instrument/s. In this sense, there are three translational processes at work: 1) the translation of Queneau's linguistic book into a musical anthology; 2) the translation of the original exercise, 'Notation', into multiple musical versions; and 3) the translation of these written notations into performed sounds. The following section explores a similar adaptational style of translation through a revisit to the musical processes of re-composition, re-contextualisation, and borrowing of a previous work for solo organ, while introducing the notion of self-translation as a creative process in composition.

3.7 Translations for Piano (2021)

Translations for Piano comprises fourteen pieces, each varying in length, for solo piano. The work is a self-translation of my piece for solo organ, *Resonant Voices* (2017) which explores clusters sounding in, and through the space. However, it is not a direct translation of the original but instead takes the pre-compositional foundations for the organ work and paraphrases these algorithmic stages into a piece which works for piano. It can thus be considered a re-contextualisation of a compositional idea, as well as a re-composition, as discussed earlier in this document.[96]

My goal, when setting out to write *Translations for Piano* was to explore a process known as self-translation: the translation process by which the author translates their own work into an alternative language.[97] As discussed in the literature review, this process raises lots of questions regarding the translation's faithfulness to the original source. A self-translation is not open to the same criticism, improvement or debate as would a translation carried out by an outsider, as it is assumed that no-one knows the work better than the author. However, this allows the author a lot of freedom, and even the ability to rewrite the original, creating a new version, as opposed to a translation. It is also worth considering the access the author may have to their original ideas (planning, sketches, notes etc.) from when they wrote the original, putting them at a possible advantage. This assumption was proved correct in my case as the entirety of *Translations for Piano* is based on the pre-compositional stages and ideas from the organ work. However, this supposition may not be correct in other instances where the author has decided to translate the work many years after they wrote the original and may not remember exactly what they initially set out to do when they composed it.

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[96] See '2.3 Re-composition', pp. 32–35, and '2.4 Re-contextualisation; Paraphrase and Borrowing', pp. 35–38 for further explanation of what these processes entail.

[97] See '1.7 Self-Translation', pp. 20–21.

The practice of self-translation has been criticised 'by some scholars and theorists in the field of translation, such as Bassinet (2013) and Cordingley (2013), for not being a translation, but rather a form of rewriting that creates a new original'.[98] This is true with certain features within my musical self-translation. Some aspects within the piano translation can be deemed more as a rewriting of the original source as opposed to a straightforward translation of the work. For example, some of the algorithmic stages used to compose the organ work have been adapted to suit the new structure of the piano solo. The biggest change can be seen with stage 1b, where some of the six options have been adapted to create the scenario in piece ten (see Translation 10, p. 42). This was a decision made in order to make more of a distinction between the singular pieces that make up *Translations for Piano.* In the original, stage 1b simply serves as a bridge between stages 6a and 1b by introducing the types of material to come in the second half of the piece. Due to the new structural setting of these stages within the piano translation, this stage loses its purpose, and so to still incorporate it, I made it individual in and of itself.

Other aspects which can be considered a rewriting are my addition of runs, the rearrangement of the structure, the change in my use of clusters, and the more varied use of registers, which will be discussed in detail in the following sections. All of these adaptations were designed to suit the new instrumental medium, similar to how an author (self-translator) may rewrite certain sections of their translation to conform to the culture and ideology of the target audience. This was discovered in a study on Haikel's self-translation of *Autumn of Fury* (1983). Here, he rewrites large amounts of text while also adding in substantial amounts of extra information into the Arabic translation, so much so, that it becomes more of a second original than a translation.[99] The study further concluded that:

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[98] Ahmad Mohammad Al-Harahsheh, and Mariam Al-Omari, 'Self-Translation: A Faithful Rendition or a Rewriting Process? Haikal's Autumn of Fury as an Example', *3L, Language, Linguistics, Literature*, 1, 25 (2019), 144–157 (p. 145).

[99] Ibid., p. 156.

> […] any act of self-translation results in rewriting to recreate another original for a new readership. It can be said that self-translators do not follow the core principles that translators understand to be standard translation rules, which is essentially faithfulness to the ST.[100]

The same thing can be said for self-translation within the context of music where some of the standard rules of translation are slightly relaxed. I often felt, as the composer of the original source, the need to add in extra details, rewrite certain scenarios, or change the order of things to create a translation of the piece that I felt better suited the piano. However, if an outsider were to translate my organ work, I don't believe they would have made so many dramatic decisions, such as revising the gradual structure, within the piano translation. For these reasons I'd likewise label my piano translation a second original, and thus a kind of re-composition/re-contextualisation of the organ work and its basic idea, as well as a self-translation. Contrary to this, the basic material such as the duration sequences and semiquaver patterns used in the piano translation, and the large leaps across registers, remain close to that seen in the original source.

Musical processes which go hand in hand with self-translation include self-borrowing, and the re-contextualisation of material or ideas. Throughout the rest of this commentary, I discuss how I re-compose my organ work, carrying over its foundations, style and references into several translations for piano. This is similar to how I extracted sections of Brumel's *Missa Dominocalis* and translated them into contemporary classical movements, however, this time it's on a larger scale. Aside my own ideas, I also re-contextualise extracts from Xenakis' *Psappha*, which has a relation to the original organ work, as discussed below.

Translations for Piano opens in a very similar manner to the organ work. It begins with a continuous stream of semiquavers from which notes are gradually omitted, leaving more and more rests in between successive semiquavers (see Appendix C, pp. 172–183, for example and *Translations for Piano*, pp. 1–12). On the contrary, since the piano piece does not progress in a gradual and linear sense (as does the organ work), I decided to use this opening section as an introduction of the material to come. This is achieved via introducing the semiquaver runs (see Figure 3.37), and the addition of rests which increase in length (see Score, pp. 7–12, bars 27–48). To bring the piano translation even closer to the roots of the organ work, I included a rough quotation from the opening of Xenakis' *Psappha* (1975): the work that *Resonant Voices* is based on (see Translation 1, pp. 4–12, bars 13–48, and measures 1–350 of *Psappha*).[101] Both the organ original, and the piano translation aim to depict the metronomic and rhythmical feel, consistent use of quavers/semiquavers, changing accents and extending rests/space, characteristic of *Psappha*. The first set of algorithmic stages was inspired by the first half of *Psappha* where the instruments sound within the space (see *Psappha* score, measures 700–980, for example). The second set of stages was enthused by the latter half where the sounds start to stretch through the space (see *Psappha* score, measures 1960–

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[100] Ibid.

[101] Iannis Xenakis, *Psappha* (Paris: Éditions Salabert, 1975).

2170, for example).[102] However, unlike the organ work, I have included the semiquaver interruptions present in the opening of *Psappha* to create a denser texture in the piano work (see Figure 3.38 and *Psappha* score, measures 200–220 and 270–300, for example).[103] These have been adapted via the addition of grace notes which give the impression of timelessness, and float above the otherwise steady semiquaver cluster attacks underneath. I included these chromatic runs for two reasons: 1) to achieve the sense of the clusters stretching through the space; and 2) to add more depth to the piano translation. Since the piano solo does not follow the linear and gradual process of the organ original, the textures between pieces require variation and contrast in order to possess their own distinct character. For the reasons discussed above, translation one could perhaps be considered one of the truest translations of the original, since it provides the same character and drive present in *Resonant Voices*, along with the gradual addition of rests. This piece is consequently a foreignised translation (moving the listener towards the original). I will now explain the algorithmic stages that generate the material for *Resonant Voices* in detail.

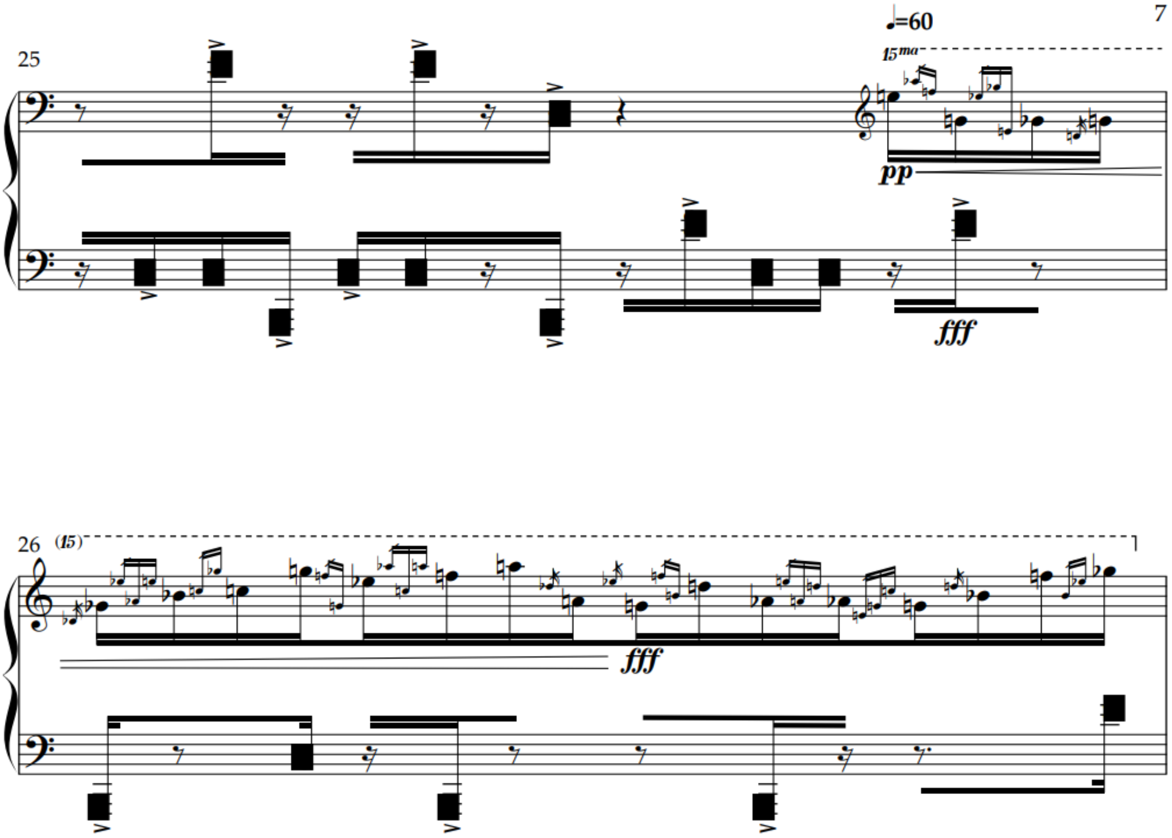

Figure 3-37: Introduction of runs in *Translations for Piano*, 'Translation 1', bars 25–26

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[102] Ibid.

[103] Ibid.

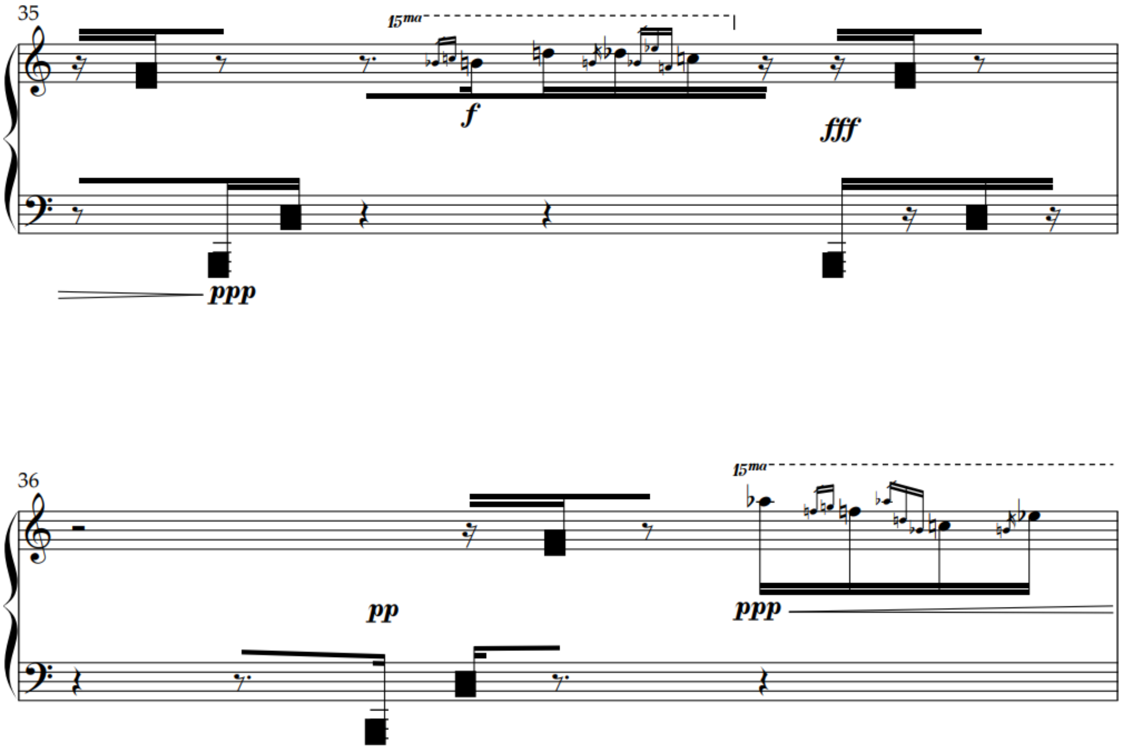

Figure 3-38: Semiquaver/grace note interruptions in *Translations for Piano*, 'Translation 1', bars 35–36

Translations for Piano is made up of material from two contrasting algorithmic stages, the first (labelled A) consisting of a series of steps from one to six. Each step comprises a selection of successive semi-quavers followed by a different length rest (see Figure 3.39). As the stages progress from one to six, the number of consecutive semi-quavers decrease while the lengths of rests increase, allowing the clusters to sound in the space. The latter set of algorithmic stages (labelled B) contain another six steps (see Figure 3.40). This time each phase comprises a sequence of durations, first followed by a rest, and later without any rests, allowing the clusters to sound through the space. In the original work for organ, the piece progresses through the stages linearly and thus demonstrates a very slow and gradual transition through these stages. However, the piano solo takes these stages as material for separate pieces, disguising this gradual process (domesticating method), or at times, combines a few stages together, exposing the original process (foreignising method).[104] I will now provide a more detailed discussion with specific examples of how I translated the main characteristics of *Resonant Voices* into its target form, as well as themes: foreignisation and domestication, and carrying across and betrayal. The translation type explored here is inter-instrumental translation: a translation from one instrument into another (e.g. clarinet into violin). The material written for Organ has been reworked into that which suits the piano, translating aspects such as timbre, material types, range, and techniques accordingly.

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[104] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

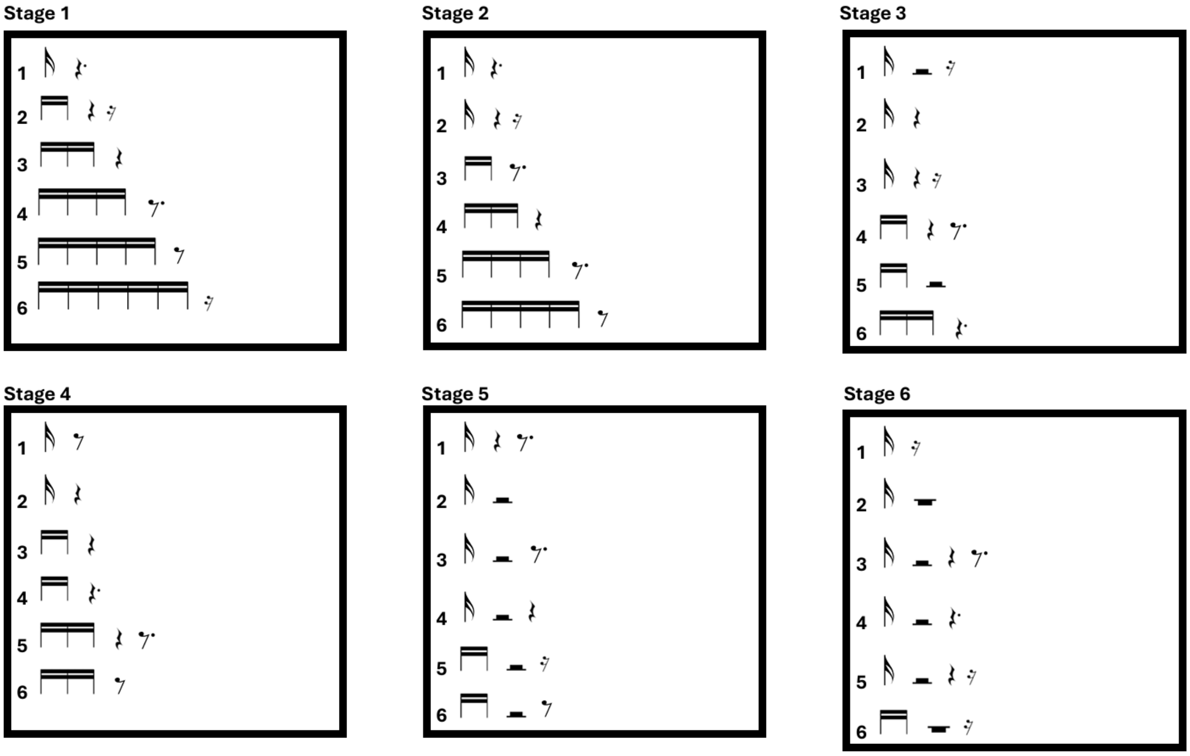
Stage 1
Stage 2
Stage 3
Stage 4
Stage 5
Stage 6

Figure 3-39: Original algorithmic stages A for *Resonant Voices*

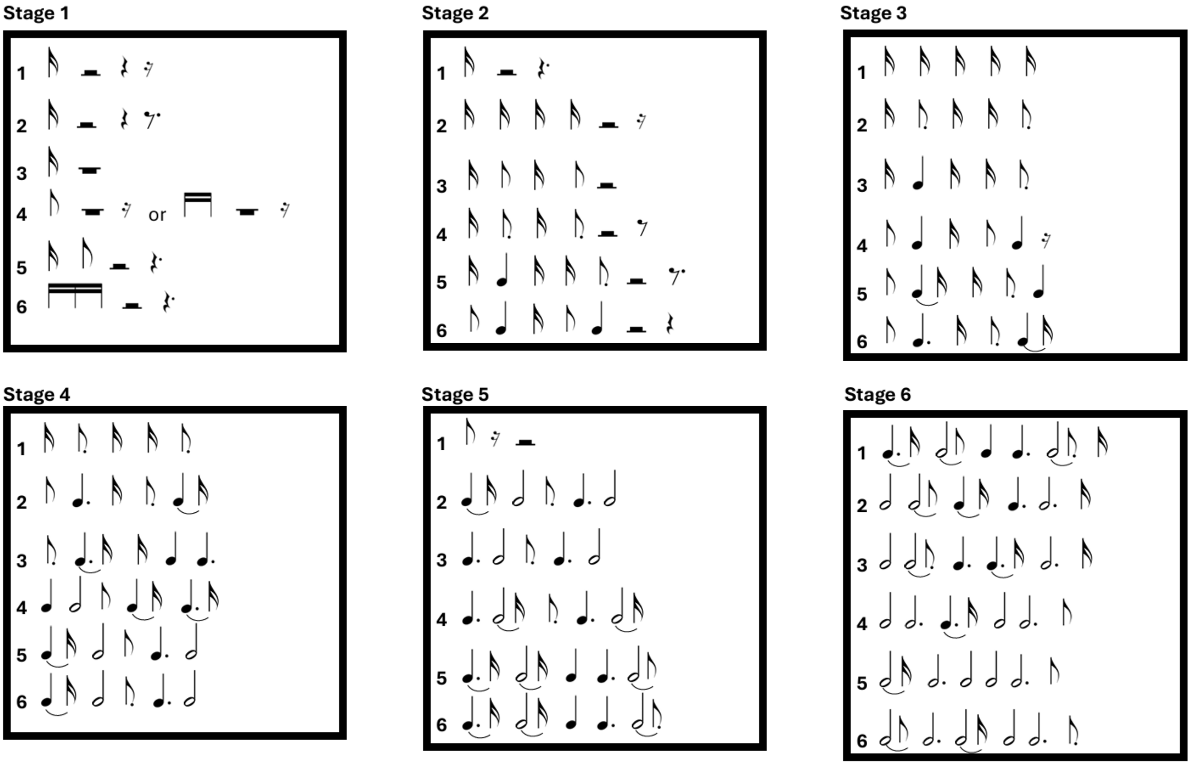
Stage 1
Stage 2
Stage 3
Stage 4
Stage 5
Stage 6
or

Figure 3-40: Original algorithmic stages B for *Resonant Voices*

Before writing *Translations for Piano*, like in previous works for this PhD, I decided on the key features to carry across from the original into the target language. These included: 1) the idea of the clusters sounding in and through the space in various ways; 2) the disparate range between clusters; 3) the algorithmic stages used to compose the original organ work; and 4) the consistent use of semiquavers which eventually form longer durations through increasingly adding a semiquaver length onto the original duration each time. These were the four main features that were successfully retained in the piano translation. Other factors, such as the specific six-note clusters used in the original, and the gradual progression through the twelve algorithmic stages are betrayed: I regarded these features less important to or not as effective in the new instrumental medium (which I will discuss in more detail).

When translating these algorithmic stages into material that works for piano, I came to realise that the gradual progression of these steps, as portrayed in the organ original, was far less effective on the piano for two reasons. First, the piano cannot sustain pitches in the same way that an organ can, thus the gradual extension of durations in the second set of algorithmic stages will not be as effective and audible within the piano translation. Secondly, the resonance that occurs as a result of the short cluster attacks in the first set of algorithmic stages will not be as noticeable in a lot of concert spaces compared with the kinds of spaces that organists often perform in. For these reasons I opted for a structure that arranged these different algorithmic stages into a non-linear order (see Figure 3.41).

Piece	**Stage/s**
I	Introduction
II	5a
III	1a
IV	2a
V	6a (modified)
VI	3a
VII	6b, 5b, 4b
VIII	Additional stage
IX	4a
X	1b, 2b, 3b
XI	4a (modified)
XII	1a (variation)
XIII	5b (modified)
XIV	6a

Figure 3-41: *Translations for Piano* structure built from algorithmic stages in *Resonant Voices*

This new ordering led to my decision to create several shorter and distinct pieces out of these stages. I believe this to better suit the new medium as it creates more variation and contrast, while avoiding long stretches of material where the rests or durations are gradually extending in length. This is an example of where, if I had translated the original material directly for piano, the piece would lose its meaning, and effect. The absence of stops on the piano, and the inability for it to sustain notes endlessly would mean that this gradual process would be ineffective, and potentially quite dull for the listener to contend with. I have therefore had to improve the material to better suit the piano and its distinct technicalities. This ties in with Eco's statement from earlier on, where he values the importance of creating the same effect and world within the translation over a direct rendering.[105]

The duration sequences within the second set of algorithmic stages remain almost the same as in the organ work. Only minor changes have been made to better suit the new idea. The first change can be seen with stage 1b: here all the six options allow for either a semi-quaver or two semi-quavers, made up of 1–3 pitches, tied to a larger cluster equalling a semi-quaver in length (see Figure 3.42). However, stage 1b still allows for the occasional singular semi-quaver attack. The second change can be seen with stage 6b, where the sixth step of the six options has been eliminated (see Figure 3.42). Stages 2–5b remain the same as those used for the organ work.

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[105] See Eco (2003), p. 56, '3.2 Brumel Translated (2019)', pp. 56–57, and '3.3 Sound Translations (2019)', pp. 65–66.

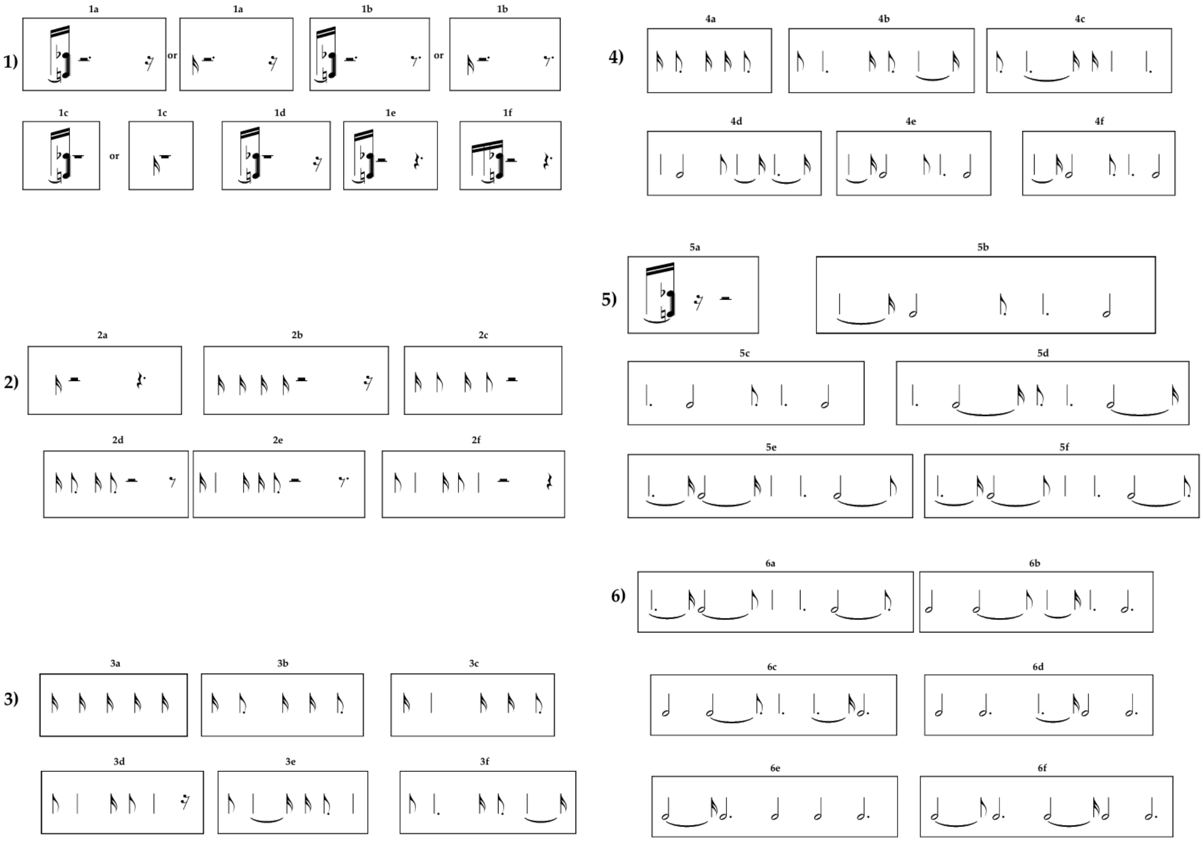

Figure 3-42: New Algorithmic Stages B, *Translations for Piano*

In order to best translate the second set of algorithmic stages (labelled b) into material which works for piano, I decided on some different piano techniques which would allow for the gradual extension of durations to be heard more clearly, and with more variety. In the original, throughout this section the organist gradually adds stops while performing these sustained clusters, which subtly changes their timbre and dynamic. To retain these sustained clusters, and delicate timbral and dynamic changes throughout these sections, I have used a mixture of trills, the sustain and sostenuto pedals, runs, glissandi, as well as ordinary attacks, while varying the dynamics. For example, translation seven contains trills paired with the sustain pedal to allow for the long durations to sound, while also allowing the frequent fluctuation between loud and quiet dynamic markings (see Figure 3.43). Later, the material switches to accented clusters with no trills, except for the occasional one (see Figure 3.44, where the clusters are left to decay naturally). The translation is a combination of stages 4–6b in retrograde, and accordingly, due to the gradual progression through these stages, closely resembles the organ original, foreignising the translation. Further, the static range of the clusters (high and low) present here is similarly reminiscent of the organ work during the b stages (see Figure 3.45). Consequently, this is an example of a foreignised translation as the translation has been brought towards the original source as opposed to the new language.[106] This said, the trills that have been added here, betray the static and still nature of the seamless organ clusters in the original. This is an example of where I have betrayed one feature to remain faithful to another, and to create sustained clusters which don't decay after being struck. This is similar to that discussed earlier where the Northern Italian slang characteristic in Eco's novel, *Baudolino*, is betrayed in order for his translators to create a similar stylistic slang in their own language.[107]

Translation five is an example of where runs (or occasionally glissandi) replace the extending clusters (see Translation 5, pp. 23–24). This piece is another translation of stage 6b. Here the chromatic runs/glissandi extend through the space in various ways. For this reason, the block clusters which sound over the specified durations are lost here. Translation ten, however, comprises a slightly closer (foreignised) translation to the organ original. It progresses through stages 1–3b linearly, along with increasing dynamic levels ranging from quiet to loud that simulate the gradual addition of stops in the organ piece (see Translation 10, pp. 42–46). In this translation, mainly ordinary attacks are executed with occasional use of the sostenuto/sustain pedals and trills, further preserving the stillness of the organ original, however, betraying the solidarity of the sustained/static clusters. In contrast, piece thirteen sits further away from the original source. The first and last durations of each step in stage 5b have been substituted for a semi-quaver attack, and the held clusters have been replaced by chromatic runs (see Translation 13, pp. 51–52). The latter further betrays the organ's sustained block clusters characteristic of the original. Nevertheless, these chromatic runs last and overlap in the middle for the exact same durations as used in the original organ work at the same stage (5b). This is an example of where the translation has been brought further towards the piano's dialect and is therefore classed as a domesticated translation.[108]

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[106] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

[107] See '1.4 Contradictions in Translation: 'Carrying Across' and 'Betrayal'', pp. 10–11, and Eco (2003), pp. 34–35.

