The Enactment of Cinematographic Techniques and Aesthetics of Perspective and Proximity in Musical Composition

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The Enactment of Cinematographic Techniques and Aesthetics of Perspective and Proximity in Musical Composition

ELSPETH MARY BROOKE

A portfolio of original compositions and thesis submitted in partial fulfilment of the requirements of the Royal Northern College of Music and Manchester Metropolitan University for the degree of Doctor of Philosophy

> Department of Composition Royal Northern College of Music Faculty of Arts and Humanities Manchester Metropolitan University

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vi

ABSTRACT

This research is situated in the field of practice-based research in music composition. The research methodology was to select visuals of existing film material, analyse the technical and aesthetic content of stills or short sequences, and develop a range of strategies for enacting components of the visuals in compositional materials, techniques, and formal structures. Working principally with the shot composition and cinematographic and editing techniques and aesthetics of perspective and proximity in the chosen film extracts, key arising compositional areas included variation forms, the subversion of registral hierarchies, and haptic timbres.

The literature review offers a wider context for the composition portfolio, examining film theory and analysis relevant to the research and providing an aesthetic survey of pertinent existing musical works.

The first films worked with were Dreyer's *The Passion of Joan of Arc* (1927) and Dulac's *La Souriante Madame Beudet* (1922). Matilda Mroz's *Temporality and Film Analysis* (2012) provided insights into two short scenes in Antonioni's 1960 film *L'Avventura*, which formed the basis of the following compositional case studies.

A methodology emerged that combined the compositional strategies generated by engagement with the film and film text materials with practical experimentation on instruments composed for, either by the composer or through workshops with instrumentalists. The result of the research is a coherent portfolio of instrumental and electroacoustic pieces, each composition arising from a filmic starting point. Central to the research methodology was an iterative process of reflecting on the questions arising from the research: these explorations form the basis of the critical commentary.

vii

CONTENTS

ACKNOWLEDGEMENTS	V
ABSTRACT	VII
CONTENTS	VIII
LIST OF PORTFOLIO COMPOSITIONS	XII
LIST OF FIGURES	XV
CHAPTER 1	
1.1 Introduction	1
Background	
Research Focus	2
1.2 Literature Review	4
Film Analysis and Theory Texts	4
Cinematography and Filmmaking Books	6
Musical Analysis and Musicology Texts	6
Musical Scores: Mapping	7
Musical Scores: Variation Forms:	8
Musical Scores: Looping and Repetition	8
Musical Scores: Perspective Shifts and Reconfiguration of Foreg	round and Background9
Musical Scores: Haptic Timbres	10
CHAPTER 2 PORTFOLIO COMMENTARY	12
2.1 Close-ups for 14 players	12
Close-ups Against Diffuse Backgrounds	15
2.2 Madame-Beudet's Faces: Miniatures for piano	21
Close-up Theories and Scale	21

La Souriante Madame Beudet	21
Instrumentation Choice	22
Face Volumes Mapped on to the Piano Keyboard	22
Movement I: Editing techniques analogies	25
Off-screen Space	26
Movement II: Shot-Reverse Shot	
Glittering Screen Interlude and Movement III	27
2.3 Outcrop for piano, EBow and samples	29
Mroz and L'avventura	29
Temps morts	29
Textured Backgrounds	31

Critical Reflection and Next Steps______33

2.4 L'Avventura Trio for Bass clarinet, Electric guitar, Live Foley and Percussion, and

Samples	35
Scene 1: Movement I	35
Instrumentation	36
Surface and Depth: Surface	37
Scene 2: Movement II	42
Hapticity: Timbral Detail and Variation	43
The Close-up and Slowness	44
Off-Screen Space	45
Field Recordings	46
Critical Reflection and Next Steps	46
2.5 Locations for piano and soundtrack	48
Visual Materials: Surface and Depth in the Soundtrack	48
Visual Materials: Live Piano	50
Structure: Looping and Improvisation	50
Critical Reflection and Research Development	51
2.6 Madame Beudet's Faces: Electroacoustic	53
Rhythm and Tempo Layers	54
Haptic Tunings	54
2.7 sharp and murky for 10 players	56
sharp and murky I: Surface and Depth	56

Camera Movement: Panning to Surface and Depth	57
2.8 Octet for mixed chamber ensemble, Workshop 3	59
Block Forms and Relativising Foreground and Background	59
Instrumentation and Haptic Timbres Experimentation	59
2.9 'seated CLAUDIA not forgotten CLAUDIA' for string quartet	61
2.10 Song for Amy for amplified acoustic guitar, electric guitar and electronic beat _	62
Haptic Listening Through Indeterminate Pitch and Timbral Instability	62
Shot Structure, Musical Mobiles and Variation of Configurations	63
Critical Reflection and Research Development	64
2.11 hillside - detail - sometimes - textures for contrabass clarinet and video	65
Video Composition	65
Structure, Camera Angle, Pitch, Register	65
Camera Angle, Grids and Repetition	66
Critical Reflection	67
2.12 Sandro, it's okay for contrabass clarinet	68
Critical Reflection and Research Development	68
2.13 Edits÷Deus Ex Machina for guitar trio	69
2.14 webby-blocks i and webby-blocks ii for Bb clarinet	70
Critical Reflection	73
CHAPTER 3 CONCLUSION	74
Emergent Research Questions	74
Reflection about Project	74
Areas for Development	75
Future Recommendations	76
BIBLIOGRAPHY	77
Texts	77

Musical Works	84
Filmography	86
DVDs	87
Media (other than DVDs)	88
APPENDIX	90
Octet for mixed chamber ensemble, Workshop 2 Score	90

LIST OF PORTFOLIO COMPOSITIONS

No.	Title	Instrumentation	Duration	Year of Composition	Recording Submitted
1	<i>Close-ups</i> for 14 players	fl, ob, B♭ cl, bn/dbn, hn in F, tpt in C, ttrbn, perc (1), piano, 2 vlns, vla, vlc, db	6 min 15s	Year 1 (Sept 2016-Sept 2017)	RNCM New Ensemble, conductor: Ellie Slorach, RNCM Concert Hall Date: 25 th January 2017
2	Madame Beudet's Faces: Miniatures for piano	piano	3 min 45s	Year 1	piano: Aaron Breeze Date: 20 th November 2017
3	Outcrop	piano, EBow and samples	3 min 30s	Year 1	piano: Elspeth Brooke Date: September 2017
4	L'Avventura Trio	bcl, elec, live foley and perc, and samples	17 min 10s	Year 1	bcl: Freya Chambers, elec: Carmel Smickersgill, live foley and perc mov I: Aidan Marsden; mov II: Elspeth Brooke Date: 4 th September 2017
5	Locations	piano and looped soundtrack	2 min (+)	Year 1–2	Soundtrack only First performance: Elspeth Brooke RNCM 22 nd November 2017
6	Madame Beudet's Faces: Electroacoustic	grand piano, upright piano, Sibelius midi playback recording	2 min	Year 2	grand piano: Aaron Breeze upright piano: Elspeth Brooke Sibelius midi playback recording Dates: November 2017

7	sharp and murky	fl, bcl, perc 1, perc 2, hp, pno, elec, vln, vlc, db	4 min	Year 2	Composers Lab Ensemble conductor: Jack Sheen Date: 12 th December 2017
8	Octet workshop 3	cbcl, bsax, perc (1), elec, acc, vln 1, vln 2, db	5 min 30s	Year 2	No recording submitted. Workshop: Composers Lab Ensemble, conductor: Melvin Tay Date: 29 th June 2018.
8a	Octet workshop 2: (Appendix)	cbcl, bsax, perc (1), elec, acc, vln 1, vln 2, db	(4 min)	Year 2	Composers Lab Ensemble conductor: Melvin Tay Date: 27 th April 2018
9	'seated CLAUDIA not forgotten CLAUDIA'	string quartet	5 min	Year 2	Marvolo Quartet. RNCM Gold Medal, RNCM Concert Hall Date: 23 rd June 2018
10	Song for Amy	gtr, elec and laptop	5 min	Year 2	acoustic gtr: Elspeth Brooke; beat programming and elec guitar ns laptop performance: Carmel Smickersgill. Amy McCauley book launch, The Peer Hat, Manchester Date: 2 nd July 2018
11	hillside - detail - sometimes - textures	contrabass clarinet and video	9 min 45s	Year 3	contrabass clarinet: Jason Alder Incógnito #1, Carol Nash Recital Room, RNCM Date: 11th October 2018
12	Sandro, it's okay	contrabass clarinet	3 min 45s	Year 3	contrabass clarinet: Jason Alder Date: 12 th December 2018

13	Edits ÷ Deus Ex Machina	guitar trio	7 min	Year 3	Zamorra Trio. RNCM PGR Conference Date: 22 nd May 2019
14	webby-blocks i	Bb clarinet	7 min 30s	Year 3–4	No recording submitted.
15	webby-blocks ii	Bb clarinet	7 min 30s	Year 3–4	No recording submitted.
			Total		
			Duration:		
			c. 89 min		

All scores and selected recordings can be found at:

https://www.dropbox.com/scl/fo/69ipux3pgph136v91cw0j/AOa5bcoDCrYxHJJ0V-HU1aA?rlkey=ps5zxo3zlw2jqt9mbfxecsl7z&st=eirx5oy0&dl=0

LIST OF FIGURES

Figure 1 Louis Ravet as Jean Beaupère in The Passion of Joan of Arc	13
Figure 2 Fanfare 1, first iteration (Ff1a), brass system (bars 4–6) in Close-ups	14
Figure 3 Relative Pitch, Rhythm and Orchestration in Fanfare Variants	14
Figure 4 Joan Background Chord	16
Figure 5 Fanfares and Background Chords in Close-ups	17
Figure 6 Jean Beaupère Fanfare Iterations, bars 4–24	19
Figure 7 Flickering flautando semi-quavers in Close-ups	20
Figure 8 Face 1: Medium Long Shot MLS (left) and Face 2: Medium Close-up (MCU) (ri	ght)
Volume Calculations	22
Figure 9 Volume Calculation for Face 3: Close-up (CU)	23
Figure 10 Pitch Ranges for Madame Beudet's Faces	24
Figure 11 Pitch Range Positions for Madame Beudet's Faces	24
Figure 12 Pitch Ranges for Madame Beudet's Faces	25
Figure 13 Thumbnail Sketches for Madame Beudet's Faces: Wipe	26
Figure 14 Off-screen Space Pitch Strategies for Madame Beudet's Faces	27
Figure 15 Visual Starting Point for Madame Beudet's Faces, Glittering Screen Interlude	28_28
Figure 16 Temps mort in Outcrop, bars 5–11	30
Figure 17 Contrapuntal Rhythmic Oscillation and Contoured Dynamics in bars 23–28_	31
Figure 18 Rhythmic Beating in Low Piano Samples in Outcrop, bars 57–60	32
Figure 19 Sostenuto piano effect in Outcrop, bars 44–46	33
Figure 20 L'avventura, 'Scene 1' Surface and Depth Shot Composition with Monica Vite	i as
Claudia	36
Figure 21 Part of the Percussion Set-up for L'avventura Trio	37
Figure 22 Surface Variation 1, bars 0–21: Visual and Musical Materials	38
Figure 23 Surface Variation 1, bars 0–5	39
Figure 24 Rhythmic and Melodic Cells Variation L'avventura Trio, Surface Variation 3 _	40
Figure 25 Final Surface Variation of L'avventura Trio, Movement I, bars 91–96	40
Figure 26 Foreground Becoming Background in Surface Variation 2, L'avventura Trio,	
Movement I, bars 22–27	41
Figure 27 Depth Section in Movement I, bars 114–120	42
Figure 28 Monica Vitti and Gabriele Ferzetti as Claudia and Sandro in L'avventura 'Sce	ne 2'
	43
Figure 29 Timbral variation in L'avventura Trio, Movement II, bars 141–143	44
Figure 30 L'avventura Trio, bars 173–175	45

Figure 31 Pitch Materials in Locations Soundtrack	49
Figure 32 Boxes 3 and 4 in Locations Live Piano Part	50
Figure 33 Structuring of tracks in Locations Logic Pro Arrange Window	51
Figure 34 Logic Pro Arrange Window for Madame-Beudet's Faces: Electroacoustic _	54
Figure 35 Structure of sharp and murky I	56
Figure 38 Octet Configurations	59
Figure 39 Jason Alder with Contrabass Clarinet and Sticky Notes	60
Figure 40 Key Structure for 'seated CLAUDIA not forgotten CLAUDIA'	61
Figure 41 Looped Ostinati with Indeterminate Pitch and Timbral Instability in Song fo	r
Amy, Amplified Acoustic Guitar	62
Figure 42 Looped Ostinati with Timbral Layers in Song for Amy, Electric Guitar	63
Figure 43 Basic Electronic Beat of Song for Amy	64
Figure 44 Grid and Perspectives Changes in hillside - detail - sometimes - textures	66
Figure 45 Grid Rhythms in hillside - detail - sometimes - textures	67
Figure 46 Staggered Timbral Transformation in Sandro, it's okay	68
Figure 47 Diagram of the Sectional Structure of the Camera Pan as Described by Whi	taker
	70
Figure 48 Structure Boxes for webby-blocks	71
Figure 49 Resizing the Area Equivalent to Time for webby-blocks Composition	72
Figure 50 Generating Time Signatures for webby-blocks	73

Chapter 1

1.1 Introduction

This research represents a significant contribution to the aesthetic debate centered on the enactment of shot composition and cinematographic and editing techniques and aesthetics in musical composition. The research outcomes are a portfolio of compositions accompanied by several recordings, and this critical commentary. In the following commentary, I provide a wider context for my work, set out my compositional methods and discuss the research questions and themes embedded in the portfolio works.