[108] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

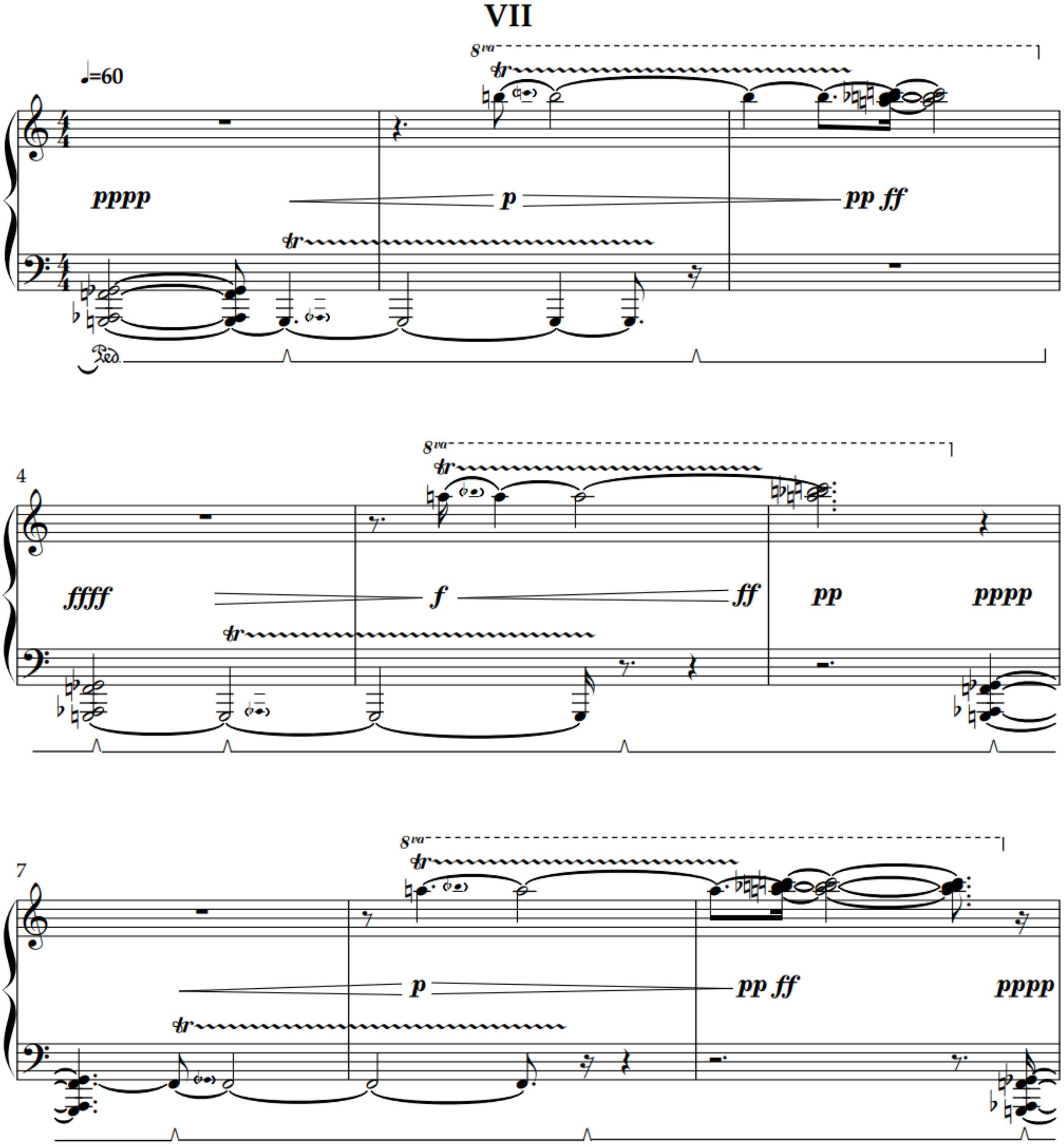
VII
♩=60
8va
tr
pppp
p
pp ff
ffff
f
ff
pp
pppp
4
7
𝄮

Figure 3-43: Trills paired with sustain pedal and loud/quiet dynamic markings in 'Translation 7', *Translations for Piano*, bars 1–9

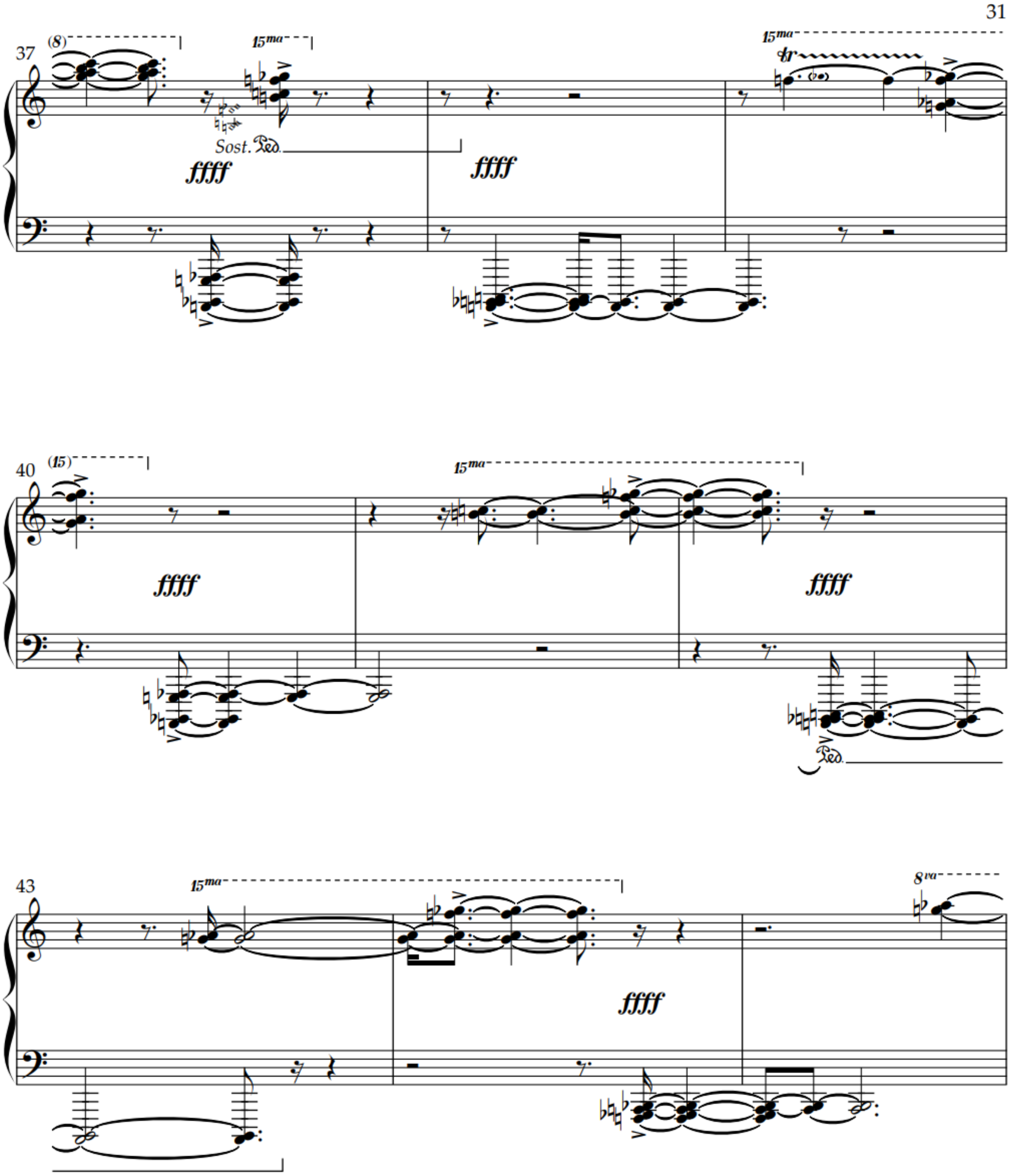
31
37
(8)
15ma
Sost. Ped.
ffff
ffff
15ma
tr
40
(15)
ffff
15ma
ffff
Ped.
43
15ma
ffff
8va

Figure 3-44: Accented clusters with occasional trills and use of the sustain pedal, with extremely loud dynamic markings in 'Translation 7', *Translations for Piano*, bars 37–45

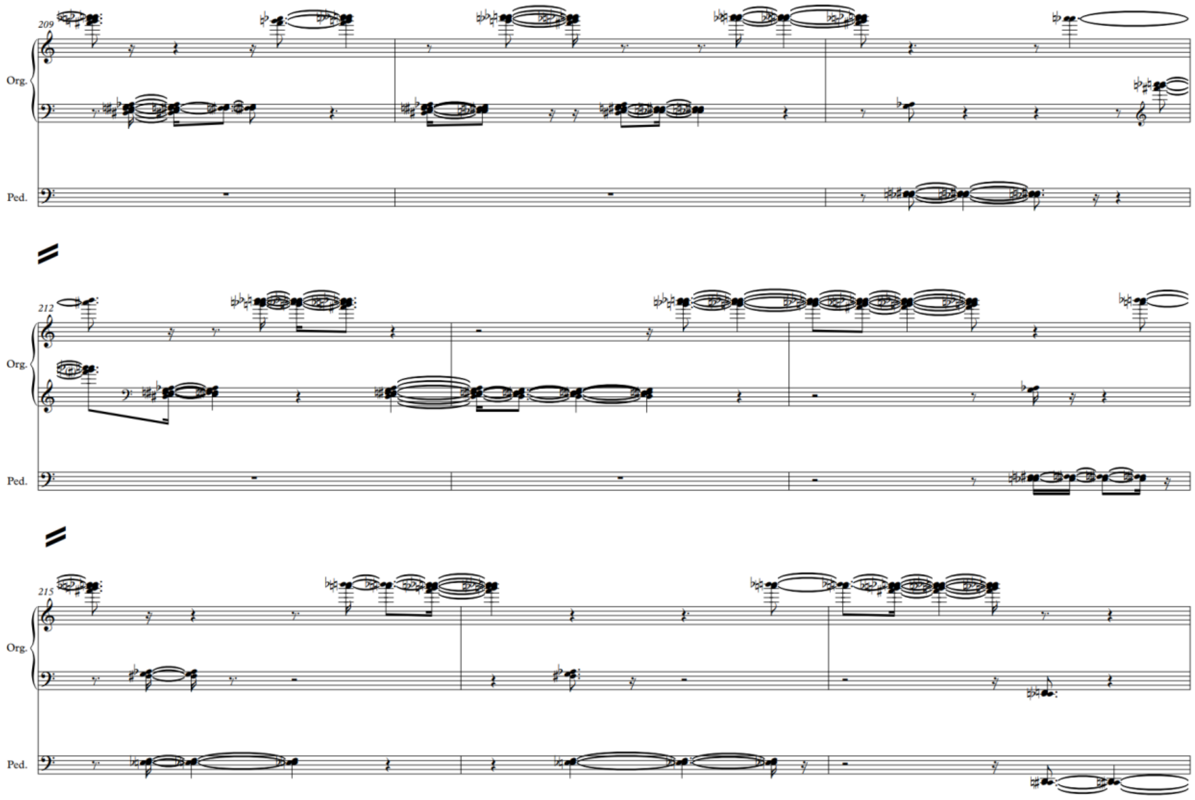

Figure 3-45: Static range of the clusters (high and low) in *Resonant Voices*, bars 183–195

In order to best translate the first set of algorithmic stages for piano, I used a combination of no pedal, or the sostenuto/sustain pedals (see Figure 3.46, for example). Using these pedalling techniques allows for the clusters to resonate more visibly within the space, as in the organ work. This is especially true in the stages where longer rests are present, such as those seen in translations two and fourteen (see Translation 2, pp. 13–17 and Translation 14, pp, 53–56). The translations containing stages 1–6a largely resemble the same stages within the organ piece (see Figures 3.47 and 3.48), except for translation eleven, where the clusters are consistently held through the space. This mixes stage 4a (with its large registral jumps) with the material representative of the algorithmic stages labelled b (see Translation 11, p. 47). Further, the original algorithmic stages of *Resonant Voices* (2017) remain un-adapted in *Translations for Piano*, bringing the material even closer to the original source (see Figures 3.49 and 3.39).

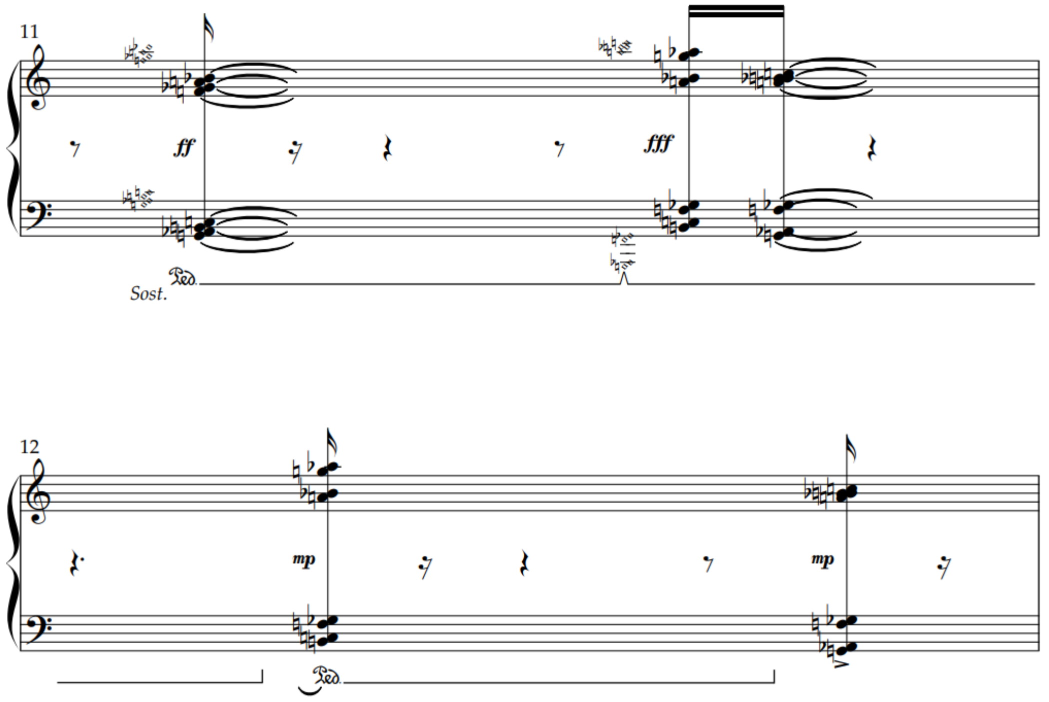
11
ff
fff
Ped.
Sost.
12
mp
mp
Ped.

Figure 3-46: Combination of no pedal, or use of the sostenuto/sustain pedals in ‘Translation 2’, *Translations for Piano*, bars 11–12

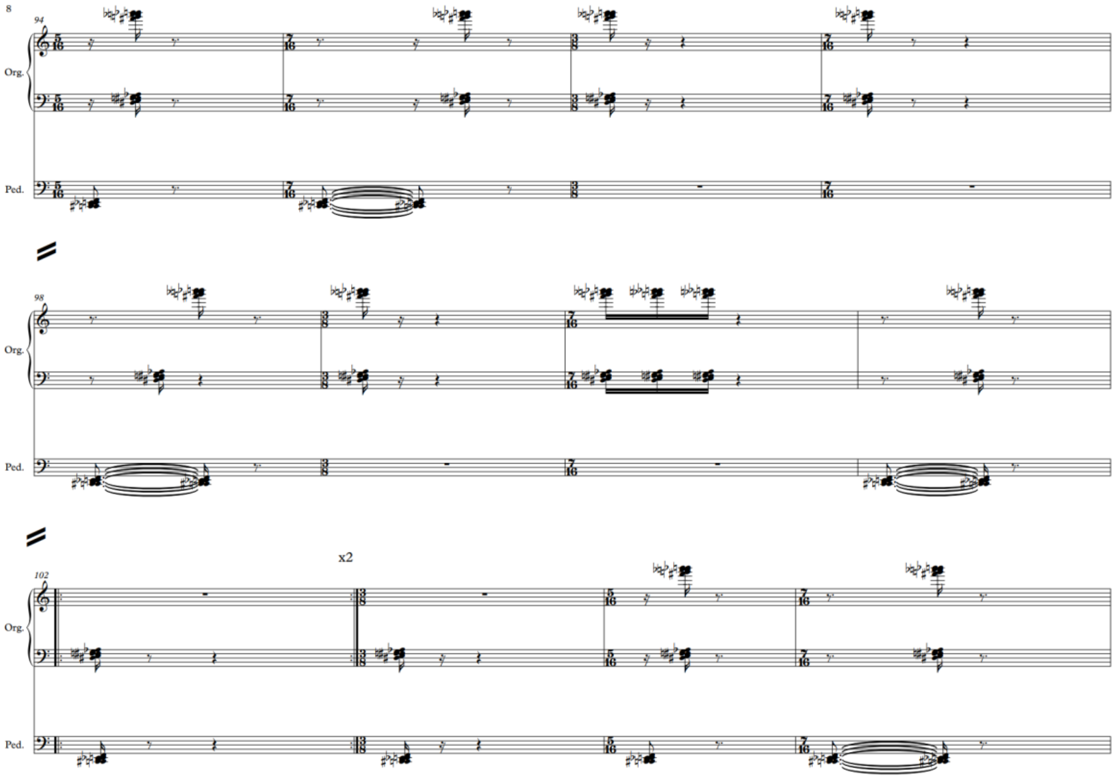
8
94
Org.
Ped.
98
Org.
Ped.
102
x2
Org.
Ped.

Figure 3-47: Similar algorithmic stage in *Resonant Voices*

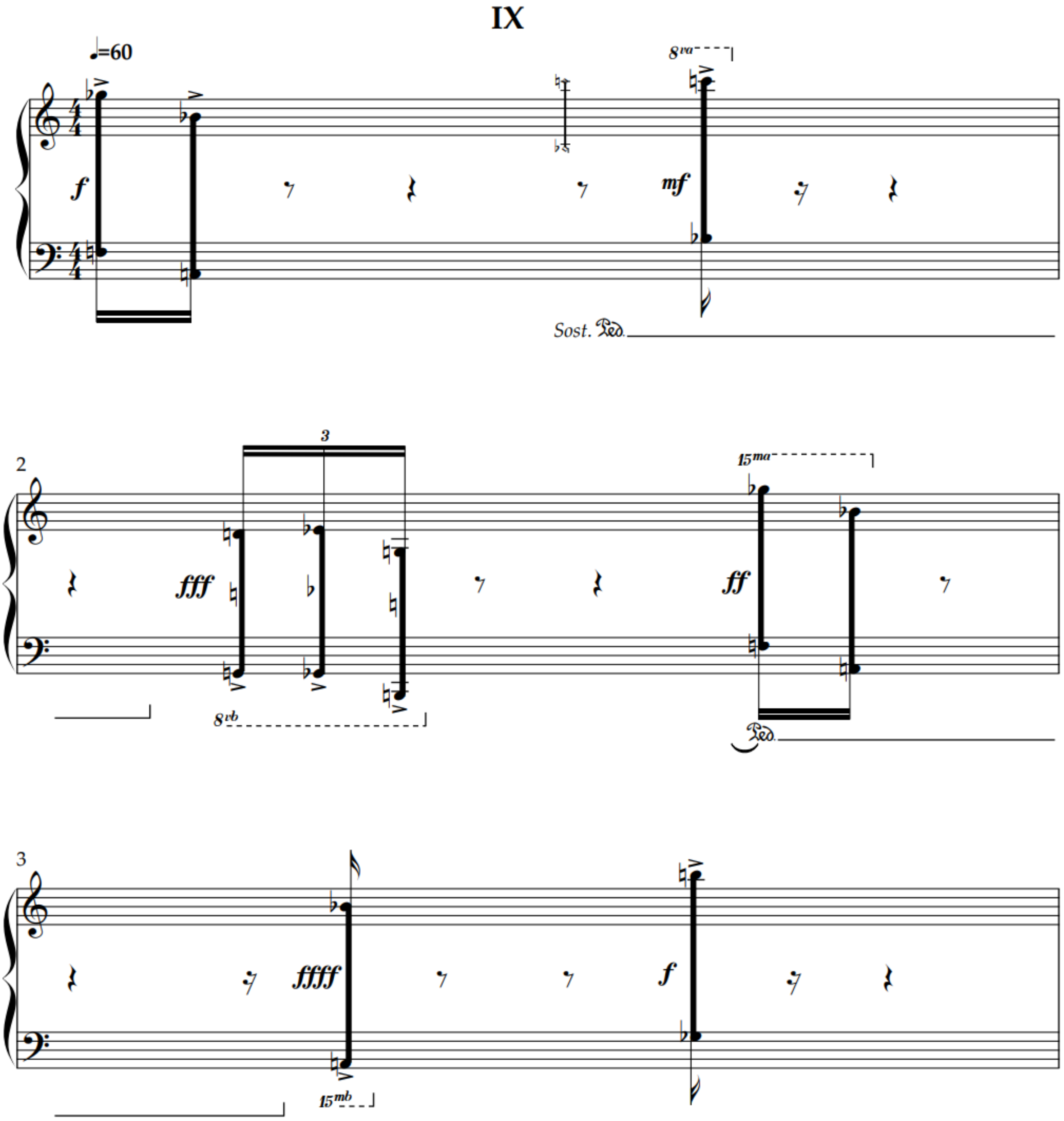
IX
♩=60
f
8va
mf
Sost. Ped.
2
3
fff
8vb
15ma
ff
Ped.
3
ffff
15mb
f

Figure 3-48: Algorithmic stages labelled A in *Translations for Piano* resembling the same stages within *Resonant Voices*

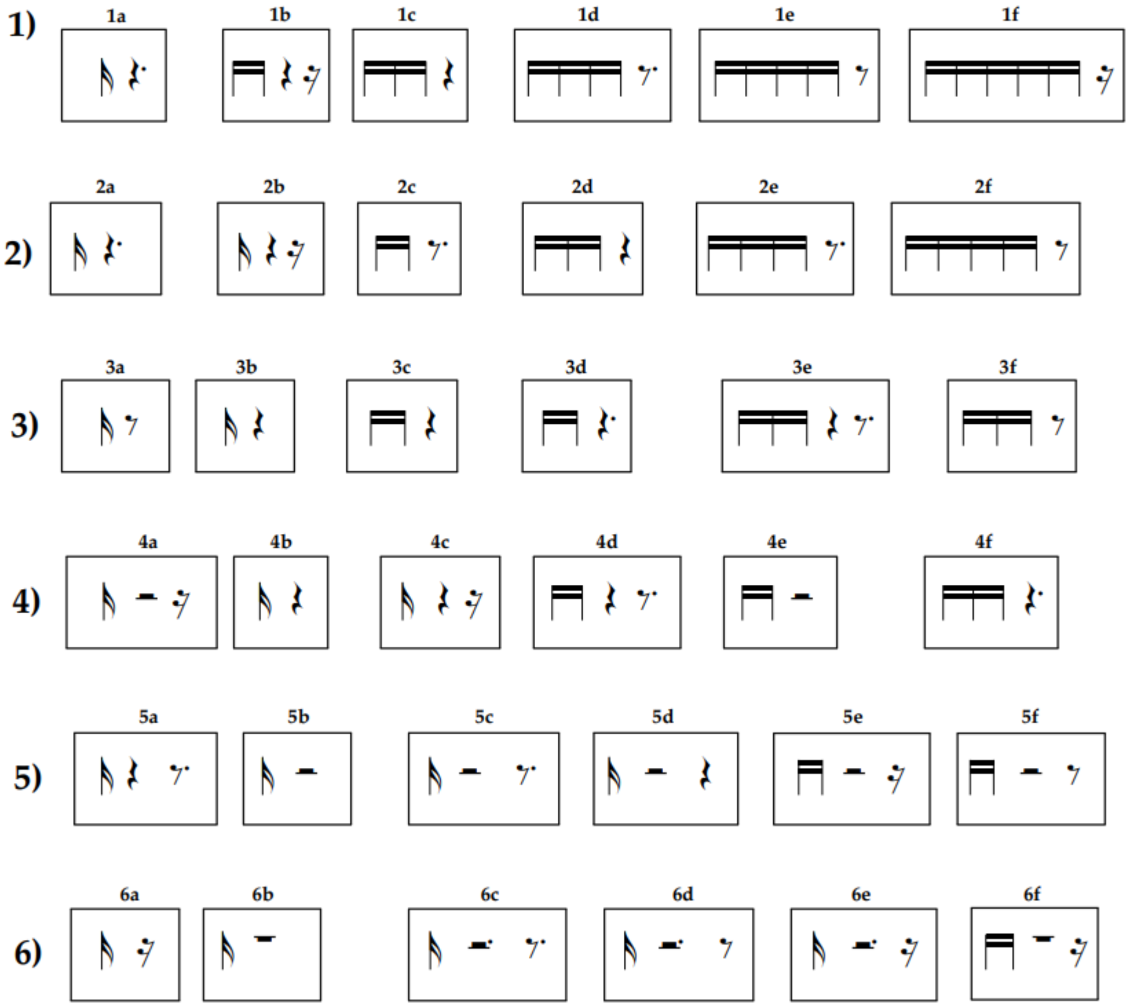

Figure 3-49: New Algorithmic Stages A, *Translations for Piano*

Another feature retained in the piano translations is the disparate range between cluster attacks, characteristic in the first half of the organ work. However, the range of these clusters change with each of the translations, and at times within a single piece. For example, in translation six, the range changes with almost every cluster (see Translation 6, pp. 25–27, for example). In translation four, groups of clusters are in the same range as opposed to the range adjusting with every cluster (see Translation 4, pp. 21–22). However, here the range of the clusters is less predictable than those in other translations. Both translations are instances of domestication, bringing the material used in the organ work closer to the target language (piano). In contrast, translations one and twelve represent three clusters, each remaining in the same range throughout (high, middle, low), as in the original organ work (see Translation 1, pp. 1–3, bars 1–12 and Translation 12, p. 48, bars 1–8, for example). This brings them closer to the original and thus foreignises the translations.

The three six note clusters that feature steadily throughout *Resonant Voices* (see Appendix C, bars 16–68, pp. 172–183) are betrayed in the piano work and are replaced by a selection of block and spread clusters (see *Translations for Piano* Score). This provides the piano translations with a little more variety and contrast in terms of pitch content: a decision made due to the specific pitches of the three clusters in the original source being less significant to the piece than their disparate range. With this in mind, to make the piano translations more distinctive from each other I sometimes change the clusters used within a specific movement. In contrast, the minimalistic use of just three clusters at one time, and their consistent permutation, remains present in almost all the fourteen piano translations, except for pieces three, five, nine, and ten where there are occasionally more than three clusters used. It is also worth noting that individual clusters (except for translation one) alternate between ranges as opposed to remaining static within a specific range, as in the organ original: a decision made due to the new work not needing to demonstrate the same gradual motion as the organ solo proposed to demonstrate. This moves the majority of the piano translations slightly further away from the original, domesticating them.

The use of repeated stations, followed by passages within the organ original, has also been transferred over to some of the translations. In some places this is more obvious than others. The clearest example is translation twelve, which contains several repeated bars followed by moving passages (see Figures 3.50 and 3.51). However, most of the time these repeats are not directly repeated bars, but instead, written out repetitions in 4/4 time. For example, in translation seven (see Translation 7, p. 33, bars 61–72) the same cluster sequence is repeated several times at the same dynamic. These pieces are examples of foreignised translations as they bring the new material closer to the original musical language. However, this feature is not as prominent throughout *Translations for Piano* as it is in the original organ work, especially with the added techniques, and changing clusters that overshadow the repetition.

The absence of organ stops in the new medium led to my decision to use more of a dynamic contrast within the piano translations. This compensates for the loss of timbral changes among the three clusters, which, in the original organ work, distinguish the three voices. It also sometimes models the subtle changes in dynamic levels that occur when using different combinations of stops. For example, in translation six (see Translation 6, pp. 25–27), the dynamics mostly change with each cluster and fluctuate between different quiet dynamic levels (all mezzo piano and below). A more dramatic example, and perhaps less alike the subtle dynamic changes in the organ work, can be seen with translation three (see Translation 3, pp. 18–20), where the dynamic markings are mainly loud, but occasionally drop to piano, or crescendo. This would be hard to achieve by changing stops at that speed. Additionally, here the dynamics do not change with each cluster, bringing this translation even further away from the original.

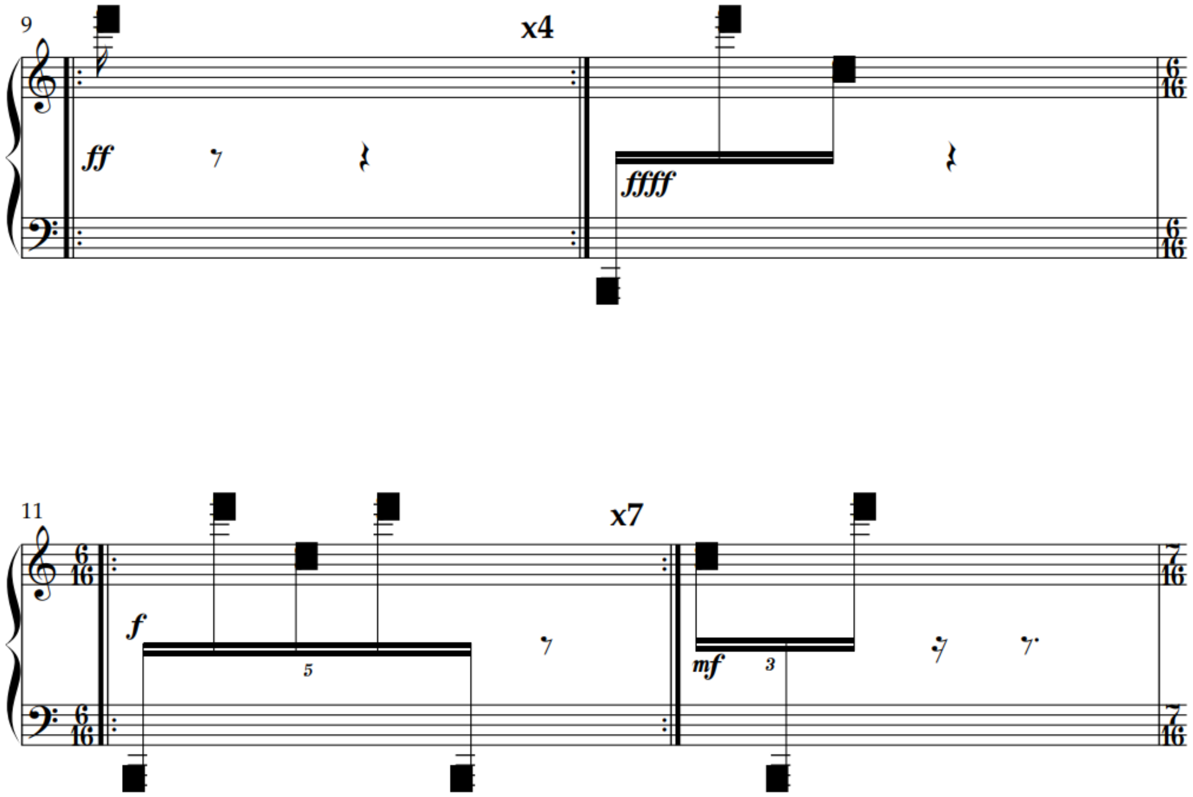
9
x4
ff
ffff
11
x7
f
5
mf
3

Figure 3-50: Repeated stations in ‘Translation 12’, *Translations for Piano*, bars 9–12

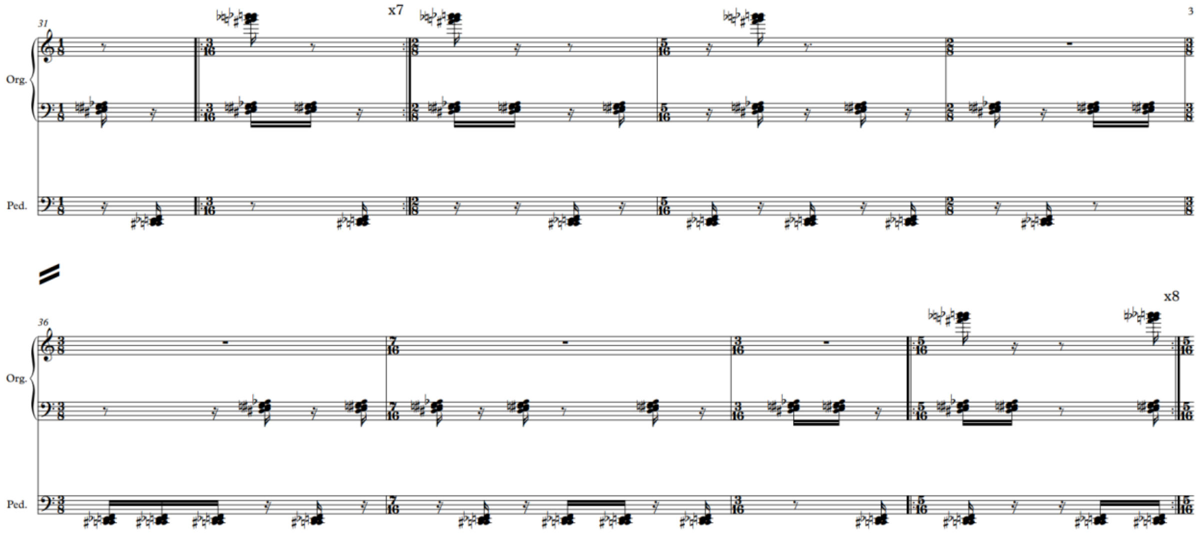
31
x7
Org.
Ped.
3
36
x8

Figure 3-51: Repeated stations, *Resonant Voices*, bars 31–39

To conclude, as with many of my musical translations, *Translations for Piano* is an example of referential translation. It gives reference to the detail and characteristics of *Resonant Voices* and aims to create the same world as the original, but definitely is not a direct rendering of its structure and intentions.[109] Translations seven and ten replicate the second part of the original more closely, as they work their way slowly through several algorithmic stages (b) and sustain more of a steady range among clusters. Similarly, the introduction holds close resemblance to the first half of the original, as it works its way through the gradual processes seen in the organ work and displays three distinct voices within a set range. Translation twelve also holds close resemblance through distinct voicing, and repeated stations. However, the everchanging range of the clusters present in the majority of the piano translations, the non-linear structure of the algorithmic stages, and the absence of three distinct voices disguises the original substantially. Consequently, overall *Translations for Piano* can be considered a domesticated translation of *Resonant Voices*. It reflects traces and episodes of the original but creates a new form including varied pitch structures and textures with this material. Additionally, like many linguistic self-translations, *Translations for Piano* can be seen as a new original of *Remnant Voices*. It should thus be labelled as an adaptational translation, as recognised by Gottlieb, since the existence of the organ piece has initiated the piano solo. As a result, traces of the original are present in the translation, but they are to some extent less apparent than in a conventional translation. 'Following from this is the inability to reconstruct the original from the translated version, something which—to a certain extent—is possible with conventional translation'.[110] The following section further explores adaptational translation via the continual adaption of a piece for B♭ bass clarinet, until three target languages are met. In turn, this challenges Jakobsen pessimistic view of a translation of a translation, as touched upon in *Sound Translations*.

3.8 Pitch Rhythm Gesture (2022)

Pitch Rhythm Gesture is a piece written for B♭ Bass Clarinet which explores what Bartoloni defines as the 'Interstitial Zone': the space between the original and the translation.[111] Through my efforts to separate the original musical parameters (pitch, rhythm, gesture) into three distinct pieces, the relations amid these parameters are revealed. These reflect the impurities amid differing linguistic systems when trying to translate one language into another, as discussed by Derrida in *The Ear of the Other*. These parametric translations result in a series of pitch, rhythm, and gesture translations; seven of each parameter. Different to my other pieces, where there is an original and several translations of that original, *Pitch Rhythm Gesture* explores what happens when you translate the original into a target language, and then translate that target language into another, and so on. This creates a string of translations which lose more detail each time (retaining key features); sometimes adding, as with the telephone game, where the story/statement changes as it is passed from person to person.

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[109] See '1.2 Source into Target and Equivalence', pp. 6–8.

[110] See Gottlieb, p. 52.

[111] See Bartoloni (2003), p. 7 and '3.3 Sound Translations (2019)', p. 68 for a definition of this concept.

Like *Sound Translations* (2019), discussed earlier, this work contests Benjamin's statement that you can't have a translation of a translation, due to how loosely meaning is attached to a translated work.[112] This work pushes these boundaries to the limits via continual transformations of the original until an end goal is reached. Further to this point, like the *Ship of Theseus* paradox, where there is a debate as to whether it is the same ship once all its parts are replaced, this piece experiments with varying degrees of transformation. Throughout I explore how this changes the piece, and if those changes adapt the piece in such a way that it is no longer a translation, and instead a new piece, which I will discuss in the following sections. Accordingly, this type of translation demonstrates what Gottlieb recognises as adaptational translation. Like in *Translations for Piano* the source text is hard to trace as the original is continually transformed, however, they are off sprouts of the original and thus relate to the source in some way.

Different to other works in this PhD, *Pitch Rhythm Gesture* explores what Jakobson names intra-linguistic translation, or what I term, intra-instrumental translation, since it explores translation within the same instrumental language. The focus of translation within this work is thus the material and how it changes with each subsequent translation. The work is additionally another self-translation since the work presents translations of my own material as opposed to somebody else's work.

The original piece consists of a series of contrasting gestures, alternating between slap tongue, air tones, spectral glissandi, and so on (see Figure 3.52). As stated in the score, the performer is to:

> Begin with the original piece. After this choose from one of the three options on page 3, depending on which aspect you would like to preserve (gesture, pitch, or rhythm). Turn to the page your choice states and play the material provided. Likewise, at the bottom of each translation there is a box of options to select from. Again, choose which feature you would like to preserve and turn to that page to play the material. Continue to do this until you reach a page with no more options.[113]

The gradual transformation displayed in each set of translations of a single parameter is thus partially distorted by this open structure. If the performer chooses to switch between pitch, rhythm, and gesture translations at each opportunity, the translational process becomes less evident to the listener. This domesticates the work as it is bought towards another structural target language, decided by the performer.[114] However, the choices are limited, and the performer is permitted to simply play all the translations of one parameter (e.g. pitch) from start to finish, making the transition more transparent. This adds a live element to the work as, in effect, the performer becomes a translator and may decide on a further performative target language, dependent on what they wish the work to portray.

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[112] See '3.3 Sound Translations (2019)', p. 77.

[113] See 'Performance Notes' in *Pitch Rhythm Gesture* Score.

[114] See '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

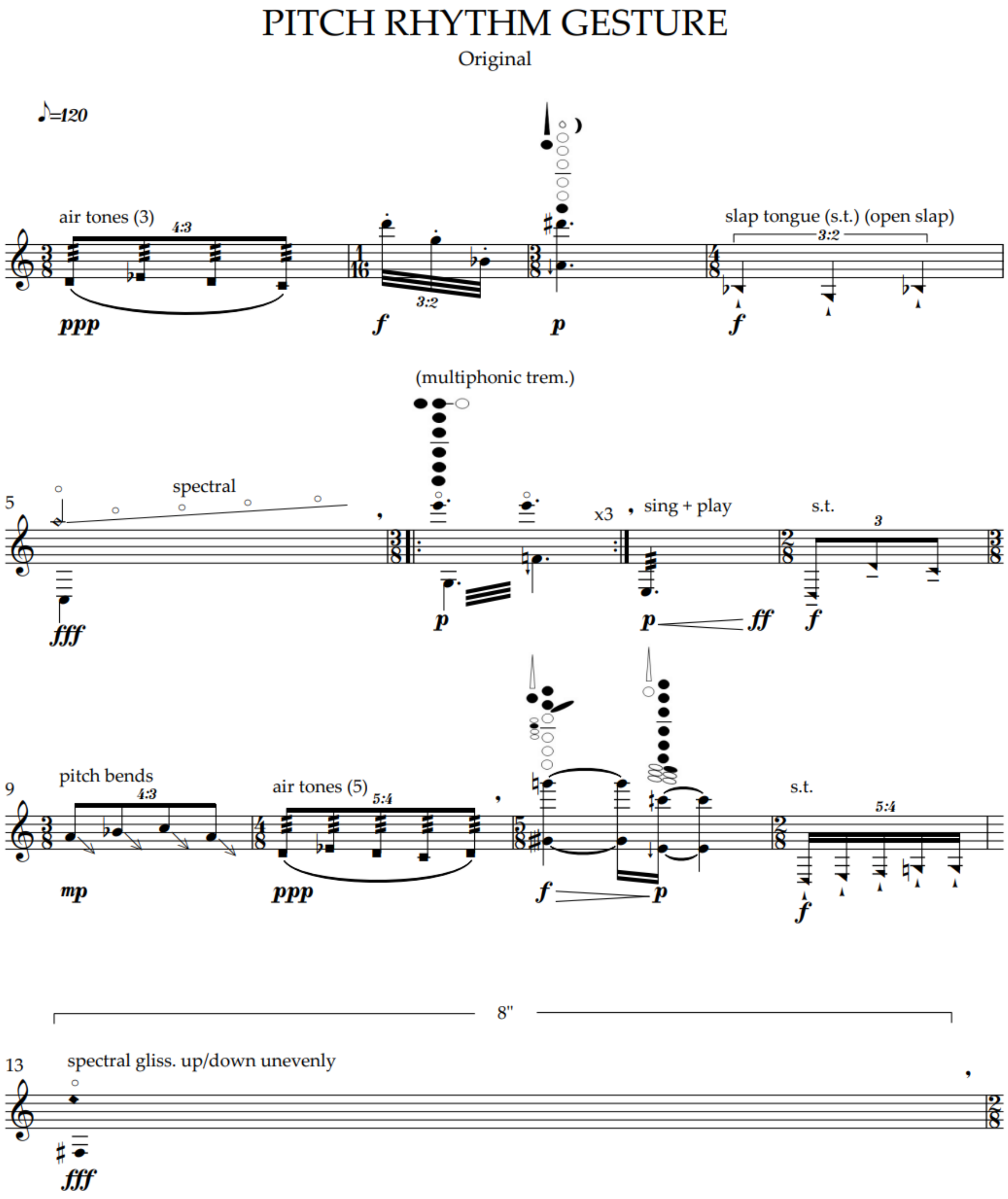
PITCH RHYTHM GESTURE
Original
♪=120
air tones (3)
4:3
ppp
3:2
f
p
slap tongue (s.t.) (open slap)
3:2
f
(multiphonic trem.)
5
spectral
fff
p
x3
sing + play
p
ff
s.t.
3
f
9
pitch bends
4:3
mp
air tones (5)
5:4
ppp
f
p
s.t.
5:4
f
8"
13
spectral gliss. up/down unevenly
fff

Figure 3-52: *Pitch Rhythm Gesture* original source; a series of contrasting gestures, alternating between slap tongue, air tones, spectral glissandi

Mentioned previously, the work displays three sets of translations, those which are of Pitch, Rhythm, or Gesture. Each take the original as their starting point and gradually translate this into one of the target languages listed in Figure 3.53.

No.	**Pitch**	**No.**	**Rhythm**	**No.**	**Gesture**
1	Omit some beams/stems	1	Pitch sieve	1	Omit some beams/stems
2	Pitch classes only	2	Pitch classes	2	Pitch sieve
3	All quiet techniques	3	Open pitches, set range	3	Open range/pitch classes
4	Omit all beams/stems	4	All loud techniques	4	Open pitches/set range
5	Technique sequence	5	Arrow contour	5	Arrow contour
6	Text piece (air to ord.)	6	Pitch sequence at top	6	Open form
7	Only pitches	7	Rhythms only, percussive	7	Gestures only, text notation

Figure 3-53: Table showing three sets of translations along with their seven target languages

Pitch translation one is a translation of the original, pitch translation two is a translation of translation one, and so on. As a result, the original gradually fades into the distance as progressively more of its characteristics disappear. However, with each set of translations, one key feature is retained until the end: pitch, rhythm, or gesture. I will now discuss each set of translations individually, with a focus on elements that are carried across and betrayed, foreignised and domesticated, and their position in relation to the original.

3.8.1 Pitch Translations

Throughout the course of the seven pitch translations, the piece transforms from its original strictly notated form to a series of pitch classes with no rhythm or detail attached. In pitch translation one, all original details are retained except for some stems/beams which have been omitted (see Pitch Translation 1, pp. 18–19), consequently resembling the original closely. In contrast, translation two converts all of translation ones fully notated pitches into a series of pitch classes (see Pitch Translation 2, pp. 20–21), betraying their range, and contour. However, the prominent techniques are still retained. By translation three, the techniques become those which could be executed quietly, for example, the spectral glissando has been translated into a pitch bend, and the singing and playing into a multiphonic (see Pitch Translation 3, pp. 22–23). Translation four loses its rhythm (see Pitch Translation 4, pp. 24–25), and in translation five, all determined techniques are removed and put into a cyclic sequence which the performer attaches to each bar (see Pitch Translation 5, pp. 26–27). Although at this point a lot of detail is lost (range, intervals, rhythms, some techniques as well as their original sequence), the consistent changing techniques with each bar allow traces of the original to still be perceptible. In contrast, in translation six, these changing techniques are lost. In fact, all techniques, except for air tones are omitted, bringing this translation far from the original source (see Pitch Translation 6, p. 28). In translation seven, the final target language is reached: simply a series of pitches (see Translation 7, p. 29).

Overall, translations one to five retain enough detail to be considered foreignised translations, since they still have obvious traces of the original, bringing them closer to the source language with their character and features.[115] They still present what the original sets out to achieve: a sequence of fast changing events. However, as we reach translations six and seven, this key feature is lost, along with the original's character, and thus these are examples of domesticated translations as they are brought towards the target language: a series of pitches (see Figure 3.54, and Figure 3.52 for a comparison).[116] Going back to the *Ship of Theseus* idea, it is also, at this point, I believe the translations become pieces of their own as too many of its original parts have been compromised.

3.8.2 Rhythm Translations

As with the pitch translations, the original is progressively translated into a series of rhythmical events. In translation one, only a few pitches from the original are lost, as they are sieved, while all other features are retained (see Rhythm Translation 1, pp. 30–31). Translation two loses all its pitches but still retains a lot of character with its prominent techniques, and rhythmic structure (see Rhythm Translation 2, pp. 32–33). In translation three, all original pitches are betrayed as they are converted into relative pitch notation according to their range (see Rhythm Translation 3, pp. 34–35). Translation four is where the biggest change occurs as any techniques perceived as quiet or delicate (air tones) are translated into those which can be executed loudly (see Rhythm Translation 4, pp. 36–37). This said, a lot of the original character remains through the fluctuating techniques, and rhythm. In translation five, the relative pitch notation is converted into arrow notation, still retaining the original contour, however, the range is betrayed (see Rhythm Translation 5, pp. 38–39). At translation six, interestingly some determined pitches return as a pitch sequence is provided (see Rhythm Translation 6, pp. 40–41), however, the contour is lost. Translation seven is where the most dramatic change occurs, as all gestures disappear (see Rhythm Translation 7, pp. 42–43). However, unlike pitch translation seven, some techniques are present (glissandi and tremolos). Further, it is also suggested that the performer use only percussive, and pitch-less sounds, providing further indication of the type of material to be played. Though, this is more of an effort to eliminate any pitch, highlighting the rhythm (target language).

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[115] '1.3 'Foreignisation' and 'Domestication'', pp. 8–10.

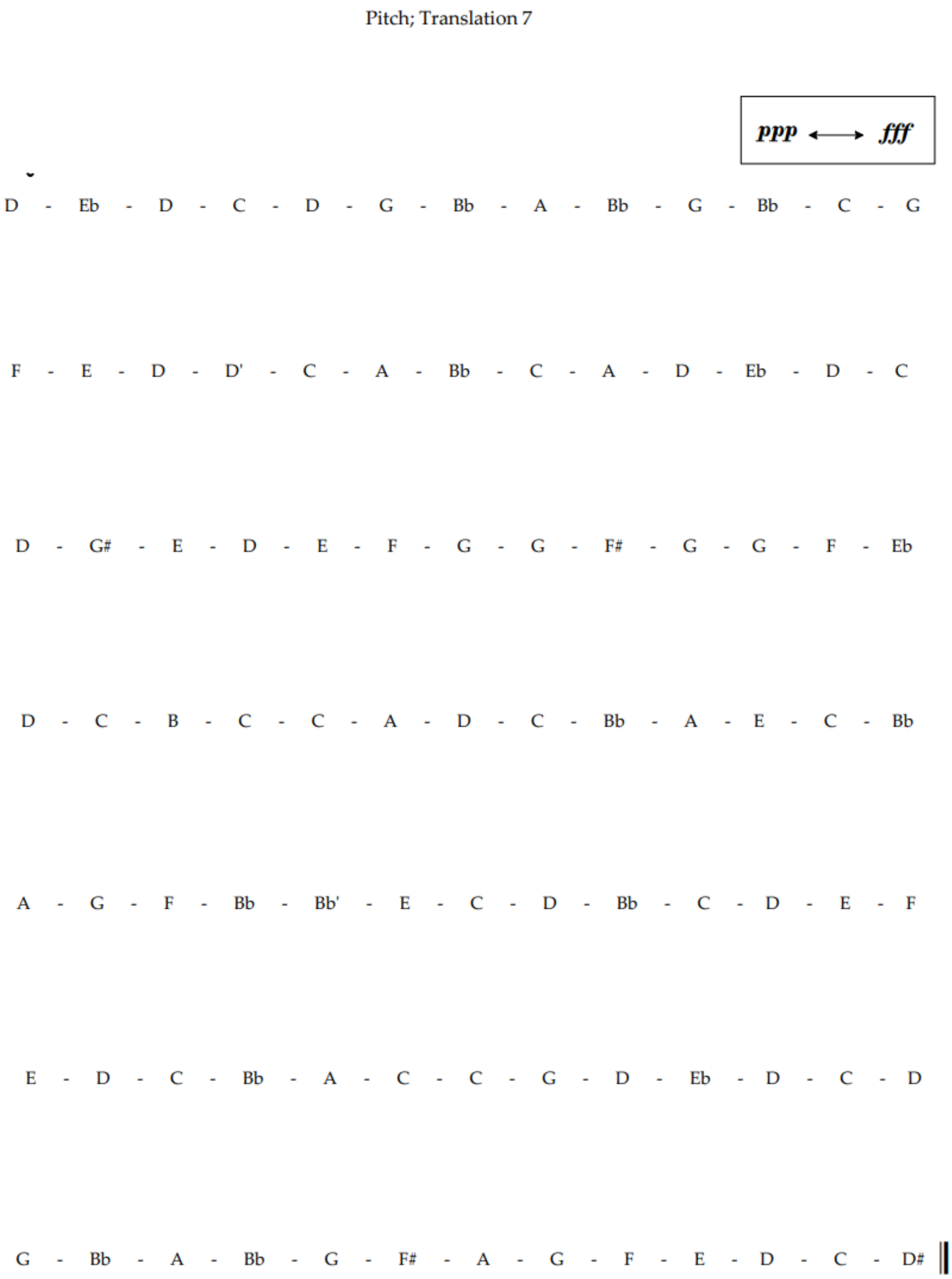
[116] Ibid.

In summary, translations one to six still hold enough resemblance to the original to be considered foreignised translations. While, out of context, it would be difficult to trace the characteristics and nature of the original in translation seven. The everchanging techniques that appear to be fundamental to the original are gone, domesticating the translation (see Figure 3.55 and Figure 3.52), for a comparison. Consequently, at this stage, the translation becomes a piece of its own, however, one could argue that since the rhythmic and metrical structures remain as in the original, it is the same piece.

3.8.3 Gesture Translations

Throughout the course of this category of translations, all features from the original are progressively lost bar the gestures. The notes in translation one lose the majority of their stems/beams, and the fluctuating meter disappears (see Gesture Translation 1, pp. 4–5). As a result, the urgency and drive that these features achieve in the original are lost, dependent on how the performer chooses to execute these bars. In translation two, some pitches are sieved (see Gesture Translation 2, pp. 6–7), but all other features remain as before, creating a minor difference by comparison. The set pitches in the original become pitch classes in translation three, betraying their range, intervallic relations, and contour (see Gesture Translation 3, pp. 8–9). Further, any remaining rhythmical suggestions are removed, along with noteheads, the attack points are instead indicated by the number of letters. Translation four brings the contour of the original pitches back via relative pitch notation (see Gesture Translation 4, pp. 10–11), however, the specific pitch classes are lost in return. Additionally, some stems/beams reappear bringing this translation a little bit closer to the original again. The range is betrayed, while the contour is retained through arrows in translation five (see Gesture Translation 5, pp. 12–13). Only the first pitch (G) from the original is provided; all rhythmic suggestions are omitted once again. In translation six, the original order of the events is lost as the structure becomes open, allowing the performer to play the boxes in any order (see Gesture Translation 6, pp. 14–15). The contour and starting pitch are still retained here. In translation seven, all pitches, range, and contour are betrayed, while the gestures are retained through textual instructions along with the number of attack points (see Gesture Translation 7, pp. 16–17). Dynamics are also preserved.

In general, due to the presence of the fluctuating techniques throughout all seven translations of this category, the nature of the original is retained. Consequently, the gesture translations all fall into the foreignised category, since the listener is brought closer to the original's style and characteristic. Accordingly, translation seven is still a version of the original, and not a piece of its own (see Figure 3.56 and Figure 3.52, for a comparison.



Pitch; Translation 7

ppp ⟷ *fff*

D - Eb - D - C - D - G - Bb - A - Bb - G - Bb - C - G

F - E - D - D' - C - A - Bb - C - A - D - Eb - D - C

D - G# - E - D - E - F - G - G - F# - G - G - F - Eb

D - C - B - C - C - A - D - C - Bb - A - E - C - Bb

A - G - F - Bb - Bb' - E - C - D - Bb - C - D - E - F

E - D - C - Bb - A - C - C - G - D - Eb - D - C - D

G - Bb - A - Bb - G - F# - A - G - F - E - D - C - D#

Figure 3-54: Pitch Translation 7 in *Pitch Rhythm Gesture*, almost all original traces are betrayed except for pitch

Rhythm; Translation 7

♪=120

Play the below material using only percussive and/or pitchless sounds (such as slap tongue/air sounds).

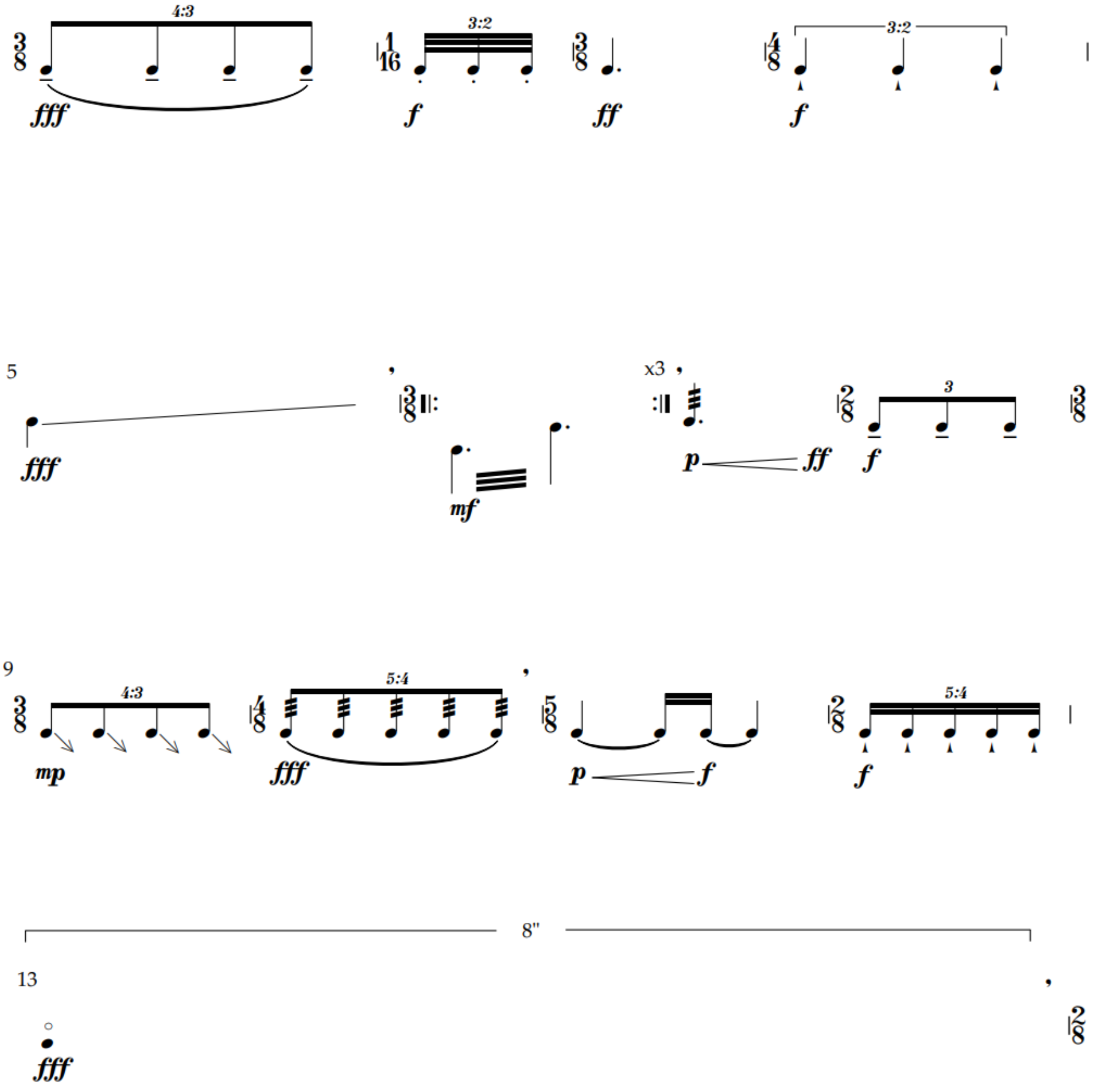

4:3
fff
3:2
f
ff
3:2
f
5
fff
mf
x3
p
ff
f
3
9
4:3
mp
5:4
fff
p
f
5:4
f
8"
13
fff

Figure 3-55: Rhythm Translation 7 in *Pitch Rhythm Gesture*, almost all original traces are betrayed except for rhythm, some techniques, and dynamics

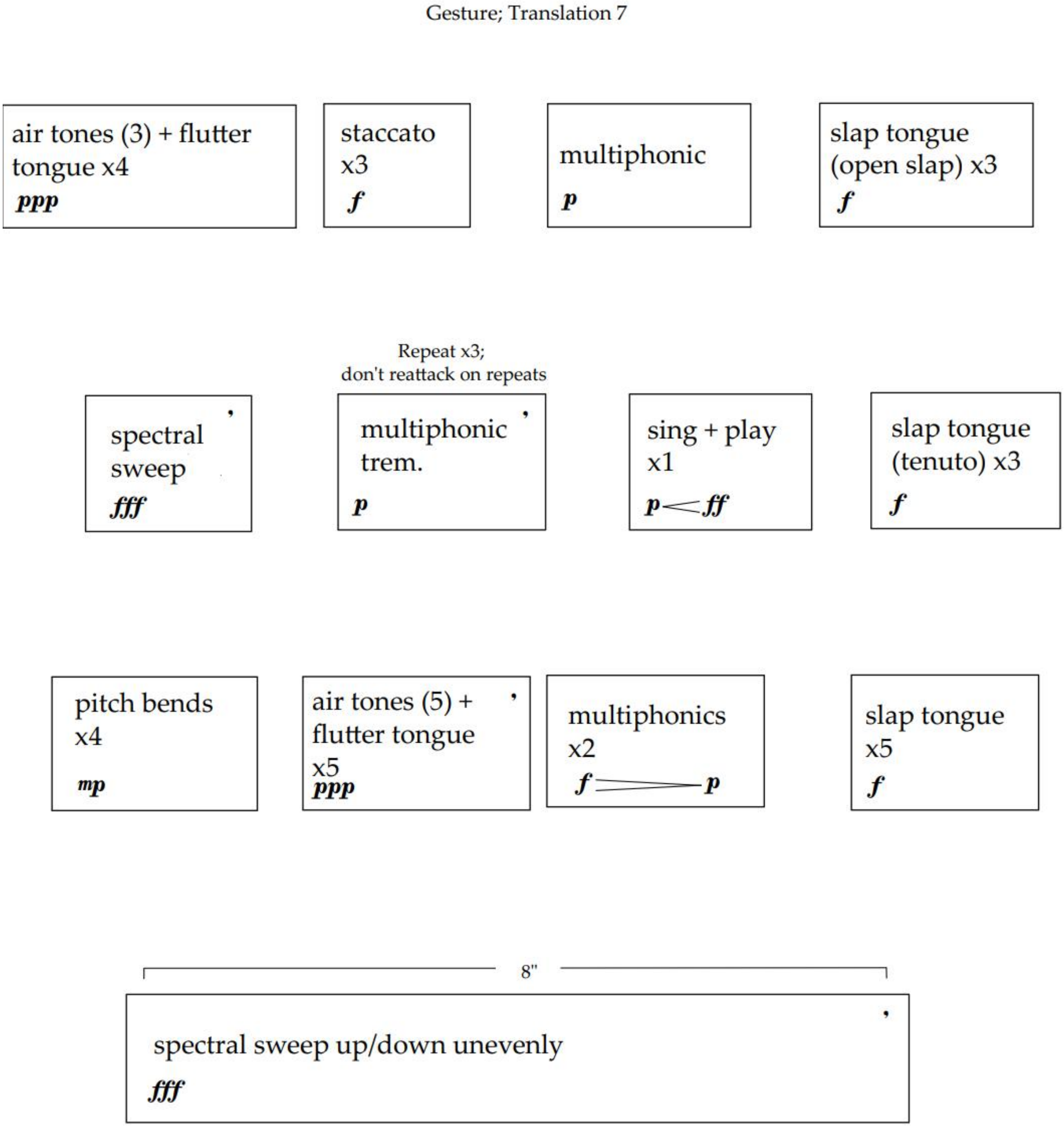

Gesture; Translation 7
air tones (3) + flutter tongue x4
ppp
staccato x3
f
multiphonic
p
slap tongue (open slap) x3
f
Repeat x3; don't reattack on repeats
spectral sweep
fff
multiphonic trem.
p
sing + play x1
p < ff
slap tongue (tenuto) x3
f
pitch bends x4
mp
air tones (5) + flutter tongue x5
ppp
multiphonics x2
f > p
slap tongue x5
f
8"
spectral sweep up/down unevenly
fff

Figure 3-56: Gesture Translation 7 in *Pitch Rhythm Gesture*, almost all original traces are betrayed except for the gestures and dynamics

The connection between all three parameters, discussed previously, can be likened to the similarities between linguistic tongues. For example, the musical parameters influence each other in a similar way to how linguistic languages share commonalities and interlink, making it hard to translate the original material into a single parameter without including traces of another. Derrida explains these problems when translating linguistic texts:

> At best, it can get everything across except this: the fact that there are, in one linguistic system, perhaps several languages or tongues. Sometimes—I would even say always—several tongues. There is impurity in every language. This fact would in some way have to threaten every linguistic system's integrity, which is presumed by each of Jakobson's concepts. Each of these three concepts (intralingual translation, interlingual or translation "properly speaking," and intersemiotic translation) presumes the existence of one language and of one translation in the literal sense, that is, as the passage from one language to another. So, if the unity of the linguistic system is not a sure thing, all of this conceptualisation around translation (in the so-called proper sense of translation) is threatened.[117]

The function and identity of each musical parameter/language interlink to create the style and meaning of those gestures. For example, the rhythm drives the gestures, giving them an urgency. If you remove the rhythm, these gestures lose some of their stylistic origin because they influence one another. This makes it hard to translate the original into one parametric language without also incorporating another. This is similar to the example that Derrida provides in relation to the 'Tower of Babel' motif that runs throughout Joyce's *Finnigans Wake*, where he discusses the issues of translating the phrase "And he war". Here he considers how the phrase shares words with other languages such as German, and how this imposes problems when trying to translate such phrases.[118] He deliberates:

> […] I wonder what happens at the moment one tries to translate these words. Even if by some miracle one could translate all of the virtual impulses at work in this utterance, one thing remains that could never be translated: the fact that there are two tongues here, or at least more than one. By translating everything into French, at best one would translate all of the virtual or actual content, but one could not translate the event which consists in grafting several tongues onto a single body.[119]

Such a multicultural influence is metaphorically demonstrated within my musical context, through my difficulty to translate these gestural happenings into a piece purely based on gestures, without including the influences that rhythm holds on such gestures.

In conclusion, a translation of a translation is possible, and can be successful in retaining key features (at least in a creative sense and in the case of semiotic translation), dependent on what the overall aim of the translation is. In the case discussed above, I aimed to experiment with how transforming each successive translation into a further target language would affect the overall feel of the original material. As revealed, the character and intentions of the original were still visibly present at stages five/six, and in the third case, stage seven. This investigation has additionally revealed a hierarchy amongst the three parameters (pitch, rhythm, gesture) regarding how their presence in the final translational stage affects the listeners ability to hear the original. For example, it appears that pitch is least important to the identity of the original, due to the techniques overshadowing their appearance. This is also made clear by how, when the changing techniques are removed in stage six, it is hard to sense any original character. The rhythm is second in this ranking, driving the momentum of the fluctuating techniques. However, both the rhythm and the gestures work together to drive the material. Yet, above all, the everchanging techniques prove to be the main identity of the original work, since they are most prominent and characterful, and even when all other parameters are omitted, bar dynamics, it is clear that it is an adaptation of the original work.

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[117] Jacques Derrida, *The Ear of the Other: Texts and Discussions with Jacques Derrida* (Lincoln: University of Nebraska Press, 1985), p. 100.
[118] Ibid., pp. 98–99.
[119] Ibid., p. 99.

All this said, this piece is another representation of what Eco terms 'referential' translation. It displays translations of key elements from the original as opposed to exact equivalents.[120] At the outset, I analysed the core components that make up the original (pitch, rhythm, gesture), and then translated them according to their end objective. More importantly, the aim of the work was not to merely translate the original into several translations, but instead to translate the pitches, rhythm, and gestures into three independent scenarios. In this sense, the translations are successful, since they achieve what I set out to do, and that was to have three separate pieces made from one: a pitch piece, rhythm piece, and gesture piece. Although the gesture piece struggles to hold its individual identity, it does allow for much more interpretation than the original and hence has the potential to be a work of its own. From another perspective, then, it could be said that there are only three target languages, and that is to translate the original into a stream of pitches, a group of rhythmic parameters, and a series of gestures. Alternatively, if I had performed such translational processes directly on the original, I would have had much closer results to the original work, with smaller deviations, and, in consequence, I would not have ended up with three distinct pieces that focus on retaining one of three elements.