Background

Bernhard Lang's essay *Cuts'n Beats: a Lensmans View, Notes on the Movies of Martin Arnold* (2006), in which he discusses the methodology for his *Differenz/Wiederholung* series (1998–2022), was a key impetus for my research. Introducing this topic, Lang writes:

At the first look it seems to be a common place statement, a composer being influenced by cinema, since most contemporary composers and musicians seem to claim this for themselves, starting with at least Berg. It should be the issue of another treatise what is the reason for this, and where film took over the function of literature and painting as legitimizing and inspiring sources for music. (Lang, 2006, p. 1).

Lang goes on to discuss the compositional procedures behind his "transmedial transcriptions" (Lang, 2006, p. 1). This area of compositional activity was of particular interest to me as a composer already engaged with film genre and the aural aesthetic of cinema; I also had some previous grounding in film music analysis and film theory.

At the start of the research, I carried out an analysis and appraisal of music I had composed in recent years; this helped me to get a clear picture of my current compositional development and future aims. I particularly

wanted to work on harmony and structural form. This included questioning my rationale for harmonic decisions and clarifying the harmonic aesthetic I was aiming for, including consideration of genre. In terms of form, my objective was to generate material that could sustain for a longer time and to compose music that was less sectional.

Having written several opera and music theatre works, I wanted to compose for instruments rather than voice and not include a text in the pieces so that compositional choices would be around musical parameters without responding to an underlying programme.

In summary, I could see the potential for developing a research methodology that would produce an original contribution in this field and allow me to develop my practice along particular lines.

Research Focus

The focus of the research was to compose musical enactments of short clips of the visual material of the films. I worked with three films, all of which were black and white: Carl Theodor Dreyer's *The Passion of Joan of Arc* (1928); *La Souriante Madame Beudet* (1922), directed by Germaine Dulac; and *L'avventura* (1960), directed by Michelangelo Antonioni. Reading film analysis and theory and cinematography books was vital in my understanding of the film material and, therefore, the development of the project. Of many texts, Matilda Mroz's reading of *L'avventura* in *Temporality and Film Analysis* (2012) had a significant impact on the research, and Rod Whitaker's *The Language of Film* (1970) was a cinematography book I consulted multiple times.

Of the many words and phrases that might describe my research methodology—translation, parallel, or analogy, for example—I preferred 'enactment' as a flexible term that can encompass the range of compositional processes involved such as mapping volume measurements derived from film material onto musical pitch, expanding and recontextualising foley footsteps in a percussive soundtrack, or reimagining

the perspective shifts between two actors as a reconfiguration of melody and accompaniment. There is also an element of translation in the research methodology: translation between the language of film and the language of music, often via a bridge of text. However, for me, working under a heading of translation would imply a more directly equivalent relationship between the source film material and the composed music and an aim of producing an optimal, accurate translation version that is full and complete. In contrast, for my purposes, enactment seems better suited to a looser interpretation that can include the physicality of the movements involved in the mechanisms of the cinematographic techniques (the camera pan, for example) and the onscreen movements and spaces.

Working with the visual film materials and related film analysis and theory as source material, my aim was to generate musical materials and compositional processes that enacted the film materials and theories. The process is inherently problematical and subjective, and I worked with the arising questions and contradictions as a means of stimulating the compositional process. As a result, my compositional practice evolved into new, more experimental areas.

1.2 Literature Review

The following literature review looks first at some texts that have informed my research and then journeys through a range of relevant musical scores. I draw on film theory and analysis, cinematography and filmmaking books, musicological research, interviews with composers and texts by composers to provide context for my contribution to the aesthetic debate centered around the enactment of shot composition and cinematographic and editing techniques and aesthetics of perspective and proximity in musical composition.

Film Analysis and Theory Texts

Mary Ann Doane's *The Close-up: Scale and Detail in the Cinema* (2003) offers a wide-ranging overview of the history of the close-up and relating film theory, including Jean Epstein and Béla Balázs.

Another text I consulted early in the project was Daniela Kulezic-Wilson's *The Musicality of Narrative Film* (2015), and her discussions helped to inform my thinking about how time functions in film and music. As the research progressed, however, I focussed more on space than on time.

One of the more densely theoretical texts I read, Melenia Arouh's *Mapping Cinema Space* (2005), examines previous film philosophers' assertions that "by examining cinematic form we will be able to establish the uniqueness of cinema" (Arouh, 2005, p. 10). Arouh cites Sesonske's assertion that cinema has "a certain logical, although not phenomenological, duality" (Sesonske, 1973, as cited in Arouh, 2005, p.10). Arouh goes on to describe ways in which cinema is simultaneously 2D and 3D (Arouh, 2005, p. 11). She also writes about the discontinuity of the cinema space, both with the world of the viewer and with itself (Arouh, 2005, pp. 11–13), which connected to one of my main research themes.

As outlined in the introduction, Matilda Mroz's chapter about L'avventura in Temporality and Film Analysis (2012), specifically the

subsection, "Depth and Movement" (Mroz, 2012, pp. 53–62) was the film analysis text that most significantly impacted my research from part way through the initial exploratory phase onwards. Certain of Mroz's cinematographic analyses had a direct impact on my compositional experiments: these will be discussed in the main body of the commentary.

Mroz notes that academic discourse around Antonioni has stressed the flat, graphic qualities of the perspective in shot composition (Mroz, 2012, p. 54). For Seymour Chatman, for example, Antonioni's depth and perspective evokes that of Giorgio de Chirico's paintings (Chatman, 1985, p. 102, as cited in Mroz, 2012, p. 54). In contrast, Mroz's reading of the film emphasises "the film's fluid mobility" (Mroz, 2012, p. 54), and the focus on a "process of *relativising* in depth; that is, foreground and background are continuously placed in positions of perspectival relativity" (Mroz, 2012, p. 54)—a concept I found a fascinating provocation for the conception of compositional structures. In Mroz's conclusion to the chapter, she proposes for *L'avventura*, "a different critical configuration, one which foregrounds intimacy, fluidity, and affect" (Mroz, 2012, p. 84). I found thinking in terms of 'affect' freeing, as it allowed for the open possibility of 'affect' to arise in the compositions without needing to factor in aims of enacting the on-screen narrative (or not enacting it).

It is important to acknowledge that it is beyond the scope of this critical commentary to do justice to the scholarly rigour of the film theory and analysis texts I read, which integrate wide-ranging references from film theory, philosophy, art history etc. When working with these texts my priority was to enrich my analysis of (the) shot composition, cinematographic and editing techniques and aesthetics of perspective and proximity to inform my compositional strategies, rather than develop a position in relation to the philosophical or polemical within the texts.

Cinematography and Filmmaking Books

I consulted several cinematography and filmmaking books to increase my technical understanding. These included practical technical texts such as *Picture Composition* by Peter Ward (2002) and cinematography textbooks by Blain Brown (2016, 2021) and Kris Malkiewicz (2005). Rod Whitaker's *The Language of Film* (1970) describes the technical and experiential with great clarity (though some of Whitaker's language is outdated), whilst the more recent *The Language of Film* (2015) edited by Robert Edgar et al. provided a helpful summary of the basics of cinematographic terminology. Reading Alexander McKendrick's *On Filmmaking* (2004) deepened my understanding of the cinematographic techniques and aesthetics of perspective, such as camera angle and panning. For the purposes of this project, it did not matter that these texts were not the most up to date on the subject as I was consulting them primarily for the technical information and descriptions that sparked compositional starting points.

Musical Analysis and Musicology Texts

Scott D. Paulin's doctoral thesis, *On the Chaplinesque in Music: Studies in the Cultural Reception of Charlie Chaplin, Volume One* (2005) is, to my knowledge, the most comprehensive overview of musical compositions with close affinities to the 'enactment' rubric of my research. Paulin terms this music "paracinematic" (Paulin, 2005, p. 61) and proposes seven categories into which the works he looks at might fall. Of the seven, my composition portfolio is most closely allied to "(3) reactions to specific films" and "(5) appropriations of techniques and technologies, visual or acoustic" (Paulin, 2005, p. 61).

Paulin's article "Cinematic" Music: Analogies, Fallacies, and the Case of Debussy (2010) also examines some of the assumptions that have been made with regard to conflating the juxtaposition of contrasting types of musical materials with a misconstrued conception of montage. He argues that there is often a failure to consider the specificities of montage (Paulin,

2010, pp. 5–6) along with a misinterpretation of the edit as the primary building block of the language of film (Paulin, 2010, pp. 3–4); the aim of the edit in continuity editing is in fact largely to be invisible (Paulin, 2010, pp. 6– 7). The arguments Paulin puts forward increased my understanding of the context for my work, the complications and pitfalls of making analogies between cinematographic techniques and musical materials and forms. When discussing the conventions of classic Hollywood editing, I would agree with Paulin; although, as will be discussed in Chapter 2, the stylistic choices in the art cinema films with which I worked sometimes deviated from these conventions.

The opening passages of Ian Pace's chapter exploring the role of cinema and television in Michael Finnissy's composition in *Critical Perspectives on Michael Finnissy: Bright Futures, Dark Pasts* (Pace, 2019, pp. 344–375) also looks at this topic, examining Paulin's arguments and contrasting his "more circumspect" (Pace, 2019, p. 346) stance with those of other musicologists.

Musical Scores: Mapping

Several pieces with mapping or quasi-mapping in the compositional methodology processes provided useful reference points. These include *Etudes Boreales* (1978) by John Cage which map the properties of a star-chart onto musical parameters; *Inkwells* (2016–2017) by Cevanne Horrocks Hopayian—one of her "Eye-music" pieces (Horrocks Hopayian, n.d), composed in response to the ornate wooden fretwork and paintings by the late Khadambi Asalache for his home at 575 Wandsworth Road (London Symphony Orchestra, 2017) and Emily Howard's string quartet miniatures *Four Musical Proofs and a Conjecture* (2017) written in collaboration with mathematician Marcus du Sautoy. A looser approach than mapping, but that I see as connected due to the gestural enactment is Michael Finnissy's *Snowdrift* for piano (1972), which was composed after Stan Brakhage's film

Dog Star Man (1964). In *Snowdrift,* the depth and perspective are realised through layered splitting of registers in the cascades of notes.

Musical Scores: Variation Forms:

Pieces including Rzewski's, *The People United Will Not Be Divided!* (1975), in which material from each variation returns in the final variation, provided models for the potentials of variation form.

Musical Scores: Looping and Repetition

I looked at several of Bernhard Lang's Differenz/Wiederholung. pieces that were composed in response to Martin Arnold's films (Lang, 2005). In films including Pièce Touchée [Part Affected] (1989), Arnold repeatedly loops short sections of an old film, sending the actors' movements jittering back and forth in the manner of a glitching animatronic. Lang describes the Differenz/Wiederholung pieces as "trans-medial transcriptions" of Arnold's films (Lang, 2005, p. 1). Differenz/Wiederholung 5 (2000), scored for a mixed ensemble of 14 instruments and magnetic tape, is typical of Lang's rhythmic approach in several pieces, with single bars looped multiple times, often with limited pitches and many doublings. Jennifer Gottschalk proposes that the effect of such looping is a kind of magnification, writing, "by looping, and in that way focusing on a narrow band of material, that narrow band is placed under a sort of microscope, filling a duration with limited material" (Gottschalk, 2016, p. 141). And Christine Dysers observes an experience of the transformation of the material while listening, remarking, "the extreme repetition of the same musical material causes the listener's perception of it to change gradually over time, causing the material to swap its previously fixed identity for a vast variety of meanings and interpretational possibilities" (Dysers, 2015, p. 37). Elsewhere, Diedrich Diedrichsen neatly summarises the Differenz/Wiederholung series as "complex simple" (Diedrichsen, 2011), and it is this description that could perhaps be applied to some of the works in my portfolio that combine one musical parameter that is very simple with more complex organisation of the other parameters.

The structure made of layered loops combined with intricate, weblike textures of Bryn Harrison's *Receiving the Approaching Memory* (2014) opened my ears as an example of looping and variations form in combination with subtly detailed materials.

Musical Scores: Perspective Shifts and Reconfiguration of Foreground and Background

Georges Aperghis's *Champ-Contrechamp* [Shot-Reverse-shot] (2010) takes a playful approach to enacting the cinematography technique of the title, with his sandbox, the context of the conventional roles of concerto soloist and ensemble. Dynamics and timbre are used to great effect as shifting meta-instruments of different sizes are created. The relationship between the soloist and the ensemble is complex and multi-layered and does not hinge on the juxtaposition of materials but on the interplay of variants of materials. Pianist Nicholas Hodges describes in an interview about the piece that you cannot measure the significance of each gesture until you have reached the end of the piece and had time to absorb the whole (Hodges, 2011), which corresponds to the way in which individual film shots function relative to each other. The dynamics of this piece are also significant, with the soloist often playing at very quiet dynamics. *Champ-Contrechamp* makes an interesting comparison with my Octet with its shifts in foreground and background perspectives.

A piece which enacts a specific example of a cinematographic technique is Steven Daverson's *Studies for Figures Outside a Dacha* (2019) for piano. Daverson takes as his starting point a shot in Tarkovsky's *Nostalghia* (1983), in which a camera pans across three women and as it continues panning we see the same figures again (with a young boy, a horse, and a dog) in a different configuration of distance from the camera (the effect being achieved by the actors running behind the camera whilst it is panning).