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[120] See '1.2 Source into Target and Equivalence', p 7.

Part 4 – Conclusion and Further Research

This research has involved an exploration of translational procedures during the practice of composition. Translational methods and techniques have been sought out from translation theory and repositioned within a musical context to be utilised as creative compositional tools. Key concepts from linguistic and semiotic practitioners (notably, Eco, Jakobson, Benjamin, Derrida, Dusi, Jia, and Gottlieb) have been applied to my compositional thinking and practice: translational betrayal, faithfulness, foreignisation, domestication, and translatability. As a translator analyses the original source for key details to be carried into the target text, all original musical or textual sources used within this PhD were examined for essential details to be retained in the target musical language. Consequently, each work within this portfolio takes translation as a point of departure. Translation models such as Jakobson's intra- and inter-lingual, and inter-semiotic, Dusi, and Gottlieb's intra-semiotic, as well as the practice of self-translation, have been explored within a musical setting, through use of compositional processes, re-composition, re-contextualisation, paraphrase, pastiche, borrowing, mapping, transcription and arrangement. Such tools have been re-thought from a translational stance and used to: achieve a translation of musical style, such as that seen in *Brumel Translated*; re-contextualise and paraphrase ideas from a previous work of mine in *Translations for Piano;* or to explore more adaptational forms of translation, when Queneau's *Exercices de style* is transformed into a musical book of exercises in my work of the same name. Other acts have also been rethought, which are not usually considered in a translational light, such as: the practice of composing music in general (as when a philosophical or conceptual idea is reformed into a musical idea, and notated), a concept recognised by Jia, are addressed; the act of realising and performing a composer's written notation in real time, as these notations are translated into performed sound (recognised as a semiotic form of translation in Gottlieb's practice).

Despite such practices of musical translation being recognised within the field of semiotic translation, they have not been investigated in-depth within the field of music. Musical practices such as re-composition, mapping, borrowing, and arranging have been employed within the practice of composition for centuries. However, these composers, arrangers, and musicians weren't utilising such techniques through the scope of linguistic and semiotic translational thought. Kagel may be a notable exception: he claims to have explored the mathematical translation and rotation of shapes which are mapped to musical parameters within his pieces, a process which could be deemed an inter-semiotic translation from mathematical data into musical figures.[1] This project aims to fill this gap in musical thinking by the direct application of translation studies concepts to my compositional practice, right from the outset. The intention was to explore the creativity that such translational methods and activities can evoke during composing when thinking of musical procedures in this way.

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[1] Mauricio Kagel, 'Translation–Rotation', *Die Reihe*, 7 (1960), 31–61.

The ideas presented in this project offer a new way of thinking which allows for a change of perspective on commonly used compositional techniques, one which may lead to interesting alternative outcomes. This study provides a variety of practical examples which demonstrate these new approaches, informed by translation theory, showing how they influenced my instrumental writing, textures, compositional decisions, structures, or even ideas for entire works, and their impact on the end results. Additionally, had the aim not been to retain original detail from previous works and material in these musical translations, such elements would be less evident in the resultant works. The following instances demonstrate the consequences of composing through a translational lens, via using concepts such as faithfulness, foreignisation, domestication, translatability, and source and target within a musical context.

In *Sound Translations* and *Remnant Echoes* the aim was to depict the timbral and technical effects of one instrument in material translations for another. Had I not been thinking with a translational vision, linguistic and semiotic techniques, foreignisation and domestication would not have been used to inform my instrumental writing. This allowed for a series of translations to be written which are either source or target orientated. This resulted in multiple translations of the same fragment which have varying levels of relation to their originals, but remain faithful in some way (through technique, pitch, rhythm, or gesture). Such methods altered my compositional approach due to the ways of thinking involved in moving a translation toward the original instrument's approach or toward the new instrument's style. Further, these works most certainly would not have been concerned with how faithful they remained to their originals, which may have resulted in fragments that relate to the original much less so, via added embellishments, variation and developments as opposed to mere representations of their original forms. Further, it's possible that such compositions would not have been written at all, since the purpose of these pieces are to examine the relations between these fragments.

This is emphasised in the approach to *Exercices de style*. Composing such an anthology of works, informed by a book of textual exercises, which aims to depict the original titles stylistic traces in a target musical work, would not have been considered outside of the realm of this project. Moreover, this work most certainly wouldn't have tried to depict the 'past', 'present', or a 'prognostication' in musical terms. Similarly, I don't think the composition would have taken such a theatrical and comical stance in certain exercises, such as the word puzzles and games. Neither do I believe it would have taken such an exhaustive and playful approach to paraphrasing the same exercise such a large number of times. This is an example of where the act of translating itself influenced the works entire structure, material, and style.

An instance where the concepts of foreignisation and domestication influenced the texture can be found in *Brumel Translated*. In aim to challenge Schleiermacher's archaic view that the two translation styles can't be combined successfully, at least within a creative sense, in the first movement Brumel's Kyrie soprano line is foreignised via its translation into a plainchant evocation which allows Brumel's model harmonies to be heard clearly. In contrast, Brumel's bass and alto parts are domesticated for the flute and clarinet via adapting them technically and rhythmically into a more contemporary style. The two distant sound worlds are then juxtaposed via vertical layering. These opposing concepts proved to be useful compositional tools that inspired so much creativity when generating new material and building texture.

In *Sound Translations*, translatability influenced the texture of the first and third movements. To portray the difficulties of translating one instrumental language into another, the texture is very sparse and focused on the technique of glissandi, as the piano attempts multiple methods of producing a seamless motion. This emphasises the complications that arise in trying to find an exact equivalent of something else. Due to the technical and timbral differences of the cello and piano, it is impossible to create the same effect in the new medium. This reflects the obstacles that arise in linguistic translation due to the variations in vocabulary and grammatical structures between languages.

In *Pitch Rhythm Gesture*, the act of exploring source and target languages, and adaptive forms of translation shapes the entire structure. To demonstrate the translation of a series of rhythmical gestures into three target languages (pitches only, rhythms only, and gestures only), the piece is split into three sets of translations (pitch, rhythm, and gesture) clearly demonstrating a slow transformation of the original piece into each of the three target forms. The performer then chooses a path to take towards achieving one of these parametric languages, allowing the possibility of many more translations of the works structure with each performance dependant on which parameter they choose to preserve.

Similarly, *Translations for Piano* would not have been structured as a series of individual translations, clearly demonstrating paraphrases of the same ideas and algorithmic stages obtained from *Resonant Voices* (2017) for solo organ. Had the aim not been to demonstrate intra-lingual translation (otherwise known as paraphrasing in linguistic terms), these re-contextualisation's would probably have been less clear in a seamless work that blends into one.

In summary, writing music from the perspective of translation adapted my approach to material, texture, and structure, while also evoking new creative ideas for works. It is this new approach to composition, using techniques and concepts derived from translation studies literature to make compositional decisions and scenarios that changed the musical outcome in these works. If this approach was not taken, the compositional processes discussed above would have been used merely to generate material, overlooking their relation to translation practice. Below is a breakdown of how various translation types (intra-/inter-linguistic, intra-/inter-semiotic, and self-translation) have been explored throughout this portfolio, followed by suggestions for further research.

4.1 Intra-linguistic; Intra-semiotic Translation

Jakobson’s Intra-lingual translation (my intra-musical or it’s subcategory, intra-instrumental) has been explored through the lens of several musical processes throughout this research. In *Brumel Translated*, re-composition and re-contextualisation are executed to extract fragments from Brumel’s Kyrie and either place them directly into the target work (foreignise) or adapt them via transformative techniques to suit the new contemporary classical style (domesticate). In these instances, the notion of foreignisation and domestication was investigated on a sentence (phrase) level, as valued by Eco, but eschewed in earlier translation research.

In *Pitch Rhythm Gesture* the original piece for B♭ bass clarinet is translated intra-instrumentally into three separate sets of translations with a finite parametric target language: pitch, rhythm or gesture. In doing so, the work explores the more adaptational forms of translation described by Gottlieb, where the original is hard to reconstruct from the translation. Additionally, it examines what happens when you translate a translation into a further target language as opposed to translating the original source: a process which Benjamin disapproves of. In turn, it uncovers the issues discussed by Derrida, due to how linguistic tongues influence each other, in a similar sense to how musical parameters interlink.

Attack Resonance Decay examines translational betrayal and faithfulness as well as foreignisation and domestication in a more conventional sense, through the musical process of transcription and arrangement. Here, a piece composed for two cellos is translated into a cello solo: intra-instrumental translation. During the process aspects such as pitch are betrayed due to a change in the number of voices. This is a process recognised by Gottlieb as infrasemiotic translation: a translation in which the semiotic channels are narrower in the target language. In a second translation the material was adapted for piano which involved the process of inter-instrumental translation (discussed in the next section). Here, the pitches were retained but the specific techniques and timbre were betrayed due to the piano’s inability to execute such sounds.

4.2 Inter-linguistic; Intra-semiotic Translation

Jakobson’s Inter-linguistic translation (also my intra-musical, or more importantly it’s subcategory, inter-instrumental) is investigated in works such as *Sound Translations*, where material is technically and timbrally translated from cello into piano and vice versa. This is achieved via three approaches: 1) the piano’s mimesis of the cello’s glissandi; 2) musical mapping; and 3) referential translation techniques. As a result, the work explores Bartoloni’s interstitial zone via demonstrating the multiplicity of ways in which glissandi can be transferred over to the piano, and the inaccuracies that arise. Musical mapping is executed in section two to explore the inequivalences that occur when directly substituting one technique for another. In contrast, the last section demonstrates what Eco terms referential and functional equivalence through translating a series of fragments for piano or cello into the alternative instrument, while aiming to remain faithful to as much of the original detail as possible to achieve the same effect in the target language.

Remnant Echoes explores the concept of referential translation more extensively, through translating fragments composed in a specific instrumental language into that for another instrument (usually from another family). This allows for an examination of translational betrayal and faithfulness when translating such fragments, especially when translating across distant instrumental families, or those from pitched to un-pitched instruments and vice versa. A key consideration is whether the phrase should be foreignised to bring the fragment towards the original instrument or domesticated in favour of the target source. The work also dips into the notion of live translation, which occurs as the players play a translated version of another instrument's material.

Translations for Piano explores the notion of self-translation through inter-instrumentally translating material and algorithmic processes originally used for my solo organ work, *Resonant Voices* (2017). This is executed through use of re-contextualisation, paraphrasing, and borrowing to see what is lost in translation as well as how this new work relates to the original. All translation types here fall under the umbrella term intra-semiotic since they investigate translation within the same semiotic sign system of music.

4.3 Inter-semiotic Translation

Jakobson and Gottlieb's inter-semiotic translation is explored at length: a translation which happens across two different sign systems (music into pictures, or vocal languages into sign language, for example). My work comprises a musical translation of Queneau's textual exercises in *Exercices de style*. The book's key characteristics were analysed and carried into the target musical language. Additionally, the same musical exercise is expressed in as many ways as possible: as is Queneau's short story, in the original. A relationship is established with the source, along with what is lost and betrayed, and how each exercise must be foreignised or domesticated, based on the target language into which the original is to be translated. Concepts of carrying across, betrayal, faithfulness, foreignisation, domestication, and translatability are explored throughout the course of my portfolio, as displayed in the above critical commentaries.

4.4 Suggestions for Further Research

Using concepts developed from linguistic and semiotic translation studies provided a wealth of inspiration and has offered a new perspective on musical practices. The works exploring these methods prove to be valid examples of translation within the realm of semiotic thought. In fact, such musical processes are accepted as forms of translation by semiotic practitioner, Gottlieb within his chapter on *Semiotics and translation*, along with many other forms of adaptational translation. However, this project lends itself less to the linguistic discipline, where the regulations are more rigid, and not as amenable to such adaptions as they are within the field of musical composition. This said, concepts such as foreignisation, domestication, carrying across and betrayal from linguistic translation literature, have proved to be useful ways of thinking throughout developing this portfolio. However, further research into the semiotic discipline of translation could be undertaken to explore more methods and concepts within the field and further examine musical transformation as a type of semiotic translation.

Due to the wide array of procedures in music that can be considered acts of translation, an in-depth exploration of all these concepts was not possible within the confinements of this project. Such concepts could be explored individually within several PhD's. For this reason, I do not claim this thesis to be exhaustive of the practices of translation within music and have suggested areas in which they could be explored further within future research in the field.

Despite *Remnant Echoes* creative attempt at producing a live form of translation, it doesn't truly demonstrate live translation, like that carried out by an interpreter. A closer attempt would involve a more improvisational work where the performers are given set material to play but are also instructed to listen to other players and translate what they hear, in that moment, into material for their instrument by ear. These live translations could be timbral, rhythmical or technique based, for example, depending on the type of material executed. A work which would bridge that gap, between this concept and *Remnant Echoes*, could be a piece where all instruments have translations of all the other instruments' fragments, allowing the performers to switch freely between materials, dependent on what they hear. This would emphasise the live translational element.

The translation of written music into performed sound could be explored through an analysis of the original score (source) and performance (target) to see what changes during this translational process. Such a translation would be deemed conventional since it holds close resemblance to the original. However, more adaptational forms of this process could be explored through an examination of the performance and realisation of graphic scores, and scores with varying degrees of indeterminacy.

A further exploration of transcription could be attained through additional translations of *Attack Resonance Decay*, examining the adaption of the cello duet for a larger group of instruments, as well as the exploration of further instrumentations which are more challenging to translate such material into. Translations could include those from the pitched original into that for un-pitched percussion, to explore what happens when translating such gestures, as well as how this changes the feel of the original, while examining its relation to the source work. These are features that can be examined in future compositions within the field of semiotic translation.

Aside the purely musical based explorations, an interdisciplinary project involving a musician and semiotician, who specialises in the field of semiotic translation, would prove an exciting and more detailed examination. Such a project would allow for a more in-depth examination of the links between translation, musical composition, and performance activity. This is a collaboration I hope to be able to arrange in the future.

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Appendices

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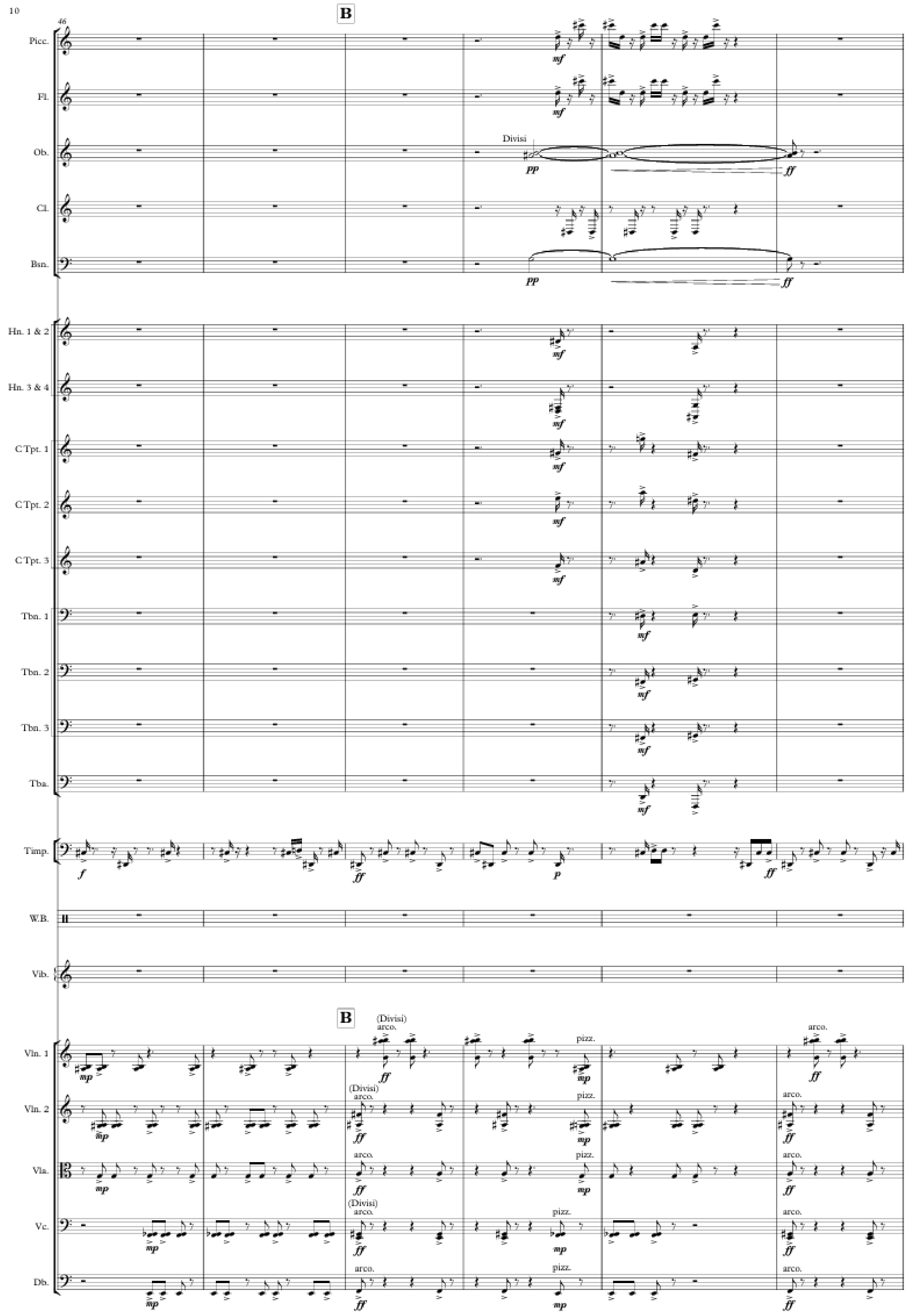
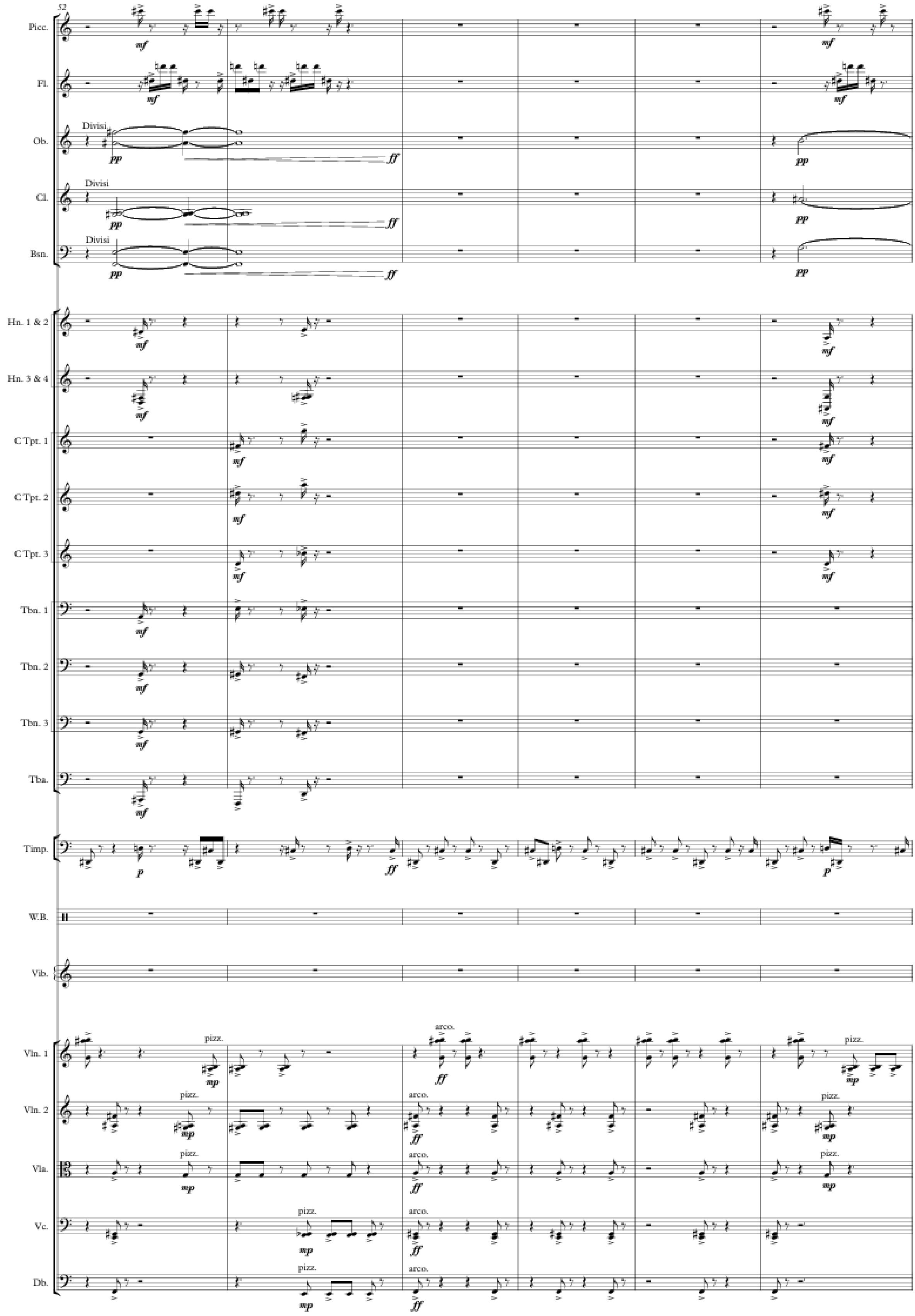
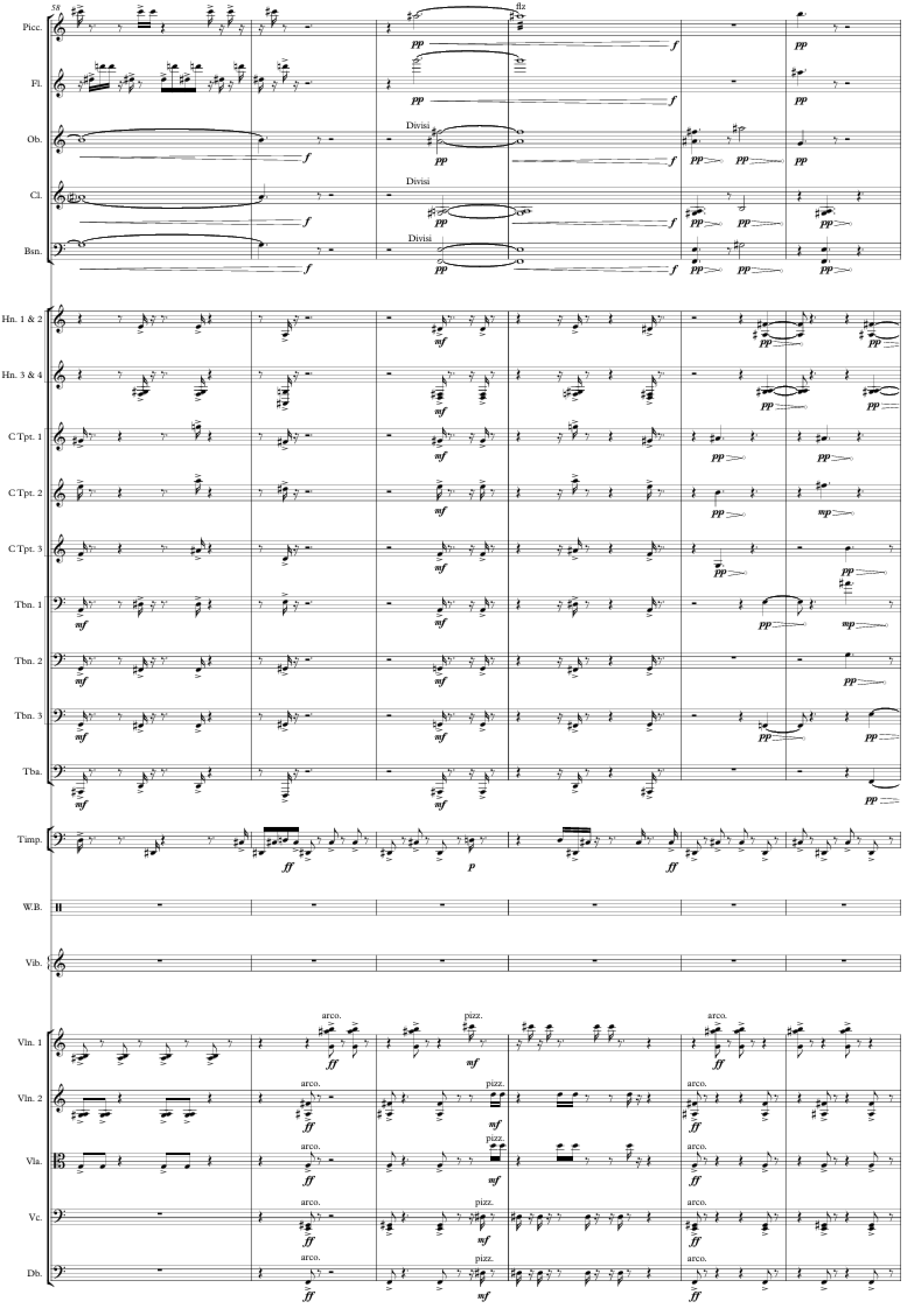
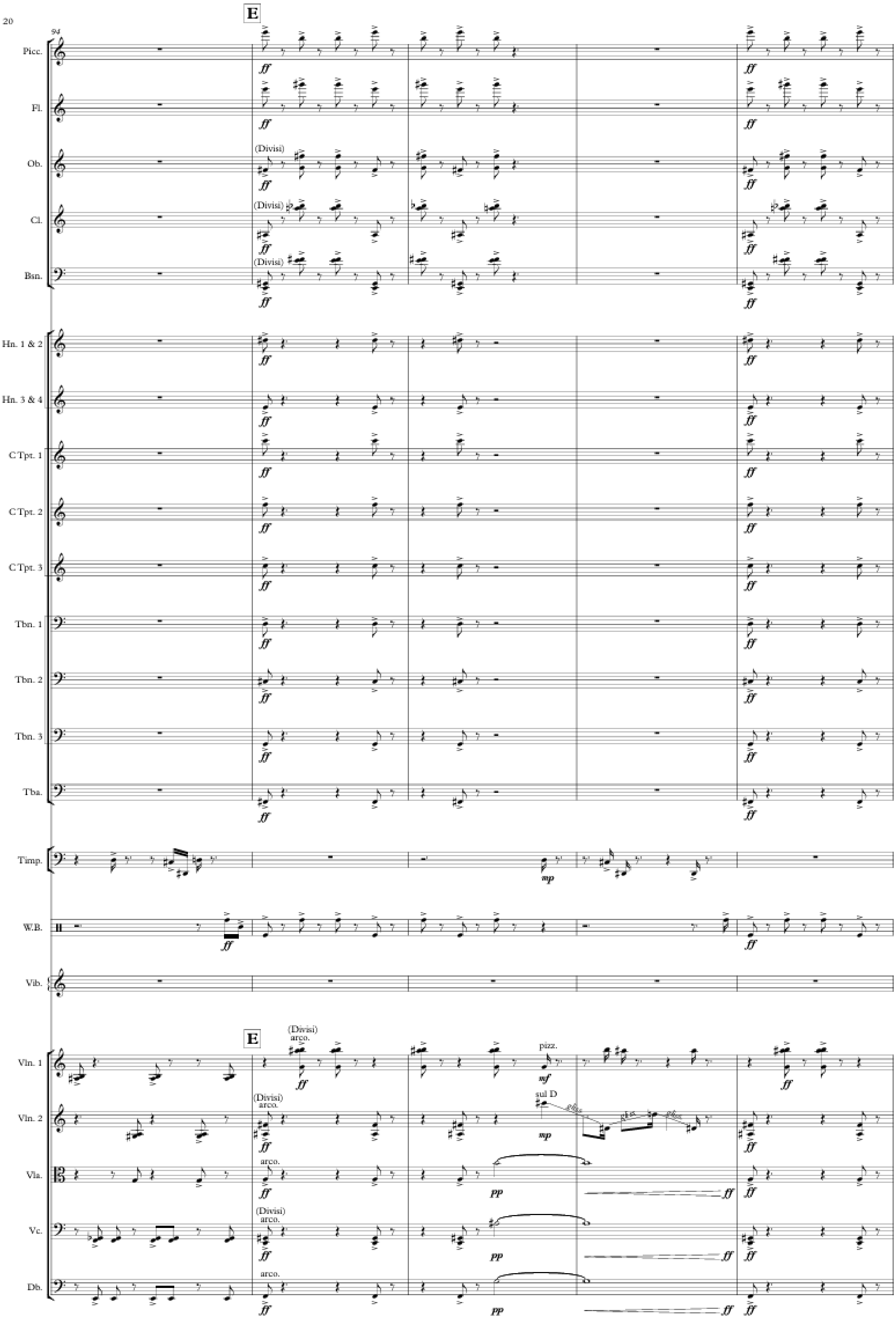
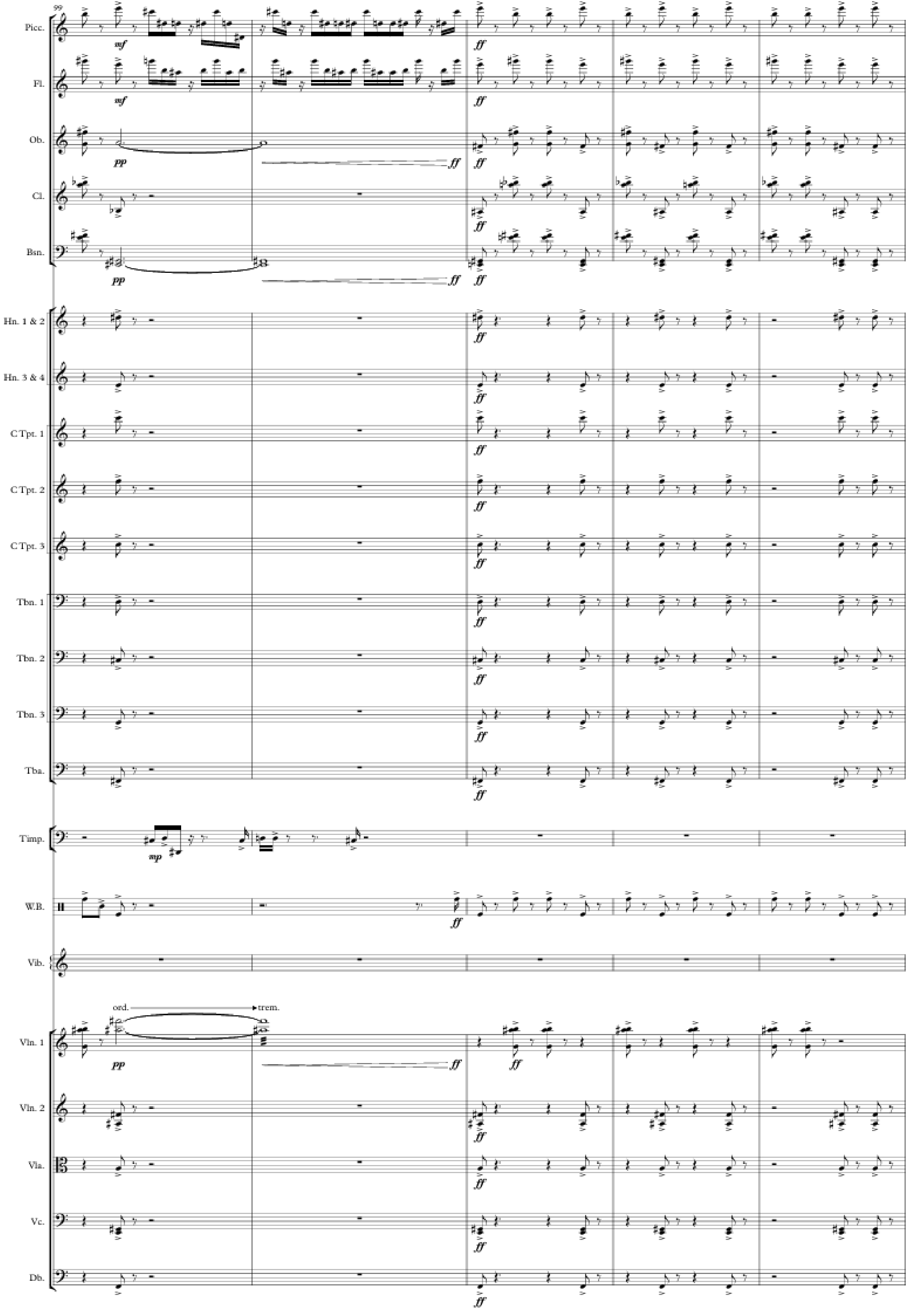
Appendix A: MMus piece, *The Real and The Imagined* (2018), Xenakis' *Psappha* motif

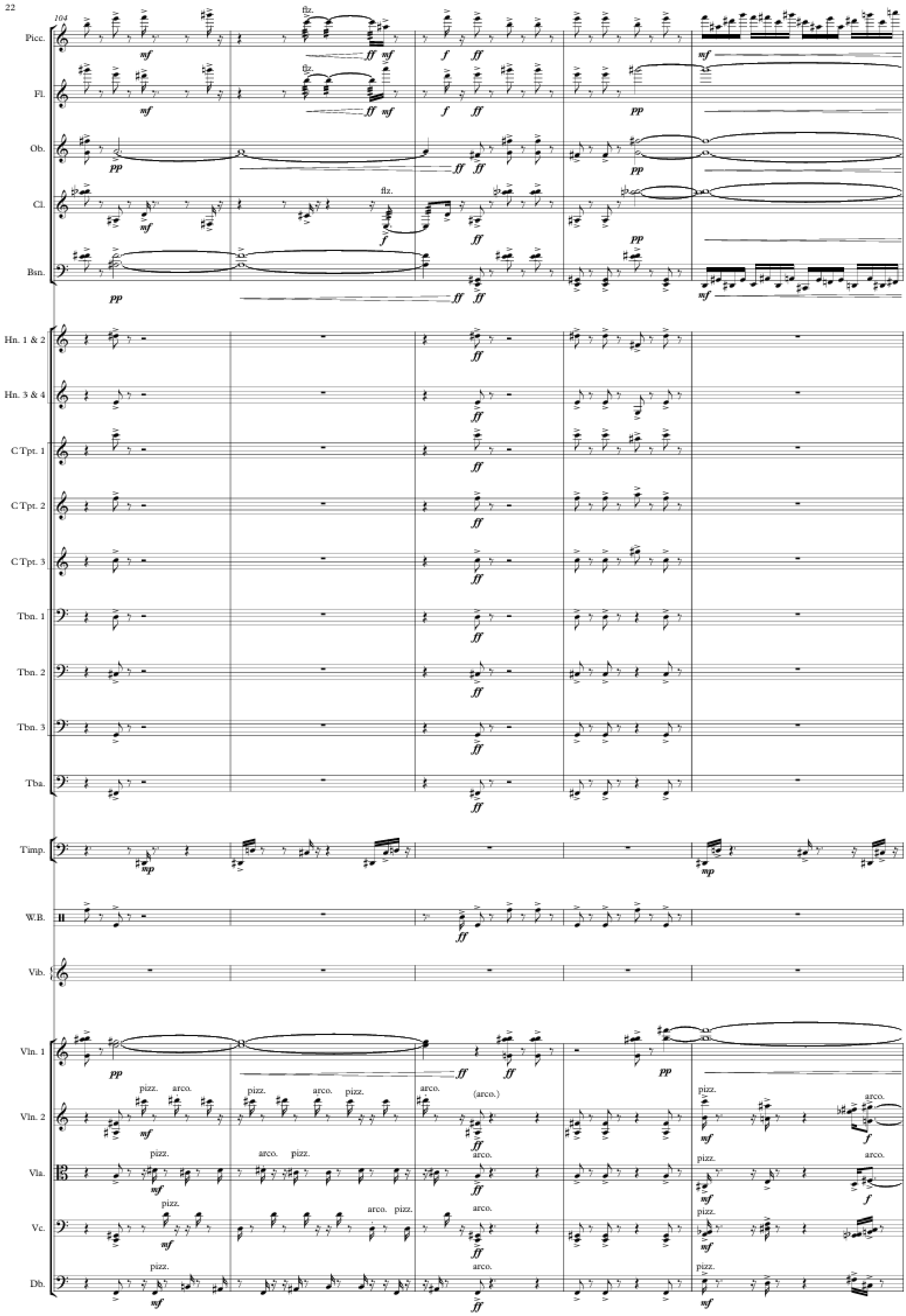

10
46
B
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
Divisi
(Divisi)
arco.
pizz.
mf
pp
ff
f
p
mp

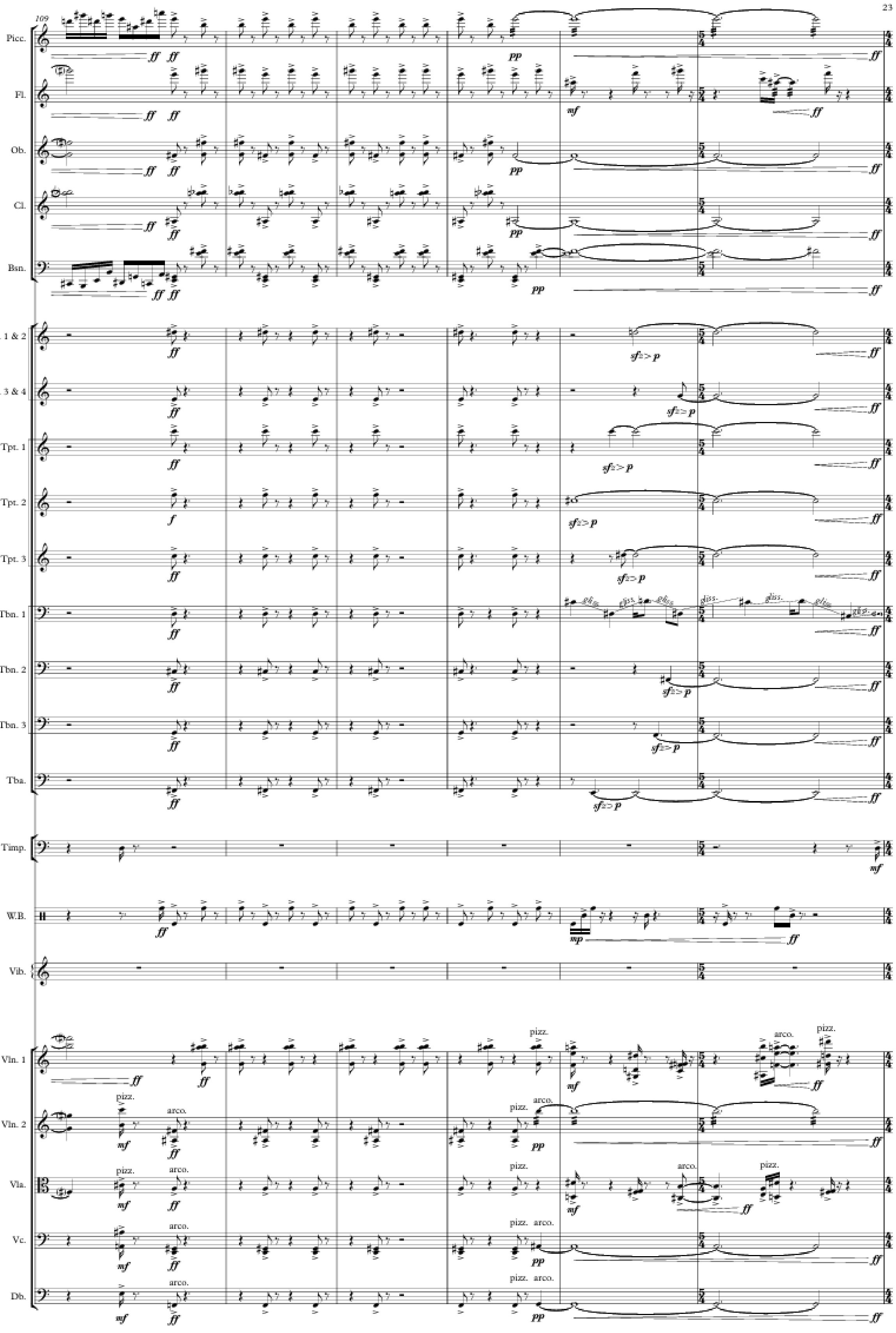

52
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
Divisi
pizz.
arco.
mf
pp
ff
p
mp


58
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
flz
Divisi
arco.
pizz.
pp
f
mf
ff
p
mp


E
94
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
(Divisi)
arco.
pizz.
sul D
gliss.
ff
mf
mp
pp


99
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
mf
pp
ff
mp
ord.
trem.


104
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
flz.
mf
ff
f
pp
mp
pizz.
arco.
(arco.)

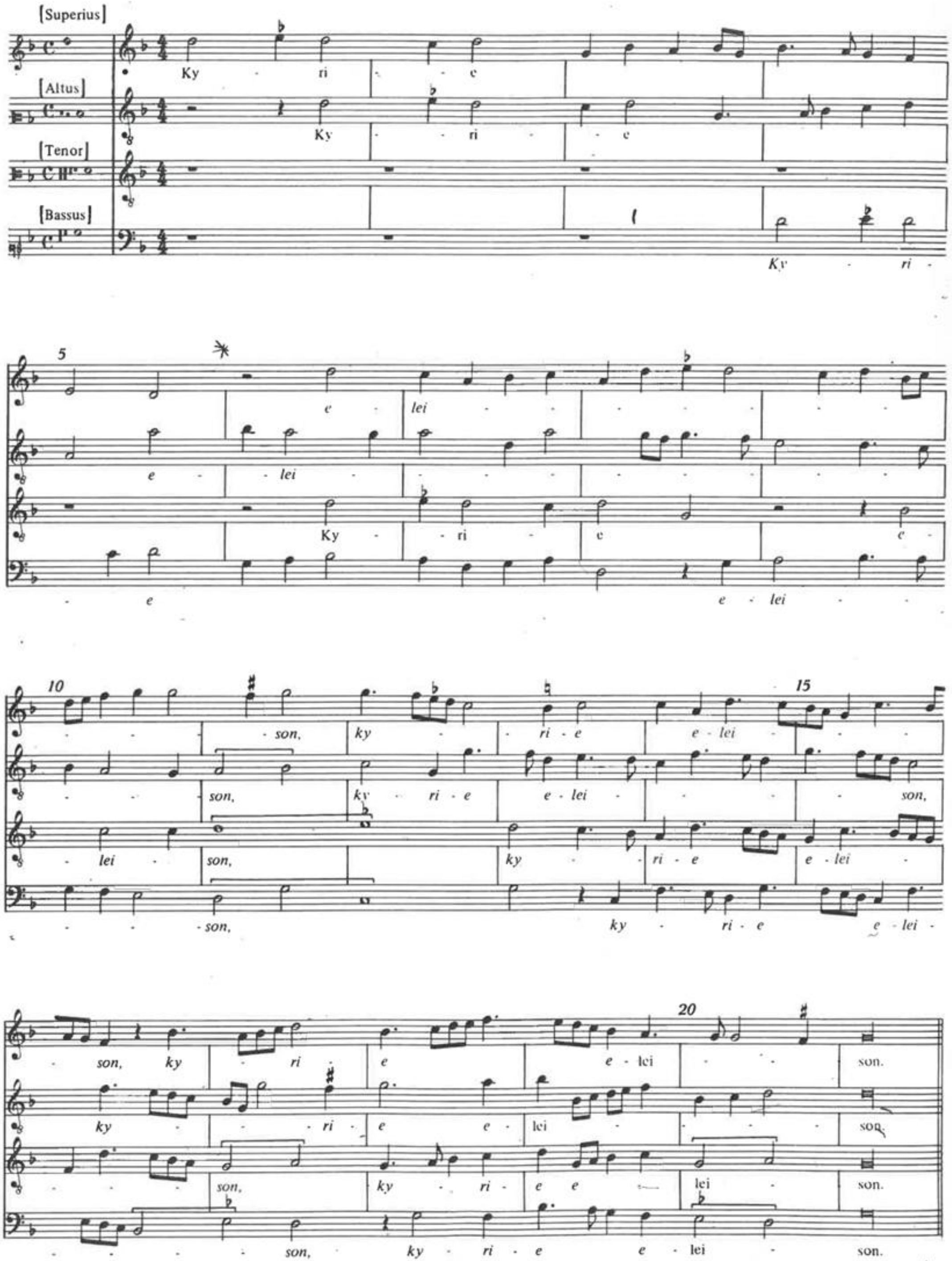

109
Picc.
Fl.
Ob.
Cl.
Bsn.
Hn. 1 & 2
Hn. 3 & 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Tba.
Timp.
W.B.
Vib.
Vln. 1
Vln. 2
Vla.
Vc.
Db.
ff
pp
mf
f
sfz> p
mp
gliss.
pizz.
arco.
5/4
4/4

Appendix B: Brumel's Kyrie from *Missa Dominicalis*, as printed in Barton Hudson ed., *Antoine Brumel: Opera Omnia, Corpus Mensurabilis Musicae* (Münster: American Institute of Musicology, 1969–70)

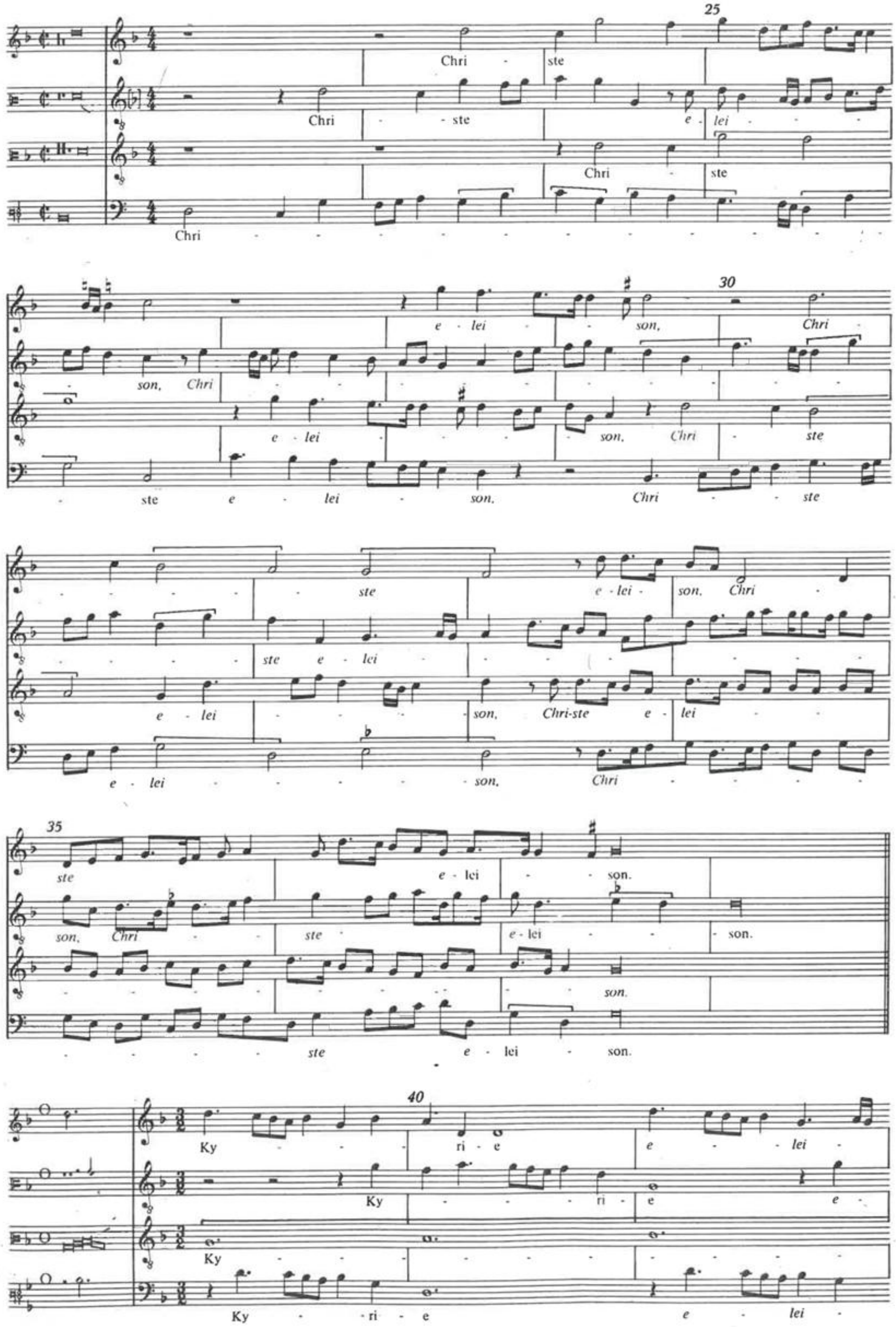
24

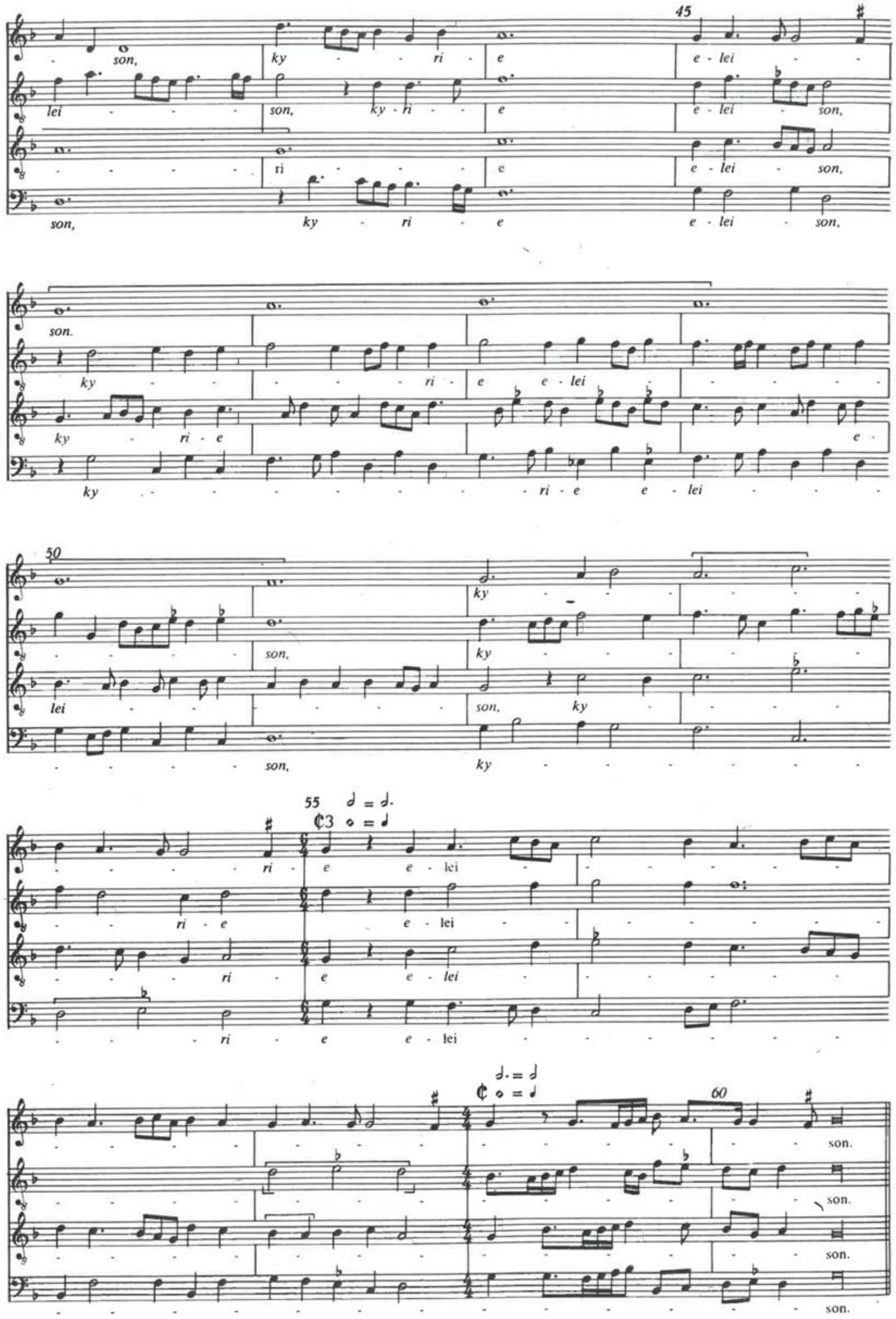
Missa Dominicalis

Kyrie


[Superius]
[Altus]
[Tenor]
[Bassus]
Ky - ri - e
Ky - ri - e
Ky - ri -
5
e - lei
e - lei
Ky - ri - e e -
e e - lei
10
15
- son, ky - ri - e e - lei
son, ky ri - e e - lei - son,
lei son, ky - ri - e e - lei
- son, ky - ri - e e - lei -
20
son, ky - ri - e e - lei - son.
ky - ri - e e - lei - son.
son, ky - ri - e e lei - son.
son, ky - ri - e e - lei - son.

CMM 52


25
Chri - ste
Chri - ste e - lei
Chri - ste
Chri
30
e - lei - son, Chri
son, Chri
e - lei - son, Chri - ste
ste e - lei - son, Chri - ste
ste e - lei - son, Chri
ste e - lei
e - lei son, Chri-ste e - lei
e - lei - son, Chri
35
ste e - lei - son.
son, Chri - ste e - lei - son.
son.
ste e - lei - son.
40
Ky - ri - e e - lei
Ky - ri - e e
Ky
Ky - ri - e e - lei


45
son, ky ri e e lei
lei son, ky ri e e lei son,
ri e e lei son,
son, ky ri e e lei son,
son.
ky ri e e lei
ky ri e e
ky ri e e lei
50
ky
son, ky
lei son, ky
son, ky
55
¢3
ri e e lei
ri e e lei
ri e e lei
ri e e lei
¢
60
son.
son.
son.
son.

Appendix C: *Resonant Voices* (2017), full score. Ideas and algorithmic processes used to compose this work were re-composed into my *Translations for Piano* (2021) work

Performance Directions:

Stops:
From bar 204-End: organist should continue to add stops during places this is made possible (e.g. rests) until the full organ is heard. Changes must be incremental.

Dynamics:
Dynamics should remain even between all 3 voices.
At bar 204-End: dynamics can vary between voices as the organist takes away stops.

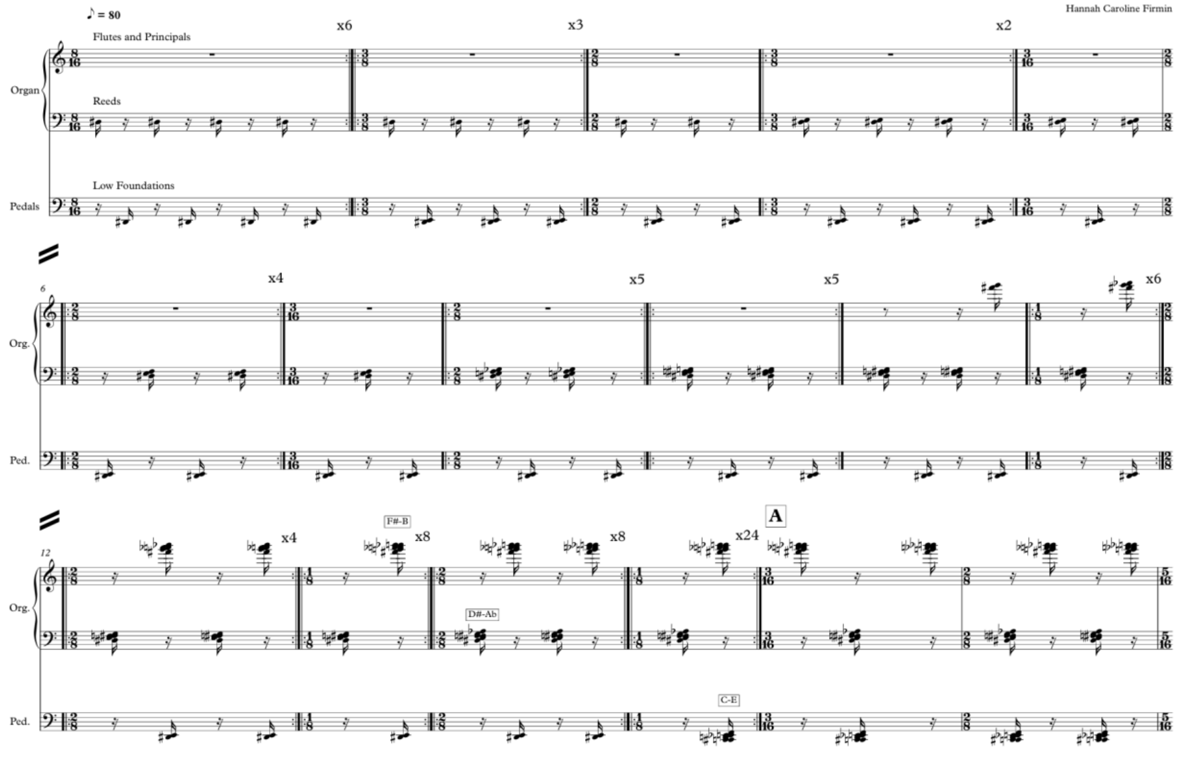
Repeated stations:
At any fixed station points such as bar 17, the number of repeats is indicated at the top right hand corner of the bar. Repeat marks **do not** supplement the specified reiterations.

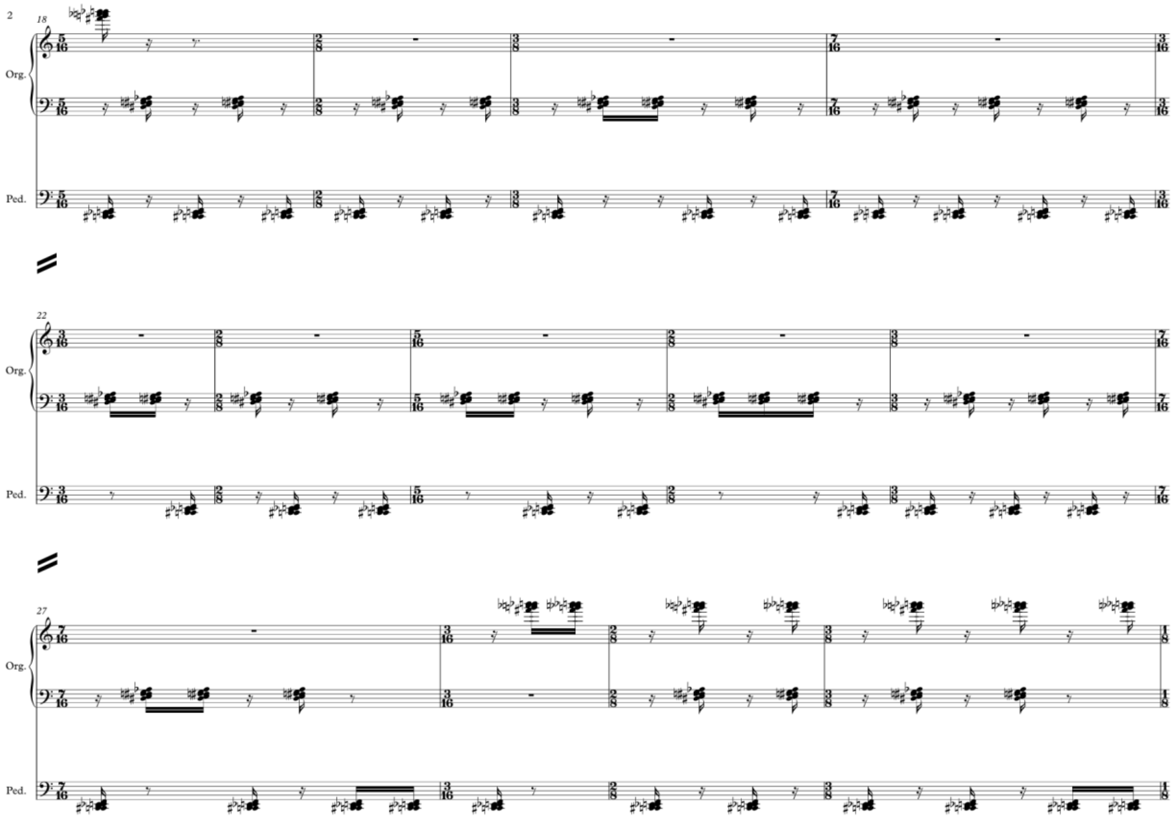
Accidentals:
Any accidentals apply to all notes within a single bar unless otherwise specified.

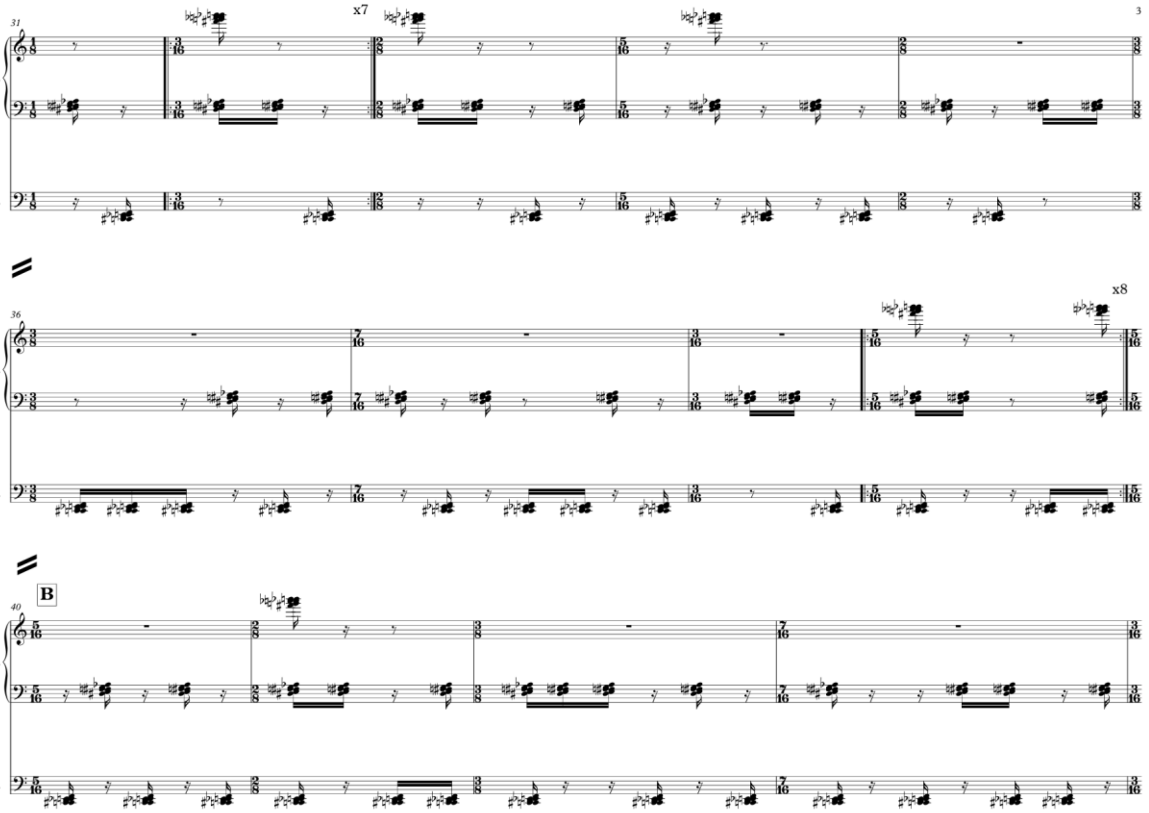
Pitches:
The pitches should sound as written.