Paulin's clarifications could be applied to Christopher Cook's programme note, which draws a comparison between the editing together of

film and the juxtaposition of contrasting musical materials in Birtwistle's music (Cook, 2014). More poetically, perhaps, Philip Rupprecht highlights the closing passage of *Chorales* (1960–1963), which features a rallentando in combination with a gradual, yet uneven slowing down of the beat, proposing that "the effect resembles a sudden cinematic zoom, focusing ever more closely on a small scenic detail, glimpsed initially in the distance. (The cinematic equivalent was already familiar in the New Wave films of Jean-Luc Godard and Francois Truffaut)" (Rupprecht, 2015, p. 31). In respect to my portfolio pieces, however, pieces such as *Endless Parade* (1986), in which a shifting scene is viewed from several different angles, are a more pertinent reference.

A contrasting approach to change of perspective is found in George Benjamin's *Palimpsests* for orchestra (2002), which plays with reconfigurations of the opening "lyrical polyphonic song" (Benjamin, 2002) played by four clarinets on which the first movement is largely based. This is reconfigured vertically and played by brass in a stab chord in bar 14.

Musical Scores: Haptic Timbres

Another piece that combines 'haptic' sounds and spatialisation is Michael Gordon's *Decasia* for orchestra (2001), which physically spatialises the players in both the staged and concert versions. When collaborating with filmmaker Bill Morrison, Morrison showed Gordon some spoiled film. *Decasia* musically enacts the physical qualities of the degraded and marked film. The enactment is primarily through creating an 'out-of-tune' harmonic language with instruments of the ensemble being detuned; Gordon envisioned the piece as an orchestral realisation of an old out-of-tune piano (Gordon, n.d.).

Several aspects of Rebecca Saunders's music can be drawn on to contextualise my project. To stay with the shifting perspective theme, the *Stirrings Still* series (2016/19) are examples of Saunders's approach. In these

chamber pieces, the instrumentalists are spatialised throughout the performance area. Saunders describes their structure as follows:

A single acoustic landscape made of quiet sound images, fragile, like echos or resonances, is enclosed within itself, encircling and neverending. Rather like a large mobilé which can be observed from numerous perspectives, this quasi static sonic image is projected into audible space. (Saunders, 2006)

Considering the connection between the 'encircling' structure and the 'quasi static' result raises questions about enacting the recursive elements of film grammar: the shot, being the most obvious, and the rate of loop, for example. Saunders's works often feature extended instrumental techniques that have been developed in collaboration with the player. There is deep exploration of the grain of the sound. Saunders describes the individual instrumental parts in the *Stirrings Still* series as "sound surfaces" (Saunders, 2006), which resonated with the hapticity in the surface and depth oppositions that will be discussed in Chapter 2.

Chapter 2

PORTFOLIO COMMENTARY

2.1 Close-ups for 14 players

My preliminary reading centred on cinema as an immersive art form. From this starting point, the close-up quickly emerged as an element of cinematic immersion that would be fruitful to investigate, with Carl Theodor Dreyer's *The Passion of Joan of Arc* (1928) given as a prime example. The close-ups in *The Passion of Joan of Arc* are notable for their abundance, the variety of unusual shot angles and the intensity of emotion displayed on the characters' faces. Paul Schrader describes Dreyer's distinctive editing together of these close-ups thus:

One of the first rules of editing is to establish spatial geography. Do a master shot, come in close, do some over-the-shoulder shots, some singles, maybe a reverse master, re-establish geography, come back in again. But there are long sections in *The Passion of Joan of Arc* in which Dreyer gives us no spatial orientation and just goes from close-up to close-up. (Schrader, 2014, para. 12)

I selected the torture chamber section of the court scene to work with (36:26-41:10)¹. This scene is largely composed of close-ups of Joan and the prosecutor, Jean Beaupère. Beaupère heads a group of church officials attempting to scare Joan into signing a confession; they threaten her with a variety of torture instruments, including a spinning spiked wheel that takes up the whole shot at times.

I made rudimentary thumbnail sketches of the scene to refer to whilst composing at my desk on manuscript paper. This was a practical step applied

¹ Timestamp refers to *The Passion of Joan of Arc* [DVD], (2004), Sony Home Video Entertainment.

throughout my research: a variety of words, numbers and diagrams functioned as 'bridges' between the film materials and the composition.

The sinfonietta instrumentation of *Close-ups* was pre-decided as the piece was a student commission for the RNCM New Ensemble for the *In Focus: Anders Hillborg* series². Working with an ensemble of this size, orchestration was a key factor in my compositional methodology; I selected a number of shot contents for which to compose different kinds of musical materials assigned to groups of instruments from within the ensemble.

Fanfares as Equivalents to Close-ups of Jean Beaupère

From bars 4–24, the close-ups of the Jean Beaupère figures, which I called fanfares, are assigned to brass, and a brass and oboe group whilst a violin duet plays the Joan figures. My aim was to enact the perspective change of three close-ups of Jean Beaupère (see Figure 1) in the rhythm, pitch, and orchestration of three variants of the fanfare.

Figure 1

Louis Ravet as Jean Beaupère in The Passion of Joan of Arc

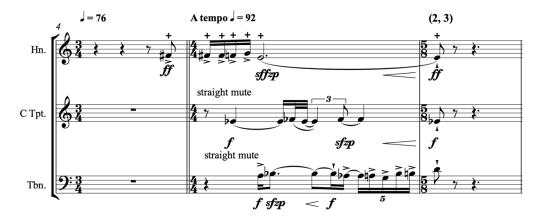


Note. The Passion of Joan of Arc, a film by Carl Theodor Dreyer. 1928 GAUMONT. Reprinted with permission.

As shown in Figure 2, the abrasive, theatrical style of Jean Beaupère's speech guided my choice of jagged, irregular rhythms for Fanfare 1.

² The RNCM *In Focus* series gives a retrospective of a living composer through several concerts, with student pieces programmed alongside the featured composer's works.

Figure 2



Fanfare 1, first iteration (Ff1a), brass system (bars 4–6) in Close-ups

A point of reference I had in mind was the french horn role in Peter Maxwell Davies's opera *The Lighthouse* (1979): in the Court of Enquiry of the Prologue the solo horn poses 'questions' to the three officers.

To enact the close-ups of Jean Beaupère from the three different angles, I varied the compositional parameters, as shown in Figure 3.

Figure 3

Relative Pitch, Rhythm and Orchestration in Fanfare Variants

Fanfare 1	
Angle of Jean Beaupère to camera:	front facing
Vertical pitch range order of instruments:	horn trumpet trombone
Pitch range:	high
Speed of rhythmic movement:	medium
Fanfare 2	
Angle of Jean Beaupère to camera:	side-on
Vertical pitch range order of instruments:	trumpet horn trombone
Pitch range:	low

Speed of rhythmic movement:

slow

Fanfare 3	
Angle of Jean Beaupère to camera:	low angle (from below)
Vertical pitch range order of instruments:	oboe trumpet trombone horn
Pitch range:	high
Speed of rhythmic movement:	fast

Rearranging the conventional vertical order of the scoring of these instruments provided a relative change in perspective for each Fanfare. In Fanfare 3, this is enacted most accurately; if we imagine a fixed mid-point listening position, the tessitura moves higher in relation to this, enacting the low angle from which Jean Beaupère is viewed.

Close-ups Against Diffuse Backgrounds

Another feature of the aesthetic of this scene is the diffuse, plain backgrounds to the close-ups. In the first section of *Close-ups* to bar 23, this is enacted through pitch, rhythm, orchestration and dynamics. There are two recurring 'background' chords which are consistent in pitch and orchestration. The Joan background chord (see Figure 4) is a widely spaced microtonal hexachord in contrast with the Jean Beaupère fanfares and Joan figures, which are tightly spaced, largely move chromatically and have more dynamic contour.

Figure 4

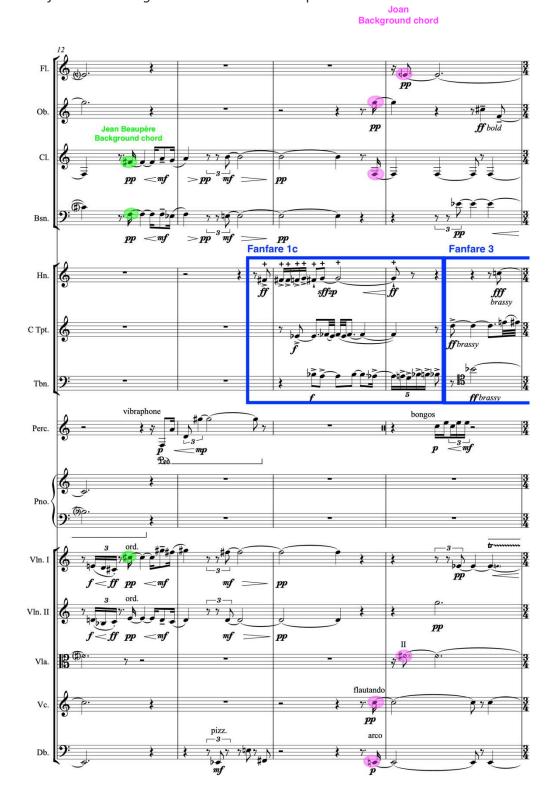
Joan Background Chord



Both the Jean Beaupère and Joan background chords recur with the same pitches, whilst the melodic movement of the foreground material is varied with each iteration, paralleling the temporal progression of the closeups of Jean Beaupère and Joan as well as the visuals of the inanimate background (particularly of Joan's background) which is visually static, despite time moving forward (see Figure 5).

Figure 5

Fanfares and Background Chords in Close-ups





Recursive Variations

Recursive variations are an inherent part of continuity editing³; seeing the same people and environments in multiple shots from different camera angles is what gives the viewer a sense of spatial continuity. As shown in Figure 6, the order of the Fanfare iterations and the variations within them enact this structure of recurrences in film grammar.

Figure 6

Jean Beaupère Fanfare Iterations, bars 4-24

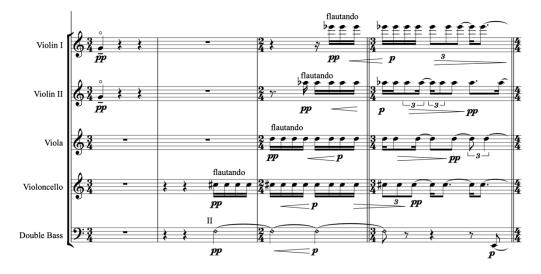
bb. 4–6	bb. 7–9	bb. 10–11	bb. 13–15	bb. 15–17	bb. 17–19	bb. 21–22	bb. 23–24
Ff1a	Ff1b	Ff2a	Ff1c	Ff3a	Ff2b	Ff1d	Ff3b

Flickering Movements on the Surface and Behind the Scenes

Having said that the backgrounds to Joan's close-ups are still, there is another layer to the film which imbues even the plain backgrounds with movement: there is a flickering quality to the film image. This flickering is translated into a recurring *flautando* semi-quaver figure in the strings (see Figure 7) Rhythmically, these figures contrast rhythmically with the fanfares, which start with canonical entries and end in rhythmic unison; the *flautando* figures begin in rhythmic unison semi-quavers and end in counterpoint, or 'blurred', also enacting a shot going out of focus. For me, it also evoked the mechanics of a film projector and the regular divisions of the film strip into rectangles.

³ For a useful summary of the key features of continuity editing, see Edgar et al., 2015, pp. 184–188.

Figure 7



Flickering flautando semi-quavers in Close-ups

This is an interesting figure for reflecting on the aim of enacting the film material: if I were to enact compositionally the flickering aesthetic of the film with any degree of accuracy, the musical element would need to continue throughout the whole composition. In terms of screen space and proximity, it was an interesting provocation for different conceptions of musical foreground and background levels.

2.2 Madame-Beudet's Faces: Miniatures for piano

Close-up Theories and Scale

Reading film theory and analysis about the close-up led me to Mary Ann Doane's article, *The Close-up: Scale and Detail in the Cinema* (2002). In one passage that I found particularly interesting, Doane (acknowledging Eisenstein's and others' observations about the following) writes:

In Russian and in French, the term for close-up denotes largeness or large scale (e.g., *gros plan* in French); while in English, it is nearness or proximity that is at stake. The close-up thus invokes two different binary oppositions—proximity vs. distance and the large vs. the small. (Doane, 2002, p. 92)

La Souriante Madame Beudet

I had not heard of Germaine Dulac: googling 'first feminist film' brought up various webpages about her film *La Souriante Madame Beudet* (1922), including Colin Marshall's article on Open Culture website (Marshall, 2015), and I sought out the film. At the same time, I was learning about the close-up and other cinematography techniques and aesthetics in cinematography textbooks. It was interesting to observe the experimental effects that Dulac was using in the context of *La Souriante Madame Beudet*. She was one of a group of early filmmakers influenced by the music of impressionist composers, as noted by Kulezic-Wilson:

The very first attempts to create fluent rhythmic structures in film were performed by the French film Impressionists who modelled their films on various musical pieces using rhythmic changes in music to determine the lengths of the shots in their abstract films. (Kulezic-Wilson, 2015, p. 38)

Instrumentation Choice

As so many of my strategies for *Close-ups* were contingent on the number and range of instruments available, I wanted to challenge myself to see how the strategies would translate to composing for solo piano. Another factor in the choice was that early in the film, Madame Beudet is shown playing the piano, and later, when her husband and his colleague Monsieur Lebas are laughing about this, we see the Debussy piece *Jardins sous la Pluie*, the third movement of *Estampes* (1903), is on top of the piano.

Face Volumes Mapped on to the Piano Keyboard

I decided to take a literal approach to exploring how the comparative scale of faces in different shots could be mapped onto the piano keyboard. I selected three stills with which to work: a Medium long shot (MLS)⁴, a Medium close-up (MCU)⁵ (both shown in Figure 8), and a Close-up (CU)⁶ (see Figure 9). I then measured and calculated the volume of each face in centimetres.

Figure 8

Face 1: Medium Long Shot MLS (left) and Face 2: Medium Close-up (MCU) (right) Volume Calculations





Note. Madame Beudet (Germaine Demoz) in *La Souriante Madame Beudet,* by G. Dulac, 1922. In the public domain.

⁴ "Medium long shot (MLS): the human figure is framed from around the knees upward" Edgard et al., 2015, p. 132).

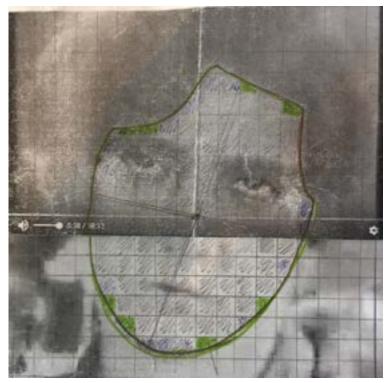
⁵ Medium close-up (MCU): "Close-up of one or two (sometimes three) characters, generally framing the shoulders or chest and the head" (Hayward, 2023, p. 374).

⁶ Close-up (CU): "The subject framed by the camera fills the screen (Hayward, 2023, p. 374).

As shown in Figure 9, I chose a lower half of Madame Beudet's face from a different shot at a suitable angle to match together, forming a large complete face for Face 3.

Figure 9

Volume Calculation for Face 3: Close-up (CU)



Note. Madame Beudet (Germaine Demoz) in *La Souriante Madame Beudet,* by G. Dulac, 1922. In the public domain.

Having calculated the relative volumes in centimetres, I mapped these proportions on to the 'frame' of the vertical pitches of the range of an 88-key piano (see Figure 10).

Shot	Percentage of Frame Volume (Frame: 17.75 cm × 12.75 cm = 226 cm ²)	Number of Semitones
MLS	3 cm ² = 1.3% of 226 cm ²	1.3% of 87 semitones = 1 semitone (1.1)
MCU	19 cm ² = 8.4% of 226 cm ²	8.4% of 87 semitones = 7 semitones (7.3)
CU	Upper half: 66.5 cm ² = 29.4% of 226cm ²	29.4% of 87 semitones = 26 semitones (25.6)
	Upper + lower half: 110 cm ² = 48.7% of 226cm ²	48.7% of 87 semitones = 42 semitones (42.4)

Pitch Ranges for Madame Beudet's Faces

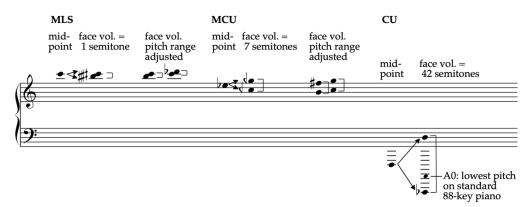
Figure 11

Pitch Range Positions for Madame Beudet's Faces

Shot	Percentage Down Frame of Mid- point of Face	Percentage Down Frame of Mid- point of Eyes	Keys Down Piano Keyboard
MLS	3.6 cm of 12.75 cm = 28%		28% of 88 keys = 25 keys (24.6 exactly)
MCU	5 cm of 12.75 cm = 39%		39% of 88 keys = 34 keys (34.3 exactly)
CU	11.65 cm of 12.75 cm = 91%	Right eye: 9.1 cm of 12.75 cm = 71% Left eye: 10.2 cm of 12.75 cm = 80%	91% of 88 keys = 80 keys

I calculated the vertical position on the piano keyboard by measuring the eyes and then mapping this onto the pitch range to produce a series of three pitch ranges, the third of which goes lower than the range of the piano to parallel off-screen space (see Figure 12).

Pitch Ranges for Madame Beudet's Faces



These pitch ranges apply across movements 1, 2 and 4, so there is an interconnectedness between the movements: Mov I: MLS and CU; Mov II: MLS; Mov 4: MCU and CU. An adjacent model for this approach was the large-scale piano variations *The People United Will Never be Defeated!* by Rzewski (1975). The piece is a set of 36 variations on the Chilean song, *iEl pueblo unido jamás será vencido!* by Sergio Ortega and Quilapayún. The theme returns in the final movement, accompanied by reiterations of elements from the previous variations.

Movement I: Editing techniques analogies

I selected three editing techniques used in the film, which I had recently read about in Rod Whitaker's *The Language of Film*.

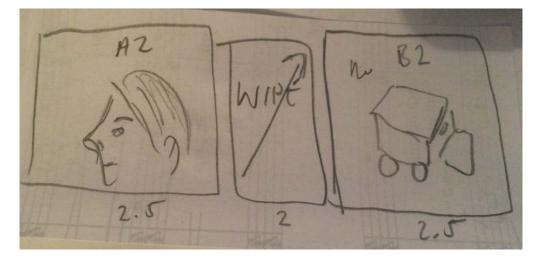
Dissolve. "Perceptually, the dissolve (lap-dissolve) is an editorial device that permits the second shot to emerge through the first and replace it on the screen" (Whitaker, 1970, p. 51). There are recurring dissolves in the piece during which, for example, the MLS material dissolves into another material (paralleling a shot).

Wipe. "In its simplest form, the wipe appears to be a line traveling across the screen, devouring the old shot as it goes, and leaving the new shot in its wake" (Whitaker, 1970, p. 52). There is only one wipe in the piece; the enactment is with pitch in bars 5–6.

Working with thumbnail sketches helped me to compose without needing to rewatch the film (see Figure 13)

Figure 13

Thumbnail Sketches for Madame Beudet's Faces: Wipe

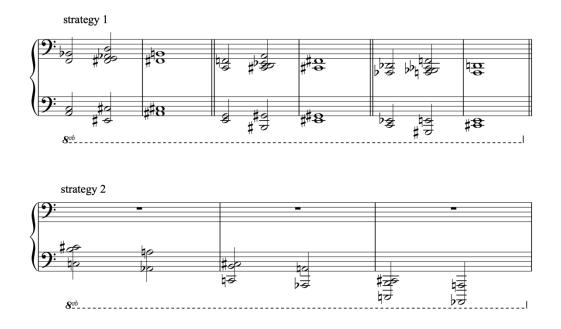


Cut. Returning to Whitaker's conception of the cut to write this commentary, I realise that I did not respond to what Whitaker describes as the "perceptual implications" (Whitaker, 1970, p. 50) of the cut. He writes, "A cut at the end of a shot projects its content forward. One does not 'cut from' nearly so much as one 'cuts to'" (Whitaker, 1970, p. 50). Later in the research project, I developed this approach. In *webby-blocks i* and *webby-blocks ii*, for example, the primary concern is trying to enact the 'perceptual implications' of panning, as described by Whitaker.

Off-screen Space

As shown in Figure 14, I developed a number of pitch strategies for paralleling off-screen space. The idea was to set up a descending pattern that would go off the end of the piano keyboard, with the upper notes remaining heard and the lower ones implied by a familiarity with the repeating pattern.





Strategy 1 is used in Movement I, although it could have been better realised with the pattern travelling lower.

Movement II: Shot-Reverse Shot

The idea was to enact a feature of shot-reverse-shot⁷: that the offscreen character is assumed present despite not being visible.

Glittering Screen Interlude and Movement III

The idea for the Glittering Screen Interlude was more programmatic. The filigree figures in the music are illustrative of the impressionistic image that appears after Madame Beudet plays the Debussy piece on the piano (see Figure 15). Movement III is a jig in Rondo form.

⁷ Shot-reverse shot: "This usually begins with a master shot to show the positioning of the two actors, followed by the shot-reverse-shot section, in which the characters are filmed actor 1 in the left hand of the frame looking right, followed by the reverse – actor 2 on the right-hand side of the shot looking left." (Edgar et al., 2015, p. 188)

Visual Starting Point for Madame Beudet's Faces, Glittering Screen Interlude



Note. La Souriante Madame Beudet, by G. Dulac, 1922. In the public domain.

2.3 Outcrop for piano, EBow and samples

Mroz and L'avventura

Researching the close-up led me to Matilda Mroz's chapter about Michelangelo Antonioni's 1960 film *L'avventura* in *Temporality in Film Analysis*. In Mroz's chapter, and particularly the section subtitled, 'Depth and Movement', there were many ideas that could serve as the starting point for composition. Interested to learn more about the stylistic choices of Antonioni and *L'avventura*'s cinematographer Aldo Scavarda, I also read more widely about *L'avventura*.

L'avventura has an elliptical structure with Anna, one the three central protagonists, going missing early in the film during a boating trip to an island. The rest of the film follows Anna's boyfriend, Sandro, and friend, Claudia, who become romantically involved as they search for her.

Unlike *La Passion de Jeanne d'Arc* and *La Souriante Madame Beudet, L'avventura* has sound and a musical score by regular Antonioni collaborator, Giovanni Fusco. I chose to continue the approach of taking the cinematographic and editing techniques of the film as the compositional impetus and did not respond to the score by Fusco, nor much to the diegetic⁸ sound in the film for *Outcrop* and the subsequent pieces in the portfolio that take different aspects of *L'avventura* as their starting point. For this piece, I worked with different ideas from the Mroz chapter as a starting point, combining them together.

Temps morts

One of Antonioni's stylistic hallmarks is the *temps mort*. This is when shots are edited so that the "footage at each end extends beyond what is strictly necessary for the action" (Nowell-Smith, 1997, p. 27). With my focus still on immersive cinematic techniques, I saw perceptual parallels between

⁸ Diegetic and non-diegetic are the most technical terms for sound that has its source within the world of the film and sound that is external, or "commentative" (Dix, 2016, p. 87).

this and the close-up: instead of a change of scale, here, the change of pace encourages greater attention to detail. Mroz notes, "the 'dead times' create a particular pace for the film and give it its slow temporal rhythms. We are invited to pay attention to things that might ordinarily escape us" (Mroz, 2012, p. 79). Most obviously, I enacted this by writing the piece in a slow tempo with lots of sustained notes.

EBow. I wrote the piece for piano and EBow, as an EBow placed on strings inside the piano extends the usual decay time of the piano notes. Depending on the make and model of the piano, certain notes are more prone to the EBow starting to rattle. As shown in Figure 16, the sustained EBow and sample notes were meant to parallel the revealed mise-en-scène⁹ and the live piano, the foreground movement of the characters.

Figure 16

Temps mort in Outcrop, bars 5–11

E-bow Pno.

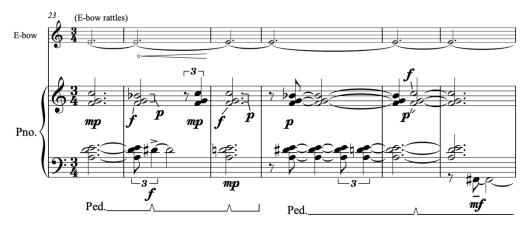
There is differentiation between the live and pre-recorded layers created through the attacks of the standardly played piano and the live EBow notes and samples, which emerge from silence.

⁹ Mise-en-scène: "A term derived from the French theatre literally meaning 'putting into a scene' and referring to the meaningful arrangement of space on-screen" (Popple & Kember, 2004, p. 129).

Textured Backgrounds

Matilda Mroz writes about the richness and variety of the backgrounds in the film, noting, "even if, for example, characters are framed against walls, these tend to be textured and detailed rather than blank" (Mroz, 2012, p. 55). There are many striking shots during the initial group search for Anna on the rocky Island of Lisca Bianca. In these shots, the foreground is the characters in front of the rocky textures and in the background, the sea extends to the horizon. In this piece, I aimed to translate both the textured, contoured surface of the rocky foreground behind the characters and the contrasting textures of the sea and sky in the background. I was interested in the idea of the textured background of the undulating waves in the sea being non-linear, but not still—there is movement, but the movement is like a loop, without an easily perceived beginning, middle or end. In *Outcrop*, a parallel for this was to compose layering of different kinds of oscillation: things moving and oscillating at different speeds. An example is the contrapuntal passage shown in Figure 17, in which there is dynamic depth in the live piano chords as well as in the tempi.

Figure 17

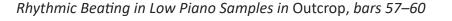


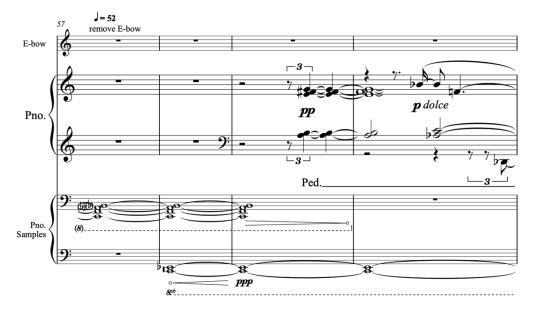
Contrapuntal Rhythmic Oscillation and Contoured Dynamics in bars 23–28

It was a new approach for me to write chords with different dynamics within each chord.

Piano acoustics. Again, the specifics of the instrument's acoustics were a key element of the composition. I recorded beating on an upright piano with the lid open, to create a rhythmically pulsing background (see Figure 18).