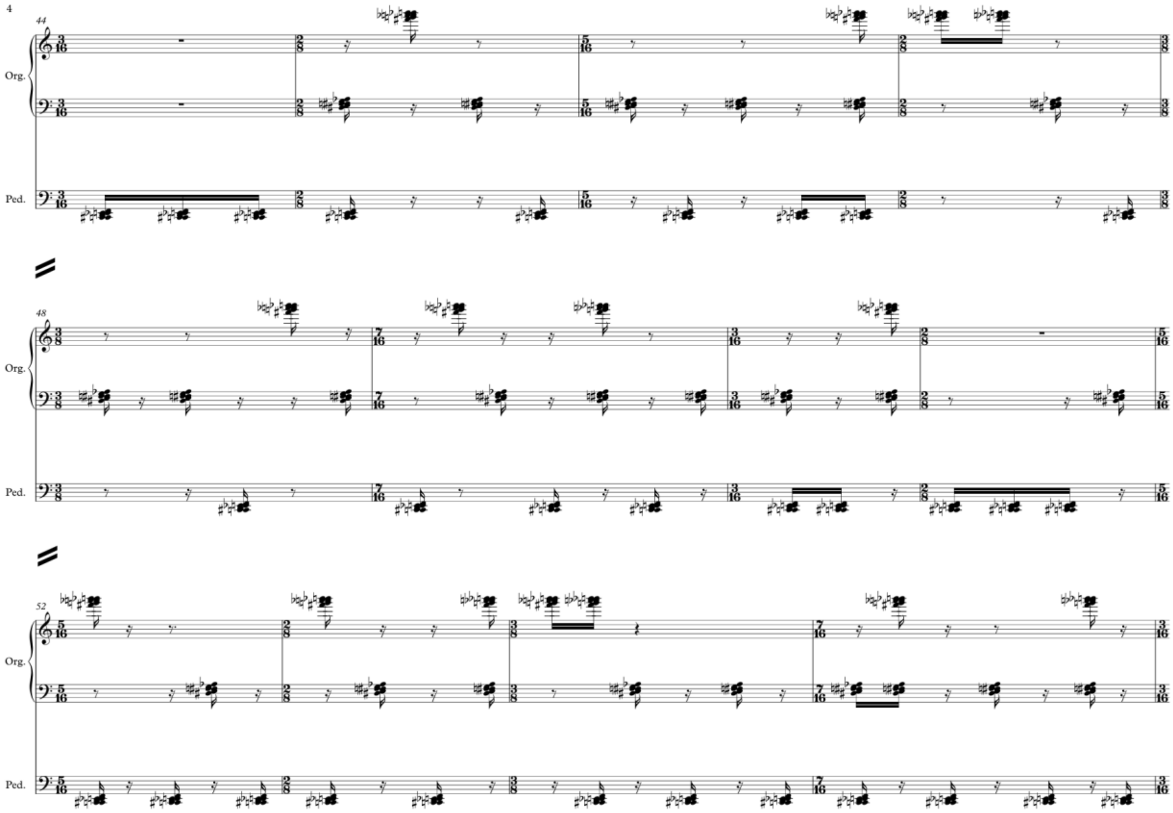
Resonant Voices

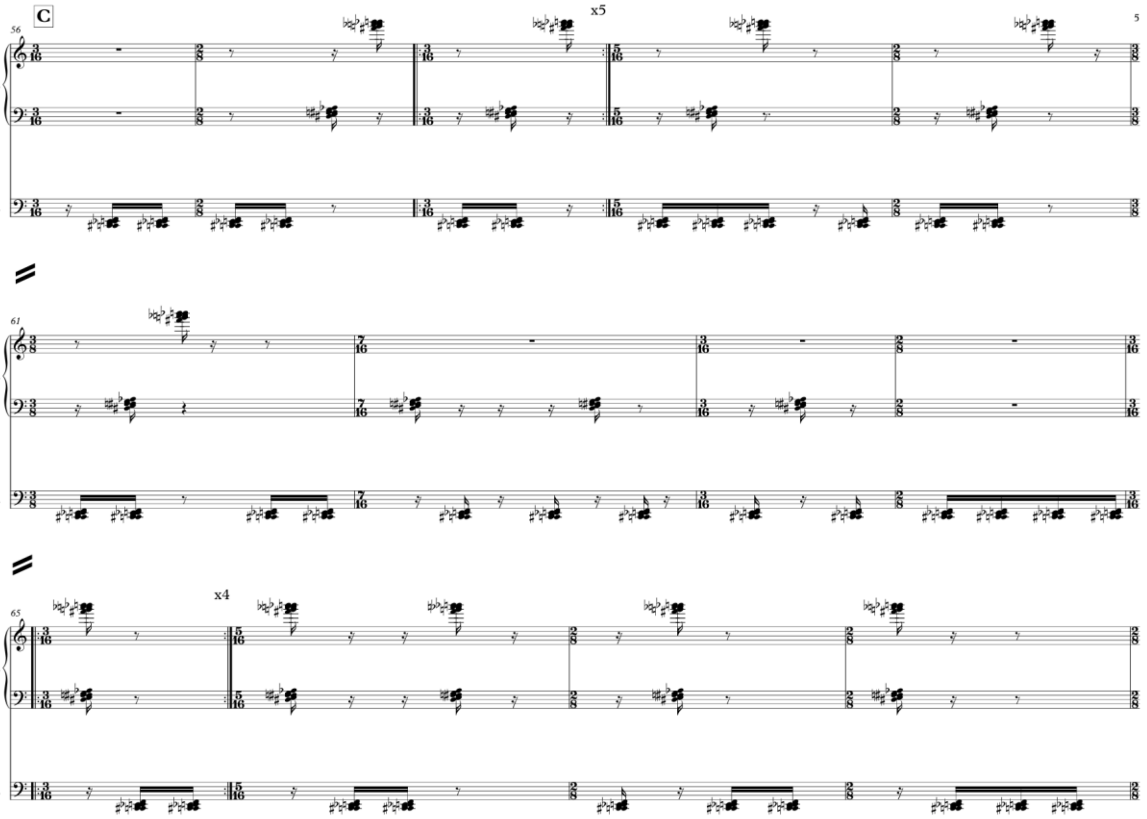
Hannah Caroline Firmin

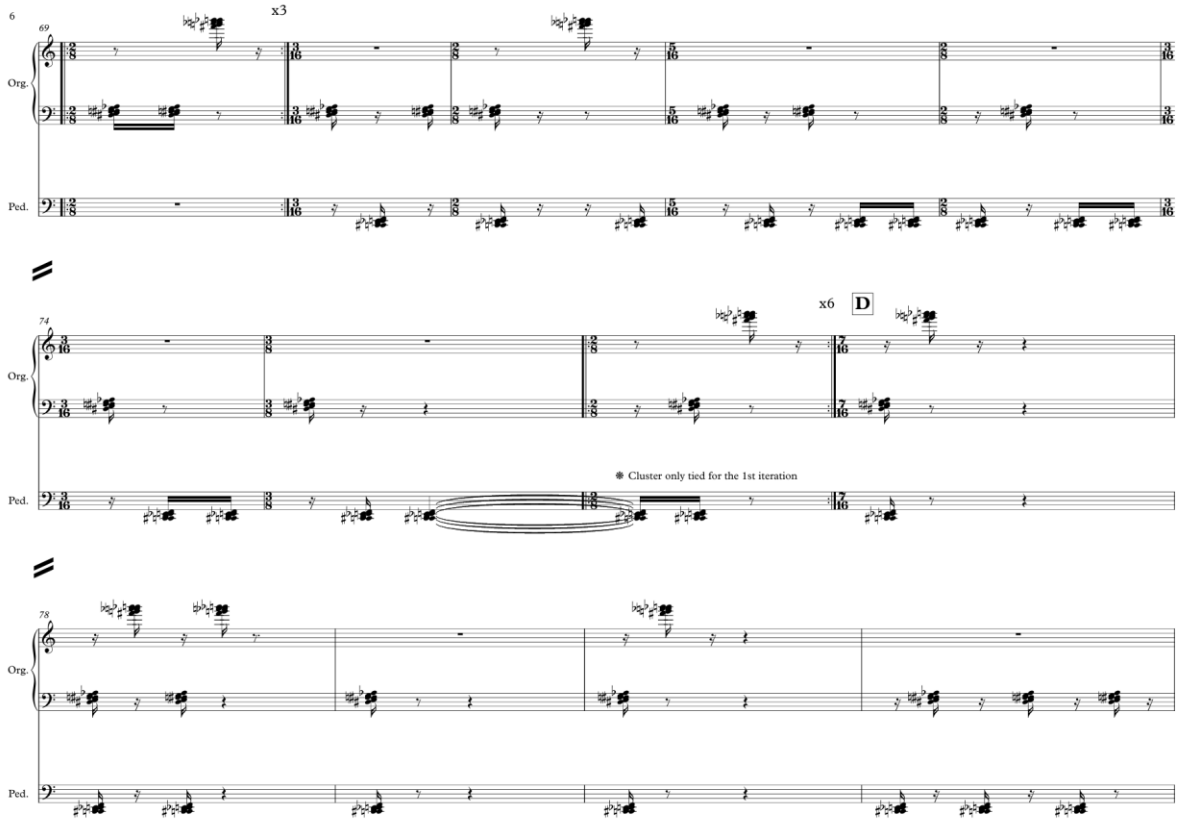

♪ = 80
Flutes and Principals
Reeds
Low Foundations
Organ
Pedals
x6
x3
x2
6
Org.
Ped.
x4
x5
x5
x6
12
x4
F#-B
x8
x8
x24
A
D#-Ab
C-E

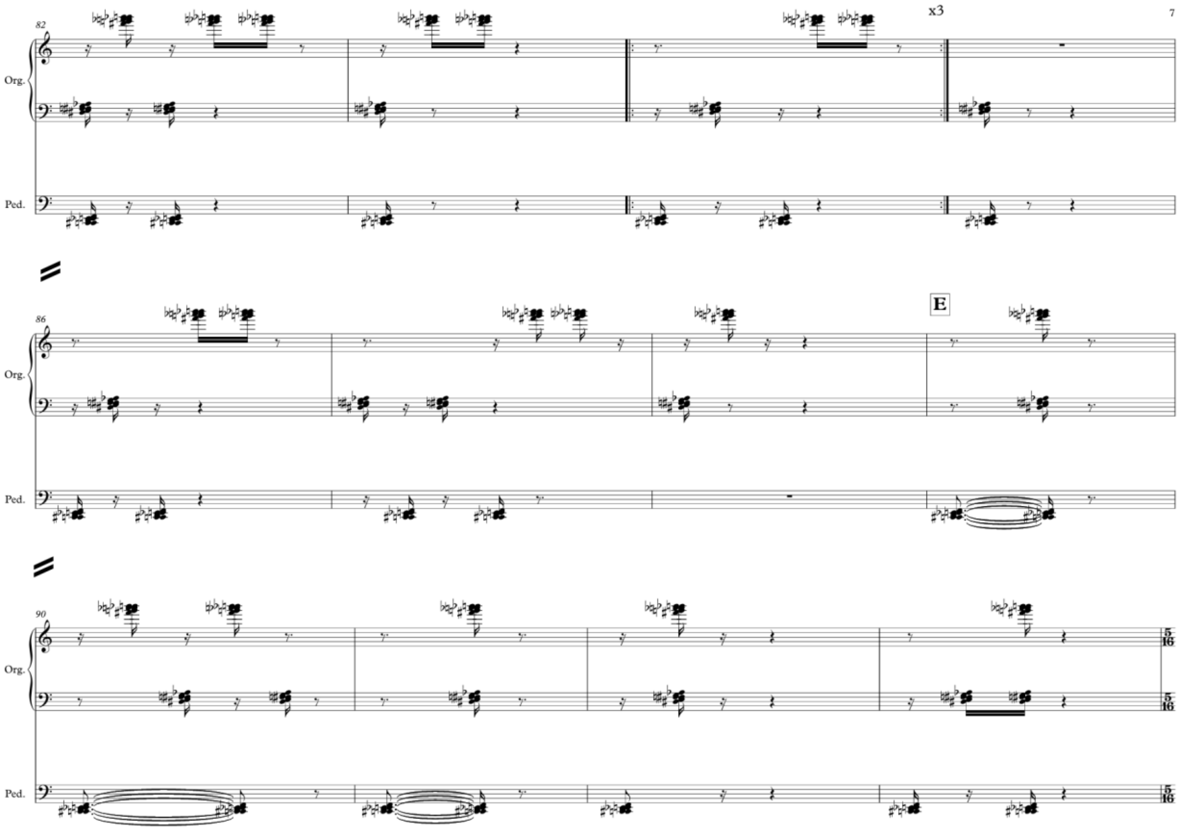

2
18
Org.
Ped.
22
Org.
Ped.
27
Org.
Ped.

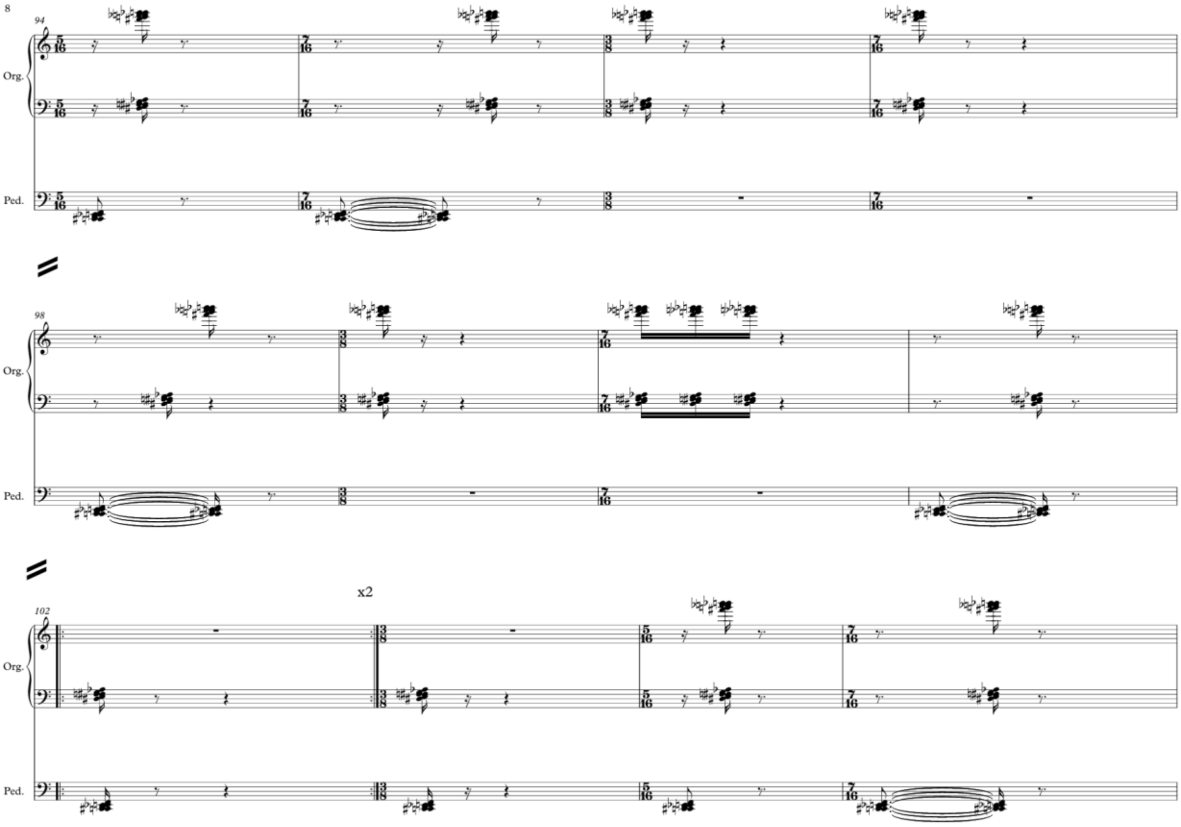

31
x7
3
Org.
Ped.
36
x8
Org.
Ped.
B
40
Org.
Ped.

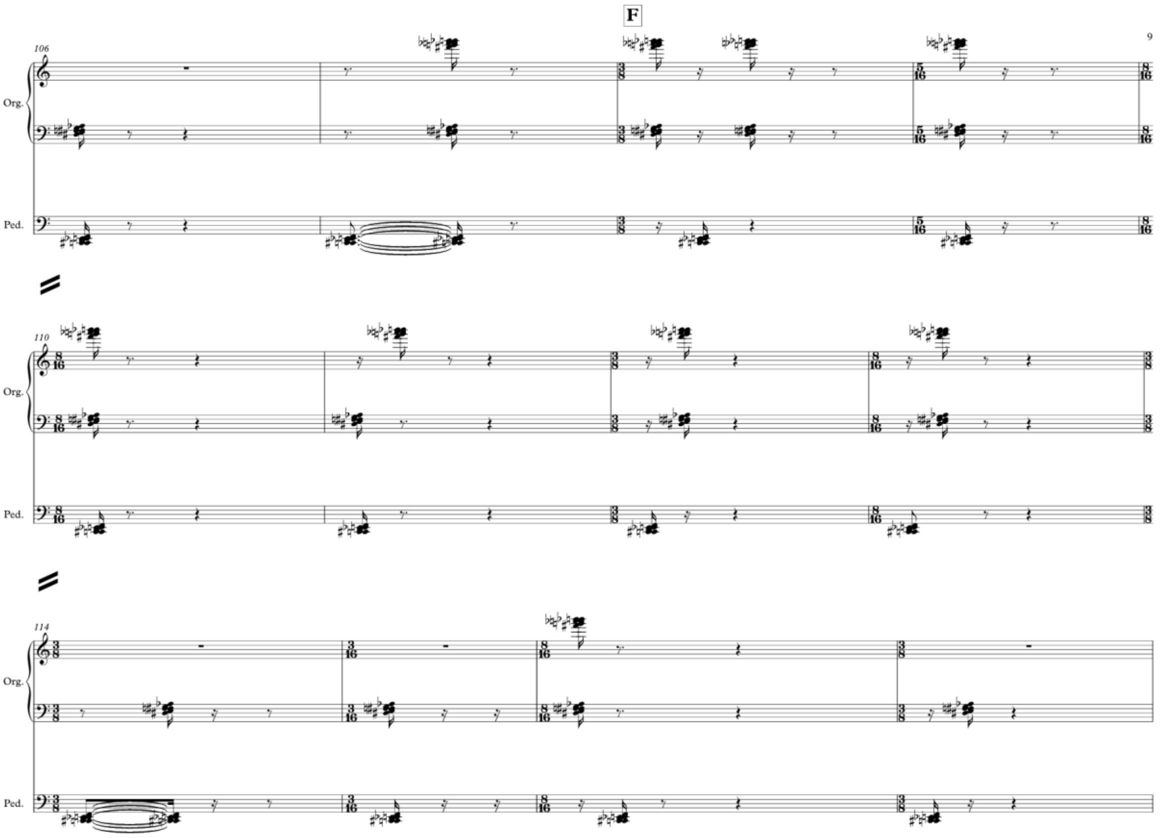

Org.
Ped.

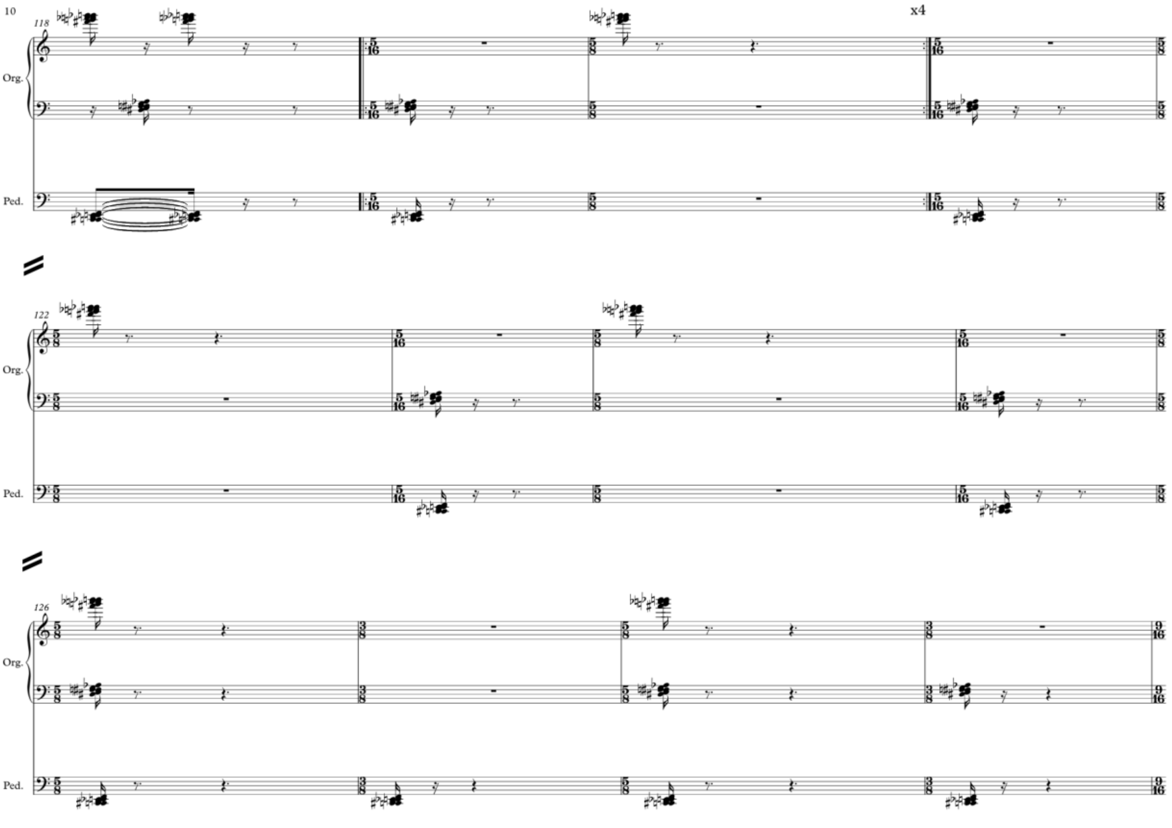

C
56
x5
5
61
65
x4
Org.
Ped.

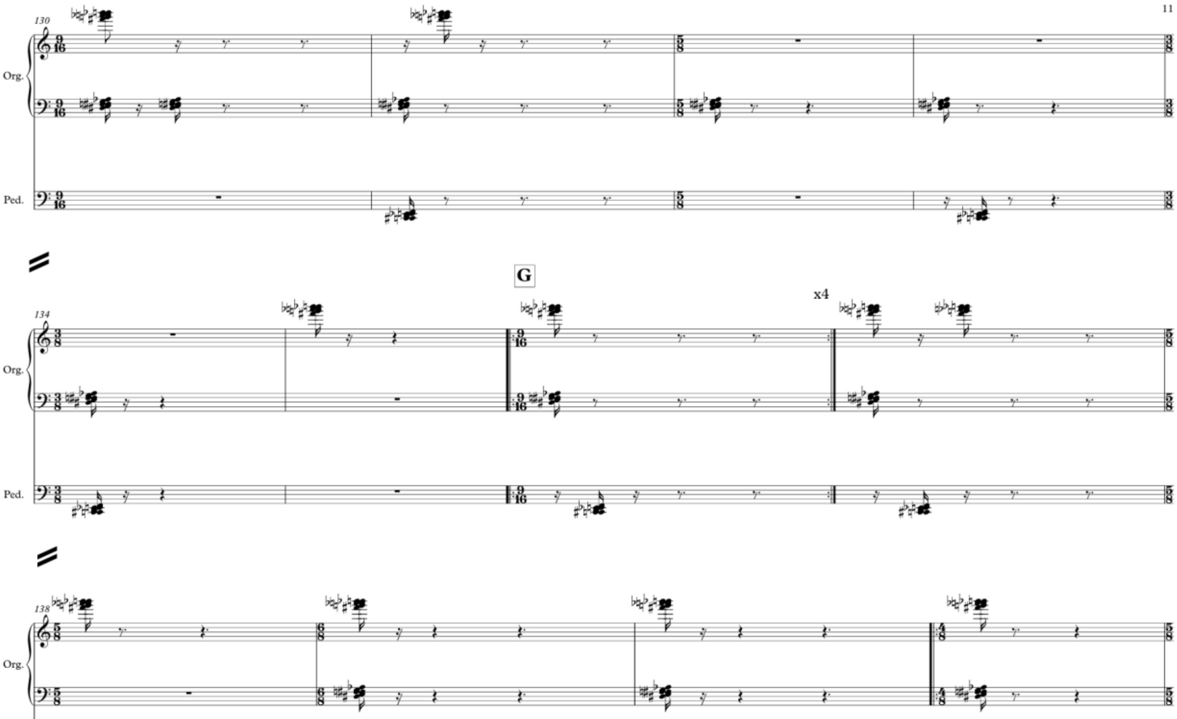

6
69
x3
Org.
Ped.
74
x6
D
❋ Cluster only tied for the 1st iteration
78

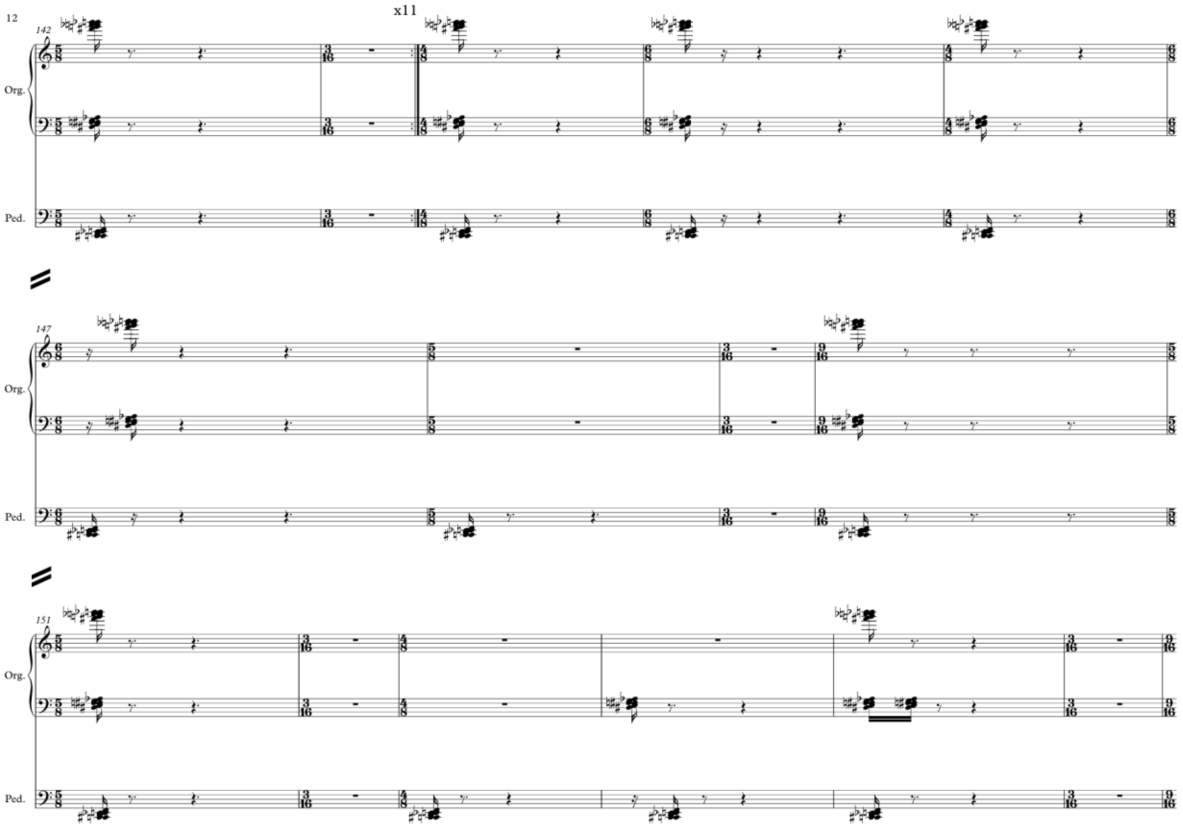

82
x3
7
Org.
Ped.
86
E
90

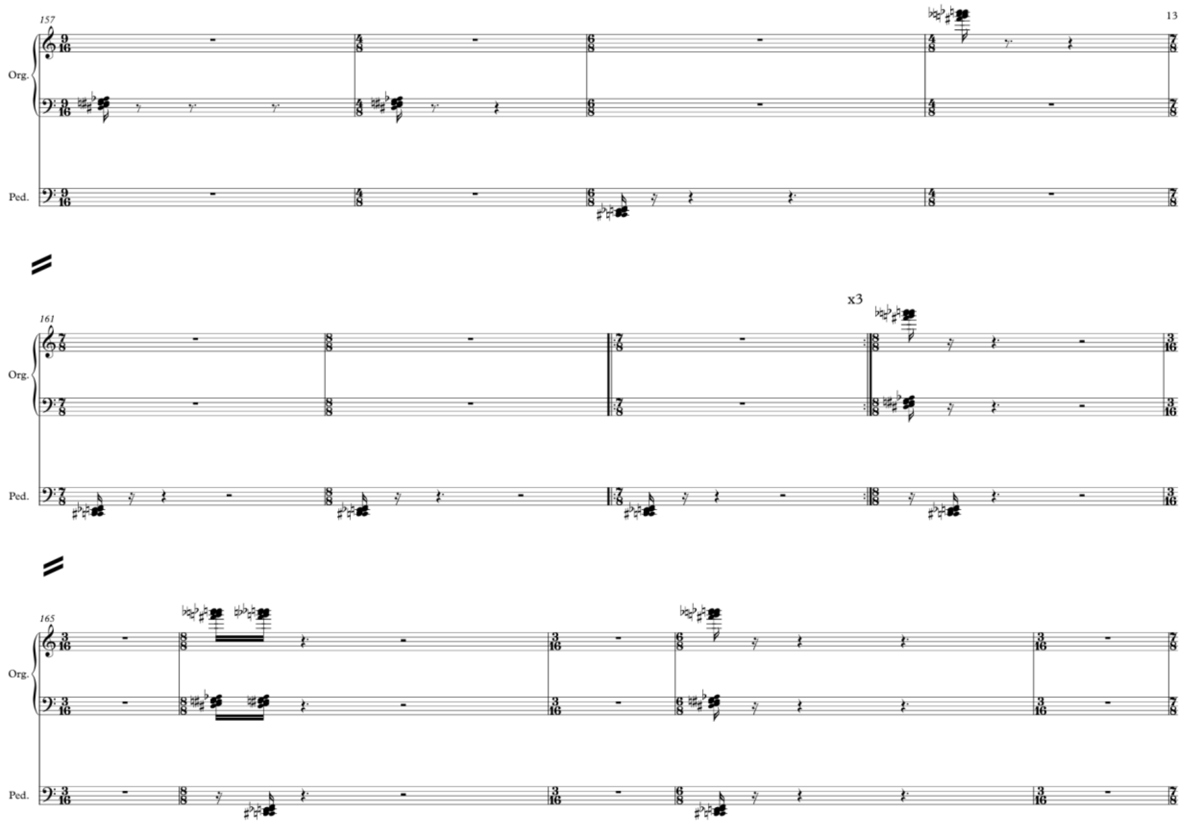

94
Org.
Ped.
98
Org.
Ped.
102
x2
Org.
Ped.

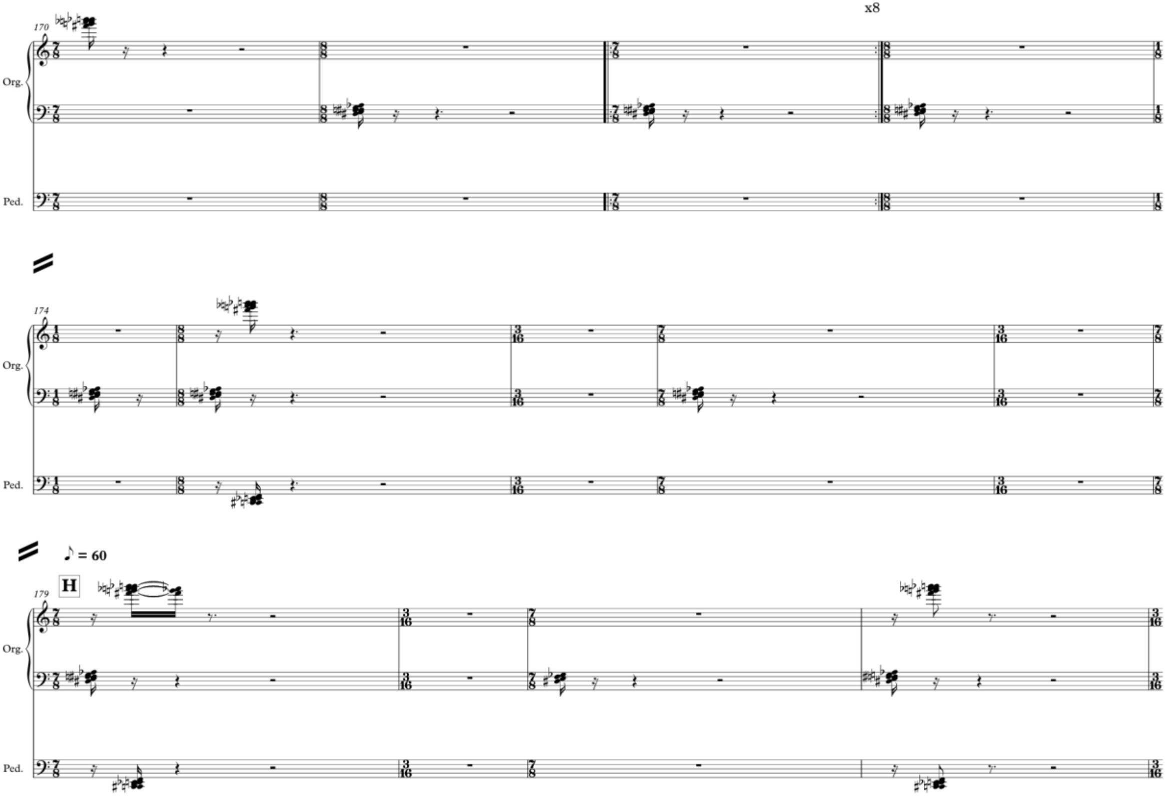

F
106
Org.
Ped.
110
Org.
Ped.
114
Org.
Ped.