Figure 18



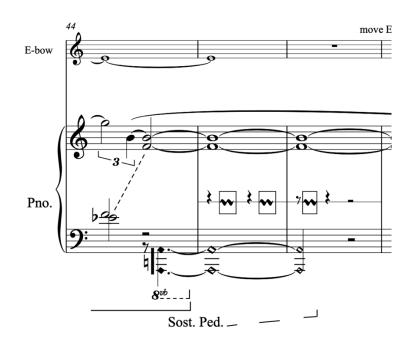


Sostenuto pedal effect. A discovery that came about through experimentation with different ways of playing simultaneous dynamic layers on the grand piano was the technique of depressing several bass notes silently, catching these depressed notes with the sostenuto pedal, and then releasing the sostenuto pedal quickly to make a very quiet, percussive, but also pitched, sound as the hammers hit the piano strings. Sharing this technique with Professor David Horne, he developed the technique on the upright piano in his room: slowly releasing the pedal in stages results in the hammers hitting the strings at different times, creating a rhythm that is both random and mechanical-sounding. On an upright piano, the technique is much more resonant through the entire range of the piano than on the grand piano. I then experimented further and found that by depressing the sustaining pedal on the piano, overlapping the sostenuto pedal and releasing

the sustaining pedal, the technique can apply to the entire range of the piano covered by the sustaining pedal, freeing up the pianist to play other notes instead of depressing the notes. In bars 44–46, the silently depressed keys will not be included in the hammer drop (see Figure 19).

Figure 19

Sostenuto piano effect in Outcrop, bars 44–46



Critical Reflection and Next Steps

I was becoming more aware of how repetition and variation are a part of the language of film and was considering ways of translating this compositionally. Another aspect that I was reflecting on was the perceptual differences between watching a film and listening to a piece of music. I was starting to consider the difference between the experiential and technical when it came to the film. Experientially, for example, the eye flickers around a large screen and is drawn to different parts of the screen at different times; despite the other sections of the screen still being present, they may be in peripheral view.

I enjoyed reading Mroz's chapter, which engages with other key Antonioni sources; it interested me that my methodology was potentially a practical mode of engaging with contrasting interpretations and readings of the cinematography of *L'avventura*.

An area I would have liked to explore more is amplification of the piano. Piano piece references I looked at included *Makrokosmos Vol. 2* for amplified piano by George Crumb (1973), in which the subtle vibrations of the sheet of paper on the piano strings are amplified. In *Outcrop*, the sostenuto pedal effect was very quiet on the grand piano and would need amplification to be heard live.

As I found Mroz's section 'Depth and Movement' particularly fruitful to work with, I began to adjust and narrow the focus of the research from the broader 'immersive cinematographic techniques' to the more specific 'cinematographic techniques of perspective and proximity'.

2.4 *L'Avventura* Trio for Bass clarinet, Electric guitar, Live Foley and Percussion, and Samples

For *L'avventura* Trio, I worked again with Matilda Mroz's *Temporality in Film Analysis* (2012). Of several scenes Mroz illuminates in the chapter about *L'avventura*, I looked in detail at two scenes described in the section subtitled 'Depth and Movement' (Mroz, 2012, pp. 53–62): I will refer to these scenes in the rest of this commentary as Scene 1 and Scene 2.

Scene 1: Movement I

Mroz describes how surfaces and depths are frequently framed together in one shot composition in *L'avventura*. An example she finds striking is the scene in which Claudia is waiting for Claudio to return to the Montaldo villa. In a two-shot sequence starting at 1:17:46¹⁰, the camera pans¹¹ right to left following Claudia when, on hearing a car, she runs out to the balcony, and in the next shot pans left to right as she runs out onto the balcony (see Figure 20). In this second shot, the mise-en-scène is made up of a dark panelled wooden wall on the left-hand side and the bright exterior of the tiled balcony on the right, with mountains and trees beyond.

Mroz writes that "the dynamic oppositions in this composition activate a powerful resonance" (Mroz, 2012, p. 57) and goes on to note that Laura U Marks's concepts of "optical visuality and haptic looking" (Marks, 2012, p. 57) can be applied here. For Mroz, "the presentation of optic and haptic modes simultaneously within one shot invites a fascinated look at the image. By being presented in a single shot rather than in succession, a movement is activated between the two modes" (Mroz, 2012, p. 57–58). I could see many possibilities for responding to this scene compositionally, with the compositional procedures guided and enriched by Mroz's writing.

¹⁰ Timestamp refers to *L'avventura* [DVD], 2003, Korean Import Edition.

¹¹ Pan: "Short for *panoramic*, the term pan applies to left or right horizontal movement of the camera" (Brown, 2016, p. 304).

L'avventura, 'Scene 1' Surface and Depth Shot Composition with Monica Vitti as Claudia



Note. From *L'avventura* by M. Antonioni (Director) – Italy, France – © 1960 – Cino Del Duca; Cinématographique Lyre. Reprinted with permission.

Instrumentation

Having written *Outcrop* for piano, EBow and samples, I wanted to explore translating the 'surface and depth' images described by Mroz for a mixed chamber group. I chose bass clarinet and electric guitar as there was much potential for layered dynamics and textural depth on these instruments. Thinking about oppositions also suggested going to the extremes of timbre with noise elements, and I decided to write a percussion part that featured objects such as toys and household items. As shown in Figure 21, I used a contact microphone and experimented with the sound of different toys, brushes, paper, etc., on a metal baking tray.

Part of the Percussion Set-up for L'avventura Trio



I had previously integrated diegetic and non-diegetic sounds into music when composing for theatre and dance. A concert music reference is the extensive playing of paper by the percussionist in the ensemble piece *Schnee* by Hans Abrahamsen (2008). I could also see the potential for the noise end of the spectrum on the bass clarinet and electric guitar. I aimed to see if I could enact the materials of the film source as accurately as possible to set limitations that would be a provocation for new compositional directions, whilst also engaging with emerging research questions about how the aesthetic of the resulting music related to the aesthetic of the film source; for Movement I, the aim was a light and playful musical aesthetic and choosing items such as the wind-up chick was part of this.

Surface and Depth: Surface

The piece is divided into surface and depth sections with distinct materials for each. The surface variations are at bars 0–21, bars 22–27, bars

60–75, bars 76–81, bars 82–98; and iterations of the surface material appear in the final depth section at bars 110–112, bars 134–135 and bars 137–138.

Surface Materials. My methodology was to look in detail at the miseen-scène of Scene 1 and make decisions about translating the specifics of these materials into musical materials (see Figure 22 and Figure 23).

Figure 22

Surface (Wall side)	Musical Translation
The wall has regularly spaced wooden panelling	Rhythm, Timbre and Pitch: All instruments: Regular accented chords, in rhythmic unison, diatonic
	chords
The wall is made out of wood, an organic material with a grain with natural variation to it	Rhythm, Timbre and Pitch: Bcl and Egtr: Rhythm, Timbre and Pitch: Contrapuntal movement with some rhythmic synchronisation of parts, variation of attacks and timbral techniques (Bcl.: trills, flz. Egtr.: tremolo with plectrum), melodic cells derived from hexachords
Figurines on top of the panel are irregularly spaced	Rhythm, Timbre and Pitch: Foley/Perc: irregularly spaced rhythms, variation of timbre (element of choice for player), 'unpitched'

Surface Variation 1, bars 0–21: Visual and Musical Materials

Surface Variation 1, bars 0–5



I chose a time signature of 6/4 and the two-bar groupings with the idea that there would be enough time between the down beat accents for rhythmic variation within the contrapuntal material as well as scope for audible rhythmic synchronisation within these sections.

Camera Angle: Rhythmic Structures. In the process of composing, the Antonioni image morphed into more of an abstract idea in my mind of a long panelled wall angled away from the camera—the perspective meaning that the panel demarcations look closer and closer together. As shown in Figure 24, the surface material—made up of rhythmic and melodic cells—repeats in a series of rhythmic and harmonic variations.

Bars:	22–23	24–25	26–27	28–29	30–31	32–33	34–35	36–37
Bcl	А	В	С	D	А	В	С	D
Rhythm								
Bcl	А	В	A1	B1	А	В	A1	B1
Melody								
Egtr	А	А	А	А	А	А	А	А
Rhythm								
Egtr	А	В	А	В	А	В	А	В
Melody								

Rhythmic and Melodic Cells Variation L'avventura Trio, Surface Variation 3

Across the surface variations, the accents enacting the panel ridges get closer and closer together. There is also a contraction procedure in how the bars are grouped within the first section. In bars 0–16, for example, the structure is:

2 bars 6/4; 2 bars 6/4; 2 bars 6/4; 5/4 + 7/8 + 2/4

2 bars 6/4; 2 bars 6/4, 5/4 +7/8 + 2/4

As shown in Figure 25, in the final variation, the surface material transfers to the electric guitar and each chord is accented. Concurrently, the bass clarinet plays a melody, competing with the surface material for the foreground role.

Figure 25

Final Surface Variation of L'avventura Trio, Movement I, bars 91–96



Camera Distance. I was interested in the way in which the interior with the panelled wall is closest to the camera initially; owing to the Antonionian editing feature of temps morts, described in the previous chapter, we see the wall for a moment before Claudia walks into the shot, rendering it background. I had previously worked with live foley in pieces and here added a recording of footsteps, referencing the practice of foley. In the second Surface variation (bars 22–27), the footsteps enter and are dynamically much louder than might be expected—they become the foreground, and the more ornate melodic musical material instantly moves to the background (see Figure 26). I was familiar with an example of when melodic material is later heard through a semi-opaque screen of noise in James Blake's track, The Wilhelm Scream (2011).

Figure 26

Foreground Becoming Background in Surface Variation 2, L'avventura Trio, Movement I, bars 22–27



For footsteps in a concert music setting, Kagel's *Pas de Cinq* [Scene change] (1965) is an interesting reference point. In this music theatre piece, percussionists (or actors) perform scored and choreographed footsteps. In a wider context, artist Tacita Dean explored foley in a performance art context in the piece *Foley Artist* (1996).

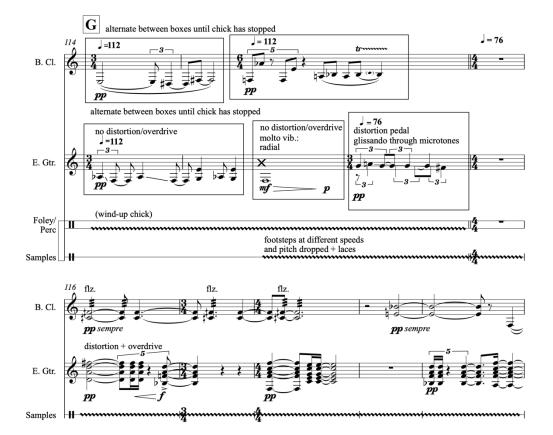
Depth. The depth sections in Movement I were primarily intended to contrast with the surface materials and were a useful first foray into scoring the large depth of field¹² of the right-hand side of the split composition in

¹² Depth of field: "The range of distances in front of and behind the point at which the camera is focussed through which objects will appear sharp" (Malkiewicz with Scorsese, 2005, p. 238).

Scene 1¹³. I aimed for timbral and pitch range contrast both with the surface materials and between the two instruments, for example, dyads and soft lines with a range of articulations in the bass clarinet, and harsh chords, distortion pedal and harmonic in the electric guitar part (see Figure 27). There are also elements of choice in the rhythms and tempi.

Figure 27

Depth Section in Movement I, bars 114-120



Scene 2: Movement II

Overleaf Mroz describes a scene that starts with a disorienting shot of Claudia being held up in the sky by Sandro (1:34:58)¹⁴. We then move to a

¹³ Many thanks to cinematographer and researcher Philip Cowan for sharing his expert insights about the cinematography of *L'avventura* Scene 1, including confirming that there is a 'large depth of field' (Cowan, P. personal communication, 2018, January 17) here.

¹⁴ Timestamp refers to *L'avventura* [DVD], 2003, Korean Import Edition.

series of close-ups of Claudia and Sandro lying in the grass, kissing (Mroz, 2012, p. 58)—the camera angle changing six times (see Figure 28 for two of the perspectives shown).

Figure 28

Monica Vitti and Gabriele Ferzetti as Claudia and Sandro in L'avventura 'Scene 2'



Note. From *L'avventura* by M. Antonioni (Director) – Italy, France – © 1960 – Cino Del Duca; Cinématographique Lyre. Reprinted with permission.

Mroz again highlights the haptic textures: "This sequence resonates powerfully with a kind of hapticity in which the surface of the screen appeals to the sense of touch" (Mroz, 2012, p. 58). To my eyes, the camera is so close to the actors in this scene that the shot sometimes appears out of focus. There is also an inherent theme and variation in the array of textures: two contrasting shades of hair, for example, and a related variant texture of the blades of grass.

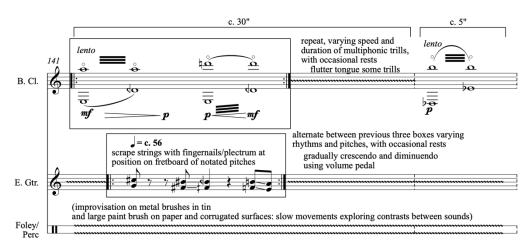
I chose these two scenes as they have different approaches to proximity and perspective through different cinematography and editing techniques: in Scene 1 there are two camera pans and one cut and Scene 2 has six cuts with changes of perspective between Claudia and Sandro.

Hapticity: Timbral Detail and Variation

I attempted to enact the haptic textures of the Antonioni through a varied palette of timbral techniques for each instrument. In the writing of the

bass clarinet part, I referred to several pages of Heather Roche's website, including (*Quiet*) multiphonic trills for bass clarinet (2015, May 19), which is based on the technique developed by Sciarrino and most notably used in the Bb clarinet piece, *Let Me Die Before I Wake* (1982). I learnt more about timbral guitar techniques through reading Frengel's *The Unorthodox Guitar* (2017) and experimenting with different techniques with Carmel Smickersgill, who played the guitar part. The speeds of oscillation and the rhythms that the different timbral techniques give rise to are unstable to different degrees; I aimed to enact the textural richness and variety of the Antonioni through the interplay of the three instruments (see Figure 29).

Figure 29



Timbral variation in L'avventura Trio, Movement II, bars 141-143

The Close-up and Slowness

Bruce Mamer notes of Antonioni's style that "a slower pace forces the viewer to contemplate the meaning of the material more, particularly when coupled with an ambitious use of proxemic effects" (Mamer, 2007, p. 349). Mamer cites the example of the extended close-ups of Monica Vitti in Antonioni's *Red Desert* (1964). Mamer notes that more broadly in Antonioni's films, the lengthiness of the scenes in comparison to Hollywood conventions arises in part from the "extensive visual detail" as well as the long silences without dialogue (Mamer, 2007, p. 349). To parallel this, Movement II is primarily improvised within flexible timings, allowing plenty of space for the small timbral details to be heard.

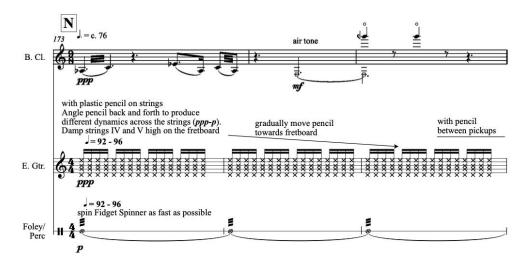
Off-Screen Space

Mroz observes of the series of close-ups in Scene 2 that "the close-up can also draw attention to that from which it is extracted, alluding to what it has failed to capture" (Mroz, 2012, p. 58). A strategy I devised to enact this compositionally was to score a diatonic chord progression for a melodic instrument and combine this with 'haptic' and unstable timbres: in Movement II from bars 173 to the end (see Figure 30), the bass clarinet material is based on a simple chord sequence but with pitches missing from the triads: as it is a melodic line, the chords are outlined, and all pitches are not heard together.

I combined this with a rhythmic shift: the fidget spinner parallels the train that is heard and seen in the distance at this point, suddenly altering the sense of space. The spectral harmonics in this section mean that only certain of the pitches of the chords are possible.

Figure 30

L'avventura Trio, bars 173–175



Field Recordings

Prior to the PhD work, I had made several pieces and sound installations that integrated field recordings with instrumental and/or vocal material. In this context, I was aiming to reference the outdoor location of Scene 2. Though clearly the result of much more involved compositional processes, a relevant piece I looked at during the research period was Peter Ablinger's *Quadraturen IV ("selbstpotrait mit Berlin")* [Quadraturen IV ("selfportrait with Berlin")] (1995–98). Similarly, Joanna Bailie's *Artificial Environment* pieces (2011–2013) are a more complex example of this integration of exterior space into a concert piece: Bailie speaks about an interest in bringing the "outside world into the contemporary music concert hall" (*The Wire*, 2016).

Critical Reflection and Next Steps

Both Dreyer and Antonioni are filmmakers associated with the Slow Cinema aesthetic. (De Luca., & Jorge, N. B., 2016, p. 9). It is notable that I was already making a large change of time scale in the compositional methodology for composing these pieces: Movement 1 is based on a circa 9second clip that becomes a 5-minute-long piece of music, and the difference between the length of Scene 2 and Movement II is even larger. In this respect, I was working within the conventions of lengths of pieces for contemporary classical concert music and not accurately reproducing the time span or pacing of the scenes.

One of the key emergent research questions was how to decide which musical parameters to prioritise in different areas of the composition. In Movement 1, for example, when I assigned 'more notes' as a parameter to make a distinction between the surface and depth sections, this impacted the possible context for 'more notes' being a translation of the accents on the panelled wall.

Interesting perceptual problems raised included that you can perceive the angled panelled wall in a matter of milliseconds with the eye: the same

cannot be done with the perception of a series of rhythmic accents. My strategy for addressing this, then, was repetition.

I generated a range of possible options for enactments and selected from among them to compose the piece, which was encouraging.

2.5 *Locations* for piano and soundtrack

This piece is based on Mroz's reading of *L'avventura* Scene 1. Mroz notes that the balcony is viewed at an angle (Mroz, 2012, p. 57). I noticed that the perspective means that the lines of the balcony are interestingly misaligned. The patterning of the tiles on the balcony throws differently angled lines towards the camera. The aim was to enact these geometric qualities in combination with the large depth of field and the contrasting textural detail of the trees, mountains and large expanse of cloudy sky in the background. Another element of the mise-en-scène that Mroz observes is the glass panel in the centre of the split composition that "presents yet another 'terrace' of textured possibility" (Mroz, 2012, p. 57).

Mroz writes about the "dynamic oppositions" (Mroz, 2012, p. 57) in the scene. As well as exploring oppositions between and within the surface and depth in the shot, I was interested in working with recorded and edited sound so that the piece would be a combination of organic and produced materials and processes.

Visual Materials: Surface and Depth in the Soundtrack

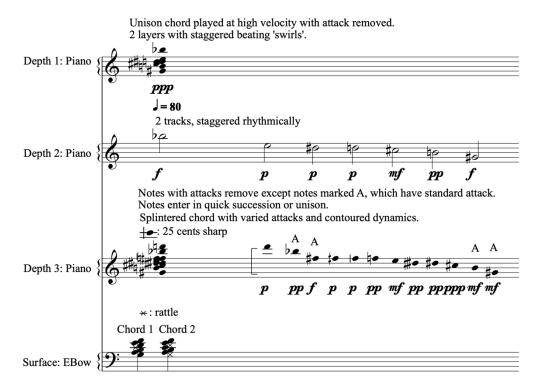
I returned to composing for the piano because I wanted to explore different ways of translating split composition ideas for the piano with more specificity to the materials. The soundtrack for *Locations* is a translation of both the surface and depth sides of Scene 1. Following Mroz's lead, I was particularly interested in experimenting with more ways in which to translate "haptic looking" (Marks, 2000, p. 162, as cited in Mroz, 2012, p. 57) into haptic listening.

The qualities Mroz highlights are enacted in quite a loose way through pitch, timbre, and rhythm. There are three Depth layers of the soundtrack (see Figure 31). Each depth layer was recorded on a different piano, so the three layers have different acoustics and piano timbres to the three layers. The pitches are in Mixolydian mode on G: this mode happened to work for

the placement of the EBow as it was possible to access all the notes needed within one octave. The only pitches that overlap between the Surface and Depth are the E and F: this is a translation of the glass panel that connects both the surface and depth.

Figure 31





Depth 1. The pitches are from within Depth chords 3 but are fewer in number. The chord was recorded at high velocity. I then edited out the attack and first part of the decay in Logic Pro; the natural beating in the decay of the dissonant chord is brought to the forefront in this layer. Two tracks of this chord are layered on top of each other out of sync to create more texture. There is a sonic translucence to this layer that is a loose translation of the glass panel.

Depth 2. This layer has the same pitches as in Depth 1 but with customary piano attacks intact. There is rhythmic variation at an independent tempo to any other rhythmic movement in the soundtrack. **Depth 3.** The chord has a 'rocky' contour with two clusters of microtones within it. I tuned the microtones in Logic Pro. Most of the attacks of the notes are removed for this layer, and there is an angling of the dynamics that is out of sync with the pitch and attack patterning within the chord.

Visual Materials: Live Piano

The live piano is a translation of Claudia's body moving in front of the panel and out onto the balcony. The four boxes of material are in tonalities that partly contrast and partly overlap with the Mixolydian mode and microtonal Depth chords in the soundtrack, with the first box overlapping most with the EBow Surface material in the soundtrack. The simplicity, rhythmic regularity and articulations of boxes 2 to 4 in the live piano part (see Figure 32) stand in relief against the more saturated and detailed soundtrack.

Figure 32

Boxes 3 and 4 in Locations Live Piano Part



Structure: Looping and Improvisation

Returning to the idea of combining naturally arising rhythms with manufactured rhythms, I edited the materials of the soundtrack in a way that is audibly digital (see Figure 33).

402 textured chord_1.	
402 textured chord_1.7 @	
D2 392 uni D2 392 uni D2 392 uni D2 392 uni	D2 3 D2 392 D2 392 un D2 392 uni D2 392 un
swirling chord 2 denoised	swirli swirling swirling chord 2 den swirling chord 2 denoised
D2 38 7	
D2 387	
D2 38 8 Dep	
399 ebow F.6 @	D3 026 F pedal 4.3 (0) D3 026 F pedal 4.7
398 ebow E.3 00	D3 028 E pedal 4_1.3 @
393 (bow D.3 ①	D3 001 D rattle 2.3 (0)
400 ebow with rattle C.3	D3 030 C pedal 4.3 00
391 ab 391 ebow B_1	D3 034 B pedal 3.3 00
390 ebow A.4 (D	D3 035 A pedal.5 00
D2 399 ebow G.5 CD	D3 004 G rattle.5 ①

Structuring of tracks in Locations Logic Pro Arrange Window

Critical Reflection and Research Development

As with the previous pieces, the methodology led me to generate compositional materials I would not have done otherwise. Beyond this, some of the questions being raised include those around the choice of modal harmony. Modal harmony can have a static quality as there is no leading note. If modal harmony is used as a contrasting harmonic area, what role do harmonic functions of tension and release play within this material?

Although rhythm was a parameter in the translation of the 'depth visuals' into the Depth materials of the soundtrack, in isolation each of the Depth musical ideas has a short duration: what are possible rationales for the choices of formal structure when the temporality of the musical materials has been driven by the spatial qualities? Another reflection I made was that if I were to work more in this area, I would think more specifically about speaker placement and the perception of sound coming from various places in a concert space.

At this stage in the research, I was considering whether to keep working with *L'avventura* Scene 1 and 2, having composed several pieces developing from the shot composition and cinematographic techniques and aesthetics of *L'avventura* and attendant film analysis. I contemplated working instead with film material by contemporary filmmakers influenced by Antonioni's style. These included Wong Kar-wai, some of whose work shares the cinematographic sensibilities of *L'avventura*. Wong describes the miseen-scène of street scenes in *In the Mood for Love* (2000) as a "hommage" to Italian filmmakers and Antonioni in particular (Wong, 2000, p. 16). Another option was to look closely at perspective and proximity in the work of a contemporary cinematographer with a contrasting aesthetic: Reed Morano, for example. I also thought about working collaboratively with a filmmaker.

I decided that continuing to keep the focus on *L'avventura* Scene 1 and 2 was the most effective approach as regards the research aims, as this would facilitate deeper exploration of the research questions. There were still many variables to explore and experiment with compositionally in response to that film material. Musical models for this kind of serial exploration from one starting point included, pertinently, Bernhard Lang's *Differenz/Wiederholung* series (1998-2022). I also had in mind an interview with David Hockney in which he discusses painting the water in his swimming pool paintings, saying, "the problem of depicting it becomes a wonderful way of... in your head, thinking of graphic terms and devices to depict it all" (Wright, 2014, 1:12:10). I found this clarity in conception and technical and aesthetic realisation to be a very helpful example.

2.6 Madame Beudet's Faces: Electroacoustic

Madame Beudet's Faces: Electroacoustic is a short experimental piece in which the recordings of Madame Beudet's Faces for piano are viewed through the prism of the haptic aural surfaces developed in the L'avventura portfolio pieces.

The piece is made up of five layers (see Figure 34):

- 1. recording of *Madame-Beudet's Faces, I: Transitions* on in-tune grand piano
- 2. recording of *Madame-Beudet's Faces, I: Transitions* on slightly out-oftune tinny upright piano
- 3. very short edited repeated loop of *Madame-Beudet's Faces: Glittering Screen Interlude*
- extracted Sibelius MIDI of Madame Beudet's Faces played by 'Steely Beats' quantized to a looped time signature pattern in Logic Pro with most beats deleted
- extracted Sibelius MIDI of Madame Beudet's Faces played by 'Classic Electric Piano' quantized to a looped time signature pattern in Logic Pro with most beats deleted

a) madame beudet edit 2 - Tracks				
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de la compañía	190 • • •			
🐠 M S R 🌌 Upright piano	Elspeth 1. Elspeth 1.17 Elspeth 1.23 Elspet	Elspeth 1.34 (2) Elspeth 1.3 Elspeth 1.42 Elspeth 1.43		
🐠 M S R 🌌 Grand piano	Madame Be Madame Be Madame E	Be Madame Beudet s Faces RD2.185 Madame Be Madame Be Madame Be		
🐠 M S R 🛃 Upright piano	20171118 170			
M S R 🎜 Glitterierlude	•			
🔿 📻 M S R 🛹 Steely Beats	madam e beudet beat line.1	ب بن وه		
M S R 🧭 ClassiPiano	madame beudet beat line.1	i i je na se		

Logic Pro Arrange Window for Madame-Beudet's Faces: Electroacoustic

Rhythm and Tempo Layers

As in the image in *L'avventura* Scene 1, certain tracks are looped in consistent tempos (uniformity of the tiles on the balcony), and these are layered with the live recordings of *Madame Beudet's Faces* for piano, Movement I, in which there are changes of time signature and a dramatic accelerando. Tracks 4 and 5, which are the same rhythmically and in the same tempo, are offset from each other. The materials are cut and looped to make the overall structure. I set myself the challenge of not panning the tracks.