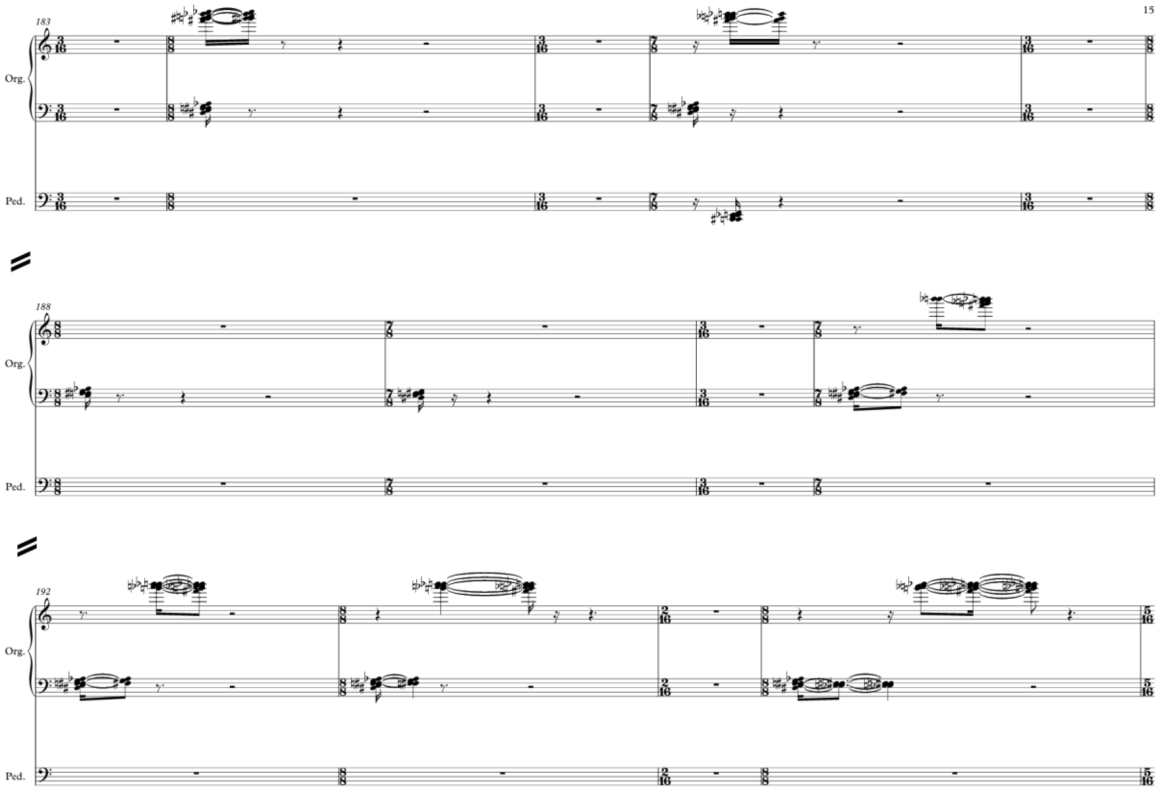

118
x4
Org.
Ped.
122
Org.
Ped.
126
Org.
Ped.

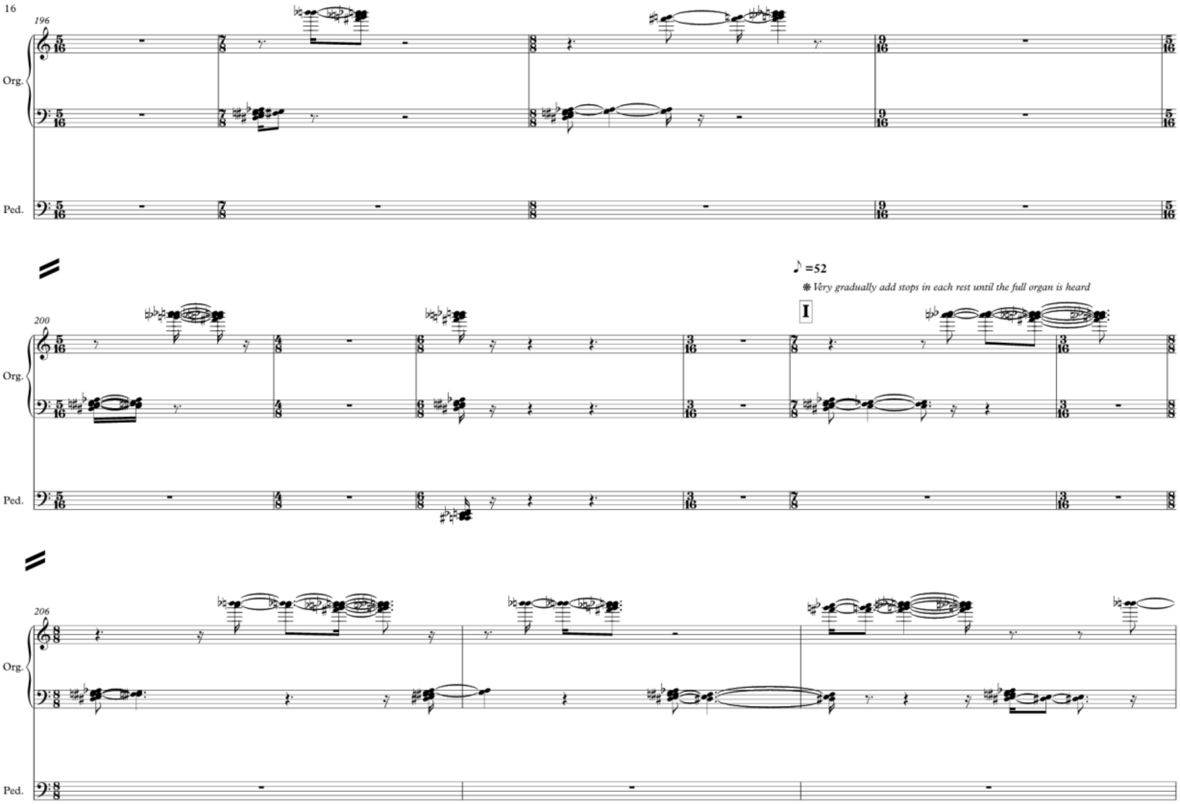

130
Org.
Ped.
134
G
x4
Org.
Ped.
138
Org.
Ped.

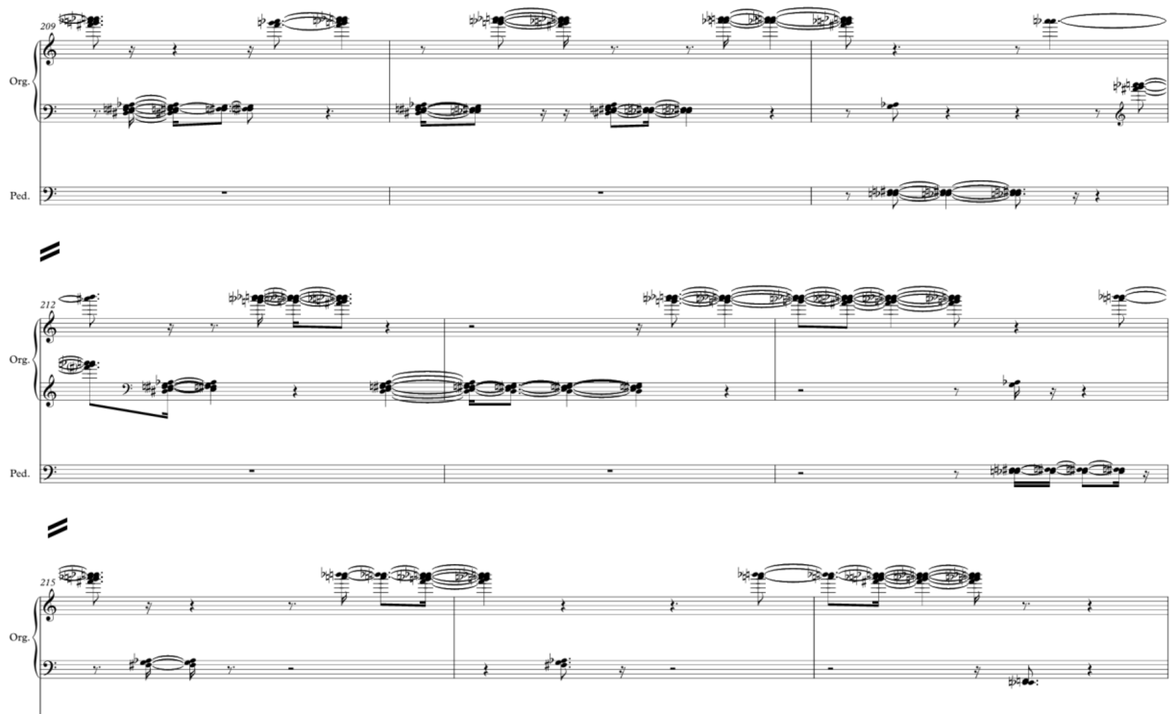

12
x11
142
Org.
Ped.
147
Org.
Ped.
151
Org.
Ped.

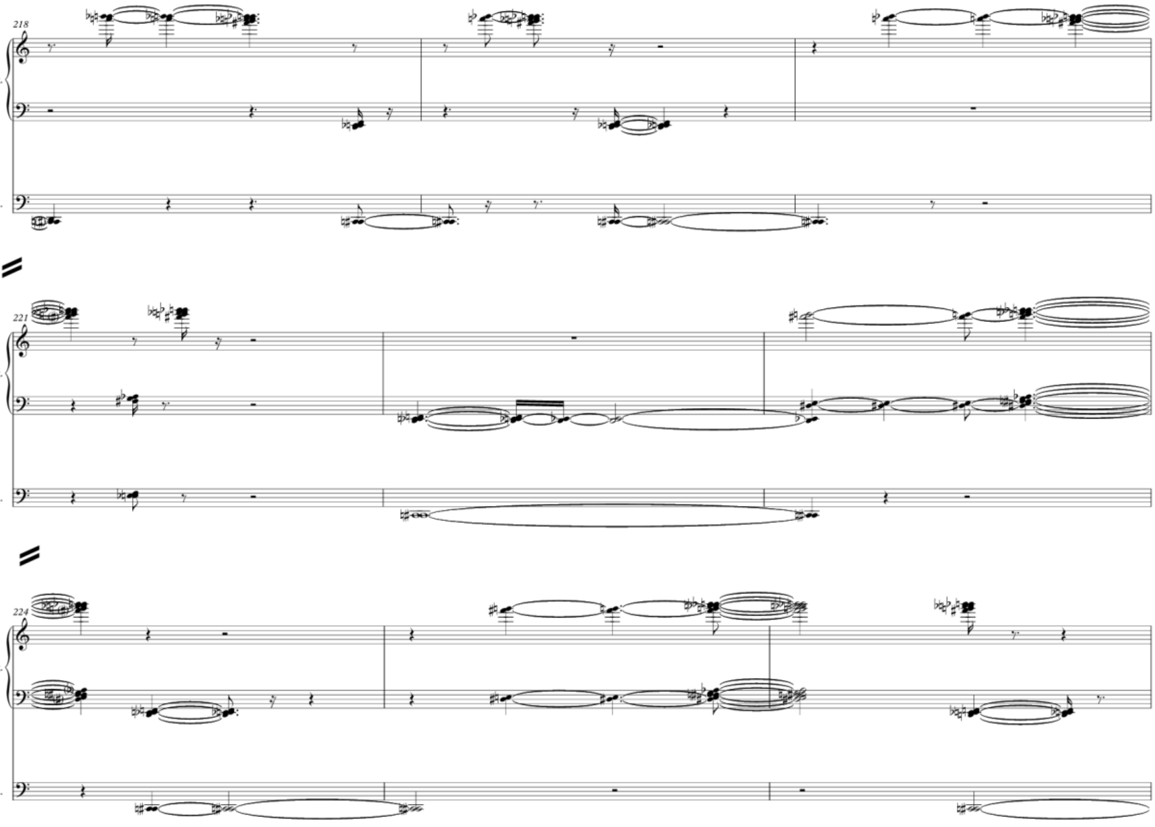

157
13
Org.
Ped.
161
x3
Org.
Ped.
165
Org.
Ped.

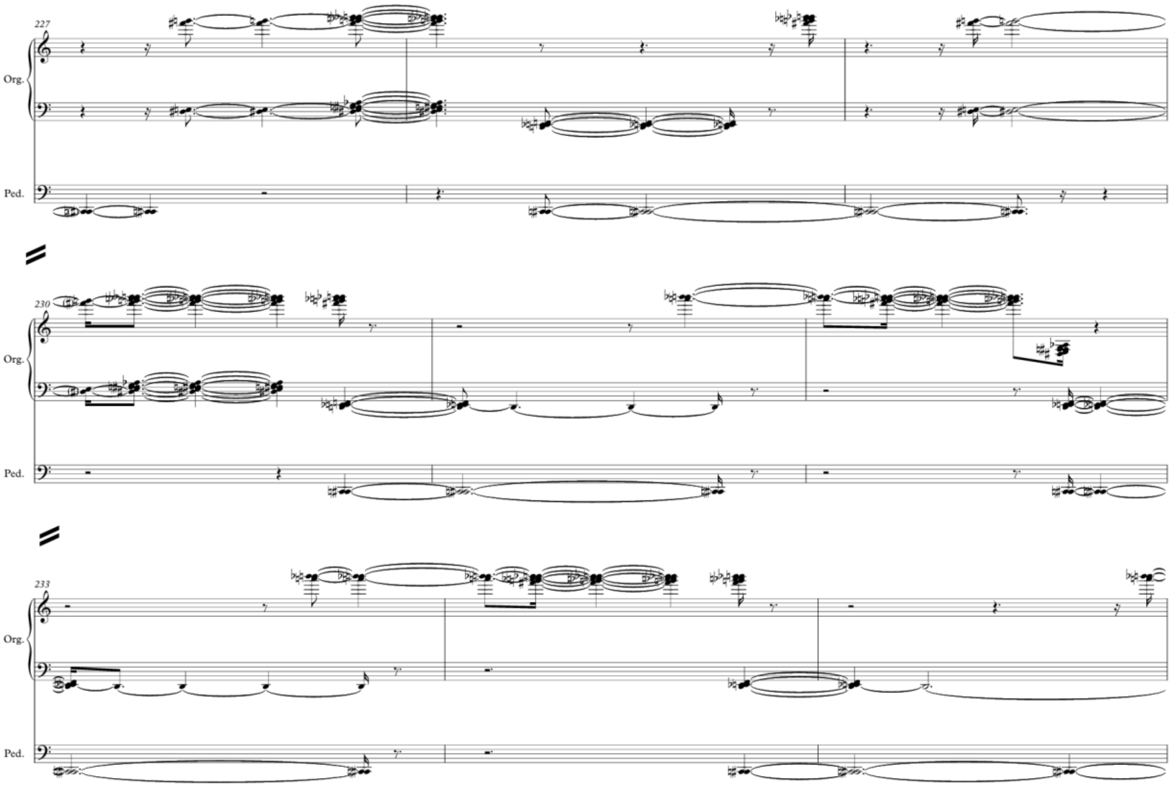

x8
170
Org.
Ped.
174
Org.
Ped.
♪ = 60
H
179
Org.
Ped.

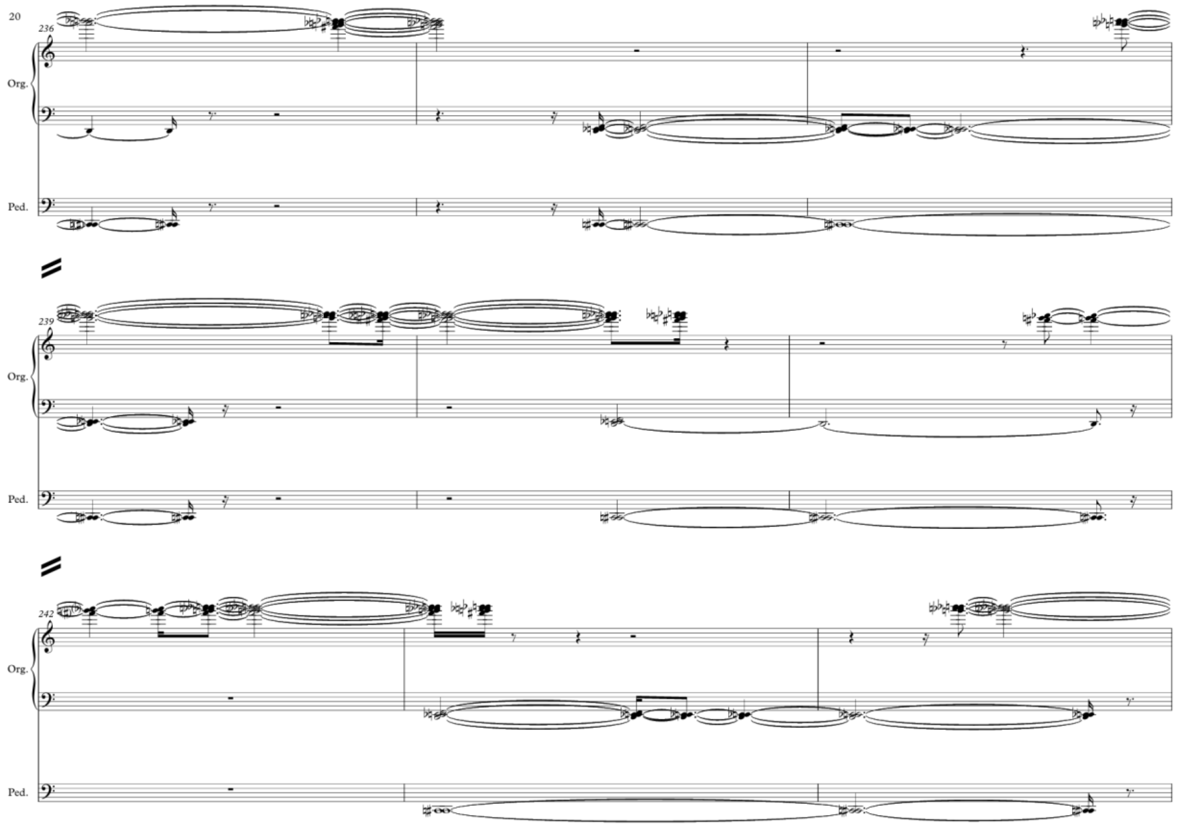

183
Org.
Ped.
188
Org.
Ped.
192
Org.
Ped.

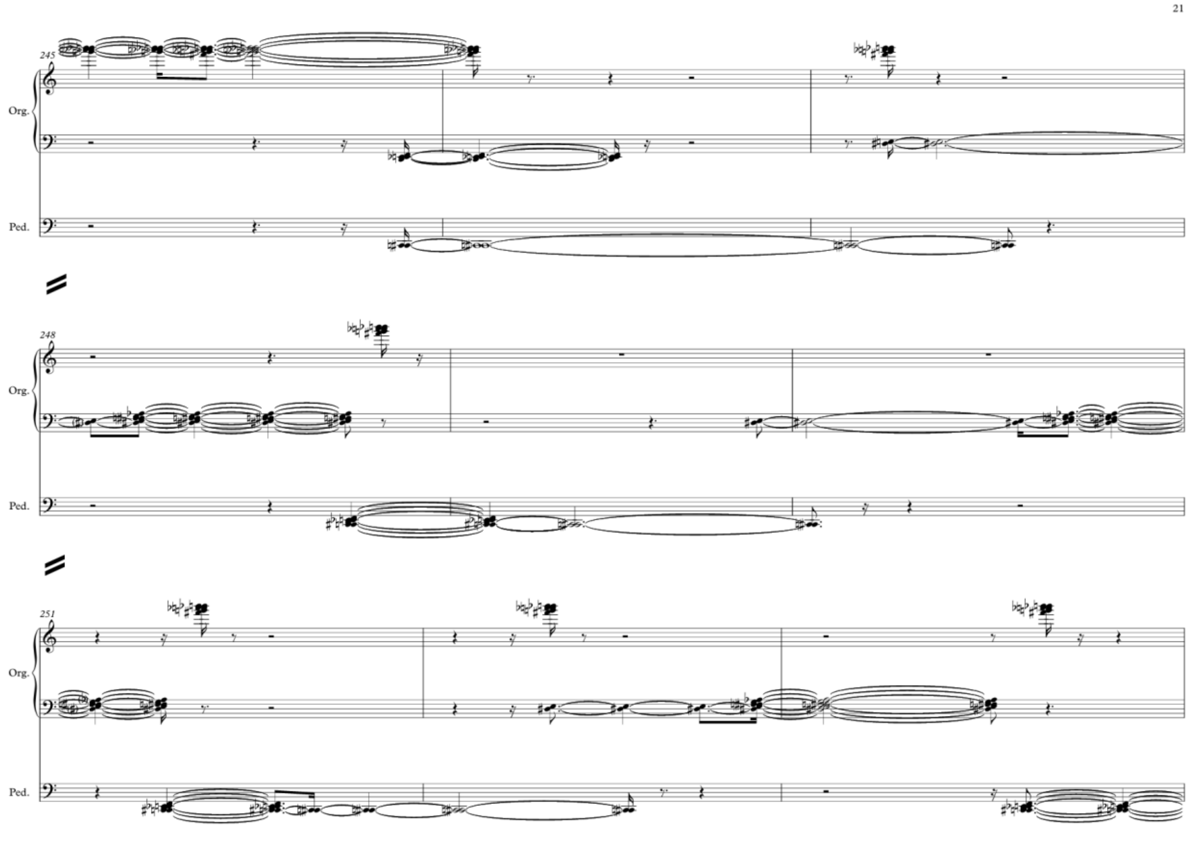

196
Org.
Ped.
200
♪ =52
❋ Very gradually add stops in each rest until the full organ is heard
I
206

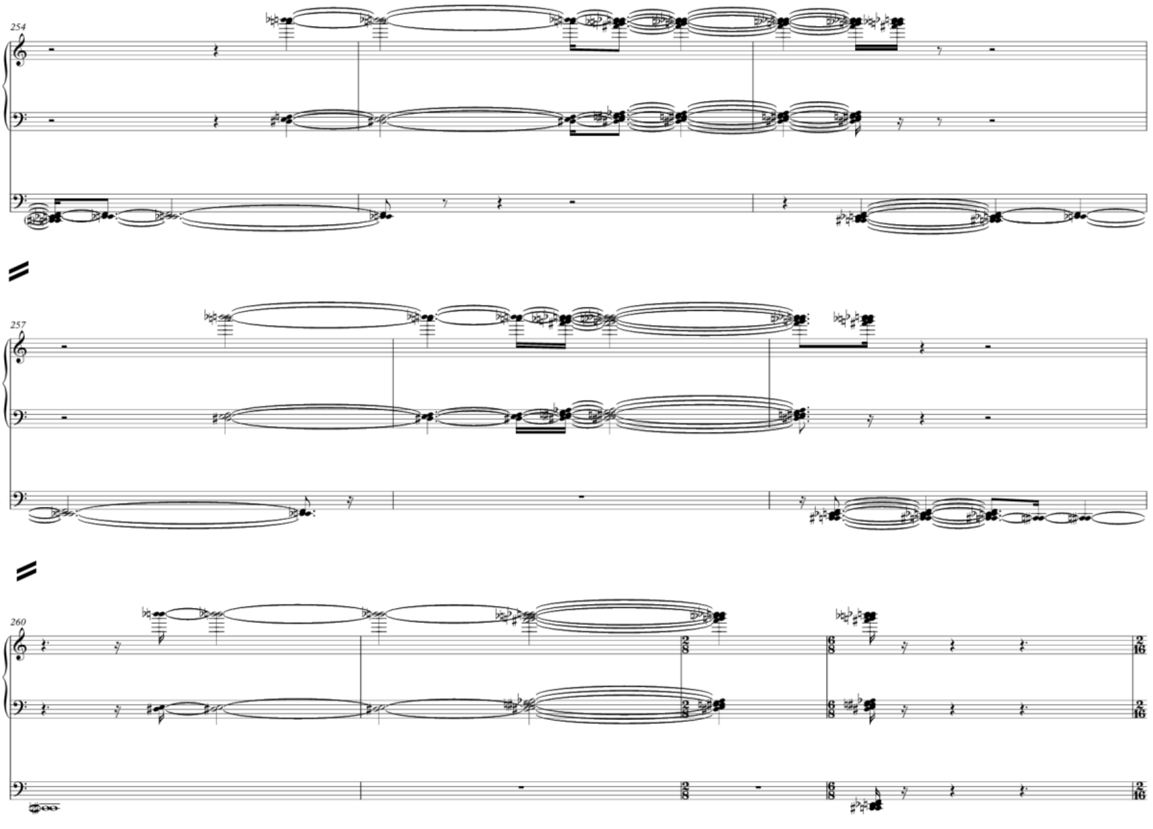

Org.
Ped.

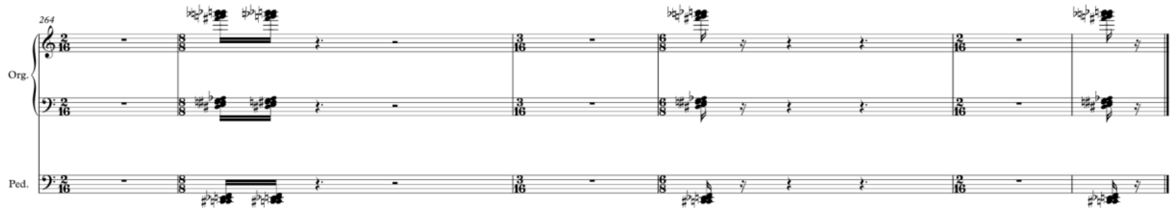

218
Org.
Ped.
221
Org.
Ped.
224
Org.
Ped.


227
Org.
Ped.
230
Org.
Ped.
233
Org.
Ped.

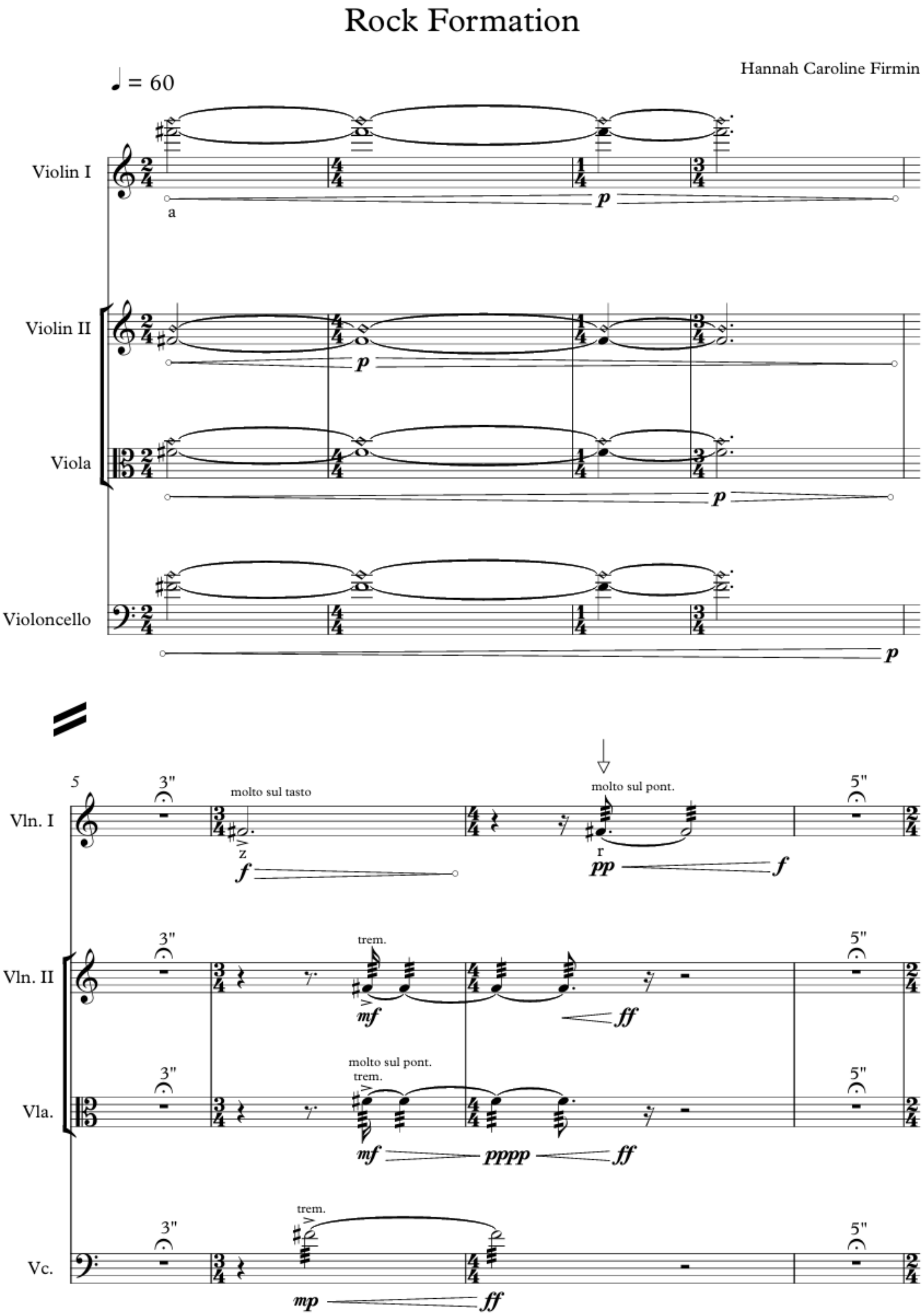

20
236
Org.
Ped.
239
Org.
Ped.
242
Org.
Ped.