Haptic Tunings

Continuing the idea of creating haptic aural texture through combining recordings of different pianos from *Locations*, I wanted to layer up both in-tune and out-of-tune pianos with a digital piano timbre. A work I looked at subsequently to composing this piece was James Tenney's *Harmonium #2* for two guitars (1977), which provides some context as an example of a piece with instruments tuned in microtonal intervals away from each other; Guitar 1 in *Harmonium #2* is tuned 30 cents lower than Guitar 2. I was interested to hear what the tunings would sound like in combination, as there would be some built-in variance as the upright piano would not be uniformly out of tune. In fact, in any case, I could have recorded that track on a piano that was more markedly out of tune for the effect to be more audible.

Critical Reflection

Again, the question of formal structural compositional choices comes up when I reflect on the role of this piece in the research; apart from the quantised 'beat' lines, I edited and looped the different tracks quite intuitively, without a pre-planned structure.

For me, the spacing of the beats in the layered tracks gives the feel of a repeated underlying pulse, but this is combined with a marked unpredictability. This seems to be a plausible temporal translation of the "dynamic oppositions" (Mroz, 2012, p. 57) between the regular and irregular in the Scene 1 mise-en-scène.

There is a lot of potential for exploring cinematographic aesthetics and techniques within electroacoustic music, and I have only dipped a toe into the water here. I can see from my notes, for example, that I had further ideas for dissolves enacted as crossfades and EQ automation enacted as wipes.

2.7 sharp and murky for 10 players

sharp and murky is another enacment of *L'avventura* Scene 1, this time for a larger mixed ensemble. The piece is in two short sections of music that were workshopped in the RNCM Composers Lab: the material has the potential to be extended into a larger-scale piece or multiple pieces.

sharp and murky I: Surface and Depth

Structure. I selected the section from the second shot in Scene 1 in which the static camera rests on the wooden panelled wall interior until just after the pan left to right to the split composition with the interior on the left and balcony on the right. The enactment of the structure is chronological, as shown in Figure 35.

Figure 35

Structure of sharp and murky I

surface foreground (still camera)	bars 1–9 beat 2
camera pans across surface	bar 9 beat 2 and 3
depth foreground, surface peripheral (looped pans)	bars 10–14

"Dynamic Oppositions" in Orchestration, Pitch and Timbre.

developed several strategies for enacting the "dynamic oppositions" (Mroz, 2012, p. 57) of Scene 1 in this movement. I developed the element of a regular rhythmic grid, here making it the harmonic material itself rather than a beat layer. One influence for this was the way in which the high repeated violin note in Damon Albarn's track *Everyday Robots* (2014) stands out in relief to the rest of the track.

The harmonic structure of the surface section is a four-bar pattern: bars 1–2: Eb mixolydian, bar 3: Db major, bar 4: Bb minor. As with previous translations of Scene 1, oscillation is part of the timbre of this section with the vibrato of the Luminous Tines midi instrument in Logic Pro, molto vibrato violin notes and cello circular bowing. The methodology for generating the pitches in the Depth chord was to analyse the frequencies of a bowed low E on the electric guitar, select a mixture of pitches outside and in Eb Mixolydian, write these pitches on cut up pieces of paper, choose pitches by chance and assign a pitches different octave, then orchestrate the pitches to make use of the staggered dynamics available on the instruments. There is a much wider pitch range for this material, which, in contrast to the Surface section, is tutti with no doubling. The scoring of the Depth chord includes the more abrasive and unstable timbres of the rattle on detuned string V with EBow on the guitar and sul ponticello double bass notes. As with *L'avventura Trio*, object-based percussion with contact mics introduces a noise element into the sound world.

Camera Movement: Panning to Surface and Depth

Uncanny¹⁵ Smoothness of Camera Movement: Glissandi. Rod Whitaker's *Language of Film* (1970) guided me to consider translating both the technical and experiential aspects of the left to right camera pan in Scene 1. Whitaker observes that the uncannily smooth movement of the camera pan and the human experience of scanning across a scene are at odds with each other, noting that a person scanning across a scene, "puts it together in a series of 'cuts' based on eye and head movement, often punctuated by blinking" (Whitaker, 1970, p. 80). This glissando material at bars 9–14 represents the smooth movement of the camera pan. A key reason for the expansion of the pianist's role with the midi keyboard was to be able to include the digital glissandi at the same tessitura as the double bass glissandi.

Peripheral Section of Shot Composition and Peripheral Rhythm. Whitaker also observes that the eye is drawn to the side of the screen that

¹⁵ Many thanks to Dr David Butler, Senior Lecturer in Screen Studies at Manchester University, for sharing his expert knowledge of cinematography, in particular the potential for "uncanny" camera movement, with reference to Steadicam (Butler, D. personal communication, 2017, July 18).

the camera is panning to, with the side panned away from rendered less important (Whitaker, 1970, p. 80). I sought to translate the experiential—that the surface is on screen and closer to the camera in the split composition shot yet is experientially (and narratively) peripheral. This is enacted through a tracing of the Surface rhythm being present in the Depth section (see Figure 36). I kept the temporal span of the Surface material proportional to its first iteration in bars 1–4. To allow for this, the camera pan movement glissandi are looped several times.

2.8 Octet for mixed chamber ensemble, Workshop 3

Block Forms and Relativising Foreground and Background

This piece is in a variation form in which melody, accompaniment and ground bass are reconfigured across eight modules. Figure 38 shows the structural plan for the whole piece (I realised part of the piece for the PhD submission) with the two violinists spatialised in front of a mixed ensemble of six musicians. The piece features a ground bass structure from Couperin's Chaconne in G minor (1658).

Figure 38

1 2 3 4 5 6 7 8 G-D Eb-C G-D G-D Eb-C G-D D-A D-A M vlns M vlns G vlns G vlns M A G G G vlns G А A M M A vlns M G G A Α grid: percussion part

Octet Configurations

Instrumentation and Haptic Timbres Experimentation

Models that I aspired to for the instrumentation and orchestration included the Beach Boys's *Pet Sounds* (1966), Miles Davis's and Gil Evans's arrangements for *Sketches of Spain* (1960), and David Byrne and St. Vincent's 2012 album, *Love This Giant*.

Contrabass clarinettist Jason Alder and I experimented with placing sticky notes behind the reed and on top of the contrabass clarinet bell (see Figure 39) as one means of extending the haptic timbral possibilities of the ensemble.

Figure 39



Jason Alder with Contrabass Clarinet and Sticky Notes

2.9 'seated CLAUDIA *not forgotten* CLAUDIA' for string quartet

The instrumentation and duration of this piece were pre-decided as it was composed for the final of the RNCM Gold Medal competition, written especially for the Marvolo string quartet. The title, 'seated CLAUDIA *not forgotten* CLAUDIA' (as with *hillside - detail - sometimes - textures* and *Sandro, it's okay*) was created by a 'cut-ups' process.

The piece is based on the same four-shot sequence as the Octet and employs a similar approach to translating the camera angles, camera distances and depths of field of Scene 1, this time structured in six modules rather than eight. As with the Octet, the musical material is conceived as melody, accompaniment and ground bass elements, which are distributed differently to the instruments of the quartet in each block (Figure 40 shows the keys of the six modules). A musical equivalent for the cinematographic shifts of perspective and proximity between the shots is established by delineating the blocks through contrasted pitch ranges, registral placement of material, dynamics and articulations.

Figure 40

Key Structure for 'seated CLAUDIA not forgotten CLAUDIA'

Module	1	2	3	4	5	6
Кеу	A major	E minor	G minor	A major	E minor	G minor

2.10 *Song for Amy* for amplified acoustic guitar, electric guitar and electronic beat

This piece was another experiment in enacting the shift of perspectives engendered by the camera angles in the section of *L'avventura* Scene 2 in which Claudia and Sandro kiss, lying on the grass.

Haptic Listening Through Indeterminate Pitch and Timbral Instability

This piece goes further in exploring possibilities for enacting Marks's "haptic looking" (Marks, 2000, p. 162, as cited in Mroz, 2012, p. 57) into guitar writing. The variegated textures of the hair, grass, and clothing in Scene 2 are paralleled in musical materials that combine simple ostinato rhythms with indeterminate and unstable pitch and timbre, as shown in Figures 41 and 42.

Figure 41

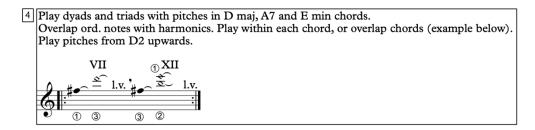
Looped Ostinati with Indeterminate Pitch and Timbral Instability in Song for Amy, Amplified Acoustic Guitar

2 Alternate between the two looped bars in a varied pattern. = c. 52arco col legno battuto on strings I-III poss. Freely angle the bow to alter the number of string played. Gradually move the bow towards the bridge making the pitches higher (example below). 1 1 Ē \$ \$ Ť 4 Improvise rhythms based on the bar below = c.80arco ord. heavy bow pressure

ххх

Figure 42

Looped Ostinati with Timbral Layers in Song for Amy, Electric Guitar



Shot Structure, Musical Mobiles and Variation of Configurations

In Scene 2, the camera changes back and forth between two points of view six times, and a fluidity is created by the varied configurations of the positioning of the actors in the frame at the start and end of each shot and their movements and relative camera distance within the shots. I translated this into a formal structure in which there are pitch, timbre and rhythmic similarities between the musical materials in each box. In boxes 1 and 2 of the electric guitar part, there will be some audible similarity in pitch together with many indeterminate and varying elements of pitch and timbres produced by the playing technique. Similarly, boxes 1 and 2, and 3 and 6 of the amplified acoustic guitar part have connections through timbre, but there are no transitions between the boxes.

I could see the potential for modularity when working with this sequence (though this was likely heightened by my method of working with the visuals without audio). I translated this into a formal structure in which the two musicians can play their six boxes in any order, and either player can cue the coordinated change to their next respective boxes.

Some of the materials in the boxes are more suited to being played at a quiet or loud dynamic, and the instruction to decide which player will play loudest echoes previous portfolio pieces in which conventional hierarchies of foreground and background materials are swapped and subverted.

Beat Layer and Disruption. The structure of the beat line unfolds at a slower pace over four boxes, contrasting with the structure of the two guitarists's materials. Starting with a very simple beat (see Figure 43), the part later expands to include the instruction to ornament the beat, adding additional rhythms into the rests between the main beats.

Figure 43

Basic Electronic Beat of Song for Amy



Throwing a spanner into the works for dynamism, the structure includes a 'Disruption' bar in the guitar parts that is an additional element, not derived from the *L'avventura* film material.

Critical Reflection and Research Development

There is a looser relationship between the six shots of the scene and the six boxes in the piece in comparison with some of the more meticulously constructed approaches I took elsewhere in the portfolio. Overall, the piece has a slow feel despite the faster rhythmic movement of the percussive sounds in the amplified acoustic guitar part. As with *L'avventura Trio,* Movement II, textural effects such as scraping the coils of guitar strings need to be performed slowly to be audible, although the amplification, of course, helps. By giving the musicians agency in choosing the order of the boxes and when the changes occur, they could perhaps be said to embody the actors in the scene but with editing powers. However, the pace of the edits and the movements of the actors inside the frame are relatively fast: this highlights the difference between the speed at which visual texture can be perceived in comparison with textural sounds and was a useful exercise.

2.11 hillside - detail - sometimes - textures for

contrabass clarinet and video

The starting point for this piece is *L'avventura* Scene 2. Related again to the "dynamic oppositions" (Mroz, 2012, p. 57) concept, I structured the video and the music very differently with the intention of placing them side by side and seeing what the energetic effect was.

Video Composition

The video is made from footage of light patterns through blinds moving on a wall, and of the rocky textures of the coast at North Berwick. The split of the screen into roughly two-thirds references the proportions of the surface and depth split composition shot in *L'avventura* Scene 1¹⁶.

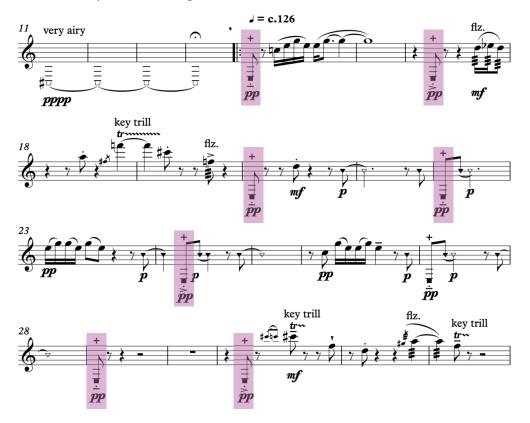
Structure, Camera Angle, Pitch, Register

This time, I worked with Scene 2 from the point at which Sandro holds Claudia up, and we see her in relief against the sky, with nothing else in shot to establish spatial geography. This is enacted in bars 1–14. The piece ends with an enactment of the distant train—the looped bars from 143–144. The main body of the piece, from bar 15 to bar 142, is an enactment of the changes of camera angle and perspective in the six shots of Claudia and Sandro kissing.