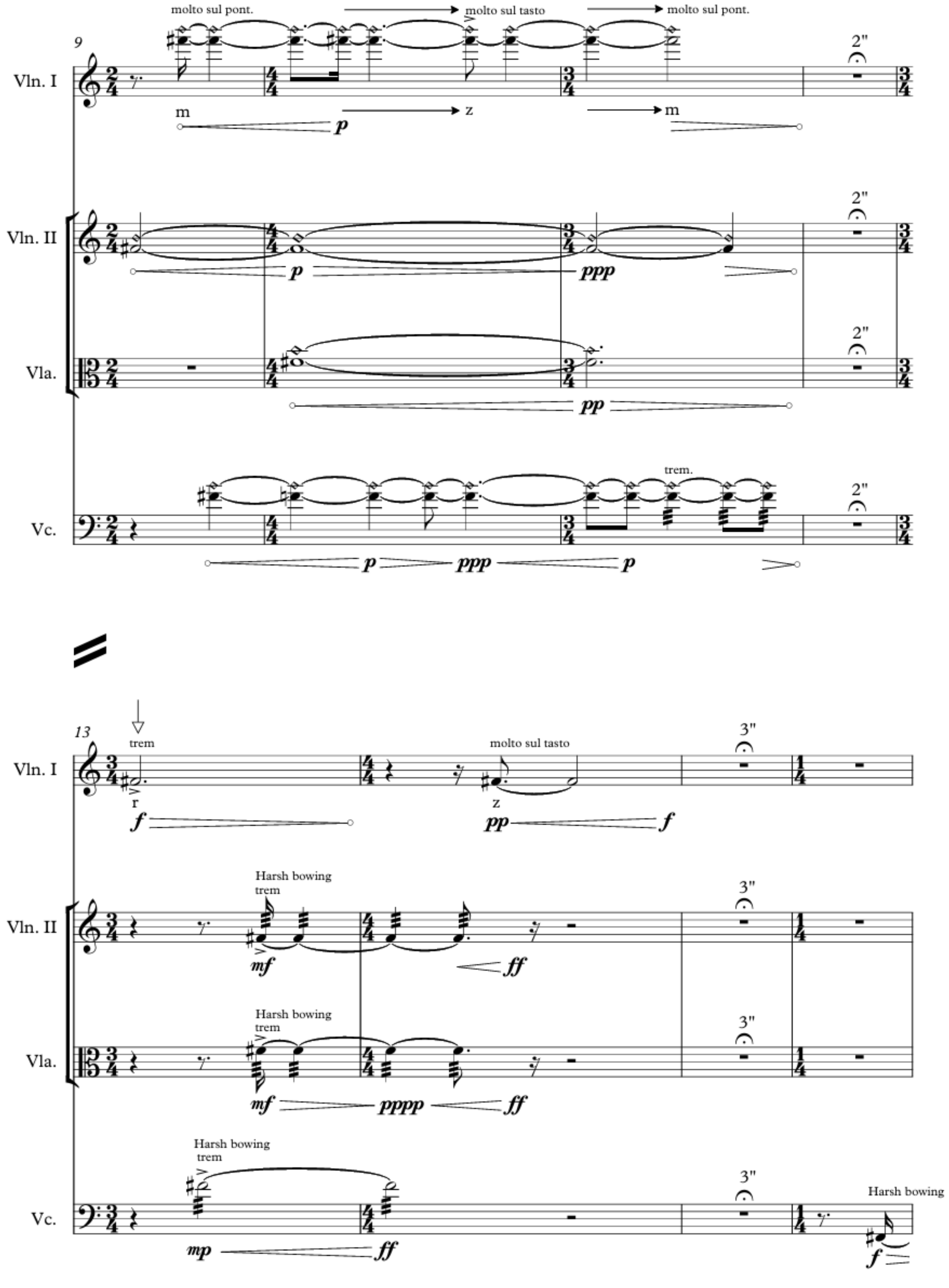

21
245
Org.
Ped.
248
Org.
Ped.
251
Org.
Ped.

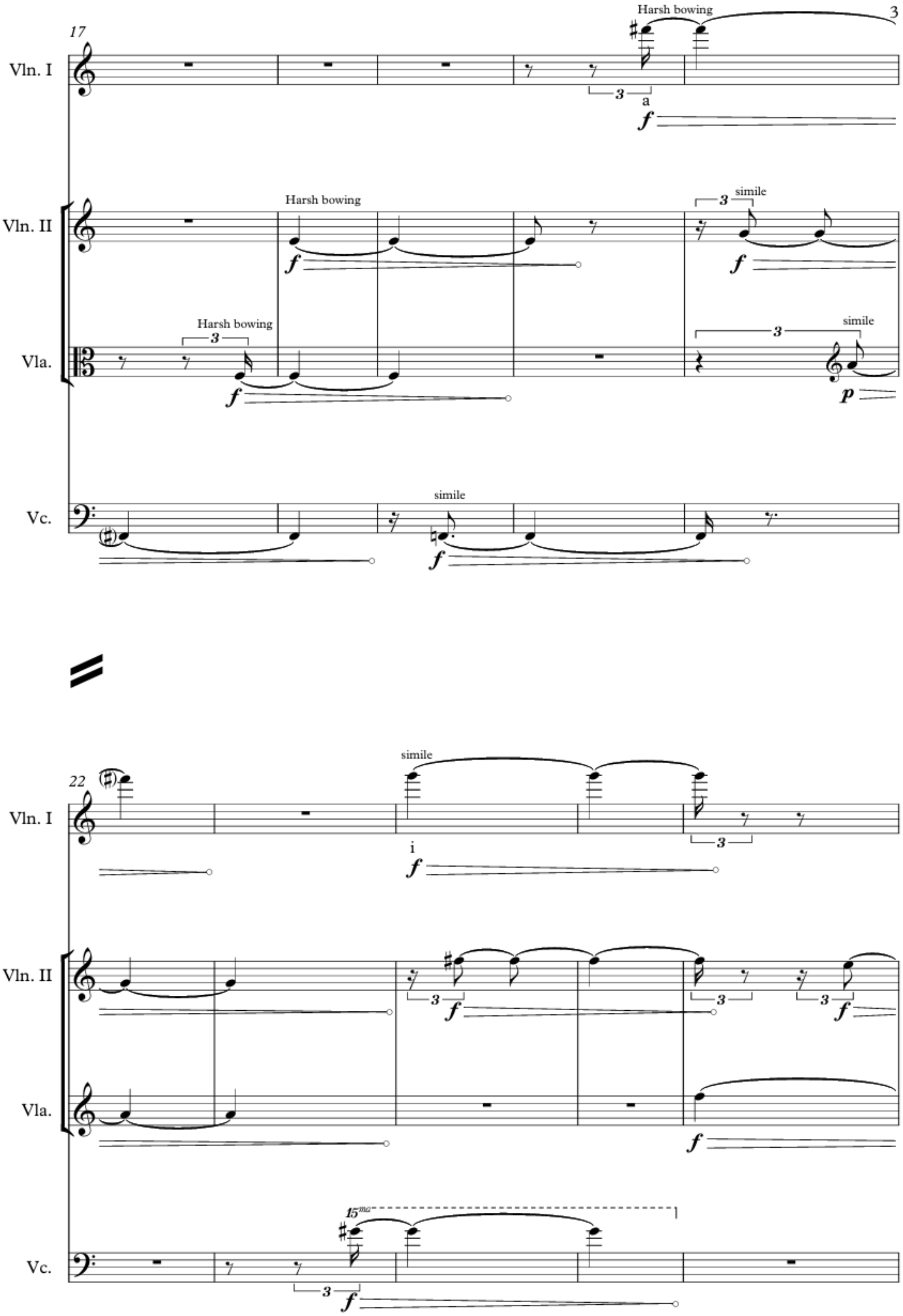

254
Org.
Ped.
257
Org.
Ped.
260
Org.
Ped.

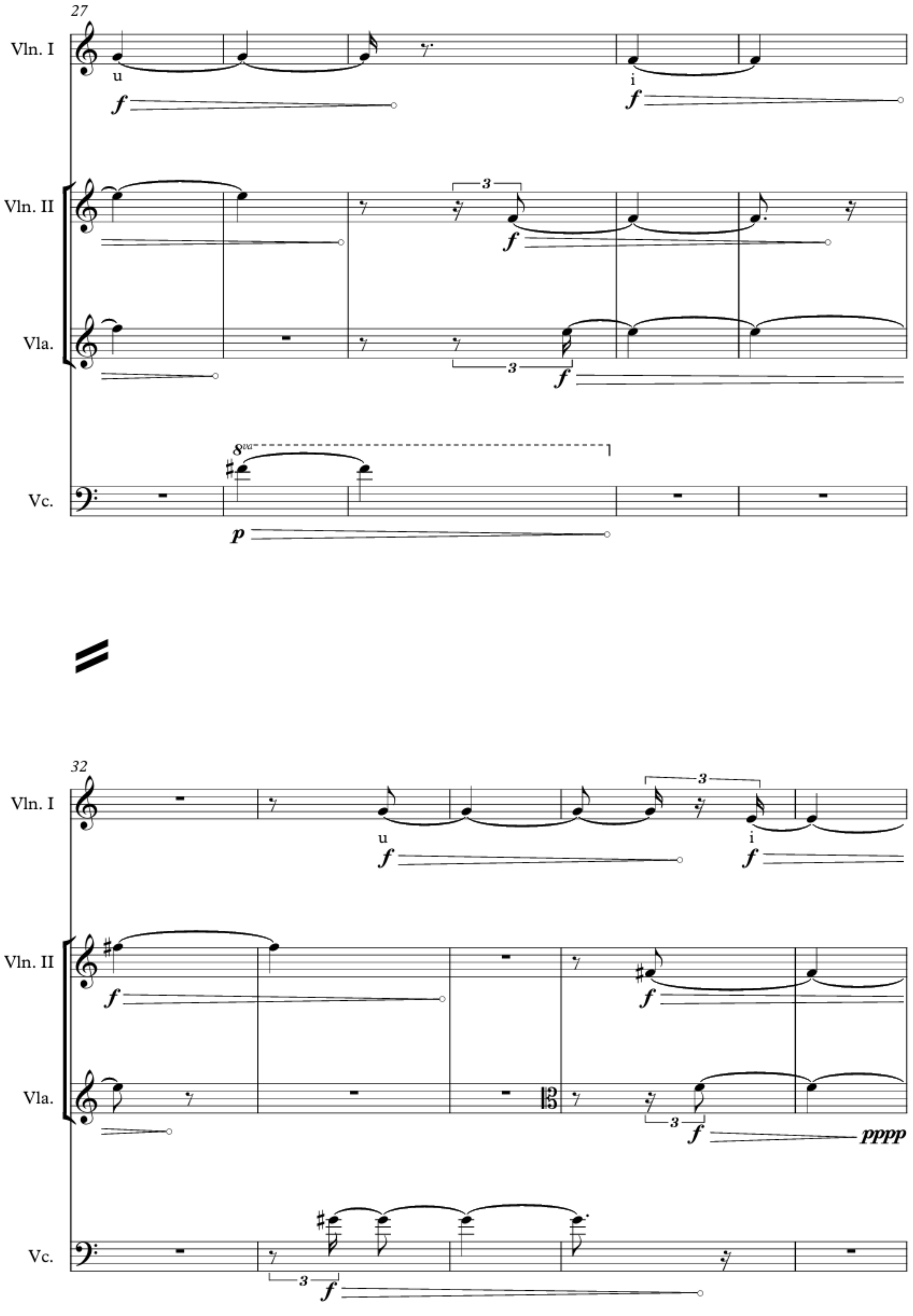

264
Org.
Ped.

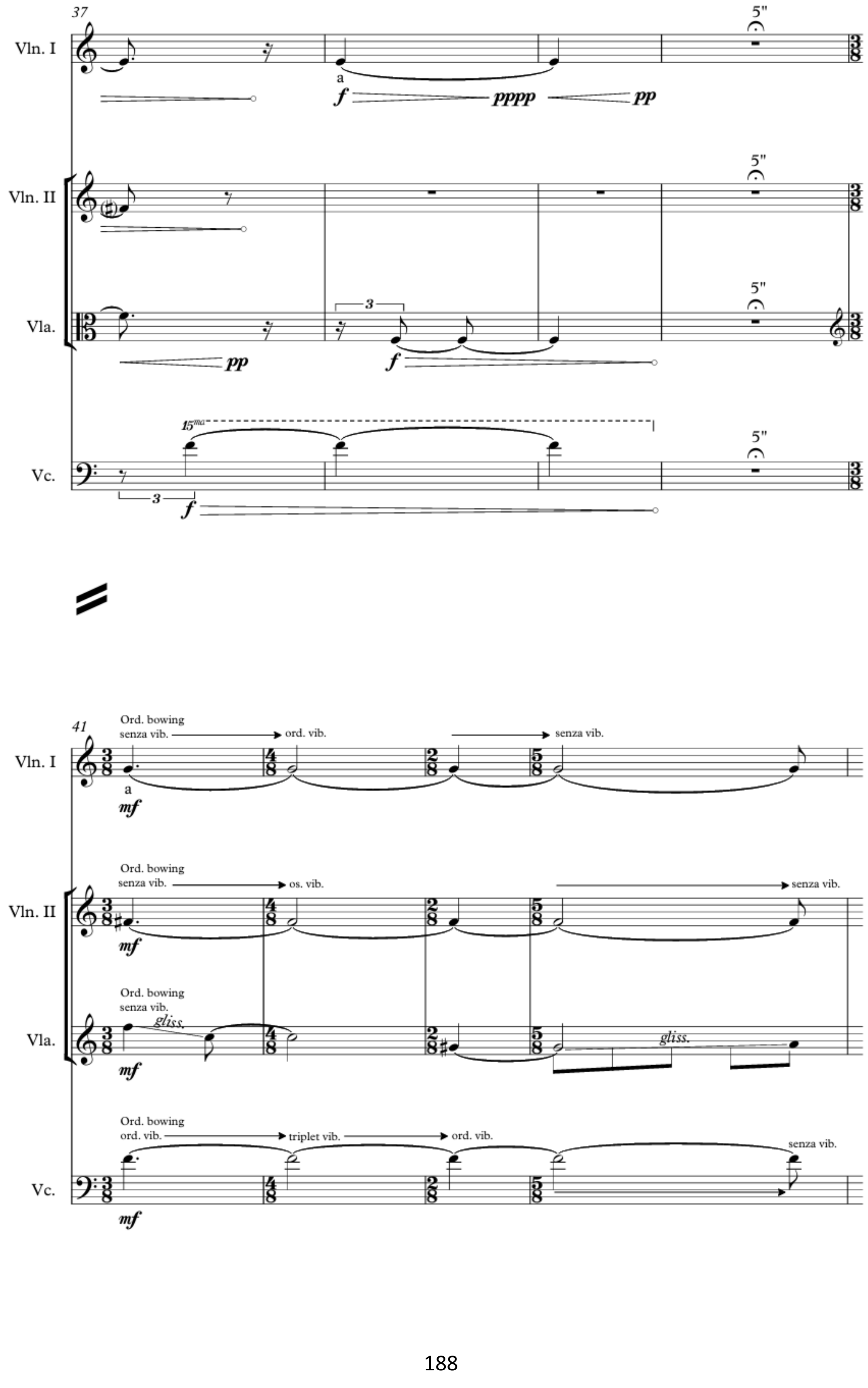
Appendix D: String quartet transcription of my MMus piece, *Rock Formation* (2017). This exercise was carried out at the start of my PhD in 2018 as a short translation exercise

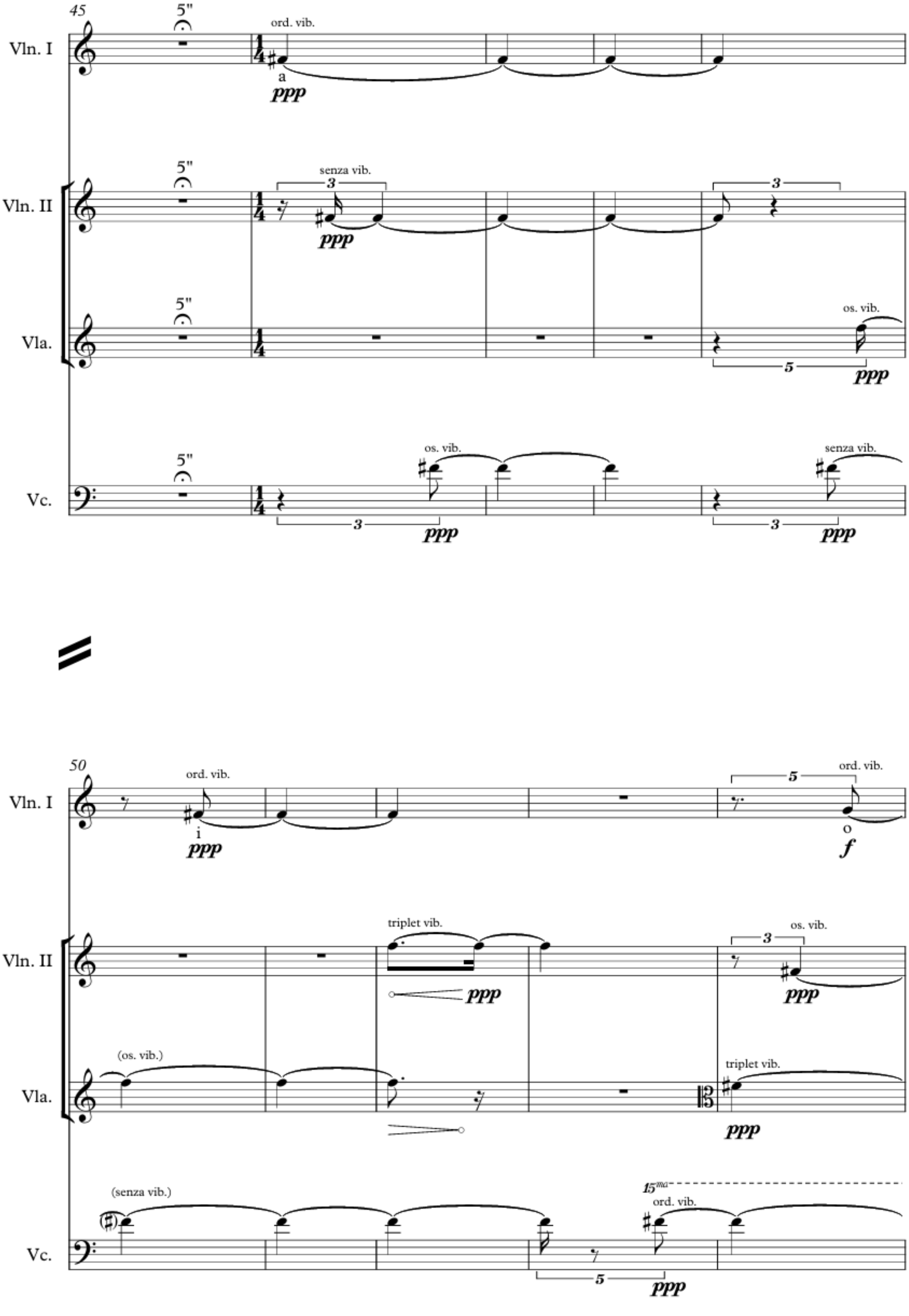

Rock Formation
Hannah Caroline Firmin
♩ = 60
Violin I
Violin II
Viola
Violoncello
a
p
5
Vln. I
Vln. II
Vla.
Vc.
3"
5"
molto sul tasto
molto sul pont.
trem.
z
r
f
pp
mf
ff
pppp
mp

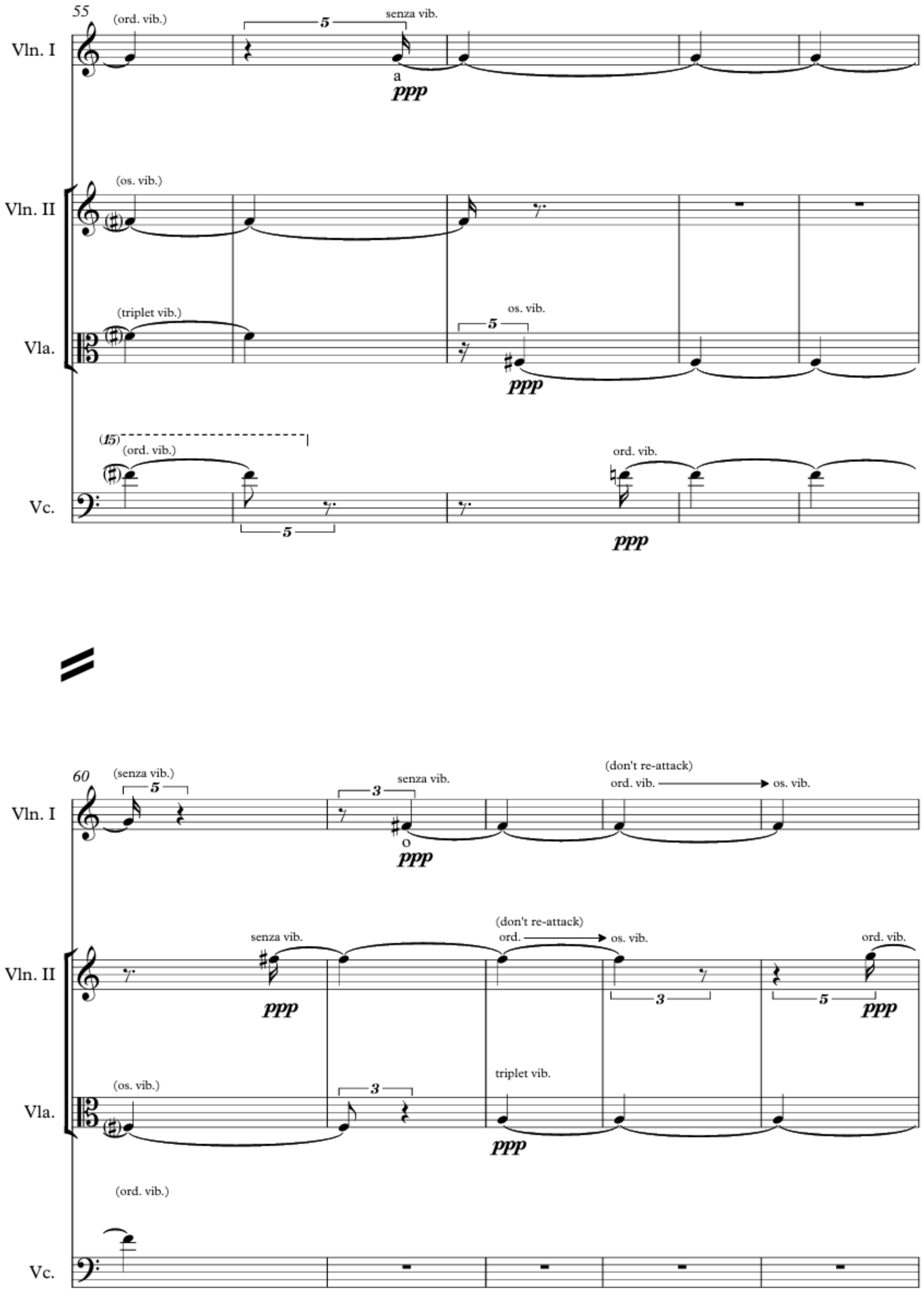

9
Vln. I
Vln. II
Vla.
Vc.
molto sul pont.
molto sul tasto
molto sul pont.
m
z
m
p
p
ppp
pp
p
ppp
p
trem.
2"
2"
2"
2"
13
trem
r
f
molto sul tasto
z
pp
f
Harsh bowing
trem
mf
ff
Harsh bowing
trem
mf
pppp
ff
Harsh bowing
trem
mp
ff
Harsh bowing
f
3"
3"
3"
3"

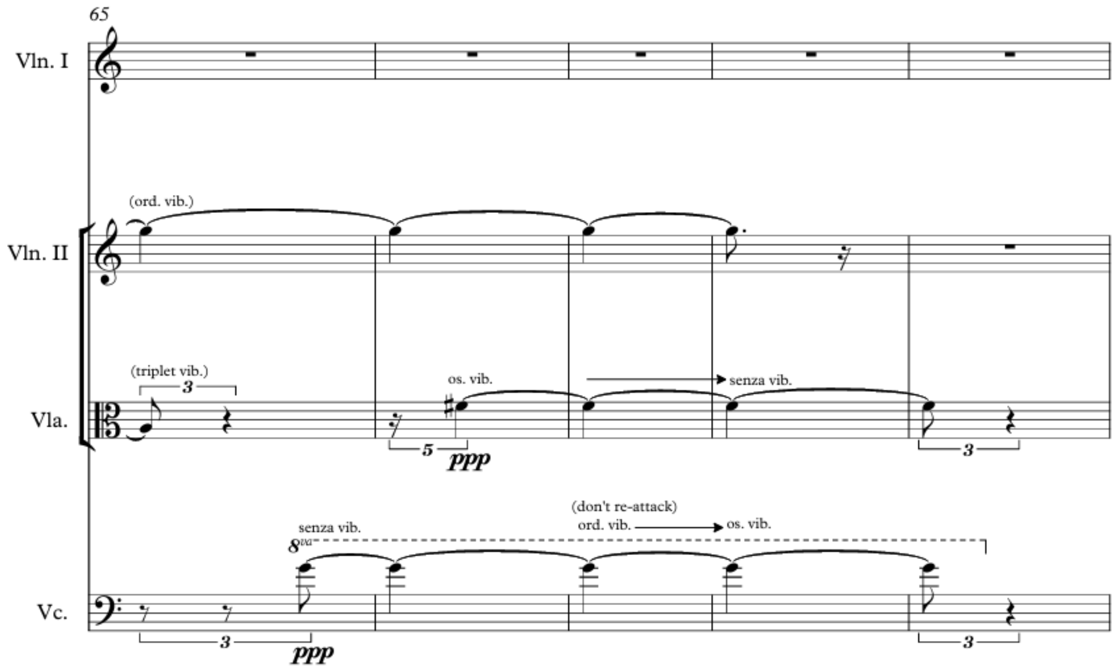

17
Vln. I
Vln. II
Vla.
Vc.
Harsh bowing
simile
3
a
f
p
22
i
15ma


27
Vln. I
Vln. II
Vla.
Vc.
u
i
f
p
3
8va
32
pppp


37
Vln. I
a
f
pppp
pp
5"
Vln. II
5"
Vla.
pp
3
f
5"
15ma
Vc.
3
f
5"
41
Ord. bowing
senza vib.
ord. vib.
senza vib.
Vln. I
a
mf
Ord. bowing
senza vib.
os. vib.
senza vib.
Vln. II
mf
Ord. bowing
senza vib.
gliss.
Vla.
mf
gliss.
Ord. bowing
ord. vib.
triplet vib.
ord. vib.
senza vib.
Vc.
mf

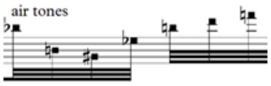

45
5"
Vln. I
ord. vib.
a
ppp
Vln. II
senza vib.
3
ppp
Vla.
os. vib.
5
ppp
Vc.
os. vib.
3
ppp
senza vib.
50
ord. vib.
i
ppp
5
o
f
triplet vib.
os. vib.
(os. vib.)
(senza vib.)
15ma


55
(ord. vib.)
5
senza vib.
Vln. I
a
ppp
(os. vib.)
Vln. II
(triplet vib.)
5
os. vib.
Vla.
ppp
(15)
(ord. vib.)
ord. vib.
Vc.
5
ppp
60
(senza vib.)
5
3
senza vib.
(don't re-attack)
ord. vib. → os. vib.
Vln. I
o
ppp
senza vib.
(don't re-attack)
ord. → os. vib.
ord. vib.
Vln. II
ppp
3
5
ppp
(os. vib.)
3
triplet vib.
Vla.
ppp
(ord. vib.)
Vc.


65
Vln. I
Vln. II
(ord. vib.)
Vla.
(triplet vib.)
3
os. vib.
senza vib.
5
ppp
3
Vc.
senza vib.
8va
(don't re-attack)
ord. vib.
os. vib.
3
ppp
3

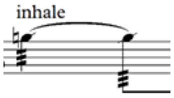
Appendix E: *Gasp* (2020), full score. *Gasp* was written as a short translation exercise which formed part of flautist, Kathryn William's breath piece series

Performance Directions



= air tones: air with a hint of pitch

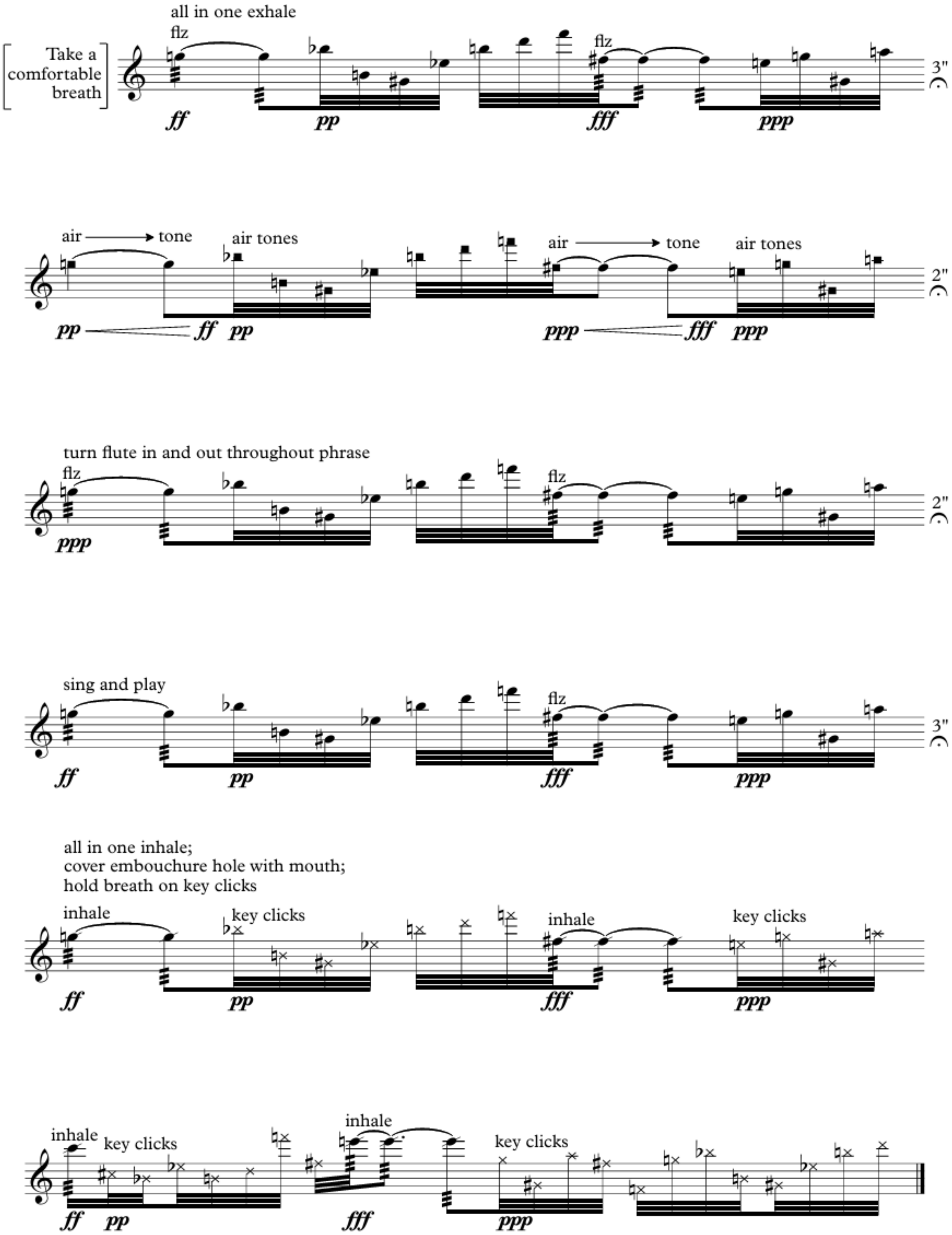
singing and playing = the performer should sing the pitches down an octave or more



= inhale while covering the embouchure hole with mouth

Leave 2-3" of silence between each phrase

GASP


Take a comfortable breath
all in one exhale
flz
ff
pp
flz
fff
ppp
3"
air → tone
air tones
pp
ff
pp
air → tone
air tones
ppp
fff
ppp
2"
turn flute in and out throughout phrase
flz
ppp
flz
2"
sing and play
ff
pp
flz
fff
ppp
3"
all in one inhale;
cover embouchure hole with mouth;
hold breath on key clicks
inhale
key clicks
ff
pp
inhale
fff
key clicks
ppp
inhale
key clicks
ff
pp
inhale
fff
key clicks
ppp