¹⁶ Many thanks to filmmaker and lecturer Danny Orwin for sharing his expert observations about *L'avventura* Scene 1, including that the golden section is used. (Orwin, D. personal communication, 2018, June 26).

Figure 44

Grid and Perspectives Changes in hillside - detail - sometimes - textures

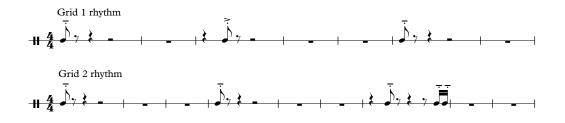


Camera Angle, Grids and Repetition

As in *sharp and murky*, the Octet, and 'seated CLAUDIA *not forgotten* CLAUDIA', this piece features a simple repeated rhythmic pattern I thought of as a grid. Figure 44 shows the grid pitches highlighted in pink. In *hillside - detail - sometimes - textures*, I plotted the grid separately to the main motivic materials. The pitches of the grid fulfil a dual function in the piece. There are two pitches which enact camera angle: E3 (camera angle 1) and D#4 (camera angle 2), and these alternate between notes within the modal pitches for each motivic section. Concert D3 and F4 are home pitches for the two rhythmic grids (see Figure 45), the idea being that the spacing of these pitches relative to the motivic material representative of Claudia and Sandro enacts the spatial relationship between the camera and the actors' relative screen space—it is representative of the change of perspective on the two actors in the two different camera angles. Within each formal block, I alternated the home pitch with a pitch from the set of modal pitches used for the motivic material in the different blocks.

Figure 45

Grid Rhythms in hillside - detail - sometimes - textures



Critical Reflection

Evaluating the effectiveness of this approach to pitch, alternating the D3 and F4 with pitches from the modal set certainly weakened the audibility of the sense of having a pitch that is a fixed point. The rhythm of Grid 2 is also spaced out, and there is much less sense of it as a repeated pattern than in Grid 1.

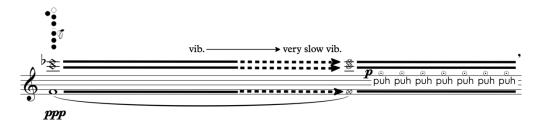
Putting two opposing structures side by side was not something I had tried previously. Overall, I was happier with the video I made for this piece than the music I composed. Reflecting on the compositional process, I spent a lot of time on an involved system for the organisation of the contrasting musical materials assigned to the different parameters, but the materials themselves are less interesting.

2.12 Sandro, it's okay for contrabass clarinet

This piece is an alternative approach to enacting *L'avventura* Scene 2, with textural detail and fluidity the priorities. In *hillside-detail-sometimes-textures*, the material was organised in blocks, including the application of textural articulations flutter tonguing and key trills. For *Sandro, it's okay*, the pitch and rhythm are organised in blocks, but this is overlayed by gradually transitioning timbral parameters: notes move from pitch to noise, the changes occurring out of sync with the pitch and rhythmic structure. As shown in Figure 46, the limitation of scoring this idea for a solo instrument led to experimenting with combining timbral effects.

Figure 46

Staggered Timbral Transformation in Sandro, it's okay



Critical Reflection and Research Development

This piece is still in quite a nascent form, and I would like to develop it into a fuller aesthetic with amplification and live electronics.

2.13 Edits÷Deus Ex Machina for guitar trio

This piece was another case study in translating the shift of perspectives produced by the changes of camera angle in the 'kissing' section of *L'avventura* Scene 2. I mainly explored strategies for enacting the edits and changes of perspectives in this scene.

2.14 webby-blocks i and webby-blocks ii for Bb clarinet

Complementary to the film source material of Scene 1, a starting point for the *webby-blocks* pieces was Whitaker's discussion of the technical and experiential aspects of "Pan Movements" in *The Language of Film* (Whitaker, 1970, pp. 79–80):

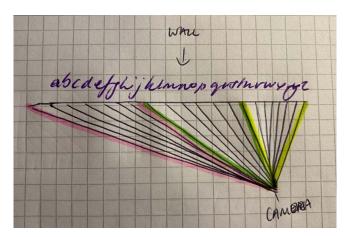
Normally, the camera is still at the opening and close of a pan shot, so the data that form the content of the beginning and the goal of the movement have more quantitive weight than has any composition through which the camera moves.

For the purposes of analysis, the pan may be thought of as a series of shots, a new one occurring each time there is a complete change in the field—that is to say, each time the data at the right of the screen approach the left, in the case of the pan right. (Whitaker, 1970, pp. 79–80)

Continuing the methodology of working with diagrams as bridges between the film material and film theory and the composition, I drew a diagram summarising the sectional structure of the camera pan outlined by Whitaker (see Figure 47).

Figure 47

Diagram of the Sectional Structure of the Camera Pan as Described by Whitaker



Key decisions in the composition of the piece included:

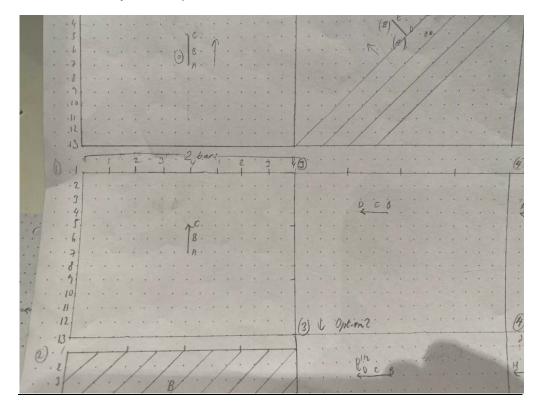
- enactment of the 'Whitaker sections'
- separating out the parameters of rhythm and pitch
- pitch choice
- limitations

The question I set myself in this piece was how to find an equivalent for panning in different directions—in both directions horizontally, and also vertically.

I initially made a series of boxes as the structural plan (see Figure 48). The boxes are sized according to the aspect ratio 1:85:1. Estimating the length of the camera movements in Scene 1 by eye, each box charts the path of a camera movement. To generate the rhythms from the boxes, I read each line of the box as if it were a line of music.

Figure 48

Structure Boxes for webby-blocks

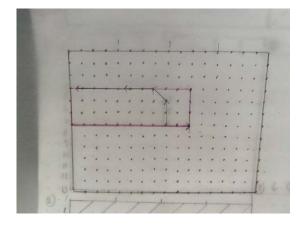


Working with the structure boxes provided me with a flexible structure; although I structured the boxes in order from 1 to 5 to match the order of the tilt and pans in Shot 1 and 2 of Scene 1, the boxes could be read in any order and in any direction, generating many different configurations of the musical material.

Early in the process, I made the decision that in order for the retrogrades and organic changes of the rhythmic materials to be audible, the space between each dot needed to be equivalent to one crotchet beat. This would entail large amounts of rests on either side of the notes, so I adjusted the rules of this structure and made the edges of the structure the size of the outer limits of the camera movement, rather than screen size structure (see Figure 49).

Figure 49

Resizing the Area Equivalent to Time for webby-blocks Composition



Working in this way encouraged me to approach the composition of time signatures in a new way, as shown in Figure 50.

Figure 50

Generating Time Signatures for webby-blocks

Critical Reflection

Whilst working within the context of pieces by composers including Finnissy and Lang that engage with film as a source material and seeking to contribute new knowledge in this area, the legitimacy of my compositional solutions is a subjective question. Determining what constitutes a valid musical enactment of the properties of the camera pans in Scene 1, for example, is a subjective process.

Working with the specificities of the two *L'avventura* scenes led me to place particularly strict limitations on the musical materials, which pushed my compositional practice into new technical and aesthetic areas.

Working with an instrumentalist or improvising at an instrument myself to discover possibilities within predetermined theoretical limitations is now a central part of my compositional process.

Chapter 3

CONCLUSION

Emergent Research Questions

The aim was not to reach a definitive answer to the following questions more that these are questions that can be ongoing compositional concerns:

- In what way am I enacting something that is inherently filmic? I kept trying to go back to the features of the film materials that were inherently filmic and interrogate my rationale for the compositional enactment.
- If I worked to make something that was as 'accurate' as I could an equivalent to cinematographic techniques and aesthetics of perspective and proximity, but I did not like how the music produced sounded, what then? Do I need to make different decisions at the initial system level?
- Other floating questions included: do you need to slow tempo down to reveal depth? Fast depth?

Reflection about Project

One of my aims at the start of the project was to compose less sectional musical forms. The framework of the research helped me to do that, which was a successful outcome. Trying to find solutions to the research questions led to me composing materials and structures I would never have arrived at if I had not had the initial conundrum of trying to find a parallel for Mroz's noted *L'avventura* surface and depth split composition (Mroz, 2012 p. 57), for example.

I did practical experimentation on instruments that I had never done before. For example, the piano *una corda* technique was an exciting discovery to make. As far as I know, this is a new technique. I worked closely with musicians over several sessions. This was a privilege and very enjoyable.

At times, I conceived large-scale structures for pieces which I did not fully realise. This was a practical decision driven partly by aiming to compose a series of case studies for different instrumentations and also wanting to take up the opportunities at the RNCM to work with ensembles on particular projects.

I could have been bolder in my musical experiments: there were a lot of different layers to the portfolio pieces; I could have pared things down further to make the experiments starker and therefore easier to assess.

Areas for Development

Given that I was working with a visual art form, I did not give much thought to the visuals of the performances of the compositions. I could have considered much more how the performances were meant to be presented in the space.

Compositionally, I would like to reach more clarity about what my intentions are with using systems like the ones I have experimented with and how this interacts with genre. Am I concluding that I was most satisfied with the aesthetic when I structured the pitches and applied chord progressions that were not generated by these methods? I am increasingly drawn to nonnarrative forms, but some of the materials I created were static.

Another critique of the music my methods produced would be that sometimes I spent so long working out the systems for the structures and different parameters that there was no further time to assess the dynamism of the musical material themselves; at times there was a lot more effort put into the making the containers for the materials than the materials themselves.

I could have engaged more directly with questions around modernist musical language, where I stand as a composer in relation to it, and how this finds a parallel with the structures of film grammar.

Some of the reading in the intermedial scholarship area I did at the beginning of my research looked at more recent developments in the visual languages of Virtual Reality and video games. In this project, I focussed solely on the aspects of continuity editing that interested me most, such as the offscreen space, the "mental geography" (Mackendrick, 2004, pp. 204–208) of film, and the way in which the technical features of continuity editing combine to create an imaginary perception of space.

I could have engaged more with the history of spatialisation in Western classical music going back to Palestrina and Monteverdi, including the music by composers I have written about in the literature review, such as Rebecca Saunders. The area of amplification and the spatialisation of the music is ripe for further exploration.

Future Recommendations

The project is open-ended and evolving. It has been kick-started by the requirements of doctoral research, and the areas of enquiry are now something I can pursue further in future composition.

There is significant scholarship in the field of film temporality and music. There is less writing about the potential connections and translations of the screen space, camera movement and continuity editing into music—there is potential for further exploration in this specific area.

I am interested in experimenting further with modular composing—of generating multiple pieces from the same starting point. This would be more practical and sustainable than the approach I took for most of my research.

If there is a system set up based on the kinds of methods I used to generate materials and structures, this could be applied on many different levels. I can see there is a lot of potential for applying these methods either vertically to blocks or horizontally, to one contrapuntal melodic line, or just to the parameter of rhythm.

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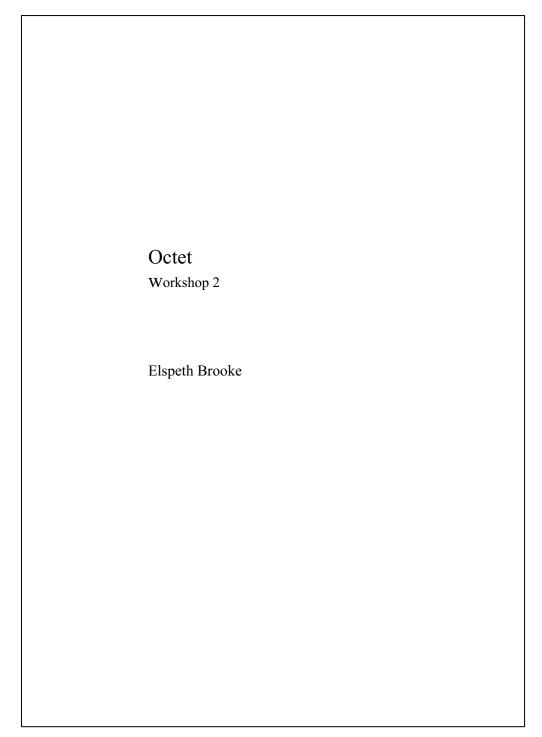
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APPENDIX

Octet for mixed chamber ensemble, Workshop 2 Score



Performance Notes	
Seating Layout	
	Perc.
E. Gtr. Bass Sax. Cb. Cl. A	ccord. Db.
Vln. 2 Vln.	
AUDIENCE	
Percussion	
cowbell	
rubber practice pad floor tom bass drum	
octave lower than notated. C	d down to B>1. The pitches played on string VI are notated at sounding pitch, sounding owing to the looseness of the string the pitches produced will be slightly variable.
m - minor chord on left hand M - major chord on left hand	
Electric Guitar sounds an oc The left hand manual of the	s Sax are notated at sounding pitch. tave lower than notated, except harmonics, which are notated at fingered pitch. Accordion sounds an octave lower than notated. octave lower than notated (including the harmonics).
The score is in C.	
Duration: c. 4 minutes	